Cold killer application

The IT industry's customers are demanding more bang for fewer bucks

THE internet bubble and the subsequent accounting scandals had at least one merit: most people now know what chief information and chief financial officers do. In years to come, they will have to get used to a combination of both jobs: the CFO of IT.

Yet for now, hardly anybody has heard of such a thing. Marvin Balliet, whose official title at Merrill Lynch is "CFO, Global Technology & Services", says that even internally he has a lot of explaining to do. Simply put, his job is to make sure that the bank's annual IT budget of more than $2 billion is wisely spent. This means bridging two worlds: IT people on the one hand and business units on the other. The business people need to know what is technically possible, and the IT lot what is financially feasible.

Mr Balliet, and the growing number of managers with similar titles, are living proof that technology buyers too are on a steep learning curve. Companies that invested recklessly during the bubble years, and stopped when it burst, are at last getting ready to make more rational technology decisions. "Capitalism has made its entry into IT," says Chris Gardner, co-founder of iValue, a consultancy, and author of "The Valuation of Information Technology" (John Wiley, 2000).

Yet this is not just a predictable reaction to the boom-and-bust cycle. There is big money at stake. After almost 40 years of corporate IT, technology investment now often makes up more than half of capital spending. As John O'Neil, chief executive of Business Engine, a project-management firm, puts it: "IT can't hide any more."

Why should it have wanted to hide in the first place? Part of the reason is that IT projects are usually highly complex affairs that change constantly and tend to get out of control. "Traditionally, managing technology was magic, with quality and performance delivered only through incredible feats of highly skilled people," says Bobby Cameron, who cut his professional teeth in the days of punch cards and is now an analyst with Forrester Research.

Even today, IT departments, particularly in America, are often magic kingdoms full of technology wizards where basic business rules do not seem to apply. Investment decisions are generally guided by gut feeling and by the latest wheeze, rather than by the firm's overall business strategy and sound financial analysis.
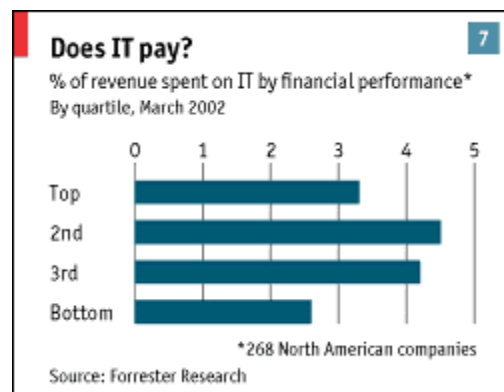
This is not just the fault of IT people who cherish their role as lone gurus, but also of their bosses who often abdicate responsibility to technologists and set no clear rules on how to make decisions. Business units, for their part, often start too many

projects and do not take responsibility for their success or failure. After all, in most companies, IT costs are not directly allocated to those who incur them.

Whose job?

This set-up creates permanent tension between the IT departments and the business units, which is why most CIOs do not survive in their jobs for more than two years. It is also the main reason why so many IT projects are over budget and late. And when they are up and running at last, they often turn out to be obsolete already; or they do not get used because they take no account of how employees actually do their work.

High-tech consultancies estimate that more than half of all IT projects go wrong. They may have an incentive for exaggerating the failure rate (the more problems there are, the greater the perceived need for consultancy), but there is no question that much IT investment is wasted. To complicate matters, firms appear to differ widely in how efficiently they invest in IT. Looking at the relationship between the technology budgets and the financial results of 268 American firms, Forrester recently found that those that spend the most on IT are not necessarily the best performers (see chart 7).

Does IT pay?
% of revenue spent on IT by financial performance*
By quartile, March 2002

*268 North American companies
Source: Forrester Research

Such statistics, along with their own unhappy experiences, have led many firms to rethink the way they spend their IT dollars. Using complex valuation methods, they try to work out beforehand whether IT projects are likely to return the investment. "They now have to compete for capital with other forms of spending," says Chris Lofgren, chief executive of Schneider National, an American trucking and logistics company.

The trend has already generated a cottage industry for tools to calculate return on investment (ROI) and similar financial measures. One of the most sophisticated of these is offered by iValue. This start-up assesses all possible effects of an IT project—from customer loyalty and likely adoption rates to the company's share price—by building complex economic simulations for its customers, which include Citibank's Global Securities arm and Baan, a software firm.

Other tools allow firms to budget for IT projects, keep track of them and allocate the costs. Business Engine operates a web-based service that brings together all the information about a project and allows everybody involved to collaborate. One of the reasons why in the past there was no real dialogue between the business and the IT sides was a lack of good data, explains Business Engine's Mr O'Neil.

The firm, which has its roots in the defence industry, also helps companies with a technique at the cutting edge of technology management: balancing IT projects in the same way that many investors optimise their portfolios. Like different types of

financial assets, IT projects can be classified according to risk and potential returns, allowing firms to pick a selection that fits their particular business strategy.

Peter Weill, a professor at MIT's Sloan School of Management, suggests that firms divide up their IT projects among four buckets representing different management objectives: cost reduction, better information, shared infrastructure and competitive advantage. Risk-averse and cost-conscious companies should have more projects in the first two buckets, whereas firms that put a premium on agility and are not afraid of failures should weight their portfolio in favour of the other two categories.

Who calls the shots?

All this fancy footwork, however, says Mr Weill, is not worth much without effective IT governance, by which he means rules that specify who makes the decisions and who is accountable. If his study of 265 companies in 23 countries is representative, most IT decisions—and not just those on geeky subjects such as picking the right IT infrastructure or architecture—are currently taken by technologists.

Some companies have already started to re-balance their governance. Merrill Lynch, for example, has put business people in charge of their technology portfolio. One of the things they have to do to get a project approved is to calculate its cost over five years, which they have a strong incentive to get right because these costs are charged back to a project's sponsors. They also have to re-assess every quarter whether it is still viable. Financial markets can change very rapidly, so a project begun in 2000 to increase the capacity to process Nasdaq trades, for example, no longer makes much sense today.

Schneider National goes even further. It has an IT steering committee that acts like a venture-capital firm, screening all proposed IT projects and picking those with the best business plans. But the firm's in-house entrepreneurs do more than produce good ROI numbers. They also point out the necessary changes in business processes and organisation to ensure that employees are willing to use the new IT system. "People can undermine any technology," says Mr Lofgren.

Given the chill in the industry, it is no wonder that companies everywhere are rationalising their existing IT infrastructure and keeping purse strings tight. General Motors, for instance, has reduced the number of its computer systems from 3,000 to 1,300 by consolidating applications and servers. Merrill Lynch has cut its annual IT budget from $3 billion to $2 billion, mostly through what UBS Warburg, another investment bank, calls "cold technologies"—the sort that do not create new revenues for IT firms and often actually reduce spending. One of these is Linux, the free open-source operating system. Another is web services, which allow companies to integrate existing gear cheaply, thus giving new life to old, "legacy", systems such as mainframes.

No wonder, either, that companies spend their IT dollars differently from the way they used to. Software vendors, in particular, can no longer depend on quick multi-million-dollar deals, but must work hard to get much smaller contracts. Customers want bite-sized projects with quick returns, and increasingly pay up only if they are successful.

The danger of this new buying pattern is that companies may miss out on important long-term "architectural" investments, says John Hagel, a noted IT consultant. If vendors want IT spending to pick up again, they will have to concentrate more of their efforts on selling to business people rather than technologists. Yet many firms are "still stuck in the old world", he complains.

Luckily for IT companies, there is one customer that is spending more now than it did during the internet bubble: government. And that is only one of the reasons why the IT industry is becoming more involved in Washington, DC.