Google Versus Microsoft: Clash of the Technology Titans **CASE STUDY**

Google and Microsoft, two of the most prominent technology companies to arise in the past several decades, are poised to square off for dominance of the workplace, the Internet, and the technological world. In fact, the battle is already well underway. Both companies have already achieved dominance in their areas of expertise. Google has dominated the Internet, while Microsoft has dominated the desktop. But both are increasingly seeking to grow into the other's core businesses. The competition between the companies promises to be fierce.

The differences in the strategies and business models of the two companies illustrate why this conflict will shape our technological future. Google began as one search company among many. But the effectiveness of its PageRank search algorithm and online advertising services, along with its ability to attract the best and brightest minds in the industry, have helped Google become one of the most prominent companies in the world. The company's extensive infrastructure allows it to offer the fastest search speeds and a variety of Web-based products.

Microsoft grew to its giant stature on the strength of its Windows operating system and Office desktop productivity applications, which are used by 500 million people worldwide. Sometimes vilified for its anti-competitive practices, the company and its products are nevertheless staples for businesses and consumers looking to improve their productivity with computer-based tasks.

Today, the two companies have very different visions for the future, influenced by the continued development of the Internet and increased availability of broadband Internet connections. Google believes that the maturation of the Internet will allow more and more computing tasks to be performed via the Web, on computers sitting in data centers rather than on your desktop. This idea is known as cloud computing, and it is central to Google's business model going forward. Microsoft, on the other hand, has built its success around the model of desktop computing. Microsoft's goal is to embrace the Internet while persuading consumers to retain the desktop as the focal point for computing tasks.

Only a small handful of companies have the cash flow and manpower to manage and maintain a cloud, and Google and Microsoft are among them. With a vast array of Internet-based products and tools for online search, online advertising, digital mapping, digital photo management, digital radio broadcasting, and online video viewing, Google has pioneered cloud computing. It is obviously banking that Internet-based computing will supplant desktop computing as the way most people work with their computers. Users would use various connectivity devices to access applications from remote servers stored in data centers, as opposed to working locally from their machine.

One advantage to the cloud computing model is that users would not be tied to a particular machine to access information or do work. Another is that Google would be responsible for most of the maintenance of the data centers that house these applications. But the disadvantages of the model are the requirement of an Internet connection to use the applications, as well as the security concerns surrounding Google's handling of your information. Google is banking on the increasing ubiquity of the Internet and availability of broadband and Wi-Fi connections to offset these drawbacks.

Microsoft already has several significant advantages to help remain relevant even if cloud computing is as good as Google advertises. The company has a well-established and popular set of applications that many consumers and businesses feel comfortable using. When Microsoft launches a new product, users of Office products and Windows can be sure that they will know how to use the product and that it will work with their system.

And Google itself claims that it isn't out to supplant Microsoft, but rather provide products and services that will be used in tandem with Microsoft applications. Dave Girouard, president of Google's Enterprise division, says that "people are just using both [Google products and Office] and they use what makes sense for a particular task."

But cloud computing nevertheless represents a threat to Microsoft's core business model, which revolves around the desktop as the center for all computing tasks. If, rather than buying software

from Microsoft, consumers can instead buy access to applications stored on remote servers for a much cheaper cost, the desktop suddenly no longer occupies that central position. In the past, Microsoft used the popularity of its Windows operating system (found on 95 percent of the world's personal computers) and Office to destroy competing products such as Netscape Navigator, Lotus 1-2-3, and WordPerfect. But Google's offerings are Web-based, and thus not reliant on Windows or Office. Google believes that the vast majority of computing tasks, around 90 percent, can be done in the cloud. Microsoft disputes this claim, calling it grossly overstated.

Microsoft clearly wants to bolster its Internet presence in the event that Google is correct. Their recent attempts to acquire Internet portal Yahoo! indicate this desire. No other company would give Microsoft more Internet search market share than Yahoo!. Google controls over 60 percent of the Internet search market, with Yahoo! a distant second at just over 20 percent, and Microsoft third at under 10 percent. While Microsoft-Yahoo! would still trail Google by a wide margin, the merger would at least increase the possibility of dethroning Google. Microsoft's initial buyout attempts were met with heavy resistance from Yahoo!.

With its attempted acquisition of Yahoo!, Microsoft wanted not only to bolster its Internet presence but also to end the threat of an advertising deal between Google and Yahoo!. In June 2008, those chances diminished further due to a partnership between Google and Yahoo! under which Yahoo! will outsource a portion of its advertising to Google. Google plans to deliver some of its ads alongside some of the less profitable areas of Yahoo!'s search, since Google's technology is far more sophisticated and generates more revenue per search than any competitor. Yahoo! recently introduced a comprehensive severance package that critics dismissed as a 'poison pill' intended to make them less appealing for acquisition to Microsoft. In response to this and other moves he considered to be incompetent, billionaire investor Carl Icahn has built up a large stake in the company and has agitated for change in Yahoo! leadership and reopening of negotiations with Microsoft, but the advertising deal between the two companies casts doubt over whether Microsoft can actually pull off a buyout.

With or without Yahoo!, the company's online presence will need a great deal of improvement. Microsoft's online services division's performance

has worsened while Google's has improved. Microsoft lost \$732 million in 2007 and was on track for an even worse year in 2008. Google gained \$4.2 billion in profits over the same 2007 span.

Microsoft's goals are to "innovate and disrupt in search, win in display ads, and reinvent portal and social media experiences." Its pursuit of Yahoo! suggests skepticism even on Microsoft's own part that the company can do all of this on its own. Developing scale internally is far more difficult than simply buying it outright. In attempting to grow into this new area, Microsoft faces considerable challenges. The industry changes too quickly for one company to be dominant for very long, and Microsoft has had difficulty sustaining its growth rates since the Internet's inception. Even well-managed companies encounter difficulties when faced with disruptive new technologies, and Microsoft may be no exception.

Google faces difficulties of its own in its attempts to encroach on Microsoft's turf. The centerpiece of their efforts is their Google Apps suite. These are a series of Web-based applications that include Gmail, instant messaging, calendar, word processing, presentation, and spreadsheet applications (Google Docs), and tools for creating collaborative Web sites. These applications are simpler versions of Microsoft Office applications, and Google is offering basic versions of them for free, and 'Premier' editions for a fraction of the price. Subscribing to the Premier edition of Google Apps costs \$50 per year per person, as opposed to approximately \$500 per year per person for Microsoft Office.

Google believes that most Office users don't need the advanced features of Word, Excel, and other Office applications, and have a great deal to gain by switching to Google Apps. Small businesses, for example, might prefer cheaper, simpler versions of word processing, spreadsheet, and electronic presentation applications because they don't require the complex features of Microsoft Office. Microsoft disputes this, saying that Office is a result of many years and dollars of research indicating what consumers want, and that consumers are very satisfied with their products. Many businesses agree, saying that they are reluctant to move away from Office because it is the 'safe choice'. These firms are often concerned that their data is not stored on-site and that they may be in violation of laws like Sarbanes-Oxley as a result, which requires that companies maintain and report their data to the government upon request.

Microsoft is also offering more software features and Web-based services to bolster its online presence. These include SharePoint, a Web-based collaboration and document management platform, and Microsoft Office Live, providing Web-based services for e-mail, project management, and organizing information, and online extensions to Office.

The battle between Google and Microsoft isn't just being waged in the area of office productivity tools. The two companies are trading blows in a multitude of other fields, including Web browsers, Web maps, online video, cell phone software, and online health recordkeeping tools. Salesforce.com (see the Interactive Session in Chapter 5) represents the site of another conflict between the two giants. Microsoft has attempted to move in on the softwareas-a-service model popularized by Salesforce.com, offering a competing CRM product for a fraction of the cost. Google has gone the opposite route, partnering with Salesforce to integrate their CRM applications with Google Apps and creating a new sales channel to market Google Apps to businesses that have already adopted Salesforce CRM software.

Additionally, both companies are attempting to open themselves up as platforms to developers. Google has already launched its Google App Engine, which allows outside programmers to develop and launch their own applications for minimal cost. In a move that represented a drastic change from their previous policy, Microsoft announced that they would reveal many key details of its software that they had previously kept secret. Programmers will have an easier time building services that work with Microsoft programs. Microsoft's secrecy once helped them control the marketplace by forcing other companies to use Windows rather than develop alternatives, but if they can't do the same to Google Apps, it makes sense to try a different approach to attract developers.

Time will tell whether or not Microsoft is able to fend off Google's challenge to its dominance in the tech industry. Many other prominent companies have fallen victim to paradigm shifts, such as mainframes to personal computers, traditional print media to Internet distribution, and, if Google has its way, personal computers to cloud computing.

Sources: Clint Boulton, "Microsoft Marks the Spot," eWeek, May 5. 2008; Andy Kessler, "The War for the Web," The Wall Street Journal, May 6, 2008; John Pallatto and Clint Boulton, "An On-Demand Partnership" and Clint Boulton, "Google Apps Go to School," eWeek, April 21, 2008; Miguel Helft, "Ad Accord for Yahoo! and Google," The New York Times, June 13, 2008 and "Google and Salesforce Join to Fight Microsoft," The New York Times, April 14, 2008; Clint Boulton, "Google Tucks Jotspot into Apps," eWeek, March 3, 2008; Robert A. Guth, Ben Worthen, and Charles Forelle, "Microsoft to Allow Software Secrets on Internet," The Wall Street Journal, February 22, 2008; J. Nicholas Hoover, "Microsoft-Yahoo! Combo Would Involve Overlap—and Choices," Information Week, February 18, 2008; Steve Lohr, "Yahoo! Offer is Strategy Shift for Microsoft," The New York Times, February 2, 2008; and John Markoff, "Competing as Software Goes to Web," The New York Times, June 5, 2007.

CASE STUDY QUESTIONS

- 1. Define and compare the business strategies and business models of Google and Microsoft.
- 2. Has the Internet taken over the PC desktop as the center of the action? Why or why not?
- 3. Why did Microsoft attempt to acquire Yahoo!? How did it affect its business model? Do you believe this was a good move?
- 4. What is the significance of Google Apps to Google's future success?
- 5. Would you use Google Apps instead of Microsoft Office applications for computing tasks? Why or why not?
- 6. Which company and business model do you believe will prevail in this epic struggle? Justify your answer.