

Microsoft Is Taking On Google

By John Markoff

At the World Economic Forum in Switzerland last week, Microsoft, the software heavyweight, and Google, the scrappy Internet search company, eyed each other like wary prizefighters entering the ring.

Bill Gates, the chairman of Microsoft, stated his admiration for the “high level of i. q.” of Google’s designers. “We took an approach that I now realize was wrong,” he said of his company’s earlier decision to ignore the search market. But, he added pointedly, “we will catch them.”

The four top Google executives attending the forum, at the ski resort of Davos, were no less obsessed with Mr. Gates’s every move. “We had many opportunities to see Bill and Microsoft here in Davos,” Eric E. Schmidt, Google’s chief executive, wrote in an e-mail message to a colleague that was distributed to employees through an internal company mailing list.

Microsoft is intently poring over Google’s portfolio of patents, hunting for potential vulnerabilities, Mr. Schmidt contended. And because Google is running its business using Linux—the free open source software that has become the biggest challenger of Windows—Microsoft is concerned that it may be at a competitive disadvantage. “Based on their visceral reactions to any discussions about ‘open source,’” Mr. Schmidt wrote in his e-mail message, “they are obsessed with open source as a business model.”

Get ready for Microsoft vs. Silicon Valley, Round 2.

The last time around, in the mid-1990’s, Netscape Communications, another brash, high-tech start-up from the Bay Area, commercialized the Web browser, touching off the dot-com gold rush. The company told anyone who would listen that its newfangled software program would reduce Microsoft’s flagship Windows operating system to a “slightly buggy set of device drivers.”

As it turned out, Microsoft—based in the Seattle suburb of Redmond, far from Silicon Valley, the heart of the nation’s technology industry—was listening.

Mr. Gates, belatedly waking up to the threat that the Internet posed to his business, aimed Microsoft’s firepower at Netscape and flattened his rival, which was later acquired by America Online and is now a shadow of its former self in an obscure corner of Time Warner.

As a consequence, however, he brought a federal antitrust lawsuit down upon his company, raising the specter of a Microsoft breakup. In the end, Microsoft escaped with little more than a requirement that it operate under a relatively mild court-ordered consent decree.

Today, nearly everyone in Silicon Valley, from venture capitalists and chip engineers to real estate agents and restaurateurs, has begun to ask: Will Google become the next Netscape?

Mr. Gates, who for more than a decade has promised—but not yet delivered—“information at your fingertips” for his customers, has decided that the Internet search business is both a serious threat and a valuable opportunity.

The co-founder and now the chief software architect of his company, Mr. Gates readily acknowledges these days that Microsoft “blew it” in the market for Internet search. Despite his early grand vision, he displayed little inclination to deploy software that would improve the ability of computer users to find information—until he saw the dollars in the business.

That opportunity fell to two Stanford computer science graduate students, Sergey Brin and Larry Page, who disregarded the industry’s common wisdom that search

technology would become an inexpensive, marginal commodity.

While the Internet's dominant companies fought one another over Web portals, the promise of e-commerce and access to providers like America Online, Google developed a speedy search engine that soon became almost a universal first step onto the Internet. It displaced earlier search engines because the technology invented by Mr. Brin and Mr. Page did a measurably better job in returning results that satisfied Web surfers' requests.

As a result, Google now has an immense number of users, with 200 million searches on an average day. That gives it a great advantage over its competitors, which are now trying to catch up.

"The system that has the most users benefits the most," said Nancy Blachman, a computer scientist and author of an independent guide to using Google (www.googleguide.com). "Microsoft faces a tremendous challenge because Google fine-tunes its system by watching how users adjust their queries."

But Google has done more than develop a smart new technology. Unlike many dot-com flameouts of the 1990's, it has also figured out how to turn it into a highly profitable business. The company demonstrated that focused ads based on key words related to Web surfers' search requests are the most effective form of online advertising.

That has ignited a three-way battle among Microsoft and its two Silicon Valley rivals: Yahoo, based in Sunnyvale, Calif., and Google, whose headquarters are nearby, in Mountain View. Underscoring the importance of search engines to Internet advertising, Yahoo recently said it planned to end its exclusive reliance on Google for search results and had established its own research lab to try to cut its new rival's lead.

Google's financial success is clear. In 2001, the company had virtually no revenue; in the past year, it recorded sales of almost \$1 billion and profits of about \$350 million, according to several executives familiar with the company's private financial figures.

As for Microsoft, its executives have already begun boasting about sharp revenue growth from Internet advertising from its MSN partnership with Overture, now a Yahoo division, which also pioneered Web search advertising. In its second fiscal quarter that ended on Dec. 31, Microsoft reported \$292 million in online advertising, an increase of 47 percent from the corresponding period a year earlier. The company has said that its overall online advertising revenue, which includes sources beyond search ads, reached \$1 billion in the past year.

Later this year, Microsoft is expected to unveil its own search technology, which Mr. Gates says will help Microsoft catch up with Google. Last week, Microsoft released a test version of a special set of software buttons for its browser designed to direct users to its MSN search and related services. For Google, though, the greater threat is that Microsoft will decide that Internet search, like the Web browser before it, should be an integral part of future versions of the Windows operating system.

For the moment, though, Google's lead seems formidable. Last year, Rick Rashid, a Microsoft vice president in charge of the company's research division, came to its outpost in Silicon Valley to give a demonstration of an experimental Microsoft Research search engine. Shortly afterward, however, Mike Burrows, one of the original pioneers of Internet search at Digital Equipment who later helped design Microsoft's experimental search engine, quietly defected. He joined Google.

But even if it can protect its technological lead, will Google still succumb to Microsoft's marketing muscle?

Google shares the intense Silicon Valley work ethic that characterized companies like Netscape. Its new headquarters, on a spacious campus once occupied by SGI, a computer maker, are just across the freeway from Netscape's original base.

But many veteran Silicon Valley executives are skeptical about Google's ability to hold its corporate culture together once it goes public later this year. The initial public offering, much anticipated, is expected to create hundreds of instant multimillionaires

among its regular employees, but will leave many others hired as contractors without significant gains. As a result, some people fret that Google is fostering a class society in its ranks.

So far, though, the disaffection is limited largely to the company's Adwords business, which is aimed at creating and placing its focused search advertising. That operation has grown rapidly with temporary workers. "The Adwords environment is brutal," one Google executive said.

Clearly, though, keeping its ebullient esprit de corps so robust after the I.P.O. will be difficult, say those who have gone through similar roller-coaster rides in Silicon Valley.

"The challenge Google faces is figuring out how to retain a high rate of innovation" in the face of a disruptive event like the I.P.O., said a former Netscape executive, who also worries that the two young founders, for all their brilliance, may not fit well into the kind of management team needed to run Google as a fast-growing public company.

Although Google has clear vulnerabilities, Microsoft is seen in Silicon Valley as a powerful but not particularly creative competitor. Beyond its core business in Office and Windows, Microsoft has no major recent successes to point to—but it has a growing list of disappointments. These include its Xbox video game player and Ultimate TV set-top box.

In other words, rivals have fought Microsoft and lived to tell about it. "At TiVo, we managed to stare down that \$40 billion barrel," said Stewart Alsop, a venture capitalist who helped finance the creation of TiVo's digital video recorder, which allows TV viewers to easily record hours of video programming for viewing at other times. "We dodged that particular bullet," Mr. Alsop said, when Microsoft "shut down Ultimate TV and got out of the business."

Other executives who compete with Microsoft said Google's position might be more defensible than Microsoft executives believe.

"The good news for Google is that what they do has many branches," said Rob Glaser, the chief executive of RealNetworks, which competes with Microsoft in the software for playing video and digital audio on personal computers. "It's not easily replicable in one step."

Others say that even though the Justice Department consent decree is weak, it may still be enough of a barrier to prohibit Microsoft from making Internet search an integral part of the operating system in the same way it absorbed the Web browser.

"They can't undercut Google on price, and I don't think they can get away with integrating search," said S. Jerrold Kaplan, an industry executive who competed against Microsoft while at Lotus, the spreadsheet maker that is now part of I.B.M.

As it prepares its public offering, Google is trying to avoid Netscape's fate by remaining focused on its own measures of customer satisfaction. On computers at Google headquarters, the home page constantly displays a graph reflecting how well Google does on searches, compared with its competitors. Even the slightest dip in performance creates alarm, a company executive said.

Google has also brought in a Silicon Valley veteran, William V. Campbell, the chairman of Intuit, to serve as a consultant. His gospel for Googlers, as employees refer to themselves, is this: Ignore Microsoft's impending arrival as a competitor and focus on the customer.

Good luck. Microsoft has already begun a recruitment campaign aimed at demoralizing Google employees, several Google executives said. Microsoft recruiters have been calling Google employees at home, urging them to join Microsoft and suggesting that their stock options will lose value once Microsoft enters the search market in a serious way.

"Our approach has been to seek out the best and brightest talent," said Lisa Gurry, a lead product manager at MSN. "Beyond that, I can't add anything."

Google executives also say they believe that Microsoft is systematically pursuing Web sites downgraded by Google, which punishes companies for trying to manipulate their rankings. The company is striking partnerships with unhappy Google customers.

Microsoft is currently relying on Overture for its paid search listings, Ms. Gurry said.

But Google is hardly standing still. As Mr. Gates himself has acknowledged, it has marshaled a remarkable collection of technologists. They are focused both on keeping the company's lead in search technology and on developing a range of new services.

To help their work, Google has been quietly developing what industry experts consider to be the world's largest computing facility. Last spring, Google had more than 50,000 computers distributed in over a dozen computer centers around the world. The number topped 100,000 by Thanksgiving, according to a person who has detailed knowledge of the Google computing data center. The company is placing a significant bet that Microsoft will be hard pressed to match its response time to the ever increasing torrent of search requests.

Besides the additional computing firepower, Google has a wide-ranging list of new services that it will roll out as competition with Microsoft and Yahoo dictates. For example, it recently introduced Orkut, a social networking service intended to compete with Friendster, LinkedIn and others. Still under wraps is an electronic mail service that will have an advertising component.

The company has also been pushing hard to find new sources of information to index, beyond material that is already stored in a digital form. In December, it began an experiment with book publishers to index parts of books, reviews and other bibliographic information for Web surfers.

And Google has embarked on an ambitious secret effort known as Project Ocean, according to a person involved with the operation. With the cooperation of Stanford University, the company now plans to digitize the entire collection of the vast Stanford Library published before 1923, which is no longer limited by copyright restrictions. The project could add millions of digitized books that would be available exclusively via Google.

On the marketing side, the company is racing to build its strengths overseas. Wayne Rosing, vice president for engineering at Google, has been chosen to travel the world, weaving the company's search engine into local economies and local technologies. It is concentrating initially on 12 countries.

Mr. Page, the Google co-founder, is even trying to persuade Mr. Schmidt, the veteran Silicon Valley executive recruited from Novell Inc., to run Google, and others in the company to market a phone with a built-in custom personal digital assistant intended to let Web surfers use Google from anywhere.

For all of Google's hyperactivity, there is still a lingering sense among many Silicon Valley veterans that they have seen this movie before. The company may not have Netscape's arrogance, but it is still not clear that all of its clever marketing, technology and brand identification can withstand Microsoft's onslaught when it arrives.

After all, just as Silicon Valley has learned from some of its errors, so has Mr. Gates. In Davos, Mr. Gates ruefully acknowledged that Google "kicked our butts," reminding him of what Microsoft itself was like two decades ago.

"Our strategy was to do a good job on the 80 percent of common queries and ignore the other stuff," he said. But "it's the remaining 20 percent that counts," he added, "because that's where the quality perception is."

He promised not to make that mistake again.