WITH THE SURGING POPULARITY of software as a service, coupled with Google's ascendance, Microsoft is looking vulnerable. Will the world's most powerful software corporation finally lose its grip?

Keep in mind: Microsoft is an awesome company. In 2006, its revenue represented 41% of the total revenue of 407 other software firms, and its profit was 116% of the total profits of those same firms (see chart).

After Microsoft, Oracle and Google recorded the largest profits among software companies in 2006. But Oracle's profit of \$3.38 billion, and Google's \$3.08 billion, are still no match for Microsoft's \$12.6 billion. With a cash

flow of \$14.4 billion a year, Microsoft has an enormous war chest that can be matched only by Google, which has more cash on hand, with \$11.2 billion in the till.

Microsoft's position, however, is vulnerable to attack by software firms that bypass its stranglehold on client devices. For instance, offering a software-as-a-service substitute for Microsoft's Office Suite or SharePoint, instead of a shrink-wrapped product, promises huge cost advantages for customers.

It all boils down to the question of whether a thin client, with only a browser, can compete with a fat client with more than 50 million lines of Microsoft code. I have priced out the hardware and support costs for installing thin clients. The payback is less than one year, and the expected life of a thin client will exceed the useful life of a Vista installation.

Another major benefit of a thin-client solution is enhanced security. Without removable media and in the absence of USB ports, most security problems disappear. Access control and the protection against viruses shift to central servers, where these threats can be handled with greater efficiency.

Microsoft: Domination Eroding?			
	2004	2005	2006
Microsoft revenue, in billions	\$36.83	\$39.78	\$44.28
Revenue as a percentage of total revenue for 407 other software firms	45%	42%	41%
Microsoft profit, in billions	\$8.17	\$12.25	\$12.60
Profit as a percentage of total profit for the 407 firms	115%	126%	116%

NOTE: MICROSOFT'S FISCAL YEAR ENDS JUNE 30.



Whether users can be weaned from the fat client is not only a matter of economics, but also one that involves deeply rooted habits that will make the transfer of applications to centrally managed servers hard to carry out. With dozens of applications and hundreds of files cluttering everybody's disk drives, the prospects of proceeding with a migration and then with a conversion into a new environment are not enticing.

Some businesses will encounter the compulsion to upgrade to Vista, no matter how much pain that means. Why? They will be ultimately driven to do so by the promise of greater security, as well as the upgrade of other Microsoft products that are only compatible with Vista. Moving

to Vista, though, requires the owner of a desktop or a laptop to upgrade the hardware on which it runs. It calls for the installation of a special chip to ensure security. According to a *Business Week* reviewer, it "drives me nuts." I ordered Vista Premium two weeks ago, and discovered that it could not run two of my most important applications, including Adobe Acrobat Professional.

Still, Microsoft counts that businesses and consumers will go ahead and upgrade, and it has based its revenue projections on Vista acceptance.

Yet another scenario: Other businesses will keep their existing XP or Windows 2000 operating systems, and avoid an upgrade to Vista. Instead, these businesses will use browsers to shift their e-mail, chat, instant messaging, virtual conferencing, encryption, audio, calendar, document management, backup storage, disaster recovery and security services into a service-based environment. The advantage of this approach is that it allows for piecemeal migration out of the Microsoft fold. It involves minimal risks because the migration can always be reversed.

Many of the elements of this approach are already shaping up. For instance, Google Apps (www.google.com/a/enterprise/), for an annual fee of \$50, makes available e-mail, calendar, spreadsheets, document management, a Web-page creator, blogs, instant messaging and audio. It is likely that additional features will become available.

So, will Microsoft lose its grip in the software marketplace? I do not think that Microsoft will disappear; there will be ample demand for its broad range of existing and future offerings. However, the company's commitment to Vista is the last gasp of a technology that is nearing the end of its dominance.

PHOTOGRAPH BY STEVE FREEMAN

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