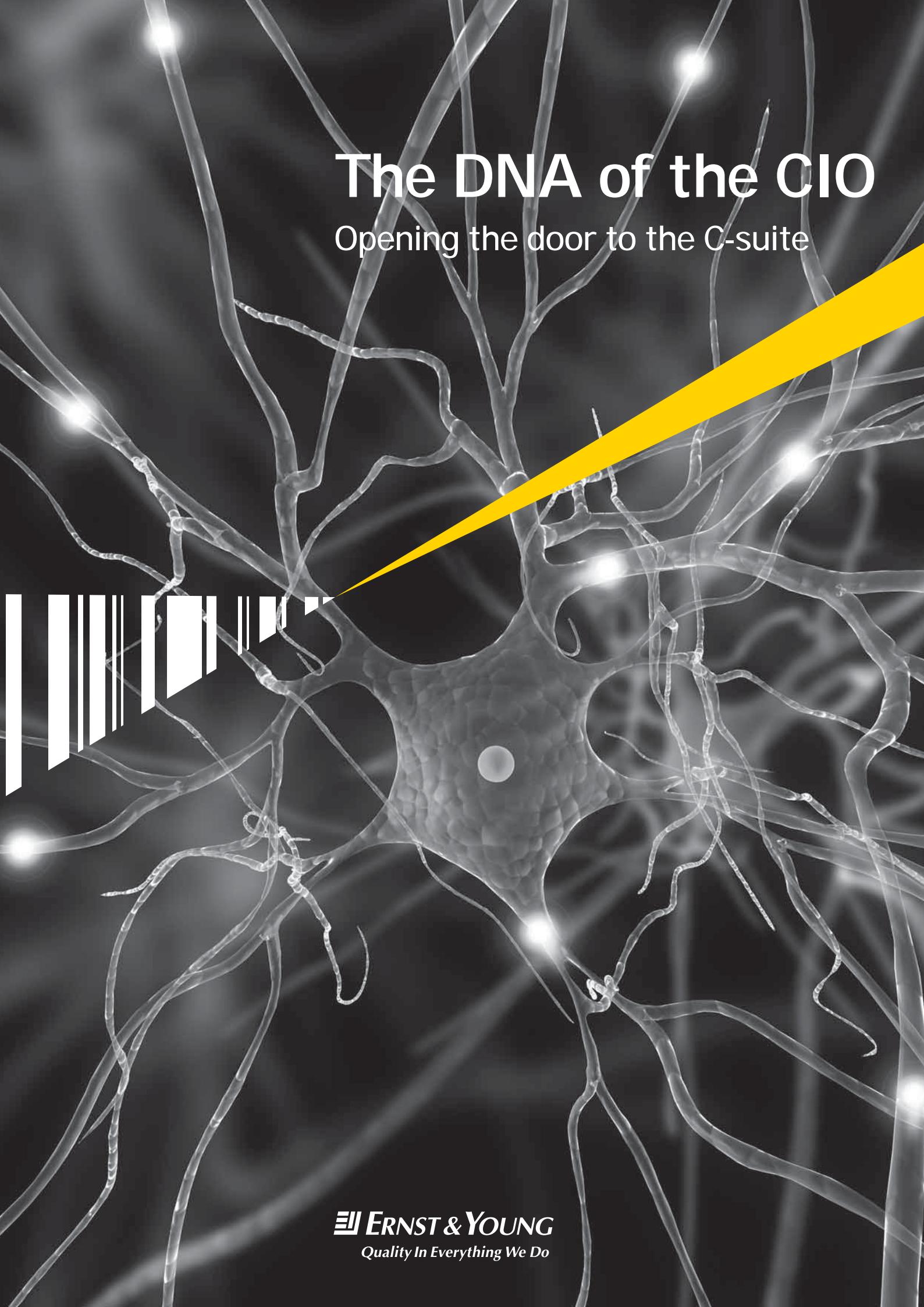


The DNA of the CIO

Opening the door to the C-suite





Our thanks go to the more than 300 CIOs, and 40 further C-suite members and executive experts, who participated in this study. In particular, we would like to thank those people who took part in a series of in-depth interviews in which they shared their insights and personal experience of the role (listed alphabetically by company name):

Petter Sundberg
CIO, Apotek Hjärtat

Manish Choksi
CIO and Chief of Corporate Strategy, Asian Paints

Daniel Hartert
CIO, Bayer Group, and Chairman of the Executive Board, Bayer Business Services

Philip Proost
CIO, Catlin

Bryan Glick
Editor-in-Chief, ComputerWeekly

Laurent Ferrari
Group CIO, Electricité de France (EDF)

Magnus Graf Lambsdorff
Partner, Egon Zehnder International

Roman Dudzik
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Thomas Pirlein
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CIO, Givaudan Suisse

Edward Capaldi
CIO, Gulf News

Anil Jaggia
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Isobel Thomson
CIO, Heinz

Vijay Sethi
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Volker Raupach
VP IT Automotive Experience Europe, Johnson Controls

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CIO, MAHLE International

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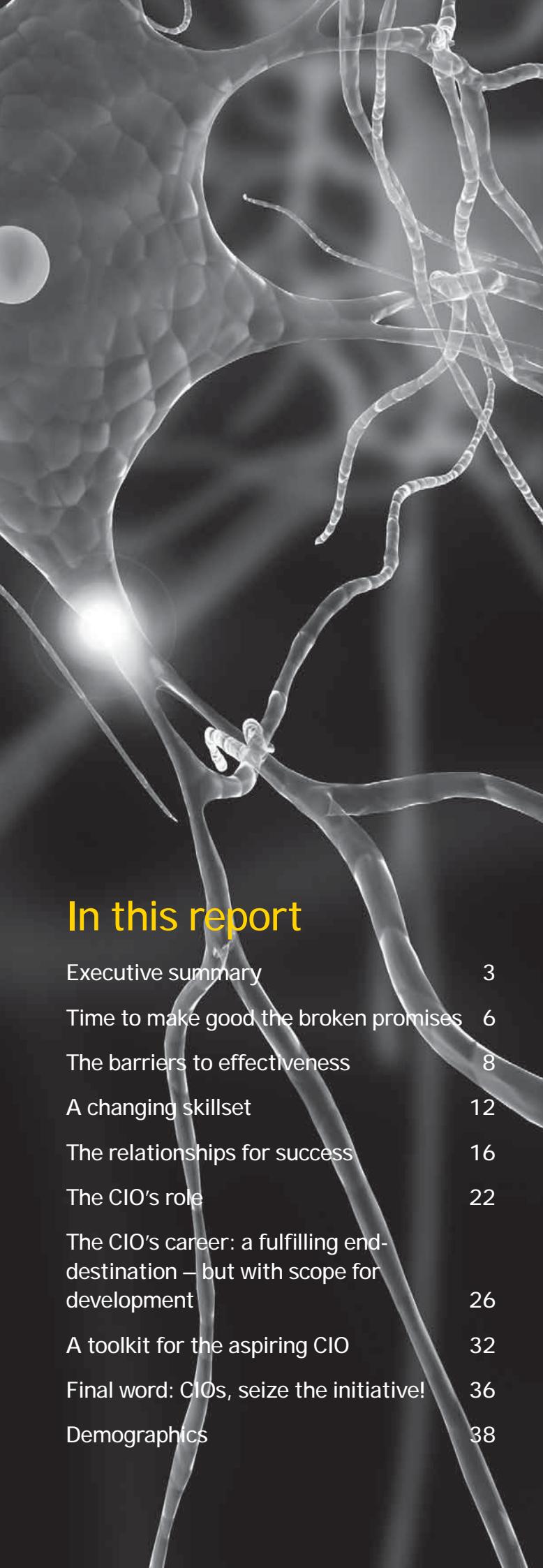
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The DNA of the CIO provides fresh insight into what it is to be a Chief Information Officer (CIO) today. The report is based on our survey of 301 senior IT professionals from Europe, North America, Asia, Latin America, Australia and South Africa. It also draws on in-depth interviews with a further 25 CIOs from these regions. A further 40 respondents from across the rest of the C-suite were polled to provide a perspective on how the CIO is perceived by the rest of the executive management team. The research and survey produced a breadth of insight and perspectives which allowed us to explore and analyze the distinctive qualities of this community of professionals.

The DNA of the CIO explores the expectations and aspirations of those in the job – and the skills and relationships that they need to master in order to succeed. It is one of a series of Ernst & Young thought leadership programs that seeks to understand the support, skills and capabilities required of C-level executives as their roles evolve. Already available is the *DNA of the CFO*, dealing with the character traits of today's senior finance professionals.



Dear fellow CIOs,



Welcome to *The DNA of the CIO*, an in-depth Ernst & Young research initiative that casts light on what it takes to be a leading chief information officer (CIO) today. This report provides insight into the person behind the title. It examines the skills, experiences, relationships and mindset that CIOs need in order to succeed in the role. I am proud that we are able to draw on the views of hundreds of CIOs, spanning every major industry and many regions, as well as many of their colleagues in the rest of the C-suite.

Some of the findings make for challenging reading. It is quite startling how few CIOs have taken steps to reinvent themselves within their business. Nevertheless, this research helps outline how CIOs can, and must, refresh some of the outdated perspectives that other executives still hold about their role. In too many companies, for example, the CIO continues to be perceived as the organizational “watchdog”: ready to jump in and highlight the risks of a new initiative, often without realizing the impact on their perception within the business.

For those of us facing such challenges – either willingly or due to forced changes as the market evolves – this research provides a useful toolkit. It considers which skills need to be shored up, how to improve our communication with the rest of the business, and what steps are needed to develop more meaningful relationships outside of IT, and outside of the business altogether.

Much of this is directly relevant to my role within Ernst & Young, where IT helps to manage a hugely complex business model: 152,000 mainly remote working employees are operating in a three-dimensional matrix of four service lines, four areas with 140 countries, in nearly 12,000 Profit & Loss Units (P&Ls), serving 15 sectors and more than 220,000 accounts and clients. It supports my underlying belief that IT can be a powerful force for innovation – and gives valuable tips on how to secure a mandate for such change.

This survey, however, is only a starting point. Ernst & Young plans to build on this initiative by developing an ongoing program that addresses the wide-ranging topics of interest to CIOs as they seek to develop themselves and their teams. I trust you will find this report as useful as I have.

Maureen Osborne, Global Chief Information Officer at Ernst & Young



Executive summary

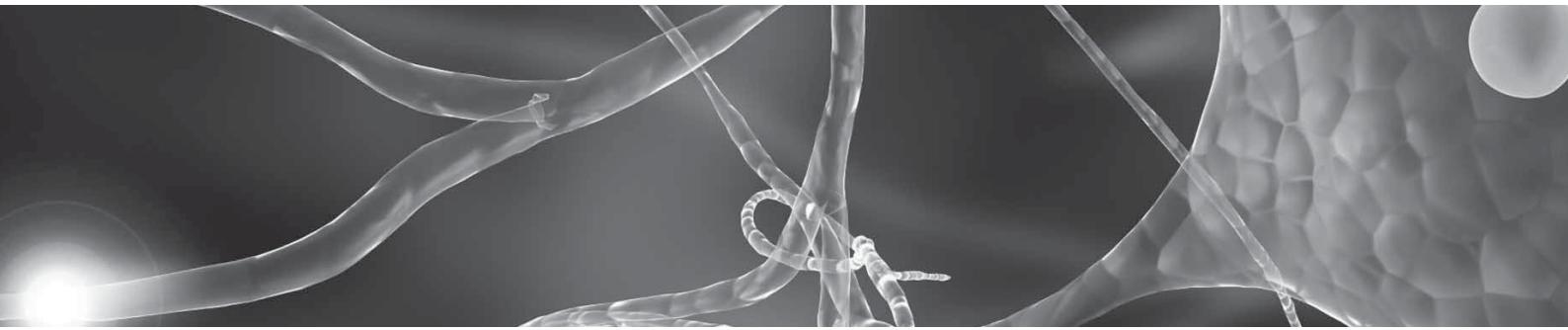
For many years, CIOs have been talking about becoming a true partner to the business and the executive management team. But, as The DNA of the CIO highlights, relatively few have broken out of their comfort zones to actually become one. The encouraging news is that many CIOs find the remit and responsibilities of their role hugely rewarding and enjoyable. Nevertheless, many more will need to test the limits of their comfort zones in order to become a relevant partner to the business in the years ahead.

Motivated to make a difference

CIOs see significant potential to add value to the business and are strongly motivated to make a difference. Many are keen to change the often weak or limited perception of IT within the business for the better. They want to move away from being seen as a mere support function, and toward a stronger role as an innovative and transformative part of the business. At a high level, underlying technological shifts, such as the move to the cloud and the ongoing consumerization of IT, provide a compelling opportunity to reshape the image of IT – and the role of the CIO. And there is no doubting their willingness and motivation to work hard on this: nearly 9 out of 10 CIOs surveyed for this report see this as a key reason why they have got to where they are today.¹

87% of CIOs believe they do a good job at helping the business to meet its challenges

¹ Whenever we refer to terms such as strong, deep, major or key, we refer to those respondents that chose 8, 9 or 10 on a scale from 1 to 10, where 1 is lowest and 10 is highest.



A wide-ranging remit

Sixty-four percent of the CIOs interviewed enjoy the scope and remit of their role. IT's influence today stretches into nearly every facet of the business, from HR and finance right through to the supply chain and product development. Nevertheless, for many, there is still much more opportunity to show influence. All CIOs are engaged in the execution aspects of the role, such as dealing with cost management and keeping the lights on – and many are involved in enablement – from proactively generating ideas through to acting as an information broker. However, the third facet of the role – development – is least often pursued by CIOs. From delivering transformation through to introducing business model innovation, this can be the most rewarding part of the job – but is only open to those who truly consider the rest of the C-suite as equal peers.

A fulfilling career in itself

CIOs clearly enjoy the depth of responsibilities of their role, making this a desirable career choice for most. About two-thirds are content to see their role as a final career destination. Many derive huge personal and professional satisfaction from the wide-ranging projects and initiatives with which they are involved. And while the others are not dissatisfied, they harbor ambitions for other executive roles within the business. One in ten, for example, have an eye on the top CEO job. And among the majority that are happy as a CIO, about half remain ambitious, hoping for a true invitation to the top table. But far too many lack a career development strategy that can support these aspirations. About one in three of those polled for this study indicated that they were strongly in need of advice on how best to develop their career. This is especially true for those with a largely technology-oriented background. For CIOs, whether aspirational or not, the underlying shifts in the technology sector will demand that they start to develop their career more systematically.

Not yet at the top table

Too few CIOs are currently regarded as true members of the executive management team. This limits their potential for change. Many CIOs nowadays appear to be C-level in title only, and this rank is not necessarily reflected in how they are perceived in the leadership team. Less than one in five hold a seat at the top table, for example. And less than half say they are deeply involved in strategic decision-making. Related to this is a perception that CIOs have a higher regard for the value that they bring to the business than that seen by their C-suite peers. For example, while 60% of CIOs strongly believe that they help enable fact-based decision-making in relation to corporate strategy, just 35% of their C-suite peers agree. But if CIOs are truly going to deliver on the potential remit of their role, and the potential of IT, they will need to work harder to finally secure their position at the top table.

Outdated views of the CIO persist

Nearly 4 in 10 CIOs cite overcoming a lack of support from the executive management team as one of the biggest barriers they face. In a worrying number of businesses, the perception of IT still appears to be shaped by its role as "helpdesk." Indeed, what is clear throughout this study is that the views of the rest of the leadership team often remain stuck in the past, when IT was simply a back-office function that operated the basement data center. Most leaders aim to keep any discussions with the CIO centered on IT budgets, with few seeing this as a chance to engage in a wider discussion about the value of technology. Far fewer also see the need for leadership from the CIO as part of a wider sense that the C-suite prefers a CIO who is simply stable, consistent and doesn't rock the boat much. CIOs acknowledge that it will be difficult to change such perceptions, but doing so will be a prerequisite for recasting the role of the CIO, and IT, within the business.

7.7

out of 10 is the average level of satisfaction with the range and remit of the CIO role

64%

of CIOs see their role as an end-destination in itself

17%

of CIOs have a position in the executive leadership team



Communication still a weakness

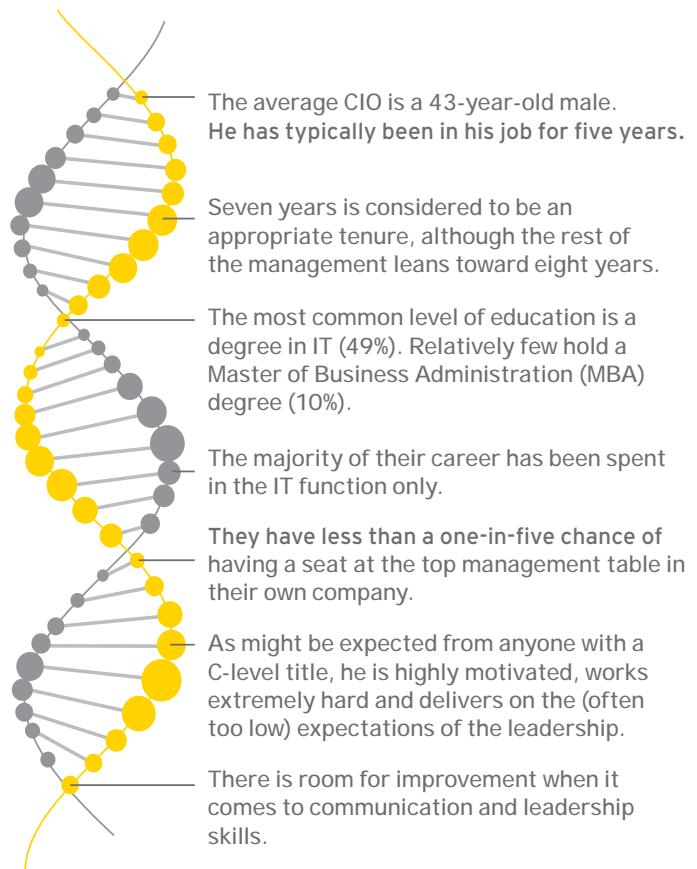
Although CIOs have acknowledged for well over a decade the need to develop their softer skills, not enough progress is being made. When asked to identify skills that are crucial for their role, 81% of CIOs cited leadership and 79% named communication and influencing skills. Both scores were well ahead of IT know-how. But despite this recognition, it is also clear that too many CIOs don't know what it takes to join the executive management team. One of the most important changes is still often forgotten: the need to discuss technology issues in terms of the business value they bring – whether costs saved, revenues gained, customer satisfaction achieved or similar – rather than in terms of uptime, gigahertz and terabytes. Too few CIOs bring strong financial literacy to their role. For instance, they need to understand how IT spend affects the net present value of the business, and consider costs in balance sheet terms versus profit and loss terms. For too long, CIOs have resisted efforts to improve these skills. But they must take action.

Relationships are key to success

A more senior role is inevitably more political in nature, making the need to win friends and influence people far more important. The transition to the modern CIO role requires many incumbents to put a far greater emphasis on relationship building and fostering better links with a wider range of stakeholders both within and outside the business. There is wide agreement that developing these skills is the number one thing that CIOs can do to bolster their chances of promotion, with nearly three-quarters considering it highly important. Nevertheless, few appear to relish the task. When asked about key priorities for the years ahead, internal politics ranks low for most respondents. More copies of Dale Carnegie's classic work² on winning friends and influencing people will doubtless be needed as CIOs work to secure the relationships they need.

Compared with many other C-suite roles, CIOs have wide-ranging opportunities to influence and effect change across the business. But few have taken action as yet. This will need to change, not least given the underlying shifts in the dynamics of the technology industry. The DNA of the CIO provides CIOs with a robust and balanced toolkit on what to change, who to influence and how to do it. But it will be up to CIOs themselves to find the courage to reinvent themselves.

The characteristics of today's typical CIO

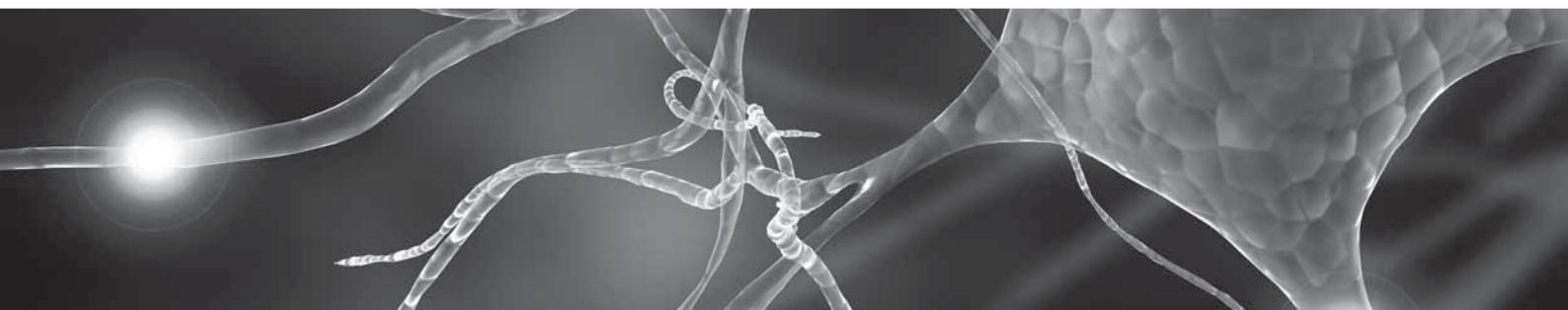


48% of the C-suite think the CIO does not get involved in discussing business performance and challenges

37% of CIOs strongly agree that they need to improve their communication skills

35% of CIOs prioritize internal politics more now than they used to

² How to win friends and influence people, by Dale Carnegie, was first published in 1936 and has sold more than 15 million copies since then.



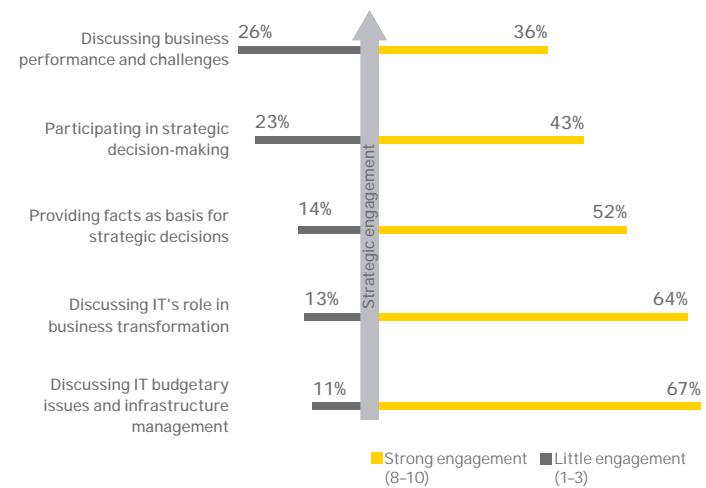
Time to make good the broken promises

The CIO has long been positioned as a senior executive on the cusp of becoming a truly strategic partner to the business. But as this research warns, the reality is that relatively few CIOs have so far managed to reinvent themselves sufficiently to actually become one. Less than one in five of the CIOs polled for this study have risen to become a full member of their company's executive management team. And when asked about the degree to which they participate in strategic decision-making, responses were lukewarm, with just 43% rating this as something that they are highly engaged in.

Indeed, in their interactions with the organization's leadership, today's CIOs are typically talking most often about IT budgets and IT's role in business transformations. They are far less likely to be discussing the overall performance of the business, or shaping the key decisions that influence it. Even when it comes to providing the data needed for strategic decisions – arguably the central premise for the "information" part of their title – many CIOs are reluctant in their reply. A notable minority (14%) even say that this is simply not something they are called upon to provide. Respondents originating from Eastern Europe especially lack this input. Still, CIOs' peers within the rest of the C-suite broadly agree, typically seeing even more limited scope for CIO engagement.

This over-arching picture suggests that little has changed since the late 1990s, when the role of the CIO shot to greater prominence. A 1999 Massachusetts Institute of Technology (MIT) report noted the rising potential for CIOs to become a more powerful member of the executive management team.³ But it also highlighted several issues preventing this, including a lack of credibility within the executive team and a troubled relationship with the CEO. Fast forward to 2012 and such discussions still persist. A recent study by CIO magazine noted that, while the strategic influence of the CIO has increased, less than one in four was considered as truly engaged in developing strategy. The findings from our research reflect a similar reality.⁴

Chart 1: extent to which CIOs actively engage with the executive management board on key issues



In short, despite nearly two decades of debate about the need for a truly strategic CIO role to emerge, this remains a work in progress. The central role that technology has played in nearly every industry and sector of business since then emphasizes just how big an opportunity CIOs have already missed. To help them steer the business, CEOs are in clear need of "co-drivers" who combine technology expertise with business skills. Executive recruiters readily agree, but such candidates are notable by their rarity.

To find out why, this research draws on the experiences of many individuals with the relevant experience on both sides of the fence. The clear message from many CIOs – old and young, in mature and rapid-growth markets and spanning a range of industries – is that the status quo will need to change. In order to stay relevant in a rapidly evolving technological landscape, CIOs will need to break out of their comfort zones within the data center. Those who don't, will run the risk of being further relegated down the corporate hierarchy, or sidelined altogether.

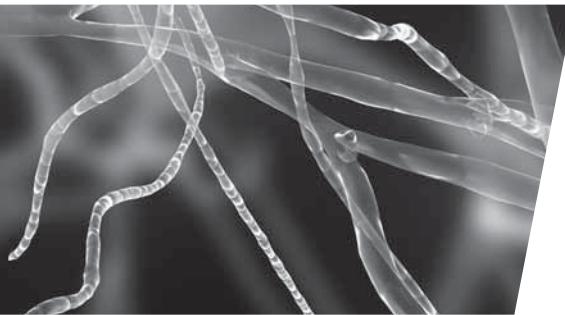
A brief history of change

To get a sense of why this might be, requires a step back, to gain a wider perspective of the transitions under way within the IT sector.

The role of what is now known as the CIO was born during the 1960s and 1970s, but it was only during the 1980s and 1990s that businesses started to digitize many of their processes. They began to demand that the CIO develop a greater understanding of these

³ The evolving role of the CIO, Jeanne W. Ross and David F. Feeny, MIT Sloan School of Management, August 1999.

⁴ 2012 State of the CIO Survey, CIO Magazine, January 2012.



CIOs need to stop ignoring the inevitable and start changing – before they are forced to.

processes. Along with this, a stronger focus on cost control meant CIOs often reported to the CFO. Since then, the internet era has taken hold. Companies of all types and sizes have gone online to share applications and data across the organization. And while much of this remains hosted on servers within the corporate walls, a new era is rapidly emerging. Companies are making a shift away from creating their computing resource in-house, toward the unassailable logic of treating this as a utility resource instead.

This isn't merely a shift in computing architecture; it is changing how companies use IT. Having previously digitized existing processes, many are now wholly automating processes, or simply removing them altogether. "We are on the threshold of a major change. A new set of technologies, such as various cloud solutions are going to be so compelling, pervasive and cost changing that CIOs will increasingly stop buying and building their own capital infrastructure for IT," argues Dave Ryerkerk, Global IT Advisory Leader at Ernst & Young.

Volker Raupach, VP IT Automotive Experience Europe of Johnson Controls, a major automotive supplier, says that this in turn is commoditizing many aspects of IT, steering the role of the CIO toward more of an information and process manager. Paolo Cavosi, EMEA IT Advisory Leader at Ernst & Young, says this commoditization process has been going on for a long time, but continues to shift into new areas of IT: "Take an IT service like helpdesk, for example, which used to be handled within IT, but is now nearly always handled externally. The same kind of process is happening across other aspects of IT, such as network management, storage, virtualization and so on. All this implies a new set of trends, with new skillset demands on the CIO."

From a different perspective, a far larger base of users are now adept at using consumer technology, which in turn is radically changing their expectations of corporate IT. "It's no longer the case that, just by your position as CIO, you constitute the monopoly of knowledge on IT. You now have to provide the added value," explains Christian Gosch, CIO of Erste Bank, a major CEE retail and corporate banking group. Many CIOs describe this consumerization of IT as an inflection point: a transition where the rest of the business starts to feel able to implement technical solutions, without the CIO. But few technology leaders have looked far enough ahead to see the real long-term transition happening. "To be successful," argues Ryerkerk, "they will need to be something of a visionary, to really understand how this is going to change operating and process models."

Time to wake up

These trends have deep implications for today's CIOs, including the risk of being sidelined if they fail to change. "I think a lot of CIOs might really be struggling to keep up," argues David Nichols, Americas IT Advisory Leader at Ernst & Young. In his view, "the CIOs that are going to survive are going to be the ones who are sitting at the table, helping to develop the strategy."

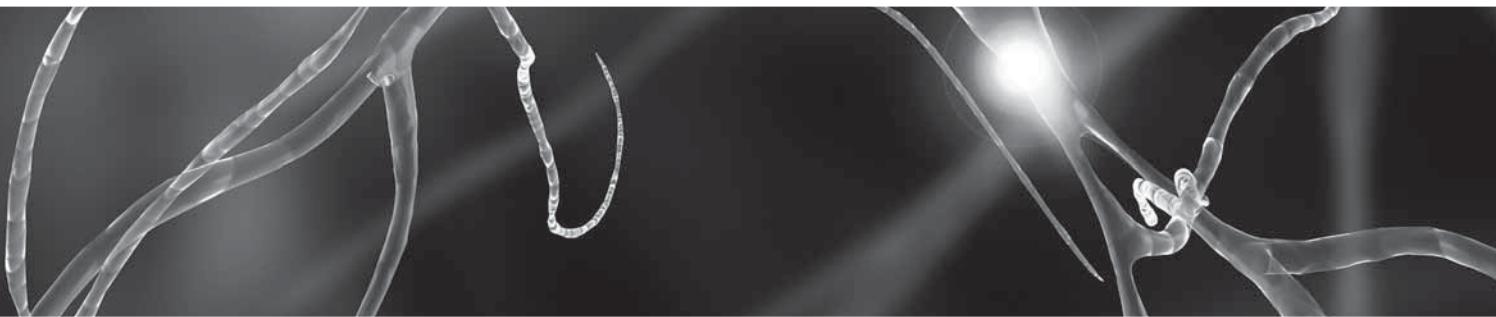
All this requires CIOs to stop ignoring the inevitable and start changing – before they are forced to. At a high level, they will need to pay less attention to the underlying technologies they love, while focusing more on developing their abilities as leaders, managers and influencers. And, while few feel like natural networkers, they will have to recognize that developing personal contacts is a crucial facet of the position they're in. This won't be easy. Few CIOs are automatically entrusted with the executive management team's backing and support. They will have to fight for it.

What the typical C-suite expects of the CIO

In interviews with a range of executives, a fairly consistent view of what the executive management team expects from the CIO emerges. They want:

- **The operational basics:** running reliable, cost-efficient IT systems
- **Tight security:** ensuring that IT risks and security are kept carefully under control
- **Technology consultancy:** providing an informed, business-centric view of how IT can support and enhance the business, both in the short and long term

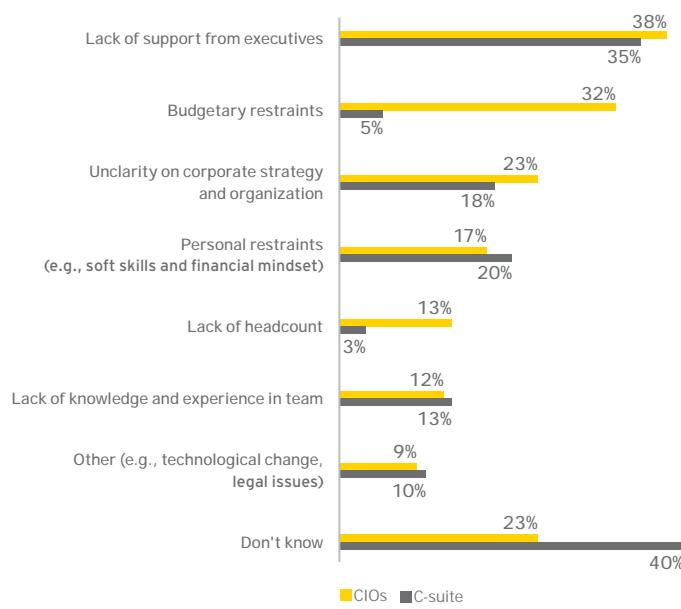
- **Change leadership:** being an effective partner in leading change management projects
- **Flexibility:** being able to fit in with the shifting needs and demands of the business
- **Don't rock the boat:** finding the courage to challenge the executive team's expectations. One of the implicit messages that emerges from this research is that the executive team often holds little expectation of the CIO. This is a risk, both for the CIO's role and for the business.



The barriers to effectiveness

Any CIO seeking to reshape their presence within the business will have several major hurdles to overcome. Topping the list is a lack of support from the executive management team. Nearly 4 in 10 (38%) respondents regard this as a major issue. This is particularly true within larger companies with revenues of over US\$1b, where nearly half the CIOs (46%) complain of this, compared with one in three (34%) of those in smaller firms. This is a fairly damning indictment, which underlines the low status of the CIO in far too many businesses today, given that they are meant to be a part of this team – in title, if not in practice.

Chart 2: barriers to effectiveness for CIO role



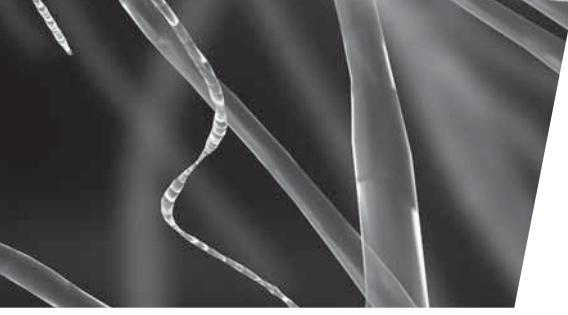
Why is this? In certain industries, of course, IT is more naturally a back-office or support-oriented function. But in many others, leadership teams often fail to grasp what IT could mean for the business and are often afraid to even ask. Historically, they don't get IT and are terrified of having someone who is going to blink at them in binary during meetings. As a result many tend to rely on the CFO to worry about IT issues.

For CIOs trying to influence the business, this is a problem. Many of those interviewed for this study noted the need to be fully represented at board level, in order to be able to properly communicate what IT can do. "You need to get access to the decision-makers in the company, at their level, and become their trusted advisor," argues Edward Capaldi, CIO of Gulf News, a media company in the United Arab Emirates.

Still scrapping for money

This lack of boardroom access feeds a second barrier: budgetary restraints. About one in three CIOs selected this as a major issue. Many businesses still regard IT as a cost center, or a function that can help disconnect the growth of a business' top-line revenue with its overall costs. But for CIOs trying to help transform the business, funding limitations can be a suffocating constraint. Here, though, there is a clear disconnect in views between them and their C-suite peers. Just 5% of other C-suite executives regard budget restraints as a barrier to the CIO's effectiveness, a sharp difference from the perception of CIOs.

This frustration shows through elsewhere, too. Thirty-six percent of CIOs strongly agree that, while the C-suite demands an entrepreneurial CIO, it restricts the CIO's ability to operate autonomously. Nearly one in four (23%) C-suite candidates agree. Jörg Wahlers, the CFO of Villeroy & Boch, a crockery and tableware manufacturer, acknowledges that the CIO as an individual needs to "be very strong in selling all the ideas and strategies to the key stakeholders."



"If you're just the guy who can make the BlackBerry work, why would they discuss strategy with you?"

Volker Raupach, VP IT Automotive Experience Europe,
Johnson Controls

C-suite – friend or foe?

How does the C-suite view the CIO today? Our survey of other executive level stakeholders reveals some surprisingly outdated opinions, which highlight the extent of the challenge CIOs face in changing their role in the business. These are:

- **Keep them in the back office.** Although building relationships stands out as one of the key tasks for the modern CIO, their C-suite peers don't yet fully appreciate this. Views are similar about the core CEO, CFO and COO links, but then fade away quickly. They're even less keen for CIOs to start talking to the media.
- **Just talk about budgets.** In terms of engagement with the executive team, the C-suite sees this as a chance to try to push down the CIO's budget, with few seeing it as a means of having a wider value discussion.
- **Don't change them too often.** The C-suite not only thinks that CIOs have little ambition, but that they're happy to stick around for the long term, at their beck and call. The majority think an appropriate tenure for a CIO is at least a decade.
- **Stay in the IT vacuum.** One of the outcomes of this study is the need for the CIO to develop their skills outside of the IT function. But most of the C-suite seems happy to let the CIO develop solely from within the depths of the data center.
- **Little need for leadership.** While it's clear that CIOs need to find new leadership and communication skills that they've largely failed to develop over the past decade, the C-suite is just looking for someone who can discuss their topics in a meaningful way. There's little desire for a true leader.
- **Still, the CIO is seen as a pretty solid chap.** The C-suite sees the CIO as a dependable guy. It's not necessarily that they don't trust him, but more that they simply don't expect much of him.

Overcoming the perception gap

CIOs need to overcome an often poor historical perception of their role. The past is no help here, given the checkered history of high-profile IT-led cost overruns and project failures. Concerns over this still linger in the boardroom. To give one example, CIOs consistently rate themselves more highly than their C-suite peers do, in terms of where they add value to the business.

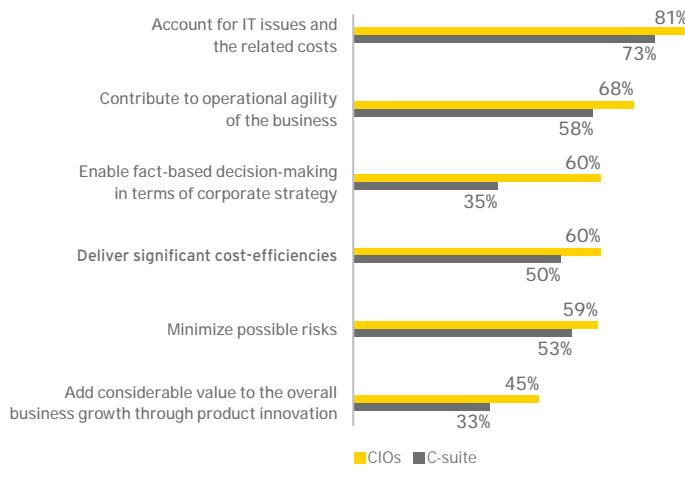
Furthermore, this perception gap doesn't appear to be shifting. Just under half (48%) of the C-suite executives think the standing of CIOs has improved in recent years. Kari Keskivari, CIO of Neste Oil, a Finnish oil refining and marketing company, says a "perception gap" exists outside of the IT function. "There's still an assumption from the business side that we simply deal with IT technology issues."

This is noticeable across a range of issues, from product innovation through to helping deliver on the operational agility of the company. But perhaps the starker example is the degree to which CIOs help enable fact-based decision-making when setting corporate strategy. Sixty percent think they add strong value here, but just 35% of their C-suite peers agree. This was the most striking disconnect, but the perception of the C-suite consistently lags behind that of the CIO. "I think the contribution is often undervalued," admits Jörg Wahlers of Villeroy & Boch.

But CIOs are also guilty of focusing the majority of their attention on specific areas, such as running an agile, low-risk IT operation within a clear budget. This is expected of them and is an important function. But it affords little opportunity to change perceptions of their role within the rest of the business. "If you're just the guy who can make the BlackBerry work, why would they discuss strategy with you?" asks Johnson Controls' Volker Raupach.



Chart 3: areas where CIOs add value to a company



One of the challenges that many CIOs face is that, when IT runs smoothly, this is considered to be the status quo, whereas any dips from that performance are an immediate negative. This leaves little in the way for a positive upside. "If your IT systems are fine in the morning then this is just okay, because it's what users are expecting. But anything that deviates from that is terrible. So it's a negative scale that effectively goes from really, really bad to just okay," says Benoit Laclau, Partner within Ernst & Young's IT Advisory practice in the UK and former CIO.

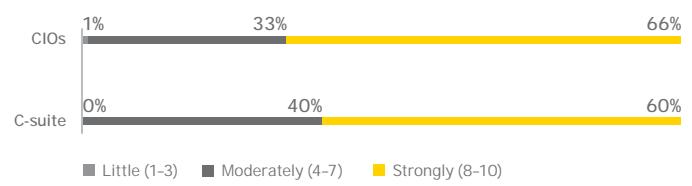
This is not to suggest that business considers IT a failure. In many companies, the IT operation increasingly provides a slick, trouble-free service to the business. But higher-order issues – relating to the role of the CIO in providing business insights or delivering innovation – are seen as weaker, both by CIOs and their peers. This extends to other areas, such as contributing to business strategy and bolstering marketing and sales.

On the surface of it, this perceived lack of value is surprising. Few people dispute that technology has made a significant impact and contributes substantial business value. A simple example might come from expanding customer sales channels – from making it easier for passengers to book and buy a seat on an airline, through to ordering groceries and goods online, or even streamlining payments within a store. But in many companies, this recognition does not appear to filter through.

Various answers explain why this might be. Topping the list is what can be dubbed "helpdesk syndrome" – where the CIO is still categorized by the rest of the leadership team as the first point of contact for IT support. Yes, this is a core component of what IT typically provides, but part of what separates true CIOs from mere IT managers is their ability to delegate operational concerns effectively, while dedicating their time to giving strategic advice and input to the business.

Vijay Sethi, CIO of Hero MotoCorp, a major global motorcycle manufacturer, says many IT leaders continue to perpetuate this stereotype. "There are two types of CIOs: a genuine CIO and one who is more IT manager than strategic thinker, but has been given the title of CIO or Head of IT. This second type is typically more comfortable in a data center or IT environment. Sadly, a large number are still like that, which is why they're not a true member of the leadership team."

Chart 4: extent to which CIOs help the business overcome its challenges



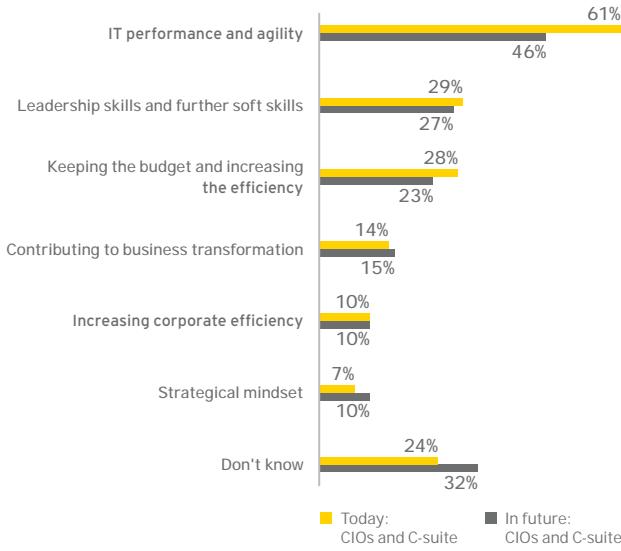
New measures of success needed

One of the implications of a changing role is that new measures and metrics will emerge to define it. But a sense of uncertainty prevails around what these might be. There is broad agreement that the traditional measures of IT performance – such as system availability and uptime – are swiftly declining in importance and will continue doing so. Adrien Gonckel, CIO of Givaudan, a Swiss-headquartered fragrance and flavor manufacturer, argues that this kind of era is over.

Such views are spreading. Although 61% of respondents say this is one of the top three issues they are measured on today, just 46% think it will remain relevant in future. But views vary widely on what will replace this. Most simply don't know. "Many companies don't have a proper way to evaluate today's newer, more evolved CIO," says Ernst & Young's David Nichols.



Chart 5: key measures for CIOs (current and future)



At Givaudan, any discussion about metrics has fundamentally changed. Today, the evaluation focuses on what insights about the business the CIO can deliver, such as why customers bought a certain brand of perfume or shampoo. This observation gets to the heart of one of the transitions under way in the role of the CIO, toward that of being an information broker to the business.

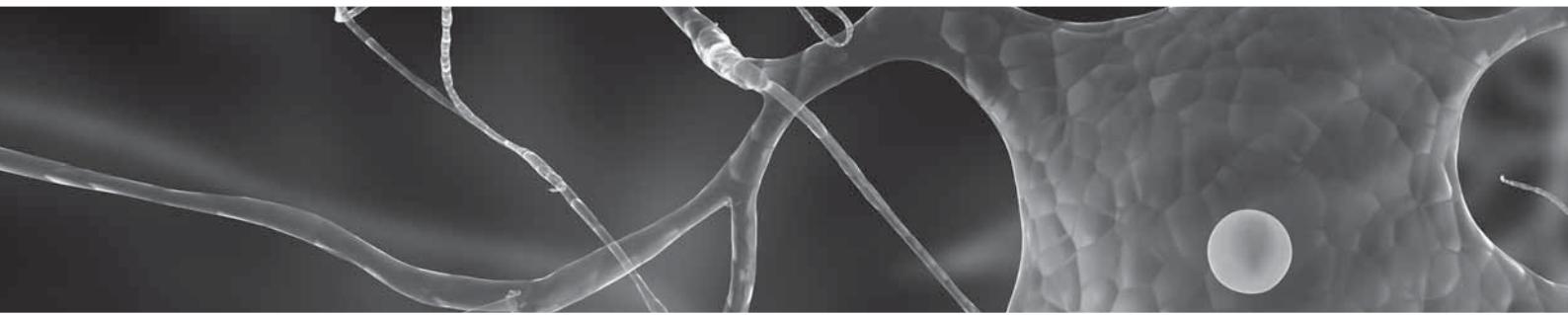
But, in many companies, the CIO and the leadership team have yet to start shifting their thinking. "When measuring CIOs, many firms basically just say, 'I think we're spending too much on technology, so therefore are you reducing costs?'" says Michel Savoie, EMEA IT Transformation Leader within Ernst & Young's IT Advisory practice. "It's at its most basic level, where executives in the management committee aren't even asking to measure business outcomes."

The billion-dollar business CIO

How does the role of CIO change in the world's largest companies, those with revenues of at least US\$1b? Our survey highlighted some subtle, but important, distinctions:

- CIOs in large firms typically have a greater recognition of the need for stronger front-office relationships. They also see more clearly how such relationships can boost their career.
- In terms of barriers, they are far more likely to flag up a lack of C-suite support, while their small business peers typically point to budget restraints.
- CIOs at bigger businesses are more aware of the need to gain exposure to other parts of the business, to communicate business value and to deliver on major transformation programs. They are also more likely to see the value of having experience in another business.
- They are, unsurprisingly, usually more ambitious. As such, they are more attuned to the need for leadership in their role, while smaller company CIOs still put more emphasis on their technology know-how.
- CIOs at large firms are far more likely to recognize the value of a business degree in broadening their skills.





A changing skillset

"In the past, it used to be enough to be just the techie guy," says Villeroy & Boch CFO Jörg Wahlers. "Today, you need to be a good business consultant to the CEO, the COO and even the CFO," he says. This view gets to the heart of the change in skillset that CIOs are finding: balancing their technology expertise with softer skills. Getting this right is an intrinsic part of being truly regarded as part of the C-suite: "When you're at the C-level, it's very little to do with knowledge of a given discipline; it's all about being a leader," argues Gulf News' Edward Capaldi.

This is not a new insight for CIOs. The demand for such skills has long been recognized. But what this research uncovers is that few have yet developed the necessary skills. Many CIOs directly acknowledge that this is the case. When asked to select where personal improvements need to be prioritized, the attributes communicating and influencing skills (42%) top the list, followed by leadership skills (37%). However, a difficult truth is that CIOs with a more business-oriented background tend to find such skills easier to grasp than do their more technical peers. This showcases one of the key skills dilemmas facing the CIO today: the balance between technological prowess and mastery of softer skills.

On the one hand, CIOs without a technology background admit to the challenge of having to assess and evaluate technology issues that are often complex. "I have seen CIOs with a finance background who have never been in a data center, but they then need to give an evaluation on what cloud can do for the business. Here it gets tricky," warns Peter Lenz, CIO of ÖBB, the Austrian federal railway operator.

Thomas Schott, the CIO of REHAU Group, a specialist global polymer company, agrees. "We have many people in our company who have a good understanding of the business, but have no idea what it means to establish an IT process that works stably in 60 countries and that is integrated with all other IT systems," he says. There is also the related challenge of securing the respect of the team within the IT function, which has long been used to evaluate CIOs on the basis of their technical credentials.





"Today, you need to be a good business consultant to the CEO, the COO and even the CFO."

Jörg Wahlers, CFO, Villeroy & Boch

But on the other hand, there is a general agreement that CIOs will never master all the technical issues. So it is a clear priority for them to develop a strong team with the necessary technical competencies. Ernst & Young's Paolo Cavosi likens the CIO's role to that of an orchestra conductor, coordinating a team of varying specialists. "The CIO doesn't need to be able to play all of the individual instruments, but must be capable of leading them. They need to create the right team that can master all of the individual components required, especially within larger companies," he says. And as for the challenge of non-technical CIOs trying to pick up the IT reins within an organization, he warns that such companies are often taking a conscious decision to try to re-engineer the IT function. "If the CEO of a large company appoints a "business CIO" to run IT, it's usually because he or she wants to make a major change in the mindset of that function."

Taking the lead

Regardless of the depth of a CIO's technical skills, there is widespread agreement among those polled for this study that IT know-how is largely secondary to other management attributes. Both CIOs and C-suite executives ranked a range of soft skills – leadership, particularly communication and influencing, and also change management, and analytical and organizational skills – as the primary attributes needed for success. These were all ahead of technology knowledge.

As a business relies more and more on IT, CIOs need to be able to stand up and fight for their beliefs about the direction that the business needs to take. At Électricité de France (EDF), for example, Group CIO Laurent Ferrari is responsible for selling the value of the company's €2b annual IT budget to the company's board and executive management committee, many of whom would prefer to see that figure shrink. "They need to understand what IT means for their business, including what the main priorities are and what IT is about. But they have little time to hear your arguments," he says. For CIOs who fail to lead, such discussions quickly become focused on IT's budgets, rather than its contribution.

Daniel Hartert, CIO of the US\$36b Bayer Group and Chairman of the Executive Board of Bayer Business Services, argues that the baseline competencies – good data, strong global networks, and so on – are just a starting point. "Yes, you need to have these, but they are mostly invisible to the business. The whole perception of the performance of the IT organization is linked to what the perception of the CIO is within top management," he says.

Chart 6: key attributes for CIO role



(Percentage of respondents who have chosen 8, 9 or 10 on a scale from 1 = not needed at all to 10 = absolutely needed)

This is an especially important transition for CIOs who've moved up from the role of IT manager. "As a CIO, you have to align your priorities to business priorities. Once the letter 'C' is part of your designation, you are part of management team (and not just IT team) – you have to make your technology hat secondary and management hat primary and look at opportunities and challenges from business point and not just technology point," says Hero MotoCorp's Vijay Sethi. Furthermore, as Paolo Cavosi says, such change to the CIO skillset is not solely aimed at delivering more effectively on the job, but also for helping to boost the overall career trajectory of the CIO (see "The CIO's career" on page 26).



Hello, does anyone here speak business?

Another common shortcoming among today's CIOs is the failure to talk in the language of business. And getting this wrong is often the quickest way to lose an invitation to the top table. "It's boring for an executive to explain to a CIO how their business models work. Know that beforehand, or they won't invite you to join in," says Thomas Pirlein, CIO of Esprit, the global fashion brand.

Anil Jaggia, the CIO of HDFC Bank, India's second largest private Bank in terms of asset book size, says it is especially crucial to be able to describe IT issues in a way that the rest of the business can relate to. He gives an example of justifying an upgrade of obsolete infrastructure. "You could just position it as obsolete, and there's nothing wrong with that. However, if you can talk about the impact on customer availability, it's the same thing, but you are making a far stronger impact," he says.

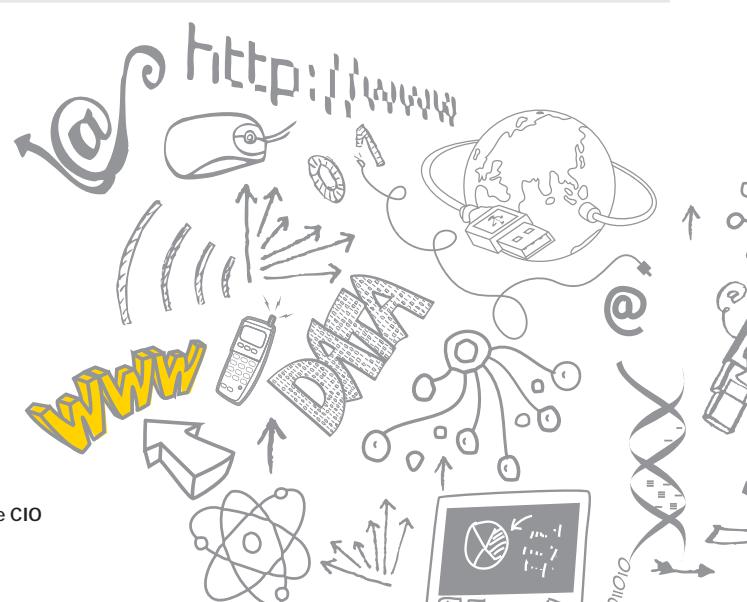
Ernst & Young's David Nichols gives an example of selling a cloud-based service to the rest of the business. Instead of pitching this as a switch that will deliver cost reductions, he argues that, when focusing on the value it brings, you capture the CEO's attention: "They have to be able to say, 'Hey guess what? I know how to increase our customer loyalty by 7.5% using cloud computing. Let me tell you what that does for earnings per share, if we can do it.'" All this underlines the need for CIOs to have a sound grasp of financial skills.

This is not only true when pitching for budgets, but also in wrapping up projects successfully. "Yes, the C-suite wants to know about the basic IT things," says Ernst & Young's Michel Savoie. "But more importantly, CIOs need to communicate on business outcomes. Did we reduce costs? Did we simplify our processes? Did we conquer another market? Did we increase customer satisfaction?"

The rapid-growth market CIO

With the world's eyes on Brazil, China, India, Russia and other rapid-growth markets as the engines propelling the global economy, what are the typical characteristics of CIOs in these countries?

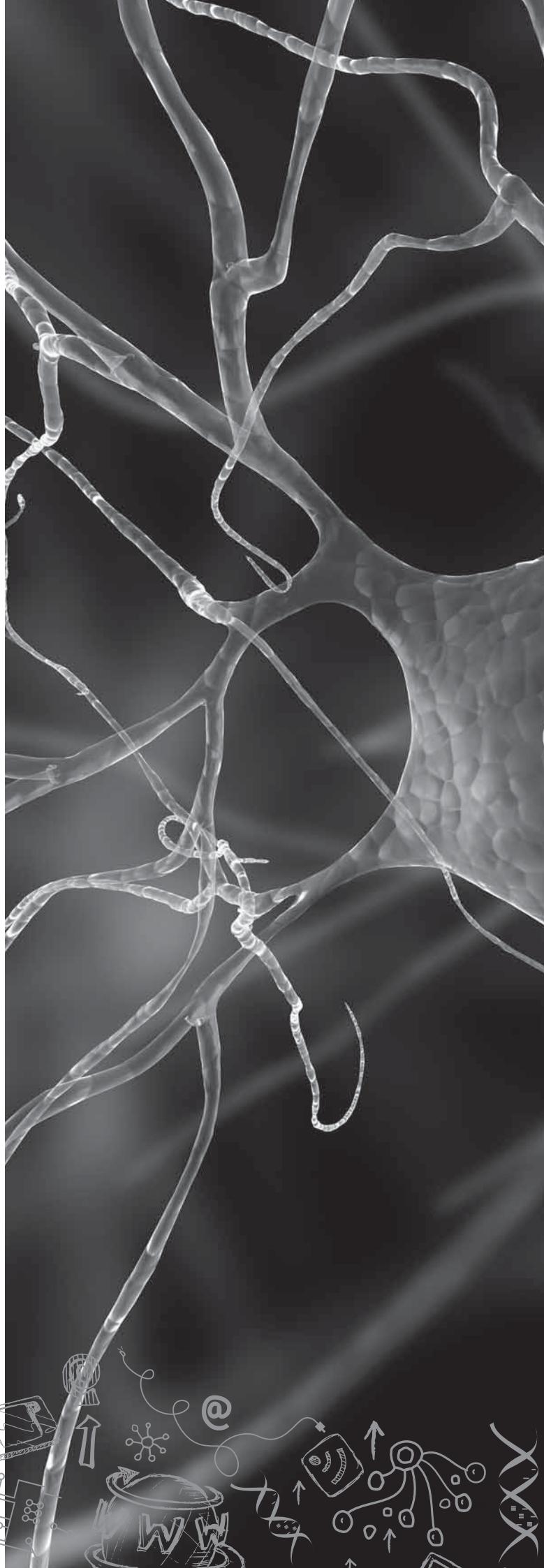
- At a basic level, the title of “IT director” is a far more common title than “CIO,” which in part reflects the fact that the average company size in these markets is smaller (but growing fast).
 - IT leaders in rapid-growth markets tend to have slightly shorter tenures, with far fewer having stuck around for a decade or more (13%, versus 29%). They also tend to be younger, at an average age of 39, compared with 47 for their developed market peers.
 - They’re also palpably more ambitious: 35% want a bigger CIO role, and 18% fancy a shot at the top CEO job, compared with just 27% and 4% among CIOs in mature markets.
 - While they identify the same target skills, they generally see a greater need to sharpen their skillset.
 - They appear to be better networkers, with closer ties, on average, to both the front office and stakeholders outside the business. Nevertheless, they’re rather less likely to be involved in their companies’ strategic business decisions.
 - Rapid-growth market CIOs are far more likely to hold an IT qualification: 60% hold a bachelor’s or master’s level degree in IT, compared with 40% of mature market CIOs.

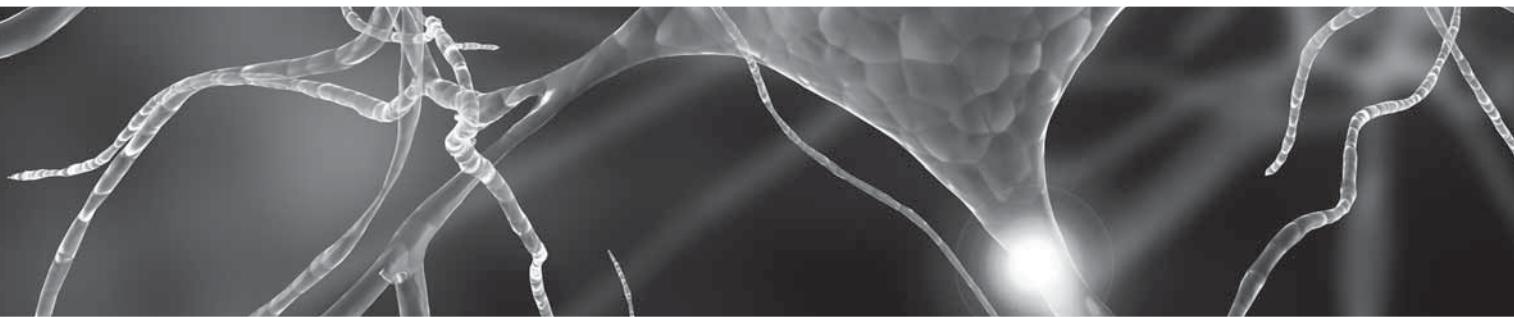


Mastering the juggling act

Another major skillset that emerges from this study is the need to manage complex situations – in particular, major IT transformation projects. About three-quarters (74%) of CIOs rate project and change management skills as crucial for their role, while 77% regard an analytical approach and organizational skills as similarly important. This ability spans both day-to-day project management and the underlying politics. This requires CIOs to dare to assume responsibility for tough projects that not everyone would necessarily be bought into.

"This is not merely about being willing to raise one's hand for a risky change management initiative, but being willing to handle the complex social and political dynamic that comes with this," says Werner Boeing, CIO of Roche Diagnostics, a leading life sciences company. It also highlights another key change to the role of the CIO, and one that many CIOs from yesteryear have struggled to adapt to: establishing a network of strong relationships across the business.





The relationships for success

Any top executive role is political in nature, operating within an ecosystem of relationships. Although few have yet fully adapted, many CIOs recognize this. In fact, when asked about what must be achieved to gain promotion, the need to build relationships and trust with key internal stakeholders overwhelmingly topped the list – for both young and old CIOs, and across companies of all sizes. Nearly three-quarters (72%) rated this as highly important.⁵ The rest of the C-suite agrees, putting the highest emphasis on this, with 58% rating it as a high priority.

"I think this has really changed in recent years. Rather than being a technical solutions provider, we're now being called in to better understand the needs of both internal and external stakeholders to the business. You can't do this without building a relationship with them first," says Ibukun Adebayo, Director of IT at Turning Point, a UK-based Social Enterprise. Esprit's Thomas Pirlein identifies this as one of the biggest changes to the role of the CIO in recent years. "The key skill is good relationship building," he argues, noting that this comes in parallel with having to win trust from the rest of the business.

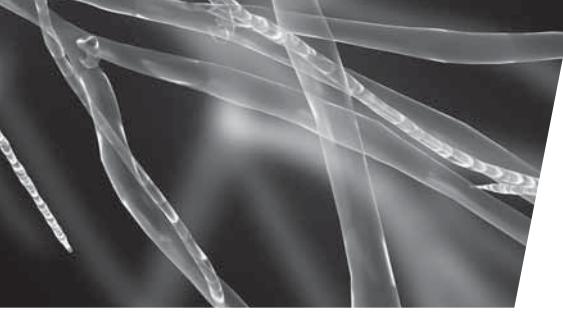
But such a shift in focus can come as a shock for many. "In the past, CIOs were more IT focused, but now suddenly you're dealing with corporate strategic thinking and that requires a lot of skill in being able to maneuver through the politics," explains Capaldi of Gulf News. For too long, too many IT leaders have not done enough to reach out to the rest of the business to develop long-lasting relationships that can support their wider change efforts.

However, it is also clear that not all are yet willing to adapt. When asked to prioritize a list of tasks and issues compared with five years ago, only about one-third (35%) of CIOs rated internal politics as a higher priority, below all else. But while few appear to relish such distractions, avoiding this won't help to shift the internal perception of the CIO role. "You need to have relationships with all business unit leaders. They are interested in growth and beating the competition, and they need technology more and more to do this. If they don't believe in you, if they think you are just someone who maintains the status quo, then you will lose their support and they will start to bypass you," warns Bayer's Hartert.

Who to "schmooze": aiming high – and wide

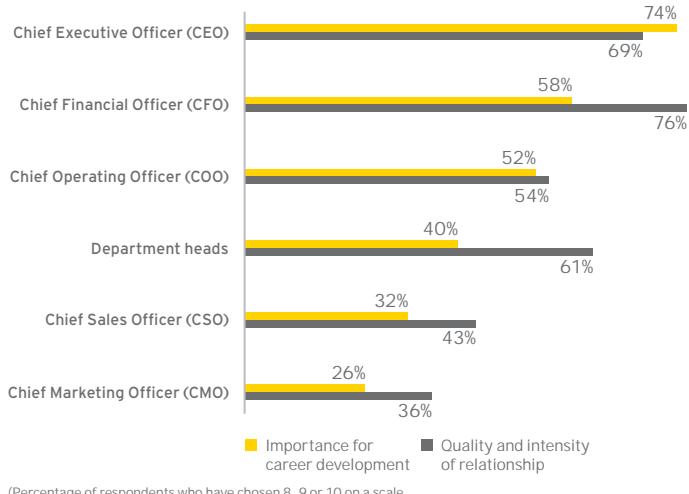
The next question, then, is with whom should the CIO seek to develop stronger relationships? As befits IT's long-running history as a cost control function, CIOs hold the closest relationship with the CFO. But CIOs recognize the CEO as a key position for the overall development of their careers. "Without the CEO's strong commitment and support, you will not manage to deliver on the whole change and transformation aspect of your role," says Roman Dudzik, the CIO of Energa, a major Polish energy utility company. Of course, in expanding discussions to encompass the CEO and other leaders, CIOs have to force the conversation onto matters about IT's value and role within the business, rather than getting tied up in budgets alone.

⁵ Refer to chart 13 on page 36 for further attributes of importance for a CIO's career development.



CIOs are in a unique position, often holding a helicopter view of what's going on in the business.

Chart 7: relevance of internal stakeholder relationships for CIO



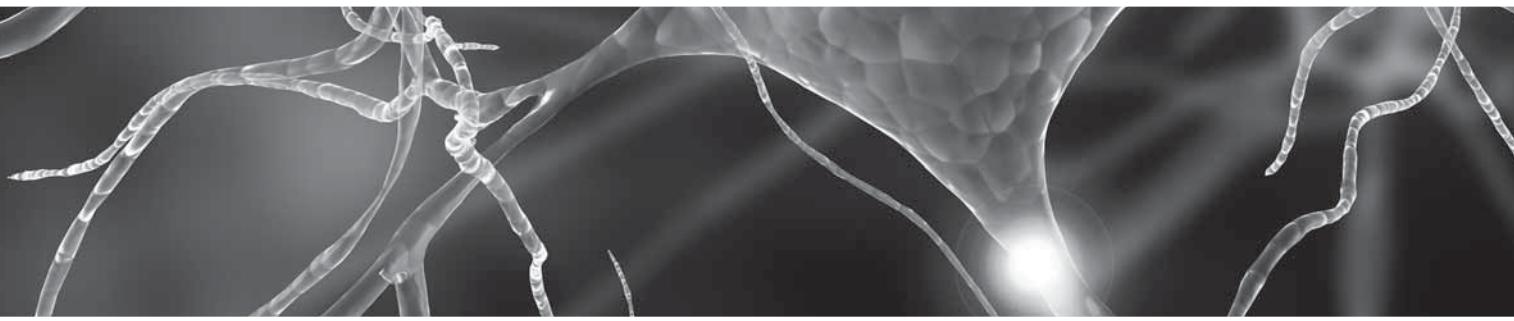
Across many interviews, leading CIOs repeatedly pointed out the importance of developing links across a wide range of key internal stakeholders, beyond just the C-suite. "It has to start at the top level but, even with the best support from the CEO, if I don't have the rest of the business aligned with me and trusting me, I will fail," says Maureen Osborne, Global CIO of Ernst & Young. Gerhard Bikar, CIO of MAHLE, a global automotive supply company, says there is a clear need to spend a lot more time communicating outside of the IT function – and to a much wider set of executives. MAHLE has about 50,000 employees and Bikar estimates that he needs to develop a very good relationship with the top 50 executives. "You need to spend a lot of time on communication, perhaps even more than 50%," he says. "This is challenging, as it shows that you need a strong IT management team behind you, to delegate less important tasks to."

This, in turn, flags up a blind spot for many CIOs. In particular, many of those polled for this study often failed to recognize the value of developing across the business, especially those in the front-office and sales function. Given that CIOs have typically been regarded as running a back-office function, this is of little surprise. But it is a worry. Failing to foster such links does little to advance the case of the IT function – and regard for the CIO – as a provider of innovation and value. Most crucially, for CIOs to be given a seat at the top table, they need to have a hand in helping to develop the revenue-generating side of the business – and they must also be perceived to be doing so.

In general, among those polled, CIOs within the consumer products sector stand out as exceptions here. They typically hold stronger relationships across the entirety of the C-suite, rather than focusing on one or two specific executives. Also, given the nature of their industry, they are in closer communication with their front-office colleagues and the heads of marketing and sales. The pressures to nurture such relationships may be less obvious in other industries, but the recognition of the role of the CIO is unlikely to shift much without progress on this front.

Don't forget your right-hand man (or woman)

A final internal relationship to remember is the one that should be closest to hand: the CIO's key delegate or protégé, who is able to run the majority of the operational side of IT on their behalf. This is most typically the company's IT director or IT manager, and someone who may or may not aspire to the top job one day. Indeed, without this kind of backup, few CIOs will be able to extract themselves from the day-to-day firefighting, and free up enough time to engage in outward-facing dialogue with the rest of the business. "It's the partnership between the CIO and the IT director that's really critical to make this work," says Ernst & Young's Benoit Laclau. "The CIO has to put more weight onto the strategic side of things, and be more value led. However, he can't do that if he hasn't got a really good and trusted right-hand IT director."



Relationship building

Across numerous interviews, a clear set of principles emerge that governs how leading CIOs should develop and nurture the key relationships they need for their success. The main principles are:

1. **Establish trust and credibility by building up a solid track record:** to gain the trust of others, CIOs need to draw up a strong list of accomplishments. "You need a databank of successful projects, so that people see you as someone stable and successful in implementing what's needed," says Asian Paints CIO Manish Choksi.
2. **Gain an understanding of other executives' issues, in the context of their function or unit:** this also involves getting a clear sense of the targets and goals that they're pursuing. "I'm not a tax expert, but I've spent time understanding what the key issues are within that function," says Ernst & Young Global CIO Maureen Osborne.
3. **Help people in a fix:** whenever possible, try to go the extra mile to help another business leader in a tight spot. "Do something out of the ordinary that gets someone out of a hole," says HDFC Bank CIO Anil Jaggia.

4. **Invest time with people, both formally and informally:** it's important to have regular meetings to discuss fixed issues, but also make the time to network less formally – such as over lunch or coffee. "Even if there is no particular new situation that requires you to talk to these key people, make sure that you have regular interactions with them anyway," says Bayer Group CIO Daniel Hartert.
5. **Set up cross-functional internal stakeholder groups:** establish cross-functional teams to brainstorm and develop ideas for future development. "If IT can be a leader within these groups, it builds a strong position for later on," says Marek Frackiewicz, CIO of Polski Koncern Naftowy ORLEN.
6. **Be proactive and positive about engagement:** although it's easy to fear the risk of simply adding to their workload, CIOs need to be proactive about reaching out to other divisions. They also need to share their natural enthusiasm for what IT can do. "It's not easy to go there and to say, 'Okay guys, let's do something together,' but you need to," says Adrien Gonckel, CIO of Givaudan.

External relationships matter too

Attention also needs to be paid to key roles outside the corporate walls. This spans the regulatory community, analysts, the company's clients and the media. Few CIOs today regard these as crucial relationships. This is especially true within specific cultures. Many respondents originating from German-speaking countries and Eastern Europe are exceedingly dismissive of external relationships. By contrast, CIOs in many rapid-growth markets are more likely to see value in these.

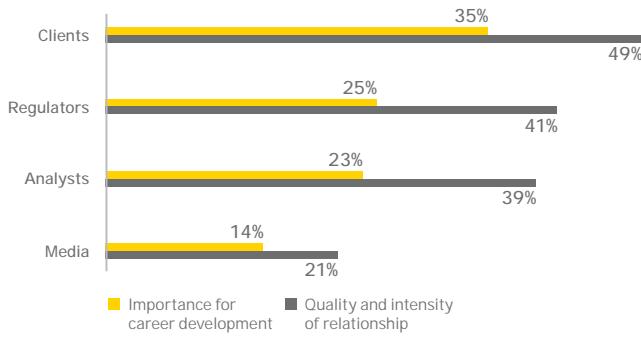
Overall, however, the lack of strong relationships – as well as the consideration that many of these are simply unimportant – does little to reassure other members of the C-suite that CIOs deserve a presence at the top level. Laurent Ferrari of EDF notes how a personal network of external contacts he has built up over time has been invaluable in giving him an edge in his role. "The CIO has to be part of a lot of different networks," he notes.

Clients are a particular point of contention, as many CIOs have historically done their best to avoid direct contact with such stakeholders. Clearly the importance of this will vary widely across specific industries, but many note that there is little harm in CIOs gaining a greater understanding of the needs of the firm's customers. "The headquarters of Bayer are not contributing to our €36b of revenue. It's all out there in the field. So go there and get that experience," argues Daniel Hartert. But only half (49%) of CIOs polled for this study noted relationships with customers as being a strength, with even fewer (35%) considering it an important one to develop. This can easily become a misstep, as several CIOs warn. "I think in order to make the right decisions in IT, we need to understand very well where the money is coming from," says Neste Oil's Kari Keskiivari.

"The CIO has to be part of a lot of different networks."

Laurent Ferrari, Group CIO, EDF

Chart 8: relevance of external stakeholder relationships for CIOs



(Percentage of respondents who have chosen 8, 9 or 10 on a scale from 1 = not at all to 10 = absolutely)

Overall, the relationship gap is most apparent with the media. CIOs readily admit this, but also seemingly shrug their shoulders at the benefits that media engagement could provide. Just one in five CIOs (21%) say their media relationships are good. Even fewer (14%) regard this as high importance. Although some are barred from contact here, it still seems a lost opportunity. The technology media affords CIOs ample opportunity to provide an independent assessment of the value of IT. Such views also tend to carry more weight. Keskiivari cites an old saying that a voice from outside the company is always given much more importance than one from within. And even for those who profess not to hold ambitions to higher office, a good CIO will want their team's efforts to gain wider recognition.

This need appears to be more widely recognized within rapid-growth markets. CIOs there rated media relationships as almost twice as important as their peers from more advanced economies. HDFC Bank's Jaggia cites the importance of winning media awards, for example, as a means of furthering internal influence.





The media perspective

Bryan Glick, Editor-in-Chief of ComputerWeekly, the UK's largest technology publication aimed at CIOs, gives his view on how the role of the CIO has been changing.

You've been meeting and talking to CIOs for many years now. What are the key changes you've observed in recent years, in terms of the types of people who are now taking the top technology job?

There are more CIOs now with direct experience of a business function, rather than with a traditional IT background. Also, for a lot of companies, although you might see this differently, we notice that many CIO positions have often become a shorter-term role. We quite often see CIOs coming in to manage a change process to implement a major new strategic system, and then they finish up and move on. So there are a lot more CIOs around who are basically change management experts.

Media relations is a very low priority for CIOs. Why do you think this might be?

It's likely due to a lack of trust. For many people who've been in IT for a long time, the media focus has mostly been on projects failing, systems crashing and budgets going over. So I can understand their wariness about talking to the press. But looking at the situation today, I think many publications have changed and often act as a champion for CIOs. This doesn't mean we don't cover IT failures, but we want to see CIOs moving up and being recognized for what they do. Unfortunately, some simply don't see the necessity to change their position with the business and move up.

What value do you think a greater media presence can give a CIO?

We know CIOs have got a lot of value out of talking to the media. Many people contact them to say they've read a piece about a project of theirs and found it very interesting. Many are seeing benefits in terms of their personal PR, as well as the corporate reputation benefits of being more involved in the media. It certainly helps their career and their internal positioning for a more senior role in the business – or even a new job altogether. Many CIOs have also found it easier to recruit people afterward, as a result of the wider profile.

Which stakeholders do you think CIOs tend to overlook as they build the relationships they need to be successful in their role?

CIOs these days are generally doing a better job of building an internal stakeholder network, but there's certainly still scope to do more of this externally. Increasingly, the role of the CIO is to be an ideas person and an innovator. If they can find ways to network more effectively with people outside of their company, it can open their eyes to new possibilities and ideas.

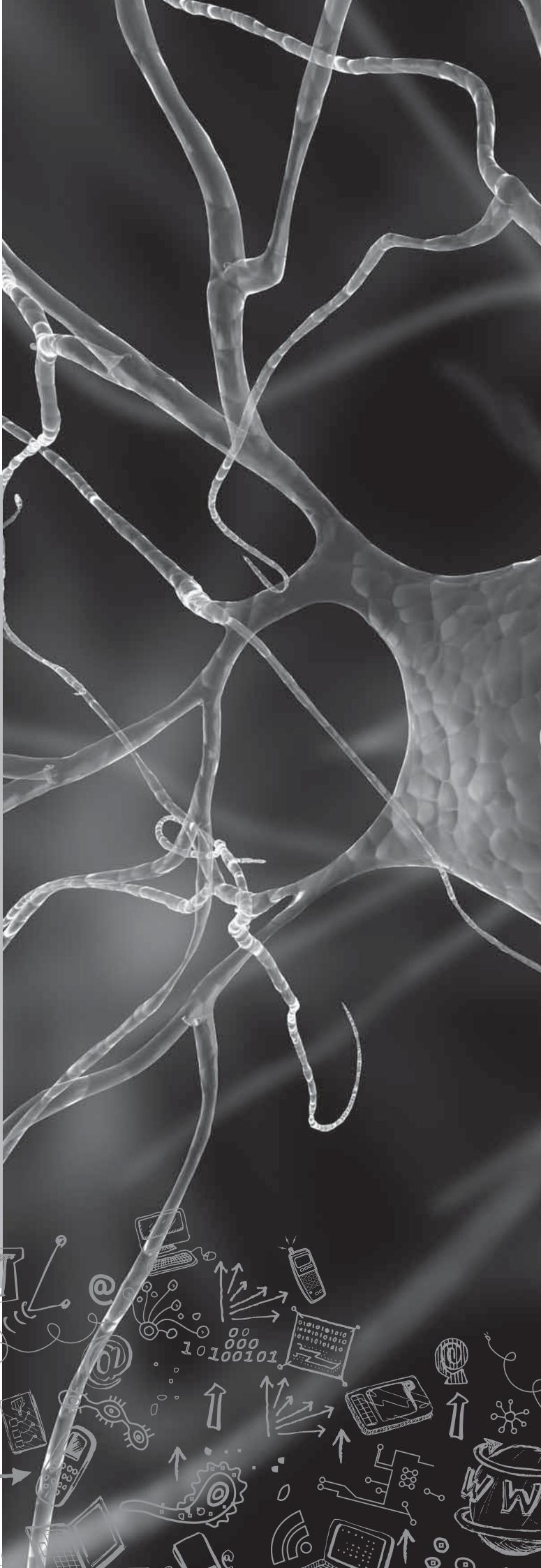
This report talks about the evolving skillset of the CIO. What do you see as the key skills required of a modern CIO?

The most important attribute for a CIO today is to be a communicator – someone who can collaborate with people from a lot of different backgrounds and environments. They've got to be able to lead the IT function in a way that will best support the rest

of the business. CIOs are in a unique position, often holding a helicopter view of what's going on in the business. The days of guys in their brown corduroys and tweed jackets, sitting in the corner of their data center, are thankfully behind us. Today, the most successful CIOs are some of the best public speakers and communicators around. They are adept at putting across complex topics in an easy to understand way.

How do you think companies can benefit from having a "modern" CIO on board?

If you ask anyone to name the top five most innovative companies over the past five years, they will either be technology companies like Facebook, or else firms that rely on technology to differentiate themselves in their niche, such as Tesco [one of the world's largest retailers]. Indeed, Tesco is one of the first major companies to appoint its former CIO as its CEO. And the current CIO there tells us that there are basically two major areas of capital expenditure for the business: retail stores and technology, on a par with each other. That's an example of what companies can do when leading CIOs get this right. Technology can help them really differentiate themselves in the market. You're starting to see a lot more firms with that sort of mindset.



The CIO's role

The CIO's contribution in any business can be wide ranging in its scope. To a great extent, it depends on the nature of the business – from a retailer trying to compete with new online rivals, through to a manufacturer managing a global supply chain, or a services business trying to boost staff productivity. Nevertheless, there is a general set of areas to which all CIOs should contribute.

The first step involves execution of the basics – keeping systems up and running, while keeping close tabs on the organization's overall IT spend. In many respects, this fits closely with the IT management aspect of the role.

But this is just the beginning of the CIO's remit. The next major strand deals with enablement. This is where a more operational focus starts to give way to something more strategic in nature. Here, the CIO has to act as an information broker, providing insights to help all parts of the business improve their decision-making. At the same time, there is the need to collaborate closely with the rest of the business to enable and optimize related business processes.

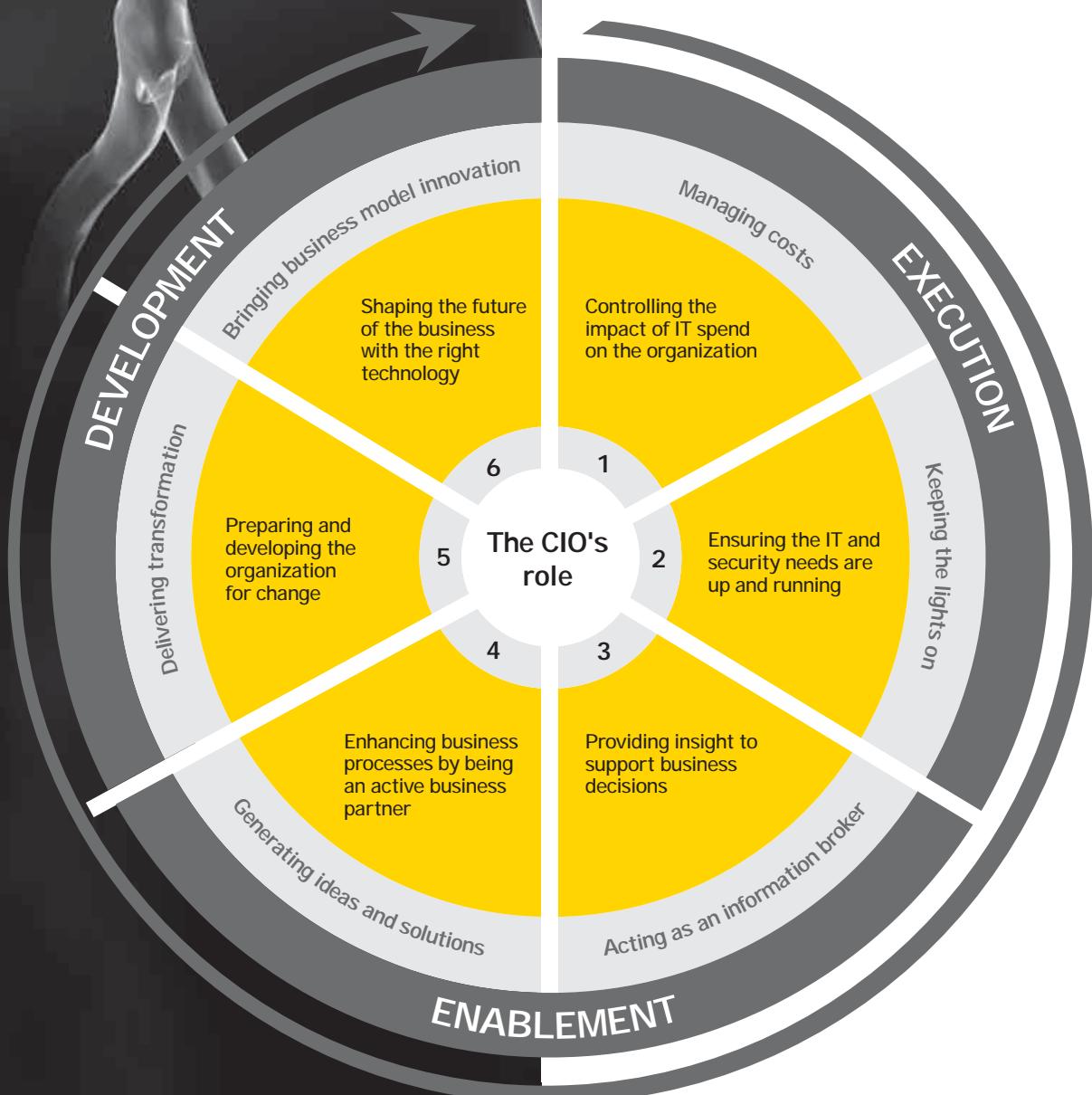
At the highest level, CIOs are also called upon to help develop the business further, which is where the role's greatest evolution takes place. This aspect of the CIO's contribution typically breaks down into two areas: preparing and developing the business for change, and suggesting new business model innovations.

Across this breadth of tasks, CIOs must draw on a diverse set of skills, knowledge and past experiences. And, in each area, they must also foster relationships with particular stakeholders. The following section outlines all of these in greater detail, providing a helicopter view of the CIO's contribution to the business. While the weighting of each segment will depend both on the nature of the business and the individual in question, they are all critical in making up the role of the CIO of tomorrow.



"If you think about the two overarching promises of IT, one is about productivity, which we've been focusing on, and the other is about value, which we've been bad at delivering on our promises."

Werner Boeing, CIO, Roche Diagnostics



Controlling the impact of IT spend on the organization



Managing costs	
Core skills	Core knowledge
<ul style="list-style-type: none"> Excellent budget planning and allocation skills Being able to track costs incurred relating to IT or the IT function Pricing of IT services delivered to the business or customers Maintaining transparent cost monitoring and reporting Aligning spend-related monitoring and measurement with the CFO's reporting standards Communicating performance clearly Being able to demonstrate business acumen 	<ul style="list-style-type: none"> Knowledge of budgeting, costing and accounting principles relevant to the jurisdictions in which the organization operates Detailed knowledge of IT services and related prices Knowledge of dashboard-like financial reporting Knowledge of cost-efficient sourcing strategies Knowledge of return on investment measures and capital budgeting Awareness of the market and commercial environment
Key areas of experience	Key relationships
<ul style="list-style-type: none"> Business acumen Financial management (in particular, planning and forecasting) Cost management and control Sourcing, contract and service level management Customer relationship management Marketing and communication Supplier relationship management 	<ul style="list-style-type: none"> Chief financial officer Chief executive officer Business unit heads Business unit controllers Finance department employees Procurement department employees External suppliers

Ensuring the IT and security needs are up and running



Keeping the lights on	
Core skills	Core knowledge
<ul style="list-style-type: none"> Being able to deliver IT services and security at agreed service levels and without interruptions Managing daily IT operations in the most effective and efficient way Strengthening IT's business-wide reputation by sticking to promises and agreements Identifying, communicating and resolving IT and security risks and information effectively 	<ul style="list-style-type: none"> Detailed understanding of business requirements Knowledge of business-critical processes and related IT services Knowledge of business-critical security threats and respective mitigations Know how and when to apply 80/20 rule in order to deliver IT on time, budget and quality Know how IT should be organized to deliver value to the business
Key areas of experience	Key relationships
<ul style="list-style-type: none"> IT operations management Business applications management Information security management Business continuity management Continuous service improvement People management Incident management Conflict management 	<ul style="list-style-type: none"> Chief financial officer Chief compliance officer Chief operating officer Chief risk officer Head of internal audit

Providing insight to support business decisions



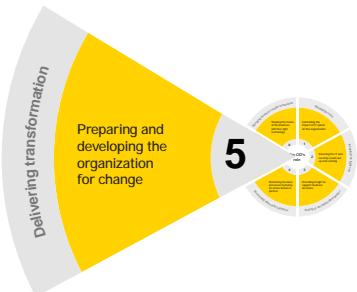
Acting as an information broker	
Core skills	Core knowledge
<ul style="list-style-type: none"> Anticipating business needs and providing adequate and sufficient information quickly and efficiently Maintaining sophisticated information architectures in order to be able to access the right data at the right speed Managing data storage more thoroughly and accurately Communicating clearly the IT implications of proposals Being able to think "out of the box" and to be creative Being able to demonstrate business acumen 	<ul style="list-style-type: none"> Knowledge of the organization's business, products and service lines Awareness of market trends, risks and issues Knowledge of enterprise-wide information management, i.e., Enterprise Intelligence Knowledge of database and access management Knowledge of master data management and architectures Knowledge of technology platforms that will support the business
Key areas of experience	Key relationships
<ul style="list-style-type: none"> Information management and business intelligence Knowledge management Data capture approaches and methodologies Business applications management Customer relationship management Marketing and communication 	<ul style="list-style-type: none"> Chief financial officer Chief executive officer Chief operating officer Chief marketing and communications officer Chief human resource officer Business unit controllers

Enhancing business processes by being an active business partner



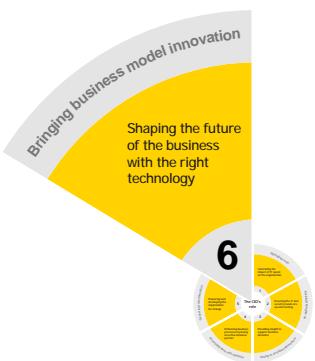
Generating ideas and solutions	
Core skills	Core knowledge
<ul style="list-style-type: none"> Continuously delivering latest and most innovative IT services to the business Enabling business function and processes to enhance their innovation and idea generation capability Proactively gathering internal and external business inputs, and stakeholder impressions Gathering, developing and evaluating ideas from own staff via the use of own knowledge management process Being able to clearly communicate IT and risk issues to C-suite and colleagues Developing strategic plans to achieve corporate goals 	<ul style="list-style-type: none"> Know how to access internal and external sources for trends and inspirations Knowledge of strategic and operational planning Knowledge of innovation management best practices Knowledge of latest technology trends Know how to adopt best practices from other areas or competencies Knowledge of the organization's business, products and service lines Overview of the industry structure and challenges

Preparing and developing the organization for change



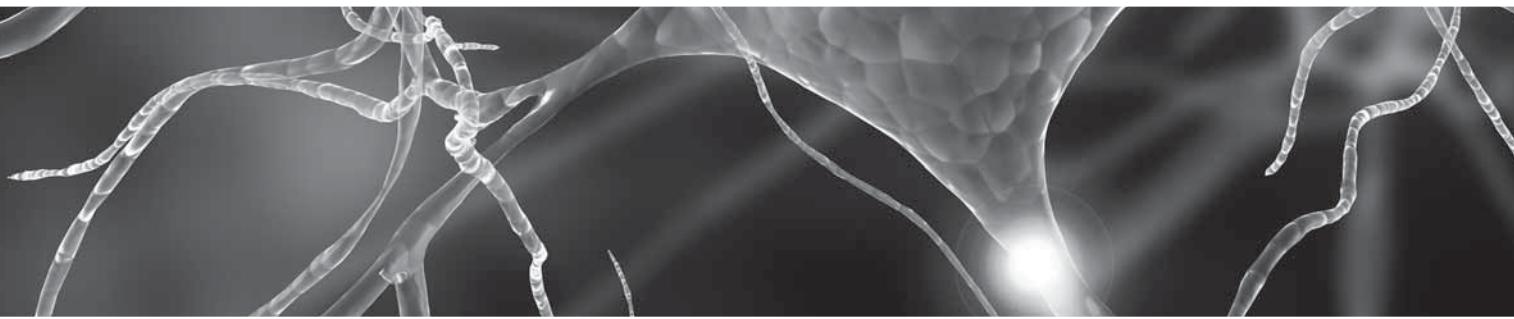
Delivering transformation	
Core skills	Core knowledge
<ul style="list-style-type: none"> Leadership skills to drive through change in IT Enabling and leading business transformations by driving IT transformations Proactively recommending transformations to board members in order to strengthen and maintain competitive advantage Setting and communicating the vision and strategy for IT Providing robust but constructive challenge to business stakeholders Communicating clearly the IT and risk implications of proposals Sponsoring delivery of planned transformation or major change initiatives in the IT function 	<ul style="list-style-type: none"> Detailed understanding of IT's role in business transformations Awareness of proposed organizational change and transformation projects Knowledge of strategic and operational planning Knowledge of program and portfolio management techniques Knowledge of change management techniques and pitfalls Practical understanding of people management implications during change and transformation projects

Shaping the future of the business with the right technology



Bringing business model innovation	
Core skills	Core knowledge
<ul style="list-style-type: none"> Anticipating future impact of latest trends on IT function and the business Radically innovating existing business models Utilizing IT as the enabler for innovative business models Sharing thoughts on existing and new business models with board members and other business executives Engaging with business stakeholders to determine the appropriate role for IT Influencing key stakeholders and winning trust and support for IT projects Turning strategic plans into operational plans and targets (including defining KPIs and monitoring progress) 	<ul style="list-style-type: none"> Awareness of industry and organizational risk profile Awareness of the market and commercial environment Knowledge of business modeling and design thinking Knowledge of innovation management best practices Know how to adopt best practices from other areas or competencies Detailed understanding of IT's role in business model innovations

Core skills	Core knowledge
Key areas of experience	Key relationships
<ul style="list-style-type: none"> Business model innovation Business acumen Scenario planning Business case creation Marketing, communication and customer relationship management Operational areas, such as supply chain, finance, HR 	<ul style="list-style-type: none"> Chief innovation officer Chief marketing and communications officer Head of product development Chief financial officer Chief executive officer Chief operating officer Head of corporate development and strategy

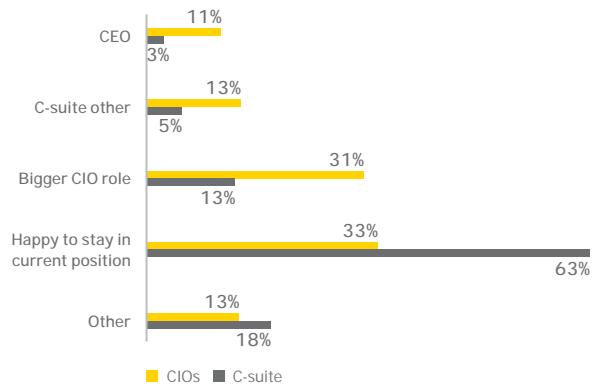


The CIO's career: a fulfilling end-destination

Many senior executive roles are often regarded as milestones on route to bigger positions. Within some industries, COOs are often thought of as CEOs-in-waiting. However, the majority of CIOs do not aspire to move out of IT. Overall, about two-thirds (64%) see the role of CIO as an end-destination in itself.

Is this desire to remain within the same role a reflection of there being limited opportunity for CIOs outside of IT, or simply satisfaction with the role itself? There is truth in both points. Many CIOs, especially those who cut their teeth in a technology field, enjoy the potential that it holds for them. In fact, one-third (33%) of respondents are satisfied to stay within the role that they currently hold. This largely remains true for younger CIOs too: 27% of those under 40 are happy to stick in their current role, compared with 36% of those in their 40s or older.

Chart 9: CIO career aspirations – where they see themselves in five years' time



When asked to rate a variety of aspects of their role, from the range of responsibilities through to their work-life balance, CIOs record an average ranking of 6.9 out of 10, where 10 is absolutely satisfied. In particular, there is general satisfaction with the remit and range of responsibilities: about two-thirds (64%) of CIOs ranked this as something they are strongly satisfied with.

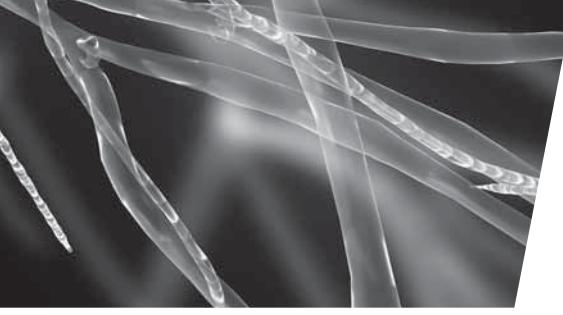
Three career routes for the CIO

The CIOs polled for this report were all asked about their future career aspirations and where they go to from here. Three broad groups emerged from the results:

- **The happy technocrat:** these CIOs often hail from more technology-oriented backgrounds. They love technology and are typically satisfied with the work they get to do – and indeed they work very hard at it. However, they're not usually seated at the top executive table, and appear to hold little desire to move up there. "I sensed that within my

peers, many CIOs are actually very happy with what they are doing. As long as the job is kept interesting by special projects that the business wants and where the board has trust in the CIO," remarks ÖBB CIO Peter Lenz.

- **The aspirational CIO:** these CIOs enjoy working within IT and are happy to stay there. However, they are also anxious to develop and expand the scope of their remit and responsibilities, not least because so few CIOs are properly represented at the top level of the company. As such, securing

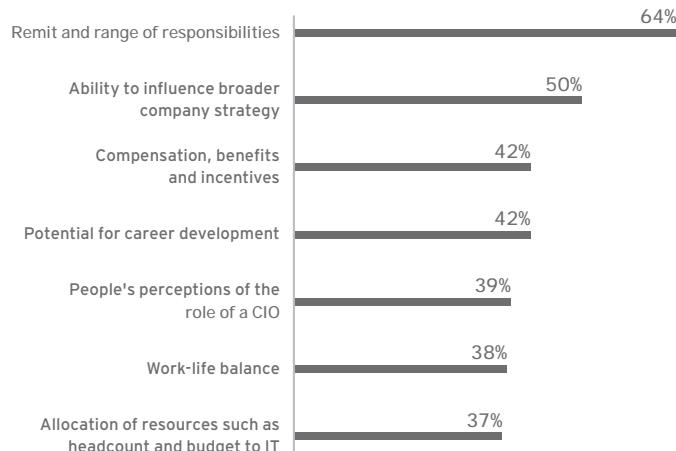


"It's not what you learnt, or what you based your professional experience on, so you have to learn dancing naked on the stage in order to qualify."

Christian Gosch, CIO, Erste Bank

– but with scope for development

Chart 10: extent to which CIOs are satisfied with key aspects of their role



(Percentage of respondents who have chosen 8, 9 or 10 on a scale from 1 = not satisfied at all to 10 = absolutely satisfied)

The rest of the C-suite is overwhelmingly in agreement: about three-quarters (63%) simply don't think their CIOs aspire to any other role within the business. This may be accurate, but it also highlights another perception gap that ambitious CIOs will have to overcome. Most CIOs may be happy in their role, but this does not suggest that a significant proportion is without ambition for higher office. However, only 8% of the C-suite recognize such ambitions, with a further 13% acknowledging that the CIO may be happy in the position, but still ambitious for a larger CIO role.

One-third (31%) of the CIOs polled plan to move into a bigger, more powerful CIO role – either a position in the executive management team, or scaling up into a role within a significantly larger business. The primary driver for this appears to be a simple desire for new challenges and greater personal improvement. This is especially true of younger CIOs still ramping up their careers and those in rapid-growth markets. And such aspirations are especially prominent among CIOs at businesses with revenues in excess of US\$1b, where 37% plan to move on to bigger jobs.

Of course, the scale of the role can vary hugely from one business to another. "CIOs can manage anywhere from 100 to 20,000 people, and they can go from CIOs of very local companies through to large global ones. Though they're all called CIOs, there are ones where you start small and learn the basics of managing IT. Then you can do it on a broader scale, right the way up to a global scale," says Ernst & Young's Maureen Osborne.

a seat at the top management table is – and should be – a key priority for CIOs. Or, as a staging post, this may involve taking a CIO role within a far larger organization. "Modern CIOs need to ensure access to the right decision-makers within the business in order to do a proper job," says Apotek Hjärtat CIO Petter Sundberg.

- **The business executive in waiting:** for a proportion of CIOs, especially those with a business background, there can be a desire to use the role as a staging post for future challenges.

There is very little in the way of a pre-determined route here, with roles as diverse as the CEO, COO, head of supply chain, or even chief technology officer suggested. "I think next for me would be a role in a new business area, and then maybe moving on and having aspirations to even become the CEO. But being able, at least, to lead a new business would be the next role I aspire to," says Asian Paints CIO and Chief of Corporate Strategy Manish Choksi.



Looking elsewhere

Of course, there is also a cadre of CIOs who plan to move elsewhere in the business. They account for one-third (37%) of those polled. About 1 in 10 (11%) aspire to the top job: the role of CEO. Others hold an interest in functions varying from COO, CFO, running another business unit, right through to a shift into the more technically oriented role of chief technology officer (CTO).

For many of these positions, an ambitious, but realistic and valuable, staging post could be to explore the chance to run a different business unit as a managing director. But for those CIOs with a more technology-oriented side, a fundamental change would be to rethink their financial skills and communication. As Ernst & Young's Benoit Laclau points out, many often don't fully grasp the language of net present value, cash flows and how costs can be positioned in significantly different ways. "They think a cost is a cost, and don't talk about costs in terms of the balance sheet or profit and loss," he notes.

Many CIOs recognize the difficulties in making such shifts – and the potential risks involved. "The step-up will require CIOs to leave their IT skills and do something completely different, which is pretty much about their managerial qualifications. It's not what you learnt, or what you based your professional experience on, so you have to learn dancing naked on the stage in order to qualify," says Erste Bank's Gosch.

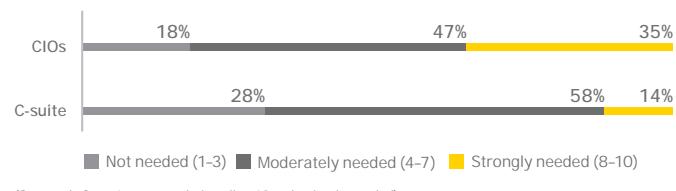
Nevertheless, CIOs bring a range of skills and experiences that can translate well into other roles, such as heading up another business unit. Perhaps the most important thing is the access that many get to the rest of the business. "They're strong generalists and they've had exposure to all the different business areas," says Isobel Thomson, the CIO of Heinz, the global food and condiment brand, with over US\$11 billion in annual revenue. Ernst & Young's Michel Savoie agrees, arguing that few other executives have the opportunity to develop a deep understanding of the wider business. "The head of marketing will understand marketing and the customers. The head of supply chain will understand supply chain. But the CIO sits with the COO across all the businesses and has a full understanding. The CIO, with the right business skills, is very well placed to be the one getting promoted to COO and CEO."

To some degree, such opportunities also vary based on the underlying sector that CIOs operate within, argues Ernst & Young's Paolo Cavosi. Some industries, such as technology and telecoms, are a more natural fit for CIOs, providing clear opportunities for a transition to the role of CEO, for example. In a number of other industries, such as manufacturing, the CIO is perhaps better positioned to become a COO, or a business unit manager. For others, such as banking, the transition to the top can be far tougher. "The top job in sectors such as financial services is often dependent on having strong relationships outside the business, which a CIO wouldn't necessarily be cultivating," says Cavosi.

Many CIOs still lack a career development strategy

One of the perspectives of the CIO that emerges from this research is the image of an individual who is strongly committed to the business and who puts in significant work and effort. However, there is a clear sense that, for a number of CIOs, not enough time or priority is given to the development of a clear career strategy. About one-third (35%) admit that they are strongly in need of advice on how best to develop their career, which reflects the lack of attention that many within technology have given to this aspect of the role. This is especially apparent among CIOs who rate themselves most highly on their technology expertise, as opposed to those with a more business-oriented education.

Chart 11: extent to which CIOs need some career advice



This lack of a development plan holds risks for many. Although aspirational, CIOs show awareness of the need to develop and reshape the perception of IT within the business. Many of the "happy technocrats" are at risk if they don't change. If the commoditization of IT continues to gather pace, with consequent changes to the nature of technology, those CIOs who have not repositioned themselves may be scrambling to adapt to a new reality. To avoid this, there is a clear need for CIOs to ensure that they successfully redefine their role within the business, making



themselves a more strategic partner and “co-driver.” Ignoring this today might not damage them. But few can afford to continue doing so for long. “There is a strong need for a transition, to stay in touch as the role of the CIO evolves. This is about developing our skills before the change occurs, rather than waiting for the change to hit and bemoaning the fact that we’ve been removed from the role or, worse still, sidelined as the business continues to transition towards a new age,” notes Turning Point’s Ibukun Adebayo.

For those who fail to develop – and implement – a more coherent career plan the risk of becoming sidelined within the business will continue to grow. Or they will remain engaged, but increasingly find themselves to be a de facto IT manager rather than a genuine CIO. “If CIOs don’t position themselves to take advantage of the changes that are taking place within IT, they will just get relegated to be non-CIOs. In doing so, the rest of the business will just choose to bypass IT, making it merely an infrastructure provider, rather than an IT partner,” says Manish Choksi, CIO and Chief of Corporate Strategy at Asian Paints, one of India’s largest paint manufacturers.

It's still a man's world

The realm of IT has long been recognized as a typically male domain. All but three interviewees for this report were male, as were 96% of respondents to our survey. The historical rationale for this has been clear: CIOs usually hailed from a technical background, as programmers, network specialists or data center experts – all fields dominated by men. But as the requisite skillset of the CIO shifts toward a greater focus on leadership, communication and networking, the gender barriers ought to be removed.

Becoming the “yes” man

Any work on reconsidering a CIO’s career map needs to be done in parallel with efforts to change how the business perceives them. As noted earlier, few members of the C-suite yet recognize any wider aspirations within their CIO, but rather pigeonhole them within their existing positions. This can be problematic both for the CIOs trying to recast themselves in the business, and for the companies who risk losing a vital member of their team if they don’t give them due recognition for their contribution. “To replace someone who’s built up 10 years of experience and then decides to walk out the door is a real challenge,” notes Villeroy & Boch CFO Jörg Wahlers.

For the CIO, this requires the delicate balancing act of proving one’s worth within a role, while actively demonstrating an ability to move upward. “I see myself as an IT person and I hope my career will be in this space. But it’s very much up to the CIOs themselves to require a higher role,” says Petter Sundberg, the CIO of Apotek Hjärtat, a major Swedish pharmacy chain.

To succeed, the CIO needs to be perceived as someone who is willing to find solutions, rather than the person who simply flags up risks. There is a place for such concerns, but in order to develop their careers further, CIOs need to accompany such issues with solutions. They also need to think actively about how to communicate the value of IT to the executive team. As Sundberg notes, many CIOs consider themselves as “watchdogs” who guard the IT space within the organization. But this narrow view can block their progress. “In order to get invited to the discussion, you need to be very flexible, both providing and contributing to good solutions. You cannot just sit and say ‘no, no, no,’ he says. “You very much shape your role with your attitude and how you actually contribute to the decision-making process.”

As part of this transition in thinking, the need to step out and find ways to positively surprise the rest of the business is often communicated. “I think it is important to take the initiative. As a specialist advisor to the business we should not be talking about the nuts and bolts of what we do, but creating a more holistic dialogue around architecture, including the relationship of technical and data architecture with business architecture and innovation,” says Philip Proost, CIO of Catlin, a global insurer and reinsurer. “Overall, we need to show not only how good the everyday support services we offer are but how we can support the differentiation of the business.”



Age ain't nothin' but a number

Technology is often perceived as a young man's game, but CIOs have been grappling with IT issues for decades. So how do the "Generation Y" CIOs, who've grown up in a world of technology, differ from their grizzled older colleagues?

- Unsurprisingly, CIOs younger than 40 tend to have shorter tenures, at an average of four years, compared with six years for their 40-plus peers.
- Younger CIOs think an individual's leadership capabilities and other softer skills are already far more relevant today, and will remain so in future: 33% see their leadership skills as part of how they will be measured, compared with just 12% of older CIOs.
- Younger CIOs generally appear to pay more attention to external relationships, especially regulators, analysts and clients (though it's unclear if this is done in person, or via Facebook). They're also typically far more media-friendly.
- There's little difference in their relative ambitions, although younger CIOs are more likely to be eyeing the CEO role than their older peers. They are also far more interested in career advice and generally highly motivated to learn.
- Given the more globalized world they've grown up in, they're typically more cognizant of the need for experience abroad, but also in other parts of the business.

At Givaudan, Adrien Gonckel gives a practical example. To help the business gain further insights into why customers selected certain fragrances, his team came up with a concept for an iPhone app that helped customers identify which perfumes matched their tastes. It gathered insights on people's preferences across different regions, ages and so on. His team then collaborated closely with the front office to develop this function in just two months, on a relatively tiny budget – a stark contrast to many executives' perception of how IT delivers. "I think you have to do it like this, because if you go to your marketing people and say 'I have a fantastic idea, but come back in two years' time,' it's much too late," he says.

A basic, but fundamental challenge is simply to be proactive. "It's about changing from the person who says 'I am available if I am asked,' to a person saying 'Okay guys, I have thought about this business process and I would suggest that you consider doing it the other way,'" says ÖBB's Peter Lenz. "When you can surprise your board members by being proactive and showing a real interest in their needs, you make much more of an impression than you do as just the IT guy," he argues. Gonckel offers a similar argument: "If I was just waiting for things to come to my desk, I would have much less to do. But it's up to us to say, 'Okay, I can help, I'm ready to take this challenge,'" he says.

None of this is a shocking revelation for anyone seeking to step up in their career, but too many CIOs today still appear to fit the reactive mold. As IT continues to evolve, the pressure to change will continue to mount.



The transition to CEO

As CEO of the Economist Group, a UK media and publishing company, **Andrew Rashbass** is an example of a CIO who has made the switch up. He gives his view on the transition.

How did your career progress to where you are today?

I started out at what was then Andersen Consulting, working on development programming, systems integration and that kind of thing. After some time at Associated Newspapers, I joined the Economist Group as CIO in 1997, before becoming publisher for *The Economist*, and then finally CEO in 2008.

How do you think the role of the CIO has changed in recent years?

I think that technology is now at the core of what many organizations do; it is often a part of the products and services being sold. And many technologies have changed. You don't build them yourself, and you don't buy boxes and stick them in your own computer rooms. Therefore, the nature of the role shifts. It's not about hundreds of servers, it's about something much more akin to an ecosystem, which requires a different skillset. But I don't think this is particularly new. I think this transition has been going on for the best part of 15 years.

Has this changed the way you measure the performance of the CIO?

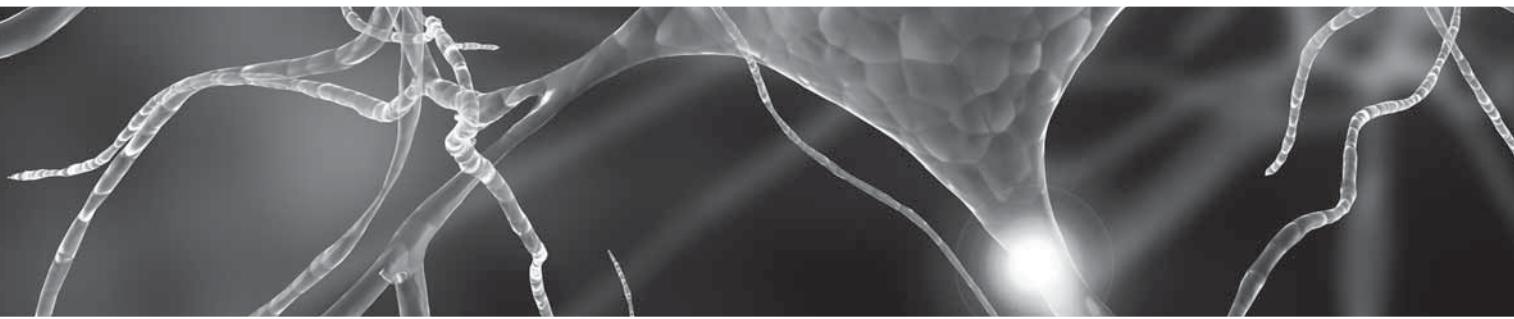
I think there are a couple of areas where it's changed. One relates to how technology is often part of the product or service that you're delivering. I'm not talking about the IT organization to its internal customer; I'm talking about the actual organization to its real customers. So it brings the CIO very close to the measures of the business. And secondly, because of the shift to more of an ecosystem, whether that's with outsourcing or cloud computing, the CIO's relationships with the outside world have lots of metrics built in contractually for the services that you're gluing together. These are now much more fundamental to the organization.

Which relationships do you think are most important for a CIO to be successful?

Obviously, the CEO is an important one. But I think more generally one of the ways to be a successful CIO is to ensure that with whomever you are speaking, that person needs to think that all that the CIO is interested in is them and their issues. The CIO's job is to engage with those people sitting around the top table. They have responsibilities that are important to that organization, and therefore CIOs need to see themselves as helping those people achieve success.

What key lessons have you identified in the transition from CIO to CEO?

As a CIO, I've got to understand business, I've got to do complicated things, I've got to manage people, I've got to deal with lots of stakeholders. Is that fundamentally different from running a business? My take is that it is different because, basically, technology manages to the downside. If you're a CIO and I come to you and say, "I've got an idea for you, it will transform what your technology does, transform your cost base and the success of your technology organization, but there's a 5% chance that it's going to destroy the company," every self-respecting CIO will turn you down. A CEO manages to the upside if you come to a CEO and say, "I've got an idea that's going to transform your company and make it more successful, it's going to delight customers, it's going to make your shareholders happy, but there's a 5% chance that it's going to bankrupt the company," as a CEO you'll say, "that sounds great. Let's work out how to do it and manage the risks". In the end, many CIOs don't want to make that switch.

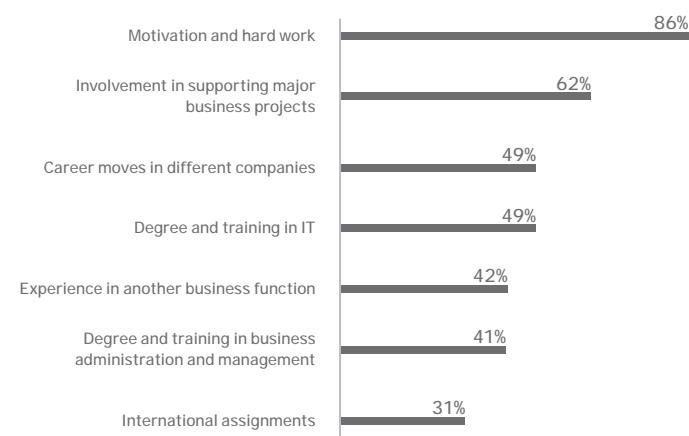


A toolkit for the aspiring CIO

What advice would CIOs give to up-and-coming IT professionals who have an eye on one day moving into their boss's shoes? In the view of today's CIOs, sheer hard work and motivation was the number one ingredient in their rise to the top. Nearly 9 out of 10 (86%) argue that this was the key to their success.

Nevertheless, while this is likely to be an essential part of how any C-suite candidate got to where they did, the CIO role comes with an important caveat: beyond the dedication and long hours, prospective candidates need to try and ensure that this time isn't simply spent on operational firefighting. To succeed, this has to be overcome, in order to be able to dedicate more time to fostering the relationships they need in order to grow, and to participate in more strategic discussions. Those who don't manage to overcome this risk get caught in the helpdesk trap: merely the go-to person for humdrum operational issues.

Chart 12: attributes CIOs strongly believe were needed to get them where they are today



(Percentage of respondents who have chosen 8, 9 or 10 on a scale from 1 = not needed at all to 10 = absolutely needed)

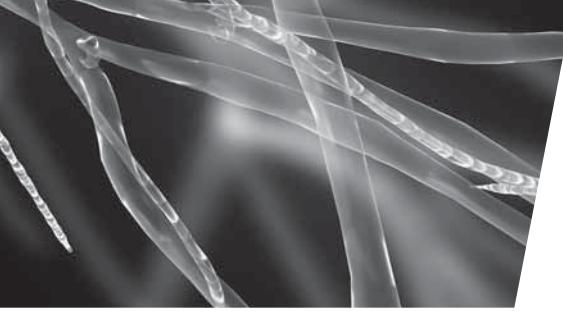
Help innovate

Future CIOs will need to be able to show proactively how IT can be used as a source of innovation within the business, rather than merely a support function. Naturally, a part of this will be securing the chance to support a major business project of some kind, which can, in turn, make a specific impact on how the rest of the business operates. Sixty-two percent of CIOs felt that their involvement in a project of this kind was a key factor in their rise to the top. The value of this is clear: once business leaders start to recognize an IT leader as someone who can transform the way they operate their business, perceptions can quickly start to shift and the candidate can be viewed in a new light.

"Clearly, the most challenging, interesting and rewarding part of the role is the transformational aspect," says HDFC CIO Anil Jaggia. "But it's also very risky, because if you do a large project, not everything will go right. Transformational projects are obviously where the joy is and also where the grief is."

One example comes from Bayer, where IT has helped to develop a new means of gaining sales feedback from the thousands of small rural agricultural dealers in India who sell its crop products. Given that almost none of these dealerships are online or technology literate, the IT team helped develop an offline means of gathering sales data. This involved simple barcodes that could be peeled off any product being sold and stuck onto a box or sales list. Then, every few days, Bayer sends teams out on motorbikes to visit each dealer, and take a picture of the barcode to send to the company's data processing facility wirelessly. "As a result, we can now segment India better. We know what sells, and in what quantities, and so on. It's very simple, but technology is enabling it," explains Daniel Hartert.

Such ideas do much to endear up-and-coming IT professionals to other business leaders. This creates new opportunities for aspiring CIOs to gain a vital invitation to the meetings that matter. "Our job is to engage people on what the value of technology can be to enable their business," says Philip Proost. Beyond this, giving practical suggestions for how IT can be used to innovate and improve the company's underlying business model can be very powerful.



"Our job is to engage people on what the value of technology can be to enable their business."

Philip Proost, CIO, Catlin

Gain experience in new areas

There are also other elements required to make the step up, although many CIOs do not yet appear to recognize these. For example, the need for gaining experience in other parts of the business was repeatedly recognized as valuable by leading CIOs interviewed for the report, but wasn't as strongly emphasized by those surveyed. EDF's Ferrari, for example, cites his background in all areas of the business, from distribution through to operations, and experience at a range of levels of seniority.

To some degree, such views vary by the candidate's specific backgrounds. For example, CIOs who put the most stock on their technical background and expertise were more likely to recognize the need for such experience elsewhere in the business: 57% ranked this as a high priority, as opposed to 48% overall.

All of this points to the need to avoid being the IT person who grew up solely within the domain of the IT function. Ernst & Young's Michel Savoie is emphatic on this point. "Diversify your career. Do other things. Go run businesses. Move to an emerging market and run the business there. Have P&L responsibility," he advises.

Think global

Another background that relatively few CIOs emphasize is the chance to gain experience outside of their home country, as part of their overall professional development. In an increasingly globalized marketplace, where many companies operate multicultural teams spanning time zones, cultures, languages and backgrounds, more CIOs need to recognize the importance of such experience. At Gulf News, for example, Edward Capaldi highlights the diversity of the team he leads: "I've got Christians, Muslims, Hindus. I've got Indians, Jordanians, South Americans, Africans, Irish, Palestinians and Algerians. It's a very, very broad mix, which pushes us to think openly and collectively bringing to the table unique traits which ultimately result in more effective decision making."

Although not all companies may be this diverse, the ability to operate in a multi-cultural environment is steadily becoming more important. Esprit's Thomas Pirlein highlights cultural understanding and a better sense of how decisions are made in different regions of the world as key. In general, the need for "internationality" as he terms it: "They look for whether you've worked abroad, or at least have a lot of projects in other countries."

"I consider international experience to be very, very useful. It just opens up your mind," says ÖBB's Peter Lenz. He spent about three years working in North America, on a transfer within his previous company, before relocating back to Europe. He views this as a key part of his development. "I think the ability to adapt to your counterparts is what you learn when you have experiences in multiple companies, nations and cultures. And you need to have this skill to be a CIO."

A role model CIO?

The CIOs and C-suite executives we interviewed for this report all had insights to share on what constitutes the essential ingredients of a leading CIO. These are:

- A well-rounded skillset, with a clear balance of both technology skills and soft skills
- Confident, with a proven ability to communicate well at an executive level
- Strong experience of initiating and delivering change management projects
- A clear ability to translate financial information into meaningful insights
- Exposure to the rest of the business, with experience elsewhere in the organization; ideally also wider experience of the overall industry
- Strong vendor management skills, with good contractual and negotiating skills
- Wide experience of different cultures and working environments and conversant in more than one language
- A solid appreciation of wider talent management issues, including succession planning, skills and talent development and diversity



Hunting down the best talent – a recruitment perspective

Magnus Graf Lambsdorff, Partner at Egon Zehnder International, a global executive search firm, gives his perspective on what chief executives are typically looking for in their search for CIOs.

What are the main CIO recruitment trends you've seen over the past five years?

I think the demands of the CIO role are constantly changing to reflect the challenges, the complexity and the speed at which decisions now have to be made. The CIO is no longer just seen as the provider of infrastructure and a key problem solver. The IT role remains inward looking, as before, but many more CEOs who discuss these roles with us are now looking for co-drivers of their business. They also want someone who is a guardian of their business models, looking out for threats and then developing countermeasures.

What are the typical skills and attributes that CEOs are putting on the CIO checklist?

Efficiency, productivity and cost sensitivity are taken for granted. The true expectations of CEOs relate to the strategic orientation of the candidate, and a good market and business understanding. They need someone who sees the evolving possibilities from a technology perspective and understands how these trends and developments can have an influence on their core business, and vice versa. They then need the underlying leadership and communication skills, so that they can engage with the relevant stakeholders within the business. They need to be able to influence the rest of the business, which is something that is quite often lacking. Functional competencies are still important, but it's increasingly acknowledged that the CIO's team has to provide these, rather than necessarily the individual. Beyond all functional capabilities, though, this person first and foremost needs to be a market-oriented strategic change leader.

How easy is it to find such candidates in the market?

They are very hard to find. It depends on the expectations of a given company, but the most advanced CEOs, who fully understand what the CIO can do, are really challenging us. They are seeking people who hold deep technical expertise, but at the same time are real business people. But, unfortunately, there are not many CIOs who have seen any other function or segment of a business during their career, because they are traditionally still groomed within the technology area.

Are companies willing to invest appropriately in such candidates?

It depends a little bit on the team and the acknowledged importance of the function for their future development, but some are. But companies that do so get good people because there are

not too many around. The ones who are up there absolutely know their price. Of course, the scarcity of this type of modern CIO is driving up the price. As a result, many CIOs are now getting remuneration packages that exceed what was seen in prior years and match their peers in the C-suite.

If you were advising a young person who aspires to be a CIO, what would you tell them?

I would probably tell them to do a bachelor's degree in a technical domain, so they get a good basic grounding. Then go into business for two or three years, probably in the IT function, before doing an MBA. Following this, they should acknowledge the value of gaining experience in various areas in the organization, but without losing their grounding within the IT function. They need to get an understanding of other parts of the business. The best-qualified CIOs are those who have strategic change experience, along with exposure to the marketing and strategy side of the business.

Egon Zehnder has co-developed a 'CIO of the Future' competency model. Can a CIO's personality really be captured in this way?

No, of course not. But this type of model offers a highly objective view of their strengths. It basically groups competencies into three categories: reactive, active and proactive. Reactive behavior patterns, such as responding to customer demands and providing support, are positive, but are also mainly found at a junior management level. Senior IT executives, on the other hand, tend to demonstrate active competencies, such as anticipating future trends and achieving goals. Outstanding leaders are proactive strategic thinkers who make a long-range organizational impact. Ultimately, however, personalities are more complex than the parameters of any model, and it is always important to consider not only a candidate's track record, but also their potential.

What kinds of competencies does the model suggest are particularly important for CIOs to have?

It is very difficult to generalize here, and our model merely serves as an assessment framework. It suggests, however, that outstanding CIOs have competencies that are remarkably similar to those of top CEOs. In other words, they are business leaders with clear strategic insights who can leverage IT investments to boost a company's bottom line.

Based in Hamburg, Magnus Graf Lambsdorff focuses on the areas of telecom services, digital business models and private equity.



The first 100 days as CIO

From working with our clients, and from across interviews for this report, we believe there are some critical principles to help a new CIO to make the best impact in their first 100 days in the role.

1. Expect the unexpected

The role you signed up for might not be the one that was sold at the interview. You may find that the reality of the issues facing you is of a different magnitude and nature than described. The complexity of the underlying IT systems and processes; the way IT is perceived within the business; the depth of skills within the team – the reality may not match your expectations. However, prior to taking office, it is important to do your due diligence, understand the role and begin to identify the key issues that you will inherit.

2. Listen well, and ask the stupid questions

There are advantages and disadvantages of being appointed internally or externally. An existing knowledge of the business, ability to leverage existing networks and inherent knowledge of systems, people and processes are some of the advantages of an internal appointment. However, the advantages of an external placement include no previous history to impair initial credibility, the ability to more easily “command the change” and the opportunity to ask the stupid questions. An external appointment is the platform to ask the straightforward questions that can throw light on fundamental issues that have previously been overlooked. A key part of this involves listening carefully and reading between the lines to pick up on potential issues.

3. Make friends, network and influence people

Not always the natural domain of the CIO, there may well have been a relationship deficit from the prior candidate. It is important to prioritize the relationships that will be critical to your future success – and start understanding what colleagues expect of you. Clearly, the key relationships encompass the traditional CEO, COO and CFO triumvirate. But you should network with all the major divisional heads you'll be supporting. Taking key stakeholders to lunch to gain an understanding of their approach and interests can be a useful step to break the ice and gain some insights into their needs. Given that your first 100 days may feel a little lonely, you may also want to identify a mentor to guide you and act as an independent confidant.

4. Get your team behind you

Spend time up front in understanding your team's issues, responsibilities and competencies. Identify who you can rely on to support you with the detail, so you can focus on the bigger picture.

5. Act promptly

A new placement is often a rare opportunity to implement necessary change quickly. Change will be expected from you, so you have a window of opportunity where you will be given a relatively free rein to act. There is a clear distinction between starting the role in a crisis situation and in one that is more stable. Where a major business transformation is required, there is a certain expectation that significant change will be made early on, which will require rapid attention. In a stable environment, where the business is already performing well, you need to start building up a vision of where it needs to go next to remain competitive. You have 100 days to listen and learn, but then the honeymoon period will be over and action will be expected.

6. Make your mark

It is imperative that you put your individual stamp on the strategy of the organization. This is clearly guided to some extent by the circumstances you inherit. An external recruit will need to focus on immersing themselves in the business and rapidly understanding how it makes money. If joining from another sector, you will want to quickly become familiar with any sector-specific issues to show you understand the pressures faced. Whether moving into the position as an internal or external appointee, a key to making an early mark is to identify and tackle the quick wins.

Final word: CIOs, seize the initiative!

CIOs with an eye on the C-suite who are looking to reposition themselves within the business, can get themselves off to a good start in a perhaps unexpected way: going for lunch. Topping the list of things that CIOs ought to do to gain promotion is to network and build relationships (72%). Many of the CIOs interviewed for this report argue that inviting important future contacts to lunch, or breakfast, is as good a way as any to nurture relationships.

Chart 13: what CIOs believe they need to do to achieve the next step in their career



(Percentage of respondents who have chosen 8, 9 or 10 on a scale from 1 = not needed at all to 10 = absolutely needed)

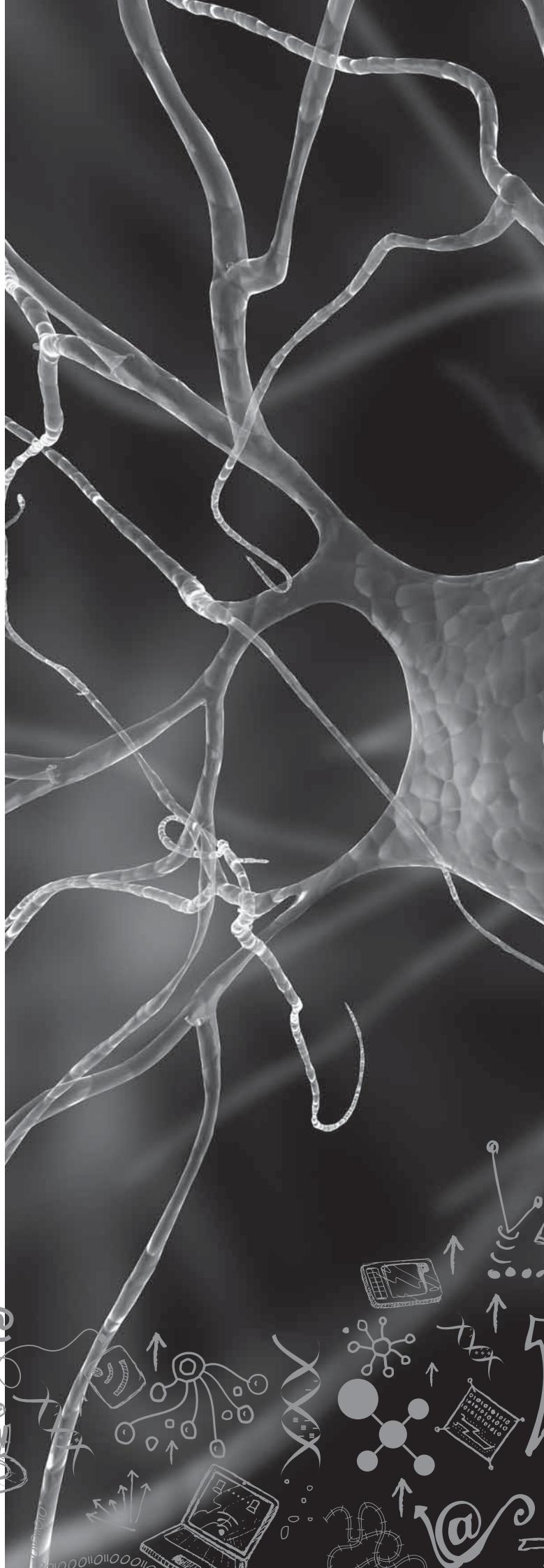
This is seen as especially crucial by those CIOs who feel in greatest need of input on their career development strategy. This underscores the fact that many of these CIOs feel largely isolated within the confines of the IT function. Ninety percent of those who felt they needed greater career advice cited relationships as a high priority, far more than those who felt more secure about their career strategy (62%). Energa CIO Roman Dudzik talks of “making a bridge” with the rest of the business, which in turn helps IT professionals get invited to the meetings from which they were previously excluded. But clearly this requires an investment of time: “It’s not something you can do from one day to another. You need to build these relationships over time,” he says.

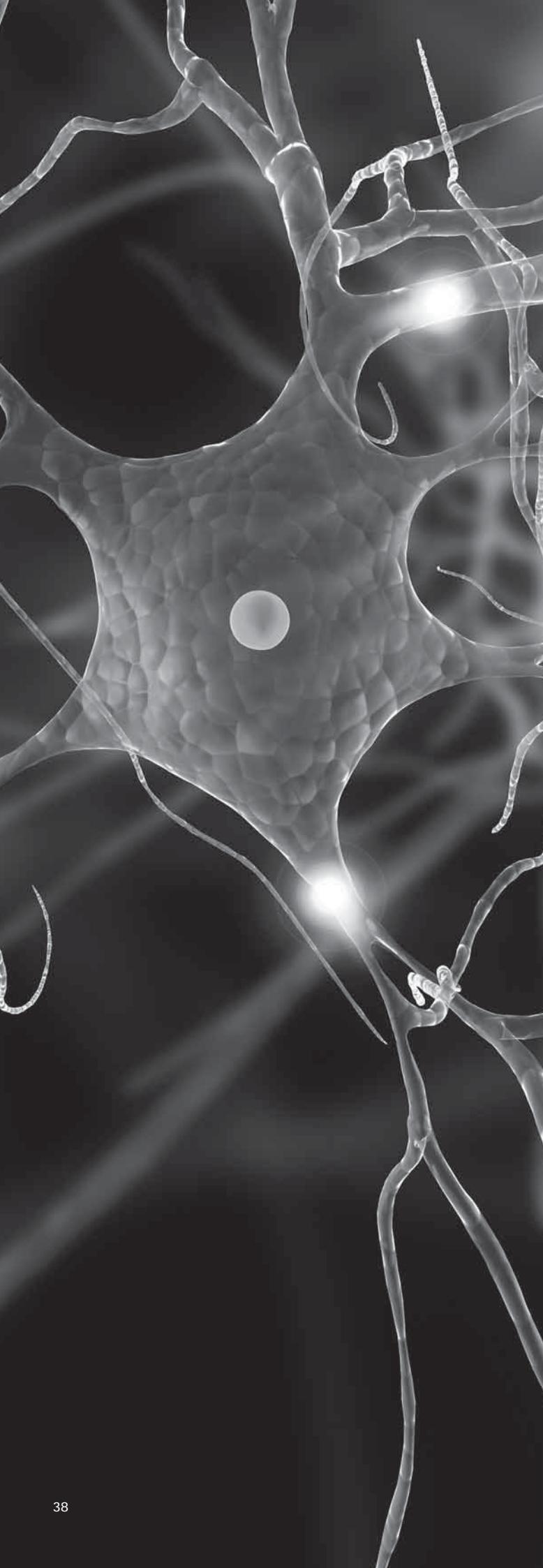
Naturally, this assumes that the operational basics are all taken care of, which Catlin CIO Philip Proost describes as the “foundational work.” Until CIOs can move out of fire-fighting mode on the operational front, there is little prospect of the door opening to more strategic work. Ernst & Young’s Benoit Laclau characterizes this as a question of timing and breaks the process down into a staged sequence. First, ensure that the operational basics are mastered, then focus on relationships, before looking to where the value can be added. “The danger is that you go and spend all of your time meeting everybody, but then they simply describe their basic operational problems to you. It’s very difficult to talk about value creation when the PCs in the call center aren’t working, or the chief executive’s printer fails.”



Sticking one's hand up for the big projects – and then delivering them – holds the biggest potential for gaining the most reward and recognition, but also the biggest risks. "If you show that you can master those things, and that you can make a difference and stand strong in the wind, while everything around you is shaking, then this becomes visible to others. People then increasingly believe that you are ready for bigger responsibilities," says Bayer CIO Daniel Hartert.

The question for CIOs is whether they've got the courage to stand up and take on the challenge.





Demographics

A unique community

Our survey of 301 senior IT professionals and a further 25 in-depth interviews was drawn from a broad group of CIOs, representing countries across Europe, North America, Asia, Latin America, Australia and South Africa. All respondents were ultimately responsible for the IT function in their organizations.

In addition, we also surveyed 40 C-suite executives who were not from within the IT function, to gain their perspectives on the role of the CIO.

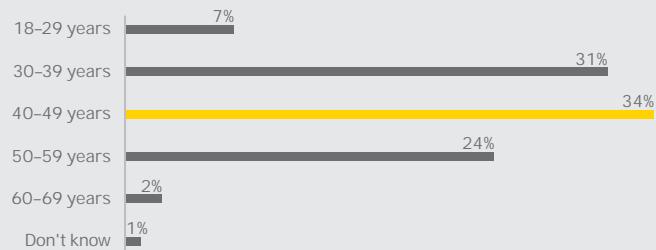
The following charts show the characteristics of the CIOs and those of the companies that both the CIOs and the other C-suite respondents represent.

Surveyed CIOs

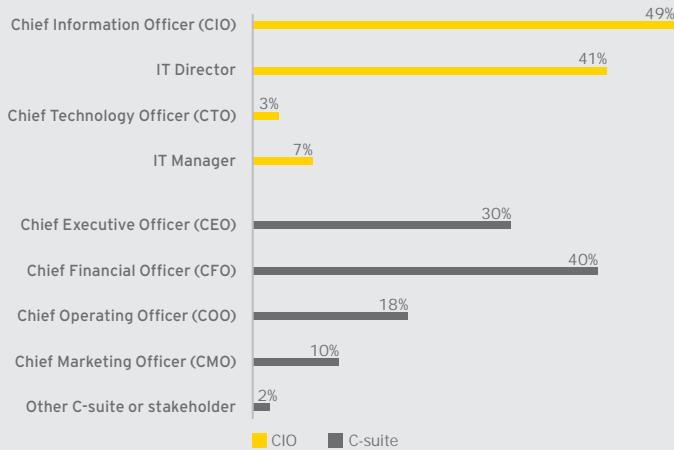
Gender



Age



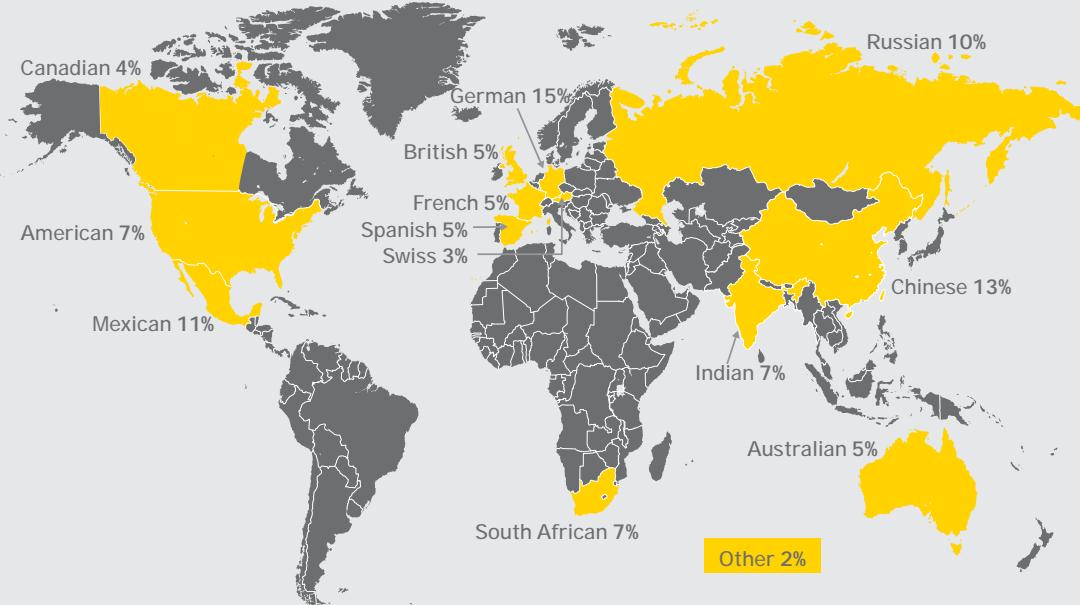
Job title



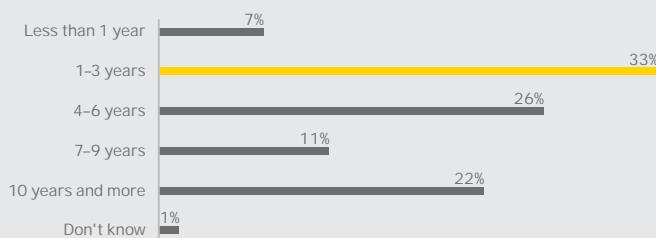
Highest qualification



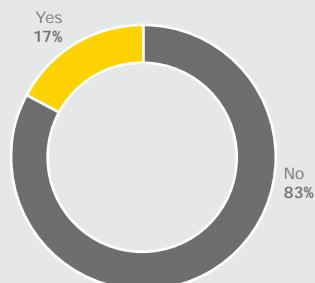
Nationality



Time in current role



Board membership



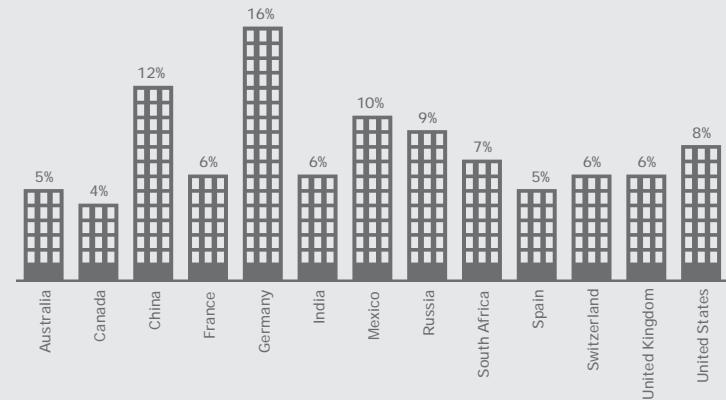


Company of CIOs and C-suite

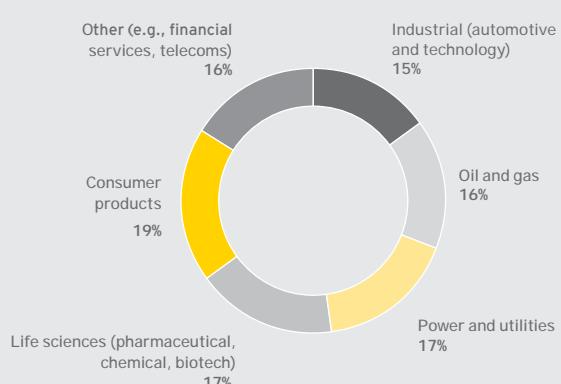
Global annual turnover



Location of headquarter



Sector



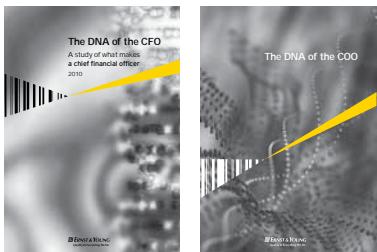
Worldwide number of employees





The DNA of the CIO is the first of Ernst & Young insights into the role of the CIO and what defines this unique group of IT leaders. Our ongoing program will address aspects of personal interest to CIOs as they seek to develop themselves and their teams, and learn from others within their community.

For further information, please visit www.ey.com/dna-cio or speak to your Ernst & Young contact.



This study is part of a series also including the *DNA of the CFO* and the *DNA of the COO* offering guidance for senior finance respectively operations leaders.

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EYG No. AU1295

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