The Inevitability Of Internet Monopolies

Yaakov Stein
Forbes Councils Member
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Yaakov (J) Stein is CTO at Allot.

In the early days of networking, you had to know where a file was and what it was called to find anything. Then, in 1990, Archie, considered to be the first search engine, arrived on the scene. Five years later, AltaVista's improved user interface wiped Archie out. Three years after that, Google arrived.

At first, Google didn't seem different from AltaVista, but over time, it seemed that Google magically floated the most relevant results to the top of the list. And it kept improving. Like everyone else on the planet, I became hooked. Google now has OVER 90% SEARCH MARKET SHARE, leaving far behind its closest rival, Bing, with less than 4%.

But I've come to find that Google's magic is gone. Years ago, I started noticing that the best results were being pushed further and further down the list and that more of the screen was being taken up with ads and Google's own content. I wanted AltaVista back, and I'm not the only one. It's not unusual to hear users complain that the top results are ads and that the next few are affiliates or those manipulating Google's ranking algorithms.

It's possible that I'm an outlier since the vast majority of my searches are research-oriented rather than attempts to buy something. But way back in 2013, the European Commission FOUND that even for commercial searches, Google favored its own products over the best results for consumer needs.

Some basic economics can help us understand what happened. In the case of monopolies, there's less incentive to offer top-notch services when customers lack alternatives. However, the situation becomes more concerning when the service relies on advertising and appears to be free. Even Google's founders fully understood the problem and, in their ORIGINAL PAPER, stated:

"The goals of the advertising business model do not always correspond to providing quality search to users...For this type of reason and historical experience with other media, we expect that advertising funded search engines will be inherently biased towards the advertisers and away from the needs of consumers."

Google is just one example of an internet monopoly. Amazon has become by far the largest e-commerce site, with CLOSE TO 40% MARKET SHARE in the U.S., far outstripping its closest rival, Walmart, with about 6%. And Amazon is facing ANTI-TRUST PROCEEDINGS due to its anticompetitive practices and abusing its dominant market share. Meta, after purchasing Instagram and WhatsApp, was SUED BY THE FTC for years of "anticompetitive conduct."

One might even wonder why there is only one internet. The only other worldwide telecommunications network, the telephone network, will be SUNSETTED. But what is behind the monopolistic tendencies of the internet and internet-based services?

Value Scaling

Let's start with the question as to why there is only one internet. Metcalfe's law says that the value of a telecommunications network with N participants is proportional to N^2. In other words, the value of a network grows with the square of the number of its users. When you add one more person to a network, they can connect with everyone else already there, making the network more valuable. So, the more users there are, the more valuable the network becomes. However, this idea assumes that connecting with every user is equally important, which might not always be true in real life.

Imagine two networks, each with 1,000 users. According to Metcalfe's Law, each network is then worth one million, so together, they're worth two million. But if they combine to form one network with 2,000 users, the new network is worth four million—doubling the value! This creates a strong incentive for networks to merge, which is why all the different networks that make up the internet are connected. Even if the value grows less dramatically with more users, there's still pressure to merge.

This idea also applies to social networks. But how does it relate to companies like Google and Amazon? The former relies on implicit user behavior, and the latter on explicit user reactions. In other words, Google tracks your searches online, while Amazon looks at what you buy. Essentially, they're both about users getting information from each other, which still follows the pattern of increasing value as the network grows.

Is there no way out?

Even if there is no way to prevent the huge players from becoming larger, you can compel even monopolies to deliver somewhat better service.

First, don’t continue to use the same monopoly purely out of habit. Try out the distant second-place services. Remember the slogan, "WE TRY HARDER"? These second-ups often precede the incumbent with innovative features or provide different ways of approaching problems.

For example, I started occasionally using Bing and discovered that it offered a free Copilot AI service that included generating images. For some searches, I use DuckDuckGo due to its privacy and anonymity to avoid being bombarded by ads for months to come. One notable caveat I've found is the use of specialized services, such as Google Scholar. I frequently use ad-free Google Scholar for research and do any product searches on specialty comparison sites.

Also, consider using new-generation AI tools instead of exclusively searching on Google. Perplexity AI is one example of a service that positions itself as an answer engine rather than a search engine, mostly using a subscription business model rather than ads. Wolfram Alpha is another answer engine with enhanced computational capabilities. Perhaps one of these alternatives will become the next dominant player.

Finally, support governmental initiatives that aim to rein in the power of tech mammoths. Google, Meta and Amazon spend unprecedented sums on lobbying to protect the interests of their organization, so it's important to support elected officials who protect ours.