

Dell and Hewlett-Packard

## Rebooting their systems

ROUND ROCK AND SAN FRANCISCO

Two computer giants prepare for a world no longer dominated by the PC

ROUND ROCK in Texas and Palo Alto in California are half a continent apart, but Dell and Hewlett-Packard (HP), two tech behemoths that, respectively, have their headquarters in those cities, have much in common. The two personal-computer makers boast impressive records as innovators—Dell in supply-chain management and HP in fundamental research—though each has lost some of its creative spark in recent years.

Both are battling to remain relevant in a rapidly changing information-technology landscape. Since Michael Dell returned in 2007 to the helm of the company he founded, he has overhauled its operations in a bid to revive its fortunes. Leo Apotheker, HP's boss since last year, is due to announce a new strategy for his company on March 14th. He has been hinting that he, too, will want to make significant changes at a firm that is still reeling from the traumatic departure of its previous boss, Mark Hurd, after a fuss over his relationship with a female marketing contractor.

Among the trends the two firms are grappling with is the growing popularity of tablet computers, smartphones and oth-

er devices that let consumers work and surf the web on the move. Apple's wildly popular iPad and other tablet offerings are starting to have an impact on low-end laptop sales. Gartner, a research firm, now reckons that global PC shipments will grow 10.5% this year, to 388m units, down from its previous forecast of almost 16%, partly because consumers are switching with such enthusiasm to tablets.

An even more important trend sweeping the industry is the growth of cloud computing. This lets companies store and process vast amounts of data in huge warehouses of servers run by third parties. The data can then be accessed over the internet whenever and wherever needed. New competitors such as Amazon and Rack-space Hosting have jumped into this market and are trying to persuade companies they would be better off renting capacity "in the cloud" than buying their own servers from the likes of Dell and HP. Of course, the cloud-services providers themselves buy lots of servers, mainly Dell and HP ones—but their huge size means they can drive a hard bargain on prices.

The emergence of the cloud is also

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partly responsible for a third trend, "verticalisation". This is the increasing tendency of makers of IT hardware, operating systems and applications to move into each other's area of business, because their corporate customers no longer want to shop around for all these different bits and splice them together themselves. They now want all-in-one solutions they can just take out of the box and switch on—and which are well integrated with their cloud-computing systems. Furthermore, for providers like Dell and HP, spreading vertically into other parts of the IT business also offers the best hope for growth in a market that is, overall, maturing.

This has created a free-for-all, with software firms swallowing up hardware firms and vice versa, HP and Dell now face stiff competition from the likes of Oracle, a software firm that bought Sun Microsystems, a hardware maker (Oracle hired Mr Hurd as its president after he left HP); and from Cisco, a maker of networking gear which has moved into the market for servers. This rapid restructuring of the industry is prompting the big IT firms to get out of low-margin businesses, as Japan's Hitachi did this week when it sold its disk-drive business to Western Digital for \$4.3 billion.

HP and Dell dominate the PC business, together with Taiwan's Acer (see left-hand chart, next page), so they are vulnerable to any shift away from such computers. Declarations of the death of the PC are premature, not least because demand from emerging markets is still growing. But Apple's stunning success with its iPad in rich

countries, and corporate customers' demands for IT firms to provide a full service, not just bulk quantities of desktops and servers, mean that neither company can afford to be complacent. The PC is not dead, but its importance henceforth is going to be significantly diminished.

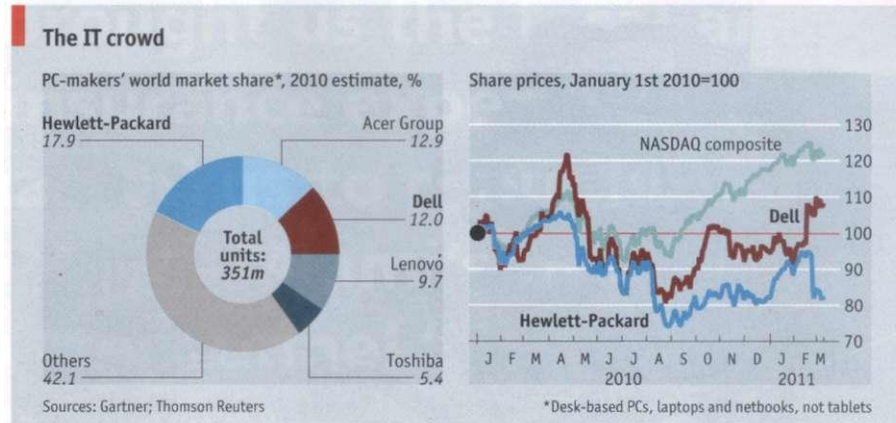
Dell is likely to fare a bit better than HP in this new world because its sales of PCs, which were 23% of the \$16 billion of revenue it earned in its latest quarter, are more heavily geared towards companies, and they will probably keep buying desktops for some time to come, HP, which counted on PC sales for 32% of its \$32 billion of revenue in its latest quarter, relies more heavily on purchases by consumers, whose heads are easily turned by new gadgets. However, both firms have plenty to worry about. "The computing market is fragmenting and devices are specialising," says George Shiffler of Gartner.

Dell's relative strength in the corporate market is becoming steadily less relevant, though. Companies are increasingly being swayed by what IT gear consumers (especially their own staff) are buying. So firms like HP and Dell need to come up with successful mass-market devices or risk seeing rivals' gadgets eat into their corporate sales. That is why they have recently unveiled tablets of their own. Dell's Streak 7 is based on Google's Android operating system, whereas HP's TouchPad runs on webOS, an operating system developed by Palm, a company that HP bought last year. In a recent Bloomberg interview Mr Apotheker said HP would start installing webOS in its pcs too, in addition to Windows, to create a broader platform for it.

This highlights a difference in philosophy between the two companies. Dell places huge emphasis on making products that are "open, capable and affordable". It is open to borrowing operating systems and other stuff from third parties and splicing them together itself, HP seems less willing—at least for now—to embrace such openness, preferring to use its in-house operating system. But if a successful ecosystem of "apps" evolves around Android, and tablets based on Google's operating system turn out to be as popular as Android-based smartphones, it may have to rethink its approach.

#### Splashing out

Although they are still paying plenty of attention to the PC and server markets, both Dell and HP have been working overtime to reduce their dependence on them—notably by splashing out on cloud-related businesses such as data-storage providers. In 2008 Dell paid \$1.4 billion for EqualLogic, or more than ten times its target's revenues. EqualLogic is now on track to deliver \$800m of annual revenue, justifying what appeared to be an extravagant purchase price. Last year, Dell added to its



cloud capabilities when it bought Boomi, which helps move software applications to the cloud, and InSite One, which offers cloud-based medical archiving.

But Dell missed out on its most ambitious target last year when HP waltzed off with 3PAR, another data-storage firm, after a ferocious bid battle, HP paid \$2.4 billion for the company, way above Dell's initial offer of \$1.5 billion. After the dust had settled, Mr Dell claimed HP had overpaid for 3PAR, which had revenues of just \$194m, whereas Dell had shown discipline. Yet Dell's final offer was a whopping \$2.35 billion, only a smidgen below its rival's. The firm got a consolation prize in December, when it bought Compellent Technologies, another data-storage firm, for \$960m.

#### Battles ahead

HP and Dell are destined to cross swords again as they go further down the verticalisation route and emulate IBM, a hardware maker which has built powerful software and services businesses with fat margins. Both firms have already made big acquisitions of service providers, with HP buying EDS in 2008 and, the next year, Dell buying Perot Systems (which, like EDS, was founded by Ross Perot, a former American presidential candidate). But they are bound to seek more such deals. Mr Apotheker, who used to run SAP, a German software giant, has made little secret of his desire to see HP expand in highly profitable software businesses. Last month HP bought Vertica, whose software helps firms analyse massive amounts of data fast, and there has been speculation that the company will consider more ambitious targets.

Dell's executives argue that the firm's diversification strategy is already bearing fruit. As evidence of this, Brian Gladden, its finance chief, points to the net profits of \$927m it earned in the three months to late January, almost three times the figure a year earlier. Admittedly, Dell benefited from low component costs and an uptick in new PC purchases by companies following the economic crisis. But its results also reflect the growth of its services businesses, which have higher margins. These

now account for 41% of the revenues of Dell's large-enterprise business, up from a third at the start of 2008.

HP'S recent record has been less impressive, which is reflected in the relative performance of its shares (see right-hand chart). In particular, whereas Dell and other firms such as IBM and Accenture have seen an increase in service-related sales recently, HP'S services revenue slipped 2% in its latest quarter. That partly reflects the fact that, although it is strong in outsourcing thanks to EDS, it does less well in higher-margin consulting—a weakness that Mr Apotheker ought to address.

HP'S boss will also need to decide whether the computers-to-calculators company, which has \$126 billion of annual revenues and 325,000 employees, can continue to dabble in so many areas, IBM, for instance, sold its PC business to Lenovo to focus on building its services activities, HP is unlikely to follow suit, considering that it is still the leader of the PC pack. Nor does it look set to jettison its printing business, which is having to adapt to an increasingly digital world. But if it is serious about beefing up its software and services activities, HP may have to make sacrifices elsewhere.

At the very least, Mr Apotheker will have to be clear when he speaks next week about the strategic logic that binds HP'S disparate activities together. And he will need to emphasise that he is prepared to undo some of the savage cost-cutting undertaken during Mr Hurd's reign, which dented the company's innovation engine and sapped its morale.

HP has already started to reinvest in its services business and in January it brought in several new board members, including Shumeet Banerji, the boss of Booz & Company, a consulting firm, and Dominique Senequier, the chief executive of AXA Private Equity, whose experience will be invaluable as it mulls new investment. Mr Apotheker likes to joke that since moving to Palo Alto from Europe to run HP he has learnt how to say "awesome" and "cool" like a true Californian. Now his task is to persuade customers and investors to use those same words about HP.