New York Times: More is Not Necessarily Better

Contributed by Matt
Monday, 23 August 2004
Last Updated Monday, 11 June 2007

This piece originally appeared in the New York Times op-ed page, August 23, 2004. More Is Not Necessarily Better By MATTHEW HINDMAN and KENNETH NEIL CUKIER

Imagine if one company controlled the card catalog of every library in the world. The influence it would have over what people see, read and discuss would be enormous. Now consider online search engines.

Few people realize that 95 percent of all Web searches in the United States are handled by two companies, Google and Yahoo, either directly or through other sites that use their technology. In the case of Google, whose shares started to trade publicly last week, the company holds the world's largest index of Web content, at more than four billion pages, and handles more than 200 million searches a day. The influence of search companies in determining what users worldwide can see and do online is breathtaking.

As disquieting as this power may be, it masks a deeper problem. While search engines are indispensable for finding information online, the technology on which they are based serves to narrow the field of sites that people see. In this respect, Google's technology reinforces a worrisome feature of the Web: the trend toward consolidation that affects everything from politics to news to commerce.

Google's use of links to find content essentially turns the Web into the world's biggest popularity contest - and just as in high school, this can have negative consequences. Google's great innovation in online searching, and the main reason it is so successful, is that its technology analyzes links among Web pages, not just the content within them. Behind Google's complex ranking system is a simple idea: each link to a page should be considered a vote, and the pages with the most votes should be ranked first. This elegant approach uses the distributed intelligence of Web users to determine which content is most relevant.

But what is good for Google is not necessarily good for the rest of the Web. The company's technology is so strong that its competitors have adopted a similar approach to organizing online information, which means they now return similar search results. Thus popular sites become ever more popular, while obscure sites recede ever further into the ether.

This winner-take-all system is not unique to the Web, but technology seems to encourage it. That would explain the predominance of one or two sites in almost every category of online information, be it eBay for auctions or Amazon for books. When people are given lots of choices, they tend to concentrate their attention on only a few. (Studies show, for example, that the majority of users don't click past the first page or two of results when looking for information online.)

Google's business model is based on tapping into the collective intelligence of Internet users, so it was hardly surprising that it would rely on the same approach when it went public. It used an auction to determine its share price, bypassing Wall Street investment banks in favor of prospective investors who were allowed to make their bids online. An argument persists over whether this method was a financial success - the day before it began trading, Google was forced to reduce both the number of shares it offered and their price -- but it was undeniably a popular triumph: because of the auction, many more people had the opportunity to buy shares at the initial offer price than if the company had gone public the traditional way.

As Google begins its life as a public company, the question is not merely how valuable it will be - - it is how powerful it will be. Investors will watch to see whether Google can preserve its dominant position. For the public, however, of greater concern is how it uses its influence over information and, more broadly, what happens when we place so much control in the hands of companies like Google.

The $27 billion question -- a figure based on the six-year-old company's market valuation after its first day of trading -- may be whether another innovation comes along that challenges both Google's market dominance and its methodology. Companies are already trying to "personalize" searches, for example, taking into account who and where a user is. So a search for "French press" will return results about journalism, dry cleaners or coffee, depending on the user's interests.

None of this would be very important if the Web weren't so vital. Some of the credit for the Web's vitality, of course, goes to Google itself. And after last week, thousands of investors have a financial interest in Google. Yet when we consider what the company means for the future of the Web, we all have a stake.

Matthew Hindman and Kenneth Neil Cukier are fellows at the National Center for Digital Government at the Kennedy School at Harvard.