



**The New CIO:
Change Partner and
Business Leader**

Contents

- 3 Executive summary**
- 6 The business landscape is changing**
- 7 Business model innovation is key**
- 7 Unlocking the business value of technology: IT “Savvy” pays off**
- 9 The IBM CIO Leadership Forum Survey: How CIOs can help**
- 10 Closing the business and technology gap**
- 11 The CEO-CIO relationship: Building a line to corner office**
- 12 CIO: The best seat in the house to envision change**
- 12 Enhanced CIO involvement in strategy is critical**
- 13 Being measured on what counts to the business**
- 14 Do you understand your CIO?**
- 16 What keeps your CIO up at night? It may not be what you think.**
- 17 Leveraging your CIO**

Executive summary

The world economy is at a historic turning point. The forces of globalization and commoditization are radically reshaping the business landscape. The role of technology as a disruptor and source of competitive advantage places the CIO at the nexus of these shifts. More than ever before, leadership from the CIO – both as a business executive and information technology (IT) expert – and partnership between the CIO, the CEO and other business leaders will shape the destiny of the enterprise.

Recent research on the state of business and technology is pointing to the need for change in how IT is integrated into the core of the business and what relationships are required between the IT organization and senior leadership to build firm-wide IT capability and ensure technology continues to drive innovation and growth.

According to a recent survey of 765 global CEOs¹, most companies face a gap in their integration of business and technology, hindering customer satisfaction, speed, and flexibility. Closing this gap is critical because of the unprecedented pace and breadth of technological change and its strategic impact on all areas of the business. Similarly, an MIT Sloan² study found that companies with “IT Savvy” have superior financial performance as measured by cost, profit, innovation, and market capitalization. These companies are addressing the integration gap by both implementing high levels of digitization of transactions and broad-based, firm-wide IT skills as well as fostering strong business unit involvement in IT decisions resulting in a partnership between IT staff and business units to generate value from IT investments.

Despite this progress in understanding the value in connecting business to IT, a recent survey of 170 global CIOs³ found that only 16 percent thought their companies were taking full advantage of technology’s transformative potential. What can CEOs do to further close that crucial gap?

Highlights

Viewing technology as an operational “black box” risks missing opportunities and making decisions that will not drive value for the enterprise.

More often companies have the CIO siloed as a support function rather than engaged as a business leader and partner for process and culture change.

Changes need to be made to enable CIOs and their IT organizations to make a stronger contribution to the business.

According to the CIOs surveyed, the first step is for CEOs and business leaders to recognize the strategic role that technology plays in the enterprise. It is no longer sufficient to treat technology solely as a cost-center or stand-alone function and implementer of the business strategy; technology is also an enabler of the strategy and a source of innovation and growth. Technology and business processes are now inextricably intertwined. CEOs, line of business leaders, and even Boards of Directors – who view technology as an operational “black box”– risk missing opportunities and making decisions that will not drive value for their enterprises.

The next step is for CEOs and business leaders to recognize the more strategic role that CIOs can, and should, now play in the business. In many companies, the CIO is the only person with a true “end-to-end” view of the business with a unique vantage point as to how information technology, combined with process transformation, can create competitive advantage. Yet companies more often have the CIO siloed as a support function rather than engaged as a business leader and strategic partner for process and culture change. Additionally, CIOs are often unable to capitalize on this perspective because of how they are measured and managed. CEOs and business leaders should make four changes to enable CIOs and their IT organizations to make a stronger contribution to the business:

- **Measurement:** *Reward CIOs for contributing to growth, innovation, and people. System reliability and cost management are only one-half of the equation.*
- **Strategy:** *Engage CIOs early on in the strategy process. Technology can often inform what’s possible for the business.*
- **Organization:** *Help CIOs undertake process transformation and give them a mandate to create organizational readiness for IT. Promote partnership with the line of business, overcome resistance to change, and drive “IT Savvy.”*
- **Talent:** *Give CIOs opportunities to develop broad skills and leadership competencies. Encourage contribution to major initiatives and relevance to the business.*

Closing the business-technology integration gap: IBM Global CEO Study 2006

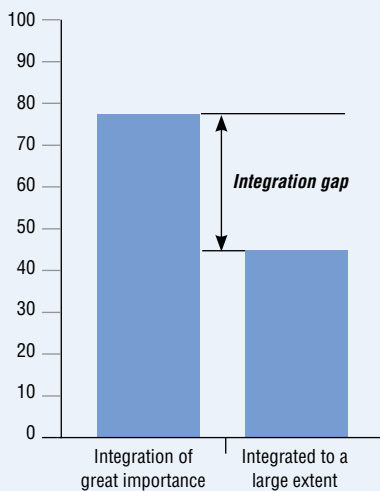
CEOs view business and technology integration as integral to innovation – or as one CEO put it, “as important as water is for sea traffic.” Because of the unprecedented pace and breadth of technological change, CEOs realized its strategic impact on all areas of the business. Most saw these advances as opportunity. They spoke of technology enabling “daring ideas” – a way to consolidate physical offices into virtual ones, to discover customer insights that drive product and brand extensions, to spot emerging trends that competitors miss. One CEO described how his organization avoids being blind-sided: “We get involved early on, in infancy, in primordial, across a range of technologies relevant to our capabilities and the needs of our customers. We maintain a portfolio of technologies, never knowing for certain which technology will take off next, but always having a hand in as many relevant areas as we can identify.”

Nearly 80 percent of the CEOs interviewed rated business and technology integration of great importance. But, CEOs identified a major “integration gap”. The lack of integration frustrated many CEOs. They wanted to improve, but “didn’t know how to do it” or found the task “too complicated.” For others, the gap loomed large because of latent potential. One CEO expressed the chase this way: “Even more is still possible...and feasible. We cannot do enough!”

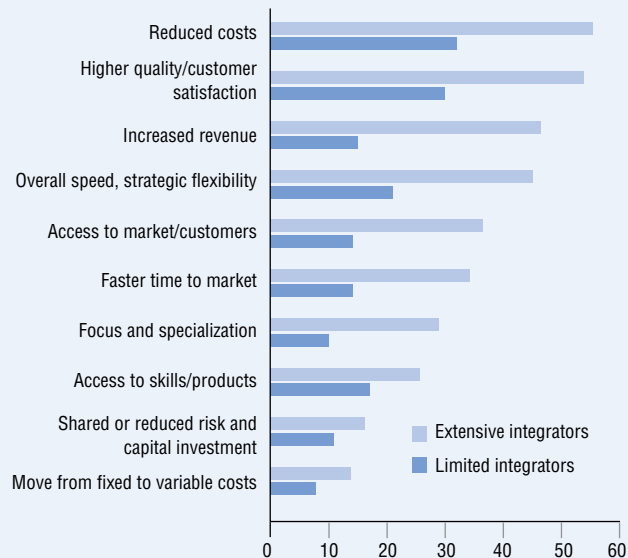
For the subset of CEOs that have gone further, integrating business and technology beyond moderate levels has paid off. Extensive integrators were much more enthusiastic about the benefits they were receiving than those who were less integrated. Though cost reduction topped the list, the bulk of the benefits actually relates to driving top-line revenue. CEOs that had implemented more extensive business and technology integration reported greater customer satisfaction, speed and flexibility than their less integrated peers. In fact, extensive integrators reported revenue increases three times as often as companies that were less integrated. These views correspond to the study’s financial comparisons which found that extensive integrators were growing revenue 5 percent faster than their competitors.

These findings surface potential for the CEO to partner with the CIO to close this critical gap and tangibly enhance business performance.

Importance versus extent of business and technology integration.
(Percent of respondents)



Benefits cited by extensive integrators versus limited integrators.
(Percent of respondents)



Source: “Expanding the Innovation Horizon,” The IBM Global CEO Study 2006.

Highlights

The merging of business and IT is driving an imperative to innovate as enterprises strive to address the gap that exists between the transformative potential of IT and the organizational capability to harness that potential.

“This is a great time to be a CIO. We sit at the center of it all.”

– IBM CIO Leadership Forum Participant

Does your CIO have a ‘seat at the table’? Are you leveraging your CIO’s unique end-to-end view of the business? Are you engaging your CIO early in the strategic decision-making process? Are you measuring CIO performance on things that drive value?

The business landscape is changing

Businesses are changing in fundamental ways – structurally, operationally, culturally – in response to globalization and new technology. Within organizations, there has been a gradual blurring of the lines between organizational units and stakeholders. As business and technology strategies increasingly become one, there must be more cooperation, more collaboration, and more integration as IT is exploited to deliver greater value across the extended enterprise. This merging of business and IT insight and experience is driving an imperative to innovate as enterprises strive to address the gap that exists between the transformative potential of IT and the organization capability to harness that potential. At the center of it all, is the CIO, who is increasingly emerging as a key business leader and potential partner for change alongside the CEO and other C-level and line of business leaders.

Today, innovation is top of mind as a competitive weapon and the most successful firms are innovating not only their offerings and business processes, but changing their business models. To achieve dramatic performance gains, companies find they must rethink, or transform, the way they do business and one of the key accelerators of change is information technology.

Highlights

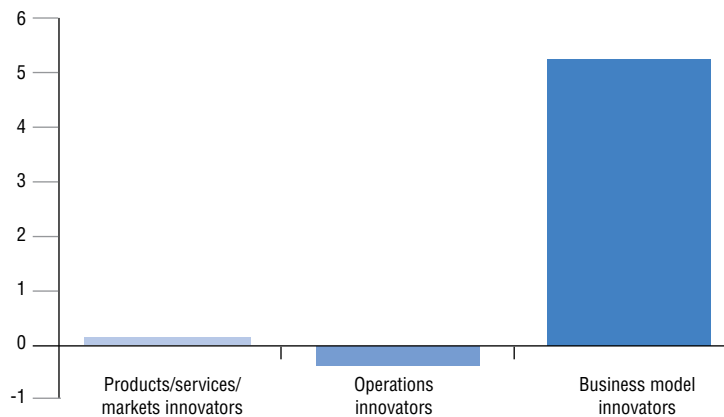
Deep business model innovation is critical and results in better operating margin growth.

Research is increasingly demonstrating that IT materially improves business performance.

Business model innovation is key

A recent survey of 765 global CEOs conducted by IBM revealed that deep business model innovation is critical. Product, service and operational innovations remain important, but competitive pressures have pushed business model innovation much higher on the CEOs' innovation agenda. And for good reason, as financial analysis revealed, companies that put more emphasis on business model innovation experienced significantly better operating margin growth (over a five-year period) than their peers.

Operating margin growth in excess of competitive peers.
(Percent compound annual growth rate over 5 years)



Source: "Expanding the Innovation Horizon," The IBM Global CEO Study 2006.

Unlocking the business value of technology: IT "Savvy" pays off

Information technology is an integral component in enabling business model innovation and in building a strong foundation for future business competitiveness and flexibility. Research is increasingly demonstrating that information technology materially improves business performance. The use of technology to achieve innovation and gain competitive advantage is changing the paradigms of doing business.

Highlights

High “IT savvy” is linked to a broad basket of performance measures, such as costs, profits, innovation and market capitalization.

The CIO, CEO and others play a critical role in driving IT Savvy deep into the organization.

Making a direct connection between IT investment and business performance is an emerging field of study. Early work done by Dr. Peter Weill, Director of the MIT Sloan Center for Information Systems Research, and colleagues, demonstrated that links can be made between what he has called “IT Savvy”, investments in specific IT asset classes and returns for a broad basket of performance measures, such as costs, profits, innovation and market capitalization. Dr. Weill has delineated five mutually reinforcing characteristics of IT savvy (See box below). The first three characteristics are practices that relate to IT use. The last two characteristics are competencies needed for high IT savvy. The mutual reinforcement of both practices and competencies is necessary for high IT savvy and the CIO plays a critical role in driving these deep into the organization. It is not the CIO’s job alone though, and as this research makes apparent, there is an organizational readiness that is the responsibility of the CEO and others across the extended enterprise.

Characteristics of IT Savvy

- *IT for communication – high use of electronic channels such as email, Intranets and wireless devices for internal and external communications and work practices.*
- *Digital transactions – a high degree of digitization of the firm’s repetitive transactions, particularly sales, customer interaction and purchasing.*
- *Internet use – more use of Internet architectures for key processes such as sales force management, employee performance measurement, training and post-sales customer support.*
- *Firm-wide IT skills – high capability of all employees to use IT effectively. There are strong technical and business skills among IT staff, strong IT skills among business staff and an adequate market supply of highly skilled IT staff.*
- *Business management involvement – strong senior management commitment and championing of IT initiatives. There is also strong business unit involvement in IT decisions resulting in a partnership between IT staff and business units to generate value from IT investments.*

Highlights

The CIO has a major role to play in fostering the organizational capability needed to extract greater value from IT investments.

CIOs feel they need to step up their contribution, but they also need the support of the CEO and other business executives to be more effective.

When combined with four basic asset classes of IT investment – Infrastructure, Transactional, Informational and Strategic – firms with high IT savvy achieved higher performance than other firms. IT investments in firms with low IT savvy, on the other hand, were associated with lower returns.

Unlocking the puzzle of how to derive business value from IT is complex, but clearly the CIO has a major role to play in fostering the organizational capability needed to extract greater value from IT investments. CEOs and other C-level executives need to consider the role the CIO can play in enhancing a firm’s “IT Savvy” and how to encourage the CIO as an enabler of business value creation.

The IBM CIO Leadership Forum Survey: How CIOs can help

To explore this nexus of innovation and technology and the strategic role the CIO plays today in advancing the innovation agenda and fostering growth, IBM convened more than 140 leading CIOs from across the globe to attend the IBM CIO Leadership Forum. There, participants discussed the challenges and opportunities for CIOs to drive innovation and generate growth by enhancing their relationships with CEOs, line of business leaders and Boards of Directors, as well as developing critical skills and capabilities.

In-depth interviews were conducted prior to the Forum, as well as a survey of 170 Forum invitees. Conversations among Forum participants and panelists revealed a number of themes that CIOs, their IT organizations and their companies must wrestle with to continue advancing the role of the CIO and the importance of technology as a stimulus for business innovation. Survey results reveal where CIOs believe they need to step up their contributions as well as where they need the support of the CEO and other business executives to be more effective. The survey and interviews showed that CIOs believe they are uniquely able and willing to have a greater impact on the business.

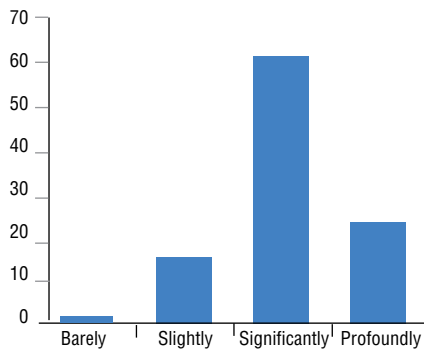
Highlights

Only 16 percent of companies felt they were taking full advantage of IT's transformative potential.

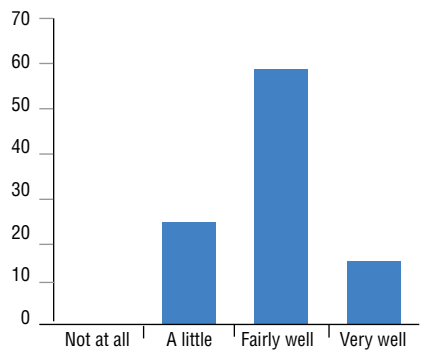
Closing the business and technology gap

According to The CIO Leadership Forum Survey, 84 percent of CIOs surveyed believe that technology is significantly or profoundly transforming their industries and enabling competitive advantage. However, only 16 percent felt their companies were taking full advantage of IT's potential.

To what degree is technology transforming your industry and enabling competitive advantage?
(Percent)



To what degree is your company taking advantage of this transformative potential?
(Percent)



Source: IBM CIO Leadership Forum Survey 2006.

In addressing this transformation gap, CIOs are challenged to build a solid business case for IT and generate the organizational commitment to be successful.

Interestingly, CIO respondents were very clear that management sees the transformative opportunity. CIOs pointed to their inability to build an effective business case for IT investment and their inability to get the organizational commitment as the reason for this gap.

What accounts for this gap? (Rank top 3)
(Percentage of responses for the top 1)



Source: IBM CIO Leadership Forum Survey 2006.

Highlights

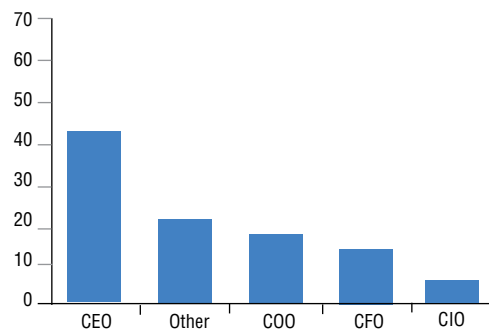
Closing the influence gap requires both CEOs and CIOs to collaborate more and build a stronger relationship.

CIOs are eager to contribute to major growth and innovation initiatives.

The CEO-CIO relationship: Building a line to the corner office

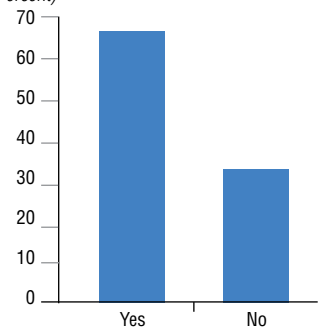
It's clear that senior leadership wants its finger on the technology button. Increasing numbers of CIOs are finding their way onto companies' management teams and executive committees. This growing trend reflects an acknowledgement on the part of senior leadership that IT matters.

To whom do you report?
(Percent)



Source: IBM CIO Leadership Forum Survey 2006.

Do you serve on the company's executive committee or equivalent?
(Percent)



That said, over one-third of CIOs surveyed do not have a formal role on the company's executive committee. Closing the influence gap requires both CEOs and CIOs to make some important shifts in the way they approach their function:

“CIOs need to move out of the role of being technology presenters – the skills that CIOs need are those of business managers. We need to think about our function as a business and if we do this, we will be better equipped to influence the business as a whole.”

– IBM CIO Leadership Forum Participant

CIOs surveyed are already collaborating at medium or medium-high levels with other CXOs, but feel that building stronger relationships with business leaders is important. CIOs also expressed a desire to contribute to major growth and innovation initiatives.

Highlights

CIOs can play an important role in driving business model innovation with their uniquely powerful end-to-end view of the business.

It is fundamentally important for IT to be “fused” with the business to better inform the strategic decision-making process.

CIO: The best seat in the house to envision change

CIOs have an important, but challenging, role to play in driving business model innovation that goes beyond their understanding of IT. Their unique end-to-end view of the business is unparalleled across the enterprise. CIOs comprehend the potential impact of technology and the power of innovation more than any other C-level executive in their organizations.

“It’s now to the point where IT people know much more about how business runs at a certain level than the business folks do because it’s so machine driven and no one department on the business side really has their hands around the entire process. It’s real-time and quite complex.”

– IBM CIO Leadership Forum Participant

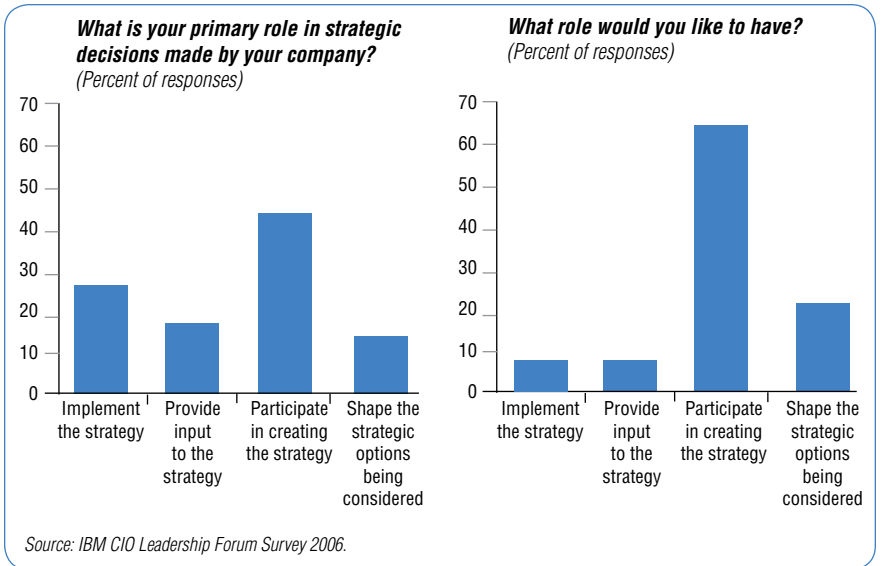
Successful innovation requires a team effort of all senior management and the CIO is a critical role given the increasing importance of IT in enabling business performance and competitiveness. The CIO has evolved from functional manager to general manager with enterprise wide scope and responsibilities. Participating in business model innovation provides CIOs with an opportunity to accelerate and manage their transition to full business partner.

Enhanced CIO involvement in strategy is critical

With the growing pervasiveness of information technology and its importance to business success, the key is to determine how to best leverage technology in support of corporate strategy. Organizations have achieved sustained competitive advantage did not do so by virtue of information technology alone; they applied technology in conjunction with fundamental restructuring of the nature of the work. Therefore, it becomes increasingly important for IT to be “fused” with the business from the point at which basic assumptions are created and strategic direction is defined. The CIO can play a central role in providing the vision and leadership to help the organization understand and assess potential areas of opportunity in which information technology could enable transformation and provide a competitive advantage.

Highlights

CIOs have a strong desire to be more involved in shaping strategy rather than merely implementing the strategy after the fact.



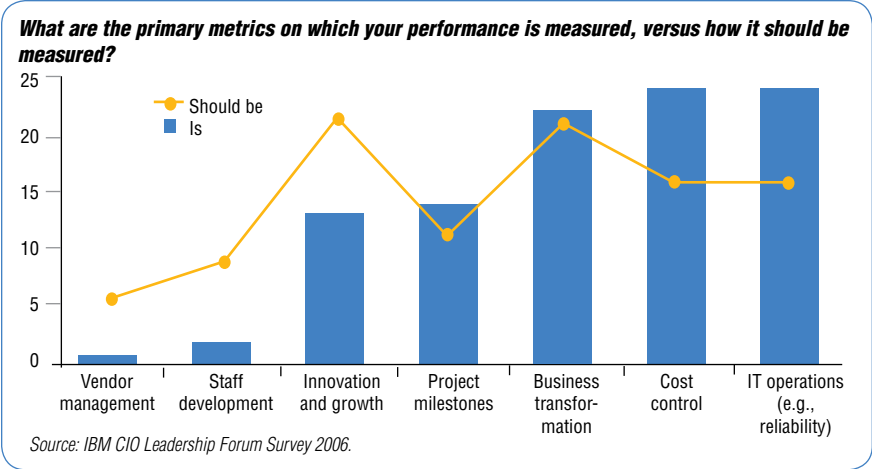
CIOs understand that innovation requires a company’s information technology strategy and plans align with those of the business. They also know that a tight linkage between business and IT occurs when there is a single, integrated strategy that includes both business and technology components. To create this linkage, CIOs want to be involved in shaping the strategy and want their performance measurement to align.

CIOs would like to be measured less on cost control and IT operations and more on innovation and growth.

Being measured on what counts to the business

The opportunity for CIOs to drive greater accountability for innovation may help CIOs improve their relationship with the business and the perceptions of the CIO. CIOs surveyed indicated that measuring their performance on business transformation and project milestones would be more appropriate. CIOs also showed a desire to be measured less on cost control and IT operations and more on innovation and growth and how they manage their people and ecosystem.

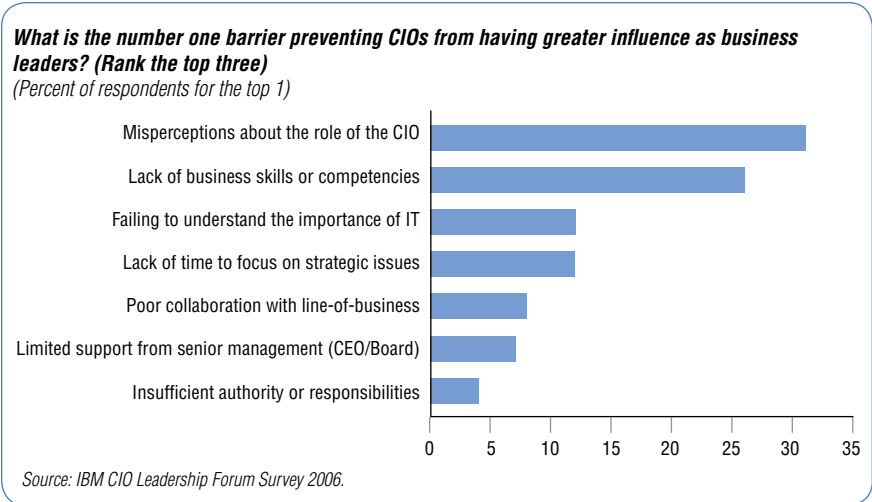
Highlights



Do you understand your CIO?

The desire for CIOs to capitalize on their horizontal end-to-end view and drive greater accountability for innovation and strategy is significant, but there are barriers.

CIOs feel there are misperceptions about the role of the CIO that prevent them from having greater influence as business leaders.



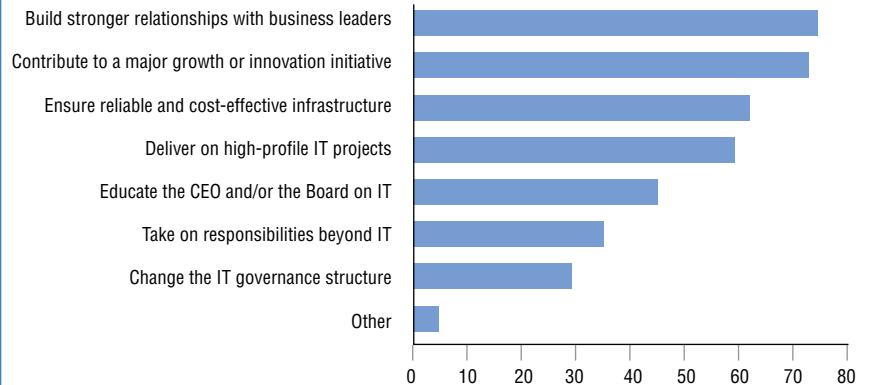
Highlights

CIOs want to build stronger relationships with the CEO and the CXOs and have a strong desire to contribute to a major growth or innovation initiative.

Finding ways to advance a broader understanding of the CIO's role and to build more positive perceptions about the CIO's business acumen is a significant challenge for CIOs and other business leaders in the organization. Evolving this issue is not trivial; CIOs surveyed are already collaborating at medium or medium-high levels with other CXOs, but feel that building stronger relationships with business leaders is important. CIOs also expressed a desire to contribute to major growth and innovation initiatives.

How do you recommend CIOs best elevate their role in the organization?

(Percent, more than one answer accepted)



Source: IBM CIO Leadership Forum Survey 2006.

“I’m beginning to wonder whether we’re redefining our role and our contributions, yet the organization hasn’t quite caught on. And if that’s the case, where do we go next? How do we break this barrier?”

– IBM CIO Leadership Forum Participant

On this matter CEOs and CIOs share a common set of obstacles impeding performance and the majority are internal challenges: culture, budget, people and process are cited by CEOs as the most significant.

Highlights

Increasing focus on delivering business value means there are new things that are keeping CIOs up at night.

“Keeping the lights on” has become the price of admission rather than other issues that offer the CIO credibility at the executive table.

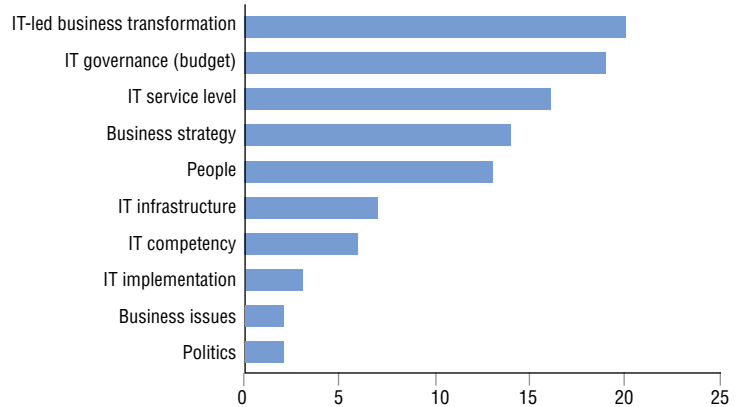
What keeps your CIO up at night? It may not be what you think.

Stories of phone calls at 3 a.m. that the network is down or that a critical customer interface has gone awry are part of the CIO’s daily grind. But in the changing world of today’s CIO where ‘keeping the lights on’ has become the price of admission, increasing focus on delivering business value means there are new things that are keeping CIOs up at night.

“Reliability, quality, and responsiveness are the price of admission to gain credibility at the executive table. We cannot be at the table answering the CEO’s question: ‘Why is my email not working?’”

– IBM CIO Leadership Forum Participant

What are the issues that most “keep you up at night”?
(Percent)



Source: IBM CIO Leadership Forum Survey 2006.

Highlights

There are actions CEOs and other CXOs can take to expand the CIOs' mandate to close the business-technology integration gap and truly leverage IT for competitive advantage.

Leveraging your CIO

Our conversations with CEOs and CIOs leave no doubt: Now is the time for CIOs to lead innovation and profitable growth initiatives by forging more collaborative relationships with CEOs and other line of business leaders. Unlike invention, which comes from effort and experimentation, innovation relies more on skill and leadership – choosing the best places to focus attention and creating the ideal environment where innovation can flourish. CEOs must find a way to make innovation happen more systematically and the CIO can be at the center of their efforts.

Distilling the collective thinking of both IBM's CEO Survey of 765 corporate and public sector leaders and the CIO Leadership Forum Survey of 170 leading global CIOs surfaces a picture of what CEOs can do to better leverage their CIOs to bring innovation and growth to their enterprises and help further close the business-technology integration gap. Based on these insights, we offer several actions you can take to expand your CIOs impact in your organization.

- **Measurement:** *Reward CIOs for contributing to growth, innovation, and people. System reliability and cost management are only one-half of the equation. Ask your CIO if they think they are being rewarded on the right things.*
- **Strategy:** *Engage CIOs early in the strategy process. Technology can often inform what's possible for the business. Invite your CIO to critical strategy formulation discussions.*
- **Organization:** *Place your CIO on the executive committee and help CIOs undertake process transformation and give them a mandate to create organizational readiness for IT. Promote partnership with the line of business, overcome resistance to change, and drive "IT Savvy." Work together to identify tangible ways to further embed IT in the business; promote your CIO as a change partner along with line of business leaders.*
- **Talent:** *Give CIOs opportunities to develop broad skills and enhance leadership competencies. Encourage contribution to major initiatives and relevance to the business. Partner with your CIO to map out your transformation agenda; hold him/her accountable for the overall initiative, not just the IT component.*



© Copyright IBM Corporation 2007

IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
05-07
All Rights Reserved

IBM and the IBM logo are trademarks of International Business Machines Corporation in the United States, other countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

¹ "Expanding the Innovation Horizon," The IBM Global CEO Study 2006.

² "Generating Premium Returns on Your IT Investments," P. Weill & S. Aral, *MIT Sloan Management Review*, Vol. 47 No. 2, Winter 2006.

³ IBM CIO Leadership Forum Survey 2006.