

## **Back to bust?**

*Richard Waters*

*High technology for harder times*

To understand why the information technology industry is about to face its toughest period since the dotcom bust, consider the case of 2nd Wind Exercise Equipment, a US company that deals in unwanted treadmills and weight machines.

Tom Kelly, the Midwestern company's penny-pinching head of technology, was faced recently with a \$250,000 (£132,500, €167,600) bill to upgrade his company's e-mail system using Microsoft's Exchange software. To save money, he switched instead to Google's online e-mail application, which will cost him \$33,000 a year.

Now, with 2nd Wind expecting no growth at all this year in its revenues of \$100m, Mr Kelly says he is working on trimming the annual fees he pays to Google and Netsuite, another company whose online service he has used to replace traditional corporate IT. The target: to whittle away 25 of the 156 "seats", or licences, he buys from these companies.

This is the forgotten side of the technology world. Flashy gadgets such as Apple's iPhone and online consumer services such as Facebook may have captured the popular imagination and created new technology fortunes, but they are not the industry's main source of prosperity. Corporate IT budgets remain the big, boring engine that powers Silicon Valley and the rest of the technology industry. Now, with a pronounced economic slowdown in the US and the UK, the engine has started to sputter.

Companies account for 60-65 per cent of the end-market for technology, according to Richard Keiser, an analyst at Sanford C. Bernstein. Consumer technology represents only about 20-25 per cent (governments make up the rest).

Weakening corporate profits, a decline in new hires and instability in the financial markets have historically all been warning signs of lower capital spending ahead. Based on the usual lag, the turmoil in credit markets of the past year virtually guarantees that corporate spending on technology will fall over the next nine months or so, says Tobias Levkovich, chief US equity strategist at Citigroup. Technology demand, which has been growing recently at an annualised rate of 5-6 per cent, could decline by 10 per cent, he adds.

This prospect has already given stock market investors a severe case of whiplash. Investors in tech stocks are invariably drawn by the promise of superior growth. It was this that made the sector a stock market stand-out for much of last year, as a slowing US economy made growth stocks rarer. The industry's seemingly endless hype cycle feeds this optimism: there's always a new computing architecture about to go mainstream, a new must-have gadget, and a Next Big Thing.

This optimism is often justified given the big markets that new technologies can create, but investors frequently pay dearly for that potential, says Kevin Landis, chief investment officer of Firsthand Funds, a tech mutual fund group. "If it doesn't work, you get your neck broke," he says. That has been the fate of many tech investors this year, as tech stocks have fallen 19 per cent over the 12 months to the end of July, nearly double the rate of the overall market.

Meanwhile in Silicon Valley, where a hubristic optimism usually reigns supreme, the looming slowdown in tech demand has already led some old hands to pull out the more cautious game-plans that got them through the lean years of the early part of this decade. "I expect [the slowdown] to profoundly impact Silicon Valley internet, networking and technology companies over the next 12 to 18 months," says Jim Breyer, a partner in venture capital firm Accel Partners and director of Facebook.

Technology start-ups should already be tightening their cost controls and turning their attention to the nuts and bolts of operational efficiency, he adds. "There are still numerous

long-term growth opportunities across Silicon Valley, but operational execution is at a premium and much more of a differentiator than it has been in many years."

Other recent trends in the technology industry are compounding the impact of the worsening economic environment. Like Mr Kelly at 2nd Wind, many corporate buyers have come to count on these to help them continually reduce the overall size of their tech budgets.

The availability of choice, thanks in no small part to the rise of the internet and other standards-based technologies, has made it easier for buyers to shop around. When the 1990s tech boom reached its peak, corporate buyers were often tied to proprietary systems from single suppliers: that is no longer the case. As a result, a severe price deflation has taken hold in some corners of corporate technology.

Two of the most powerful recent technology trends that exemplify this change are the rise of "software as a service" and virtualisation. The first involves shifting corporate computing tasks to online services - using a company such as Google to provide an e-mail service, for example. "I don't have to buy servers, I don't have to buy storage, I don't have to do back-ups," says Jay Jones, chief administrative officer at Kana, a US software company which has moved much of its own computing to Net-suite, an online service provider.

Many of these service companies have priced their services at rock-bottom rates, relying on attracting large volumes of customers to spread their large fixed costs. "We're talking about products that are one tenth the cost of things that were hawked in the last recession," says Ross Mayfield, whose company SocialText, is trying to sell tools to corporate customers that emphasise the "Web 2.0" concepts of networking and collaboration.

Virtualisation, meanwhile, makes it possible to run several computing workloads on a single server, greatly reducing the number of machines that companies need to buy and maintain.

Trends like these have created new markets - and supported the rise of new companies - but they have also exposed those whose technologies or business models are not suited to the changing times. One of the most visible: Sun Microsystems, which soared in the dotcom boom as its proprietary servers became the mainstay of Web 1.0, but which has struggled to adapt to the latest generation of low-cost, standards-based machines and open-source software.

Even tech companies that have been better positioned to ride this wave, however, are starting to feel the pinch. Mr Jones at Kana, for example, says that his company decided earlier this year to take a more "pragmatic" approach to its tech budget, and has put off buying some new services from Netsuite.

Weaker corporate demand is not the only dark cloud looming over the tech industry. Consumer spending on tech, though far less significant overall and traditionally less prone to big dips, could also be hit in a wider downturn, says Mr Levkovich. Meanwhile, another big source of growth, the rapid rise in online advertising, has slowed notably this year in the face of a wider softening in consumer advertising.

Industry forecaster e Marketer predicts that after growing nearly 26 per cent in 2007, online advertising in the US, which accounts for the lion's share of the global market, will grow by only 17.5 per cent this year and 14.5 per cent in 2009, before growth eventually pushes back above 20 per cent in 2011.

For the Web 2.0 economy, this slow-down could not have come at a worse time. Many of the consumer web companies created since the dotcom crash have been avidly building an audience in the expectation that they will cash in through advertising.

The effect of the slowdown may be even sharper than the headline advertising numbers suggest. While advertising on search engines, for which an advertiser only pays when a potential customer clicks on their message, has held up this year, other types of advertising are flagging. "What we're seeing is that search still dominates - people are cutting back on

typical display ads," says Tim Schigel, chief executive of ShareThis, one of the many Web 2.0 services that is still in the early stages of hunting for a way to generate revenues.

While all of this points to more difficult times ahead for a wide range of tech companies, there is one important mitigating consideration: the downturn will not be anywhere near as painful as the one that hit the industry at the start of this decade.

The late-1990s tech bulge was more than a bubble in stock market valuations: it also reflected a massive bubble in tech spending, as internet euphoria and fear that many older IT systems would not be able to handle the date shift at the turn of the millennium combined to produce a boom in corporate spending.

"We don't have the overcapacity [in IT systems] we had going into the last downturn," says Jesse Greene, chief information officer at Eastman Kodak at the time and now an executive at IBM. Mr Keiser at Bernstein adds that capital spending in the US has been low by historical standards for the past four years, cushioning the blow from any fall now.

Other factors could also soften the blow this time around. While the US and the UK are slowing, demand in many countries -particularly in the emerging world - has risen strongly. After many years of investment, these markets are finally on the brink of becoming significant money-earners for some of the industry's biggest players. At its current growth rates, for example, IBM projects that what it calls "growth markets" will account for nearly 30 per cent of its revenues in five years' time.

While factors such as these may lessen the pain for some, there is no escaping the fact that, after five years of steady growth, tougher times lie ahead. In an echo of the dotcom bust, Silicon Valley is once again turning into a place of "haves" and "have-nots" - those start-ups that raised a comfortable cushion of cash from investors to see them through this more uncertain period and those that risk being left high and dry if business turns down.

Having raised \$15m in venture capital in March - something he admits would be a lot tougher now - Mr Schigel at Share This finds it hard not to gloat. "We love it - we think it's a really good time. Other companies will be running out of money and having a hard time raising more."

Web 2.0 start-ups that thought the good times would last and did not pay attention early enough to generating revenue are likely to suffer, adds Munjal Shah, chief executive of Like.com, a search engine for shoppers that matches items using visual clues. With his own company's revenues topping \$10m a year and a fresh round of venture capital in the bank, Mr Shah is now digging in.

"We're just putting our heads down, and hoping that in two or three years things will have re-emerged," he says. For many Web 2.0 hopefuls, that time will never come.

**Fonte: Financial Times, London, August 15 2008. Primeiro Caderno. p.7.**