

The Connected Business

Wednesday November 7 2012

www.ft.com/reports | twitter.com/ftreports

Relationships in the C-suite set to change

Technological developments are reshaping the way that boardrooms work, says *Paul Taylor*

Information technology now plays a critical role in most industries. And just as IT systems have come to pervade almost every aspect of business, so the relationship between the chief information officer and other senior – or C-suite – executives has also shifted.

These changes are being accelerated by trends such as cloud computing – the hosting of IT services on remote servers – and the influence on corporate life of devices aimed at consumers, a process known as consumerisation. Such innovations raise questions about how much IT knowledge chief executives and boards are expected to have and about the future of the chief information officer role itself.

As Cathy Bessant, chief information officer at Bank of America, says: “Technology began as a back office function, but in many ways it has become the actual products and services that financial institutions provide to our clients.

“That means the chief information officer has to know the business inside out, and company management has to be engaged to a certain degree in IT strategy.”

“It takes a balance. Technologists today must have technological capa-

bilities, but they must be able to adapt those capabilities to the needs of the business in order to deliver in the marketplace.”

Such use of IT goes beyond financial services. Peter Sondergaard, head of research at Gartner, the consultancy, says that as traditional businesses are transformed into digital businesses, chief executives will need to partner with what a new breed of executive. “By 2015, 20 per cent of organisations will have a digital business officer,” he says, adding that chief information officers who make the transition will play a strategic role in driving growth and innovation. Ron Tolido, chief technology officer for application services at IT and research company Capgemini Continental Europe, agrees: “No significant business change is nowadays thinkable without IT.”

But he also notes: “Our definition of IT knowledge is shifting as well, and [C-suite executives] should particularly understand how to apply IT for business change and to create value, rather than just understanding the technology aspects of it. This is one of the great qualities that consumerisation and the cloud are bringing.”

But he and other consultants admit



©Vind Hovland

that many companies and their boards are still trying to understand the relationships between IT and their core business operations – and between the chief executive, the chief information officer and the rest of the C-suite team.

“It is an ongoing concern for chief information officers that, despite their growing prominence in the boardroom, few are viewed as chief execu-

‘No significant business change is nowadays thinkable without IT’

Ron Tolido, Capgemini

tive officer successors, and it is fair to conclude that many current chief information officers have been recruited and assigned to... focus mainly on cost reduction and risk management,” says Mr Tolido. “It is not always realistic to assume such a job profile would also include strategy qualities and business leadership.”

There is evidence the chief information officer role is becoming less technical. According to Gartner, about 25 per cent of chief information officers now come from a non-technical background, and that number is growing.

Conversely, only about 4 per cent of chief executives were formerly chief information officers, according to a survey last year by Vanson Bourne, the research company, but this also is slowly changing.

Traditionally, candidates for the chief executive role have spent time in marketing, sales or finance and perhaps had a stint overseas. But a growing number of large US companies are recruiting IT professionals and Silicon Valley entrepreneurs to run non-IT functions, potentially putting them in line for the top job.

But how much do chief executives need to know about technology? “The amount of technology available in the marketplace today is virtually infinite, but the chief executive’s list of priorities for improving shareholder value is finite,” says Tom DeGarmo, global and US technology consulting leader at PwC.

“Chief executives shouldn’t bother trying to decode all the technology

Continued on Page 3

Inside »

MBA education
Business schools instil digital competencies in trainee executives
Page 2

Future employees
Generations to come will learn quickly
Page 2

Leadership
Danger of information overload poses threat to growth
Page 2

Career structure
Developing nature of senior IT job clears a path to the top table
Page 3

On FT.com »

Rise of the techie
From computer geek to executive
podcast.ft.com

Internal networks let employees make better use of their skills

Communications

Social media can benefit all aspects of business, writes *Sarah Murray*

Staff members at Lowe’s, the US DIY chain, give plenty of home-improvement tips to shoppers, but they are rarely called upon for advice on wildlife.

However, when a customer presented workers with a photograph of two snakes hanging out of a domestic vent and asked them what to do, modern media provided the answer.

Using the company’s internal social network, the employee found a colleague who could identify the snakes as harmless, explain that there was probably a bird’s nest in the vent and that the snakes were seeking food, and told the customer how to remove them safely.

“That all happened with a retail store employee leveraging the social network in the Lowe’s organisation to help someone who came into the store,” says Jeff Schick, vice-president of social software at IBM, whose clients include Lowe’s.

Instant access to an organisation’s expertise is among the many benefits of using corporate social technology. However, when it comes to using social media as a strategic tool that can enhance every aspect of business operations, companies must grapple not only with the technology, but also how to manage it.

Some are still struggling, according to the 2012 Hype Cycle for Social Software report from Gartner, the research firm. “While the advancement in the business use of social technologies reflects a significant step forward, there is still a great deal of confusion, hype and risk aversion, which holds many business executives and IT leaders back from pursuing social initiatives,” says the report.

Even so, adoption rates

are rising. In 2011, according to a McKinsey survey, corporate social networking increased its lead over technologies such as blogs and video sharing, with 72 per cent of respondents saying their companies used at least one social technology.

According to Gartner, the “consumerisation” of technology (the influence of consumer-originated technologies on businesses) is “in full force” when it comes to social media.

“We’re seeing everything from enterprise [corporate-specific] social networking to wikis, blogs and microblogs,” says Michael Chui, an expert on social media in companies at McKinsey, the research company.

Much of the value of social technology lies in its ability to make collaboration and communication easier, speeding up everything from the exchange of information on rogue snakes to product and service development.

When employees across an enterprise are connected, improvements in operational efficiencies can also be accelerated, whether that is fine tuning a process such as account openings in

a bank or transferring insurance claim processing from call-centre support to an online service.

“This is all about changing the process,” says Mr Schick. “You’re providing the ability for people to work with experts and have the right sort of information they need to make decisions.”

Social tools can also be applied to talent management. Rather than simply

‘You can measure demonstrable return on investment from social capabilities’

posting job ads, companies can now tap into sites such as LinkedIn to search for candidates, saving time and money.

“Social is a fantastic opportunity for recruitment and understanding where talent is,” says Peter Sieyes, vice-president of consumer marketing for Infosys, the Indian IT consultancy. “Before, you had to go out

and find an individual, but now you can understand that individual via their network. So the recruitment process has become much richer.”

As former head of digital marketing for Diageo, Mr Sieyes also sees opportunities for companies to use social networking to make better connections with consumers. “The old model of marketing was the funnel,” he says. “Reach as many prospects as possible and hope to convert them into a loyal consumer.”

Social media greatly expands this effect by converting active, influential social media users into loyal consumers and getting them to spread the word via their networks. “In the new world, the opportunity that social provides is to be more efficient in the spending of marketing dollars,” says Mr Sieyes.

But corporate social media tools need to be carefully managed. For a start, social interactions across an enterprise generate vast amounts of data. If properly analysed, companies can use this to capture valuable information, for example, or to identify sales representatives meeting or exceeding revenue targets.

“You can measure demonstrable return on investment from social capabilities but analytics and the ability to derive metrics are important factors behind that,” says Mr Schick.

Most importantly, however, reaping rewards from social enterprise software requires more than an understanding of the technology. Human and organisational factors are equally vital.


Mr Sieyes advocates a hub-and-spoke approach, with a group of social-savvy senior executives at its heart who have decision-making power, with the spokes being the different functions that connect to the rest of the business.

“That’s critical because, however you come at this, it has cross-functional implications,” Mr Sieyes says. “From day one, social needs to be thought of as an enterprise-wide strategy.”



Wide network: social media is a useful in-store tool

Getty



#go beyond





BLENDED METHODOLOGY

A second passes and the world around you is no longer the same. IE Business School’s Blended methodology: where combining work, personal life, and a master becomes possible. Our Blended methodology combines face-to-face periods on our Madrid campus and other international locations with interactive online learning through IE’s online campus, enabling you to follow courses wherever you are. Because you change, we change with you.

1st WORLDWIDE DISTANCE LEARNING

THE ECONOMIST February 2012

www.ie.edu/business-school/blended-masters | blended.admissions@ie.edu

The Connected Business

Schools look to instil digital competencies

MBAs *Adam Palin* finds institutions are turning to high-tech teaching methods

Business schools are increasingly turning to emerging technologies – even though they have traditionally been wary of the threat they posed.

The change has come about because institutions realise they can use technology to enhance delivery of degree courses, while also studying its effect on business.

This is not a sector renowned for taking early advantage of innovation.

"I remember one of my students introducing me to Twitter a few years ago," says Theodoros Evgeniou, academic director of the eLab at Insead.

"I think this is proof, frankly, that business schools have found it difficult at times to keep up."

Recent advances in teaching technology are being used by schools that had snubbed remote study, although distance learning using different techniques was established long before the IT revolution.

A pioneer of the online delivery of programmes is the University of North Carolina's Kenan-Flagler School, which launched its MBA@UNC degree in 2011.

While the programme has been designed to retain the rigour of its full-time equivalent, the technology allows students to work from anywhere.

As well as accessing interactive course content on demand, students connect face-to-face with faculty and peers via a virtual classroom. Weekly class attendance is compulsory, irrespective of location.

"There is, in fact, an intensity which does not always exist in person," says Doug Shackelford, the programme's associate dean.

"The tools allow us to give more attention to individual students with-

out holding up the whole class." He says traditional on-campus programmes could benefit from technology-enhanced interaction, which is increasingly used in the workplace.

A project at Imperial College Business School, London, embraces this. By embedding technology in its on-campus masters programmes, the school tries to create what it calls a "seamless learning" environment. An online learning portal, or hub, connects students with faculty, study materials and each other in a manner reflecting social media-style communication.

"Schools like ours have been held back by earlier virtual learning environments [that] have not encouraged successful student interaction," says David Lefevre, director of Imperial's Educational Technology Unit.

"By putting infrastructure in place that reflects how students interact, we can help them learn more and faster."

To encourage early adoption of flexible learning practices, Imperial provided 700 of its 1,100 students with Apple iPads at the start of the academic year. Though a significant investment, Mr Lefevre stresses that the iPads are an important tool to ensure access to a suitable mobile device.

Student involvement and feedback has been encouraging, according to Imperial faculty members.

"There is no question that we see enhanced student interaction," says Marco Mongiello, director of Imperial's highly ranked masters in management programme, now supported by the technology.

"Discussions are continuing beyond the classroom via the class forum... where we can keep an eye on conversations and redirect them where needed."

Dr Mongiello emphasises the capacity of the hub to facilitate feedback to



Online tutorial: weekly attendance is compulsory for UNC courses no matter where students live

students who, he adds, increasingly expect it.

One objective of flexible student engagement – and of the iPad investment – is to enable collaboration between student groups, as stressed in Imperial curricula.

"We are training them to be responsible managers," says Dr Mongiello. "Learning what tools are most effective for collaborative work is part of this process."

Some business schools have established leadership in "idea generation" at the nexus of IT and business.

One making efforts to keep pace with technological innovation is the MIT Sloan School of Management, in Massachusetts, which established the MIT Center for Digital Business in 1999. "For more than 10 years, we've partnered with industry and engaged with the most cutting-edge, perplexing problems that companies face," says David Verrill, the centre's executive director.

Individual Sloan faculty members are matched with sponsor companies,

which fund bespoke projects to find answers of economic value to them. Current sponsors include Google, Hewlett-Packard and McKinsey.

A representative of each company is hosted at Sloan to help collaboration during the research period, and then returns to their company to pass on knowledge.

"Technology transfer is a full-contact sport," jokes Mr Verrill. Companies benefit from academic insight, and the centre disseminates its findings in publications, while being sensitive to commercial confidentiality.

Project results contribute to the development of Sloan's technology-driven curricula. MBA students can elect to take research assistant positions and work with faculty on these projects.

Given the inseparability of IT from modern management, Mr Verrill says: "We need to supply our graduates with more than technological competencies if they are to succeed as tomorrow's managers."

Driving innovation should be the main objective

Systems management

A lack of focus on business goals can be a big problem for companies, writes *Jane Bird*

A typical IT department is like an old house that has been mended and extended so that the original design and infrastructure have almost disappeared, says Peter Chadha, chief executive of DrPet, an IT strategy consultancy.

Nobody remembers the location of gas pipes and electricity cables or how the plumbing works, making the building difficult to adapt to a new purpose.

"The house is so difficult to update and ill-suited to modern living, it is now easier to put a Portakabin in the garden than continue using it," says Mr Chadha.

Similarly, meeting a business's technology needs can often now be better accomplished using additional

products and services – such as smartphones, tablet computers, software as a service (SaaS) and outsourcing – rather than upgrading legacy IT systems.

For example, Mr Chadha helped to implement an iPad-based electronic reception logbook for The Office Group, the meetings and events organiser, using Google Apps with Google Scripting. "It gave reception a modern feel and meant anyone in the building could instantly know who was in," he says.

Business executives have seen how quickly apps can be implemented on their personal mobile devices, and they expect IT departments to be equally responsive to their business needs. But most applications need to be integrated with existing systems – a difficult, expensive, time-consuming process, as IT departments point out.

Executives often think of the IT department as blocking innovation, says Rook Singh, managing partner at Bangalore-based Wipro Consulting Services.

"This is a bit unfair, because IT departments have to worry about complexity, security, risk and support," says Mr Singh.

"Moreover, since 2009 they have been forced to focus on minimising costs, keeping the lights on rather than making a difference to the business."

This showed in a recent UK survey of 1,000 senior IT decision makers, commissioned by KCom, a services communications provider.

Some 72.5 per cent of respondents said they had no plans to invest in IT systems during the coming year, and 26 per cent cited an inability to demonstrate that IT will help meet strategic objectives and provide a return on investment as the reason for holding back.

This lack of focus on business objectives is crucial, says Stephen Pratt, managing partner of worldwide consulting at Infosys in California. "It is very common for the business to say it wants something done in two years and for the IT department to say it will take four," says Mr Pratt.



Consultant Peter Chadha

"Most executives say technology infrastructure is limiting their ability to achieve business goals," he adds. "It ought to be doing the opposite: driving the innovation that pushes the business faster than it's comfortable with."

Mr Pratt says IT should be split into two parts, infrastructure and innovation. Infrastructure should provide a basic service, as do the office's air conditioning and coffee machines.

Innovation should focus on ways to help the busi-

ness achieve its strategic goals. You need two distinct personalities to lead these functions, Mr Pratt says.

"People focused on innovation are more likely to look for progressive ways to deploy technology – they are more likely to embrace change than resist it."

Outsourcing applications, such as enterprise resource planning, finance and supply chain, is a good way to focus on innovation, says Brendan O'Rourke, chief information officer of Telefónica Digital, the telecommunications company, which outsources many applications to IT services consultancy Cognizant.

"An outsourcer can get on with the management, operation and maintenance of IT, and is best placed to optimise costs," says Mr O'Rourke. He involves Cognizant closely in developing applications. "This means we can hand over application maintenance to Cognizant at an early stage, and eventually send it offshore."

Mr Chadha cites applications that make it possible to implement customer rela-

tionship systems in "days or weeks rather than the months or years it might if organisations implemented it themselves".

Cloud-based SaaS systems are also easier to try out, says Mr Chadha. This frees time to concentrate on improving processes and training people.

Wipro's Mr Singh says: "IT needs to engage with the business and explain how difficult it is simply keeping the lights on."

But he notes that IT departments are recruiting more people who understand the business side. Banks, for example, are hiring regulatory experts who can take proactive steps to ensure compliance.

In retail, communications experts are joining IT teams. This helps them not only respond better to business needs but also lets them articulate the benefits and problems with technological developments more clearly. Such approaches will help teams communicate more effectively and so drive the business forward rather than hold it back.

Generations to come will learn quickly

Future employees

The young will adapt to technology faster, so it will be natural to use it in business, says *Charlotte Clarke*

The next generation of business leaders are often dubbed "digital natives". With technology becoming an integral part of their personal lives and education, they are adept and confident users. But the implementation of technology in the workplace is different.

One way companies can ensure the next generation is aware of this distinction is by setting an example.

Victoria Ransom, founder of Wildfire, a social media marketing company owned by Google, says: "If today's leaders are early adopters of technology and publicly embrace newer customer relationship tools such as social media, would-be executives will follow suit."

"I'd also recommend company sponsored tablets and smartphones, online workplace collaboration tools such as Google Apps, access to a company's social media accounts, and sending young business leaders to digital marketing workshops. All these things will help build technology and innovation into [a] company's DNA."

Alternatively, companies could give these so-called digital natives the authority to lead the way.

Allen Kupetz, executive in residence at Rollins College Crummer Graduate School of Business in the US, says: "The leaders of this generation [need] to understand that the rules have changed and let the next generation launch new social media marketing campaigns to have conversations with customers and prospective customers."

"The mobility that smartphones enable, coupled with collaborative social media that empowers consumers like never before, is something a lot of senior management doesn't seem able to understand or willing to accept."

Some consumer electronics groups, for example, are suffering not because the next generation does not know how to run the business, but because the current generation of managers in those companies failed to adapt to the next generation of consumers, adds Mr Kupetz, who also teaches technology management courses.

Victor Seidel, a member of faculty at the University of Oxford's Saïd Business School, agrees there will be a lot of beneficial bottom-up initiatives. "It is incumbent on managers to discover these new ways and spread them across their organisation," he says.

In-house social media could be used to this effect. France Telecom-Orange, for example, started using one called Plaza last year that has provided much more freedom and flexibility, says Charles-Henri Besseyre des Horts, associate professor of management and human resources at HEC Paris, the business school.

Some 35,000 employees of the mobile and broadband internet provider have now voluntarily connected and more than 1,500 communities created, he adds.

Professor Besseyre des Horts values this type of private network over public ones such as Facebook because it gives the organisation more control – they can design it how they see fit.

However, he advises against actually forbidding employees from connecting to the public ones. Anyone can connect via their 3G phone regardless so there is no point, he says. It is better to educate employees on standard practices.

There may also be a need for companies to tailor their recruitment process. Nick Barnville, director of MBA programmes at European School of Management and Technology in Berlin, believes companies should hire people who have had exposure to the management of innovation in an applied setting.

His MBA students, for example, gain exposure to emerging technologies through consulting projects at companies such as SumUp, a mobile payments provider. Three of the students – from France, Israel and Georgia – have since been headhunted to work for the company.

According to Mr Barnville, the fundamental criteria a company should look to cover are an understanding of the principles of managing a technology portfolio and the technology life-cycle; a knowledge

'Tomorrow's business executives are primed to adopt digital technology'

of how to explore and identify new applications in the market for an existing technology; and the ability to work with research and development teams to ensure input from the market is included in the development of relevant or applicable new products.

Mr Barnville says it is important future managers are trained to consider alternatives to extending the company's technology portfolio and understand the most likely organisational structures that are optimal for innovation.

And financial managers, in particular, should have an understanding of the terminology and know what questions to ask the experts when assessing their investment priorities, he adds.

But the learning curve for the next generation is unlikely to be a steep one.

Ms Ransom says: "Tomorrow's generation of business executives is already primed to adopt digital and social technology in the workplace."

"These are active social network users, with smartphones, tablets and laptops an arm's length away. It's not a leap for them to understand how hardware and software can improve business processes and customer relationships."

Risk of information overload that threatens business growth

Leadership challenges

Executives want more data but they cannot keep up with the quantity, says *Stephen Pritchard*

Technologists estimate 1.8 zettabytes of data were created worldwide, last year. That equates to 1.8tr gigabytes, according to IDC, the industry researchers.

The volume captured is believed to be doubling every two years. Although much of this is transient – such as TV signals or phone calls – 80 per cent is the responsibility of businesses,

and they analyse it to improve performance.

How to handle so-called "big data" is fast becoming a board-level discussion.

Bryan Cruickshank, global IT advisory leader at KPMG, the professional services group, says: "It tends to be that information is not reaching the right people, in the right format, at the right time."

IT is producing better tools to handle data and present information but struggling to keep pace with volumes. Both trends are outstripping developments in management techniques for more data-driven organisations.

"Technology is far outpacing managers' ability to use it to their business

advantage," warns Dr Vishal Sikka, chief technology officer at SAP, a business software company.

"Chief executives may say they have control of their businesses, but they need to seriously disrupt traditional metrics. They just don't work any more."

The challenge stems not just from the volumes. There is also timeliness, and whether leaders can act on the insights data offer.

Conventional business intelligence (BI) – including dashboards, display screens offering multiple sources of information, and reporting tools – focuses mostly on historical data. Bernard Lioutaud, founder of Business Objects (part of SAP) and one of the fathers of BI,

notably described the tool as a "rear view mirror".

Management can only do so much with reports about the past. They want more emphasis on real-time data feeds, predictive analytics, and modelling the outcomes of proposed decisions.

Doing this forces companies both to capture more data, and to look further afield for data sources, including social media and public data such as transport flows and weather.

This insight is improving decision making, especially in fields such as retailing. Whether it is helping companies at the strategic level is harder to judge.

"It is not the ability to capture data that is the bottleneck," says Andy

Rusnak, Americas enterprise intelligence leader at Ernst & Young, the professional services firm. "It is the human leader's ability to consume what is relevant. The business is demanding more concise information from IT."

John Michelsen, chief technology officer at CA Technologies, a software company, says senior managers are asking for more data, but their abilities to act on it are not keeping up.

"If they don't execute on those insights, they will drive themselves out of business," he cautions.

Mr Cruickshank agrees. "I don't think we'll get away from organisations keeping data because they can. Storage becomes

cheaper, and there are legal requirements to store data... but businesses have not learnt what their strategic, analytic requirements are," he says.

This puts IT departments, and chief information officers in a difficult spot. On one hand they are being asked to store more data,

'Information is not reaching the right people, in the right format, at the right time'

Bryan Cruickshank, KPMG

The Connected Business

Power to evolve is in information officers' hands

Executive potential Post-holders in many companies are looking at economic growth, not just keeping the lights on, reports *Paul Taylor*

There has been a dramatic change in the responsibilities of the head of corporate IT, or the chief information officer. It used to be about keeping company IT systems running. That is now only a small part of the job. In most companies it is now about much more.

Many chief information officers still have a background in technology – which some say they need to understand IT systems – or they may designate that nitty-gritty role to a chief technology officer. But a growing number of chief information officers says the most important qualifications for the job are to understand the business and the potential of IT to transform it and fuel innovation.

"Our job as the backbone of the company is not about what we produce, it's about how it supports the business," says Cathy Bessant, Bank of America's chief information officer. "I don't know how the chief information officer of the future, or even of today, could function without a keen understanding of the business."

"Technology and operating capability are not destinations unto themselves but exist to serve customers and an institution in its risk and financial management," she adds. "For chief information officers, the ability to make judgments and be influential across the firm has to start with business acumen."

Butch Leonardson, chief information officer of Boeing's Employee Credit Union (Becu), a not-for-profit financial institution, says people in the role today "have the tools to transform the experience of their customers, and the more they know about the businesses they are in, the more successful they're going to be."

"I think chief information officers have to use the language of the business, not the language of IT."

Others, such as David Giambruno, chief information officer at Revlon, the cosmetics company, try to manage IT as an almost transparent infrastructure that "enables the business units to do whatever they need to do". He says: "I make systems work for people, rather than people work for systems."

To reflect the fact the role has changed, some companies have even done away with the title of chief information officer. For example, Glenn Morgan is head of service transformation at British Airways.

"No C-level position has undergone as many changes as the chief information officer during the past few years," says Dermot O'Kelly, senior vice-president and UK country manager for Oracle, the software group.

"In today's business environment, chief information officers have a unique opportunity as everything is based on information," he says. "The rapid uptake of cloud computing [using computer services based on remote servers] and opportunities created by effectively analysing growing volumes of data will accelerate the evolution of chief information officers as they work to become key leaders and business-driven executives."

Mark McDonald, a vice-president at IT research group Gartner, says that, when asked, about half of chief information officers list supporting economic growth in their organisations as a priority. "The fundamental question for chief information officers over the past 10 years was 'how do I control costs and quality?' The fundamental question for them over the next decade will be 'how does



Business outcomes: Royal Caribbean Cruise Lines' chief information officer backed a commitment to get rid of queues

technology support growth?"

He advises them to identify specific business outcomes and then use technology to help make achieve them. For example, he says that when Royal Caribbean Cruise Lines set no customers standing in queues as an objective, the chief information officer made a commitment to use his resources "to make that happen".

But Mr McDonald warns that not all post holders understand the implications of this transformation. "If you are thinking about how big your budget is, if you are thinking about how many people you control or about all the projects you have going, and you are not thinking about the business benefits you can deliver, you are speaking the wrong language and are really telling the business 'there is no value in what I do so you may as well manage me as a cost'."

Chief information officers who want to have a greater strategic say, however, may be pushing at an open door. A recent Gartner survey of 175

board members found that, despite their pessimistic view of the economy, 64 per cent of respondents at companies with more than \$250m in annual revenues plan to increase their investments in IT. Just as importantly, the directors also said they want chief information officers to play a more transformative role in their companies, with 86 per cent saying they expect IT to make a greater strategic contribution over the next two years. Ultimately most IT experts agree that, despite the challenges, chief information officers have the power to determine their own futures.

"They must unlock the potential and opportunities they already have at their fingertips," says Mr O'Kelly. "It's widely recognised they spend up to 80 per cent of their IT budget simply keeping the lights on, which limits the amount they have to spend on innovation. The demands placed on businesses have changed, so why shouldn't the IT systems be charged with satisfying demand change also?"

C-suite relations set to change

Continued from Page 1

buzzwords," he says. "Rather, they should pull out their to-do lists for improving shareholder value over the next three years and, for each entry, ask themselves: can technology propel us toward this goal and to what extent? Sometimes technology will have a high impact. In others, maybe IT has a minimal role. Regardless, the chief executive has some homework to do if the answer is 'I don't know' to any of those items."

PwC says most chief executives fall into one of two categories. There are those who have never even considered the IT department other than as a business utility. "These chief executives would benefit immensely from looking at IT through the lens of business transformation," says Mr DeGarmo. The second type, he says, has witnessed at firsthand the power of IT to achieve the impossible. "The difference between the first and the second is often reflected in the company's bottom line."

PwC has surveyed 489 companies with annual revenues of more than \$500m to discover what separates the best from the rest.

The 2012 Digital IQ survey found 73 per cent of high performing businesses – companies that achieved at least 5 per cent revenue growth over the past year – said their chief executive was an active champion of IT. In the bottom performing group, 44 per cent of respondents made the same claim.

For many years most companies had the chief information officer reporting to the chief financial officer. "That trend is largely behind us and signals a shift in the chief executive's perception of IT," says Mr DeGarmo.

According to the Digital IQ survey, 60 per cent of

chief information officers now report to the chief executive.

"This is an indication the majority of business leaders understand the importance of IT as a strategic enabler," Mr DeGarmo says. But he warns this finding does not mean that chief information and chief finance officers have parted ways, or that chief executives are engaging with chief information officers as directly and frequently as they should.

Often, says Mr DeGarmo, the chief information officer is helping the chief financial officer harness the potential of data analytics to enhance the company's financial operations. "Like the chief finance officer, more chief executives are recognising the power of IT to transform the business. However, we still have a long way to go before sufficient numbers of chief executives are standing at the whiteboard alongside the chief information officer to scope out a plan for unleashing the full potential of technology."

Others, including McKinsey, the management consultancy, argue company boards also need to pay more attention to IT and its strategic role.

As Michael Bloch, Brad Brown, and Johnson Sikes of McKinsey said in a recent article: "Technology has become too embedded in the fabric of the business – and too critical for competitive performance – to be left to the IT department alone." They say many senior executive teams have been called upon to get involved in technology issues. "Boards are also beginning to take a strategic view of how technology trends are shaping their company's future. More boards than ever before are asking questions that ensure executives focus on the right issues."

Changing nature of IT job helps clear path to the top table

Career structure

Commercial acumen has taken the place of technical skills, writes *Maija Palmer*

Sarah Flannigan never pictured herself as a chief information officer. But the 38-year-old was attracted to the idea of working for the National Trust and saw in the IT department a business unit in need of a revamp that she could deliver.

One of the first things Simon Jenkins, chairman of the National Trust, said to her when she started was that he hated computers.

"That's fine," Ms Flannigan answered. "I'm not here to talk about computers. I am here to talk about delivering your business goals."

Ms Flannigan is one of the new, emerging breed of chief information officer who are more concerned with communication and business acumen than they are about bits and bytes.

She does not have a technical background despite being in charge of a team of 85 developers.

She says: "Perhaps five years ago a chief information officer would have started out as an IT developer, but I am not a techie."

"The leadership challenges are the same in any department. I have run teams of builders and I am not a builder," she adds.

A 2011 survey by Gartner, the technology research group, found that around a quarter of chief information officers globally have non-technical backgrounds.

"We don't have the formal data yet but we think the trend is growing," says Dave Aron, analyst at Gartner. "The demands of IT are more complicated."

"It is no longer about running payroll and customer-relationship management systems, it is about how the business exists in a digital environment. Strategic, visionary and interpersonal skills are what is needed."

Sarah Murray
Jane Bird

IT officer's practice at Russell Reynolds, the London-based recruitment agency, agrees interpersonal skills trump technical knowledge. "The chief information officer search is the one search that chief executives often do not want to do. They are worried they will be faced with techies they will not connect with."

Hence, Mr Cook says, candidates who have come from management consultancies or more business-oriented roles tend to do better in interviews.

Part of the reason chief information officers no longer need to be as technical is that technology has become more standardised, and less specialist. Its functions can be outsourced.

Some companies also have a separate role for a chief technical officer, a technical specialist who reports to the chief information officer, says Mr Cook.

Ms Flannigan says: "I need to know enough to challenge my team and

not be fobbed off. You have to have a nose for bullshit... I respect their knowledge and consult with them but when necessary I take a leadership role."

"What they get from me is clear direction."

The trend is both good and bad news for IT professionals. It may help to make IT a more appealing role for a wider pool of people, especially women.

Ms Flannigan says the growing importance of communications skills may be one reason why more women are going into the job. It is making the chief information officer role a more desirable one, and one with a clearer path to the top management roles.

Mr Cook says: "People used to joke that chief information officer meant career is over. If you said to a group of up-and-coming general managers would you rather spend time

in IT or sales, most would not go for

IT." But now it could be a step on the career ladder to becoming chief executive.

Mr Aron says: "What we are seeing in the more advanced companies is that [the chief information officer role] is part of the chief executive fast track for senior executives."

"One of the common laments of chief information officers has been: 'Why am I not on the board?' But this new kind of executive often is on the board."

On the other hand, taking on a broader, more strategic role, can be a difficult adjustment for older chief information officers who have come from more traditional backgrounds.

Mr Aron adds: "It is quite threatening for chief information officers towards the end of their careers."

"They need new relationships, they need to be working on influencing the organisation, a whole new set of skills."

The trick he says, will be to bring a much broader range of people into the IT profession at all levels.

Ms Flannigan says: "There is a dearth of good candidates out there."

"I recruit strategically at every level for strong communication as well as technical skills. I like to recruit style over substance."

She adds: "The technical skills have to be there, but the right can-do attitude will overcome any technical deficiencies."

She also pushes her often shy technicians out of their comfort zone, requiring them to spend at least five days each year at Trust properties, where they may find themselves washing up or polishing brass.

"I want my IT people to be completely blended into the organisation," she says.

However, Mr Cook says human resources departments can do more to make IT attractive. Policies of moving people in and out of the IT department would help. And chief information officers can be the best ambassadors.

Mr Cook says: "Chief information officers have to make it feel like more of a cool job."



Contributors >>

Paul Taylor
Editor,
The Connected Business

Maija Palmer
Technology Correspondent

Charlotte Clarke
Social Media Producer,
Business Education

Adam Palin
Business Education
Researcher

Sarah Murray
Jane Bird

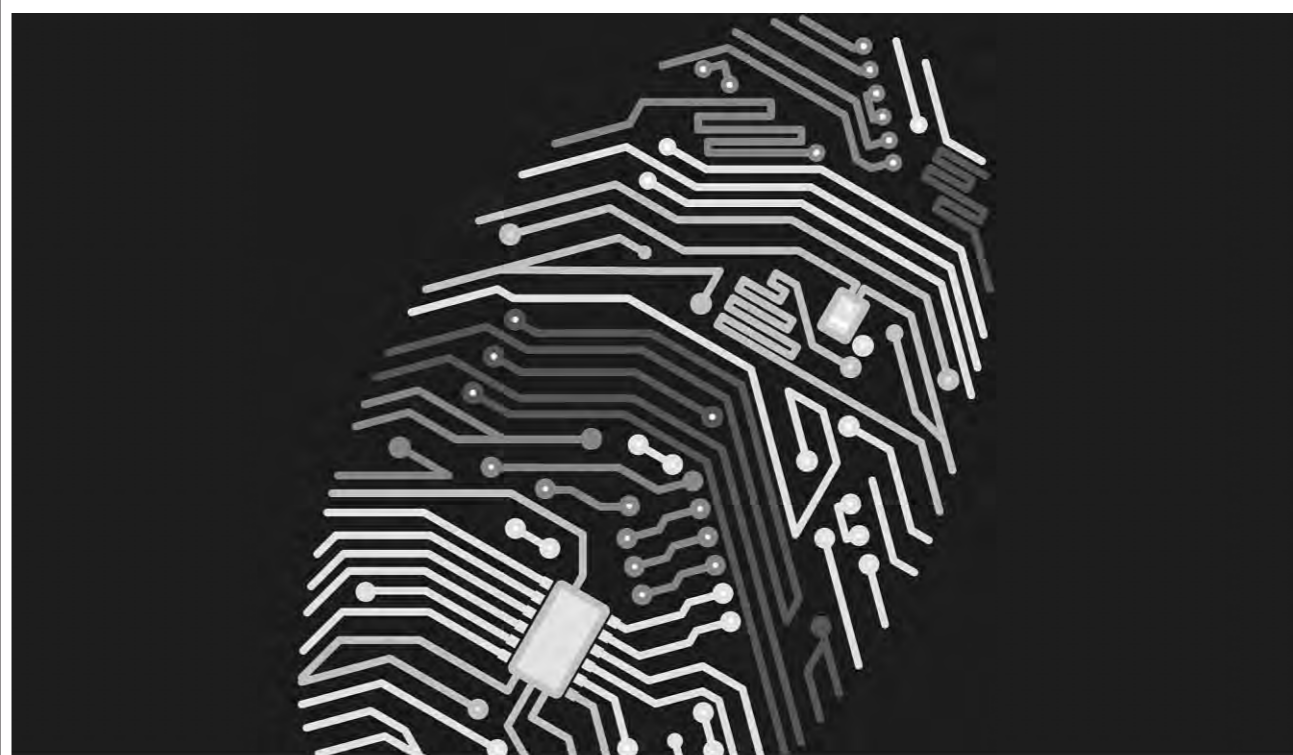
Stephen Pritchard
FT Contributors

Adam Jezard
Commissioning Editor

Steven Bird
Designer

Andy Mears
Picture Editor

For more details about advertising, contact:
James Aylott
Phone +44 (0)20 7873 3392
Email: james.aylott@ft.com.



The challenges of corporate security

This month's Business Technology Debates looks at how companies are faced with a baffling amount of IT regulation, particularly in terms of data protection. Maija Palmer, the FT's technology correspondent, discusses the incoming breach notification rules and how companies are coping with the additional burden of compliance.

The panel features:

Bryan Glick, editor-in-chief of Computer Weekly

Steve Durbin, global vice-president of the Information Security Forum

Simon McCalla, chief technology officer at Nominet

Watch the latest video now at ft.com/business-tech-debates

Supported by



We live in FINANCIAL TIMES®

data for:



Data exists to provide support. Helping people use it to beat the odds is what we do.

When used efficiently and effectively, data can improve lives. From helping first responders access the right data in an emergency, to providing caregivers accurate medical information to heal their patients, we help the brave improve their chances. If you're looking for a global partner with the expertise to create unique IT solutions and consulting for your business and customers, NTT DATA is for you. Get to know us at nttdata.com.

data for : the people

NTT DATA
Global IT Innovator