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CIOs at a Technology and Cultural Crossroads

CIOS TODAY EXERT MORE STRATEGIC INFLUENCE THAN EVER, BUT TACTICAL DEMANDS STILL CONSUME MUCH OF THEIR TIME AND FOCUS. IS IT TIME TO RETHINK THE CIO TITLE AND ROLE?



EXECUTIVE SUMMARY

CIOs and other IT executives have made significant progress in their long-standing efforts to tightly align and coordinate their IT departments with their organizations' business units, according to a recent Red Hat and IDG Research Services survey. Many IT executives are also playing strategic roles in helping drive business innovation and competitive differentiation. Still, day-to-day tactical demands continue to pull CIOs away from more-strategic functions, and too few of their business counterparts think of IT executives as business strategy leaders or peers. Given IT's essential role in virtually every organization today, it has become critically important to break free from set behaviors and relationships in order to establish IT as a full business partner. Might a change in the traditional CIO title and role help achieve this end?

» How "Keeping the lights on" pulls CIOs from more strategic roles

For more than two decades, CIOs have worked to bridge the IT and business divide. Indeed, the CIO position materialized and proliferated in the late 1980s and early 1990s precisely for this purpose. At the time, the era of cloistered mainframes and minicomputers was shifting rapidly into a more democratized age of personal computing and local-area networking.

Enterprises recognized the need to enlist this new generation of proliferating IT more directly in the service of their business objectives and strategies. The previous approach of acquiring IT for its own sake and maintaining a high wall between an organization's IT pros and its business units wouldn't do.

As it turned out, identifying the need to better align IT and business activities proved easier than actually doing it. The challenge has been a paradoxical one for ClOs. Each year, business processes have become ever more dependent on a reliable and available IT infrastructure, a trend that has boosted the profile of IT as well as ClOs. Somewhat ironically, however, this escalating dependence has made it increasingly critical for IT departments to "keep the lights on." The result: Too many ClOs still find their time consumed by tactical systems maintenance and upgrade tasks, leaving too little time for them to engage in more-strategic business activities.

This persistent situation has become especially problematic in a world in which many business and IT activities are virtually inseparable. In earlier days, IT departments worked primarily to make existing business practices more efficient and workers more productive. In recent years, by contrast, computing and communications technologies have permitted enterprises to create entirely new business processes and revenue streams that simply couldn't exist without IT advances. Where does "IT" end and "business" begin in online shopping, mobile banking, the computer modeling of pharmaceuticals or the collection and analysis of geological data for oil and gas exploration?

To get a better picture of the current and future roles of CIOs, enterprise software leader Red Hat partnered with IDG Research Services to survey 100 respondents at the IT director level (and above) at organizations with 1,000 or more employees. The survey results provide insight into the progress CIOs and other IT







executives have made in assuming more-strategic roles as well as into the challenges they continue to face. The survey results also raise fundamental questions about how CIOs can best drive business innovation within their companies and even suggests that getting the business and IT together may take something as fundamental as rethinking, and retitling, the CIO position itself.

» CIOs: In the eye of a business and technology storm

CIOs, perhaps more than any other corporate executives, face a constantly changing landscape of opportunities, threats and job demands. On the IT side of the ledger, each technological advance confronts CIOs with a double-edged sword of risk and reward. Move too quickly to adopt a new technology, and CIOs risk becoming the proverbial "pioneers with arrows in their backs." Move too slowly, and more-aggressive competitors can gain insurmountable leads.

Each IT decision and technology also carries with it unique business benefits and threats. One example: the proliferation of smartphones and an increasingly mobile workforce. CIOs and their business unit peers can increase employee productivity and customer satisfaction by playing the mobile card intelligently. But the number and diversity of mobile devices, as well as the need to manage and protect them and the corporate information they contain, can provoke both budgetary and security nightmares for overburdened CIOs.

Meanwhile, IT and the business interact in an everaccelerating virtuous cycle. IT advances enable new and faster business processes. As more IT-enabled business activities occur in near real time, companies require new generations of IT technologies and processes to make informed decisions, immediately capitalize on emerging opportunities and quickly counter competitive threats.

Sitting at the center of this maelstrom, many CIOs and other

IT executives spend much of their time just keeping their—and their IT departments'—heads above water. When the Red Hat/ IDG Research Services survey asked the respondents to name their top five activities, 48 percent selected "improving IT operations/systems performance" and 47 percent selected "implementing new systems and architectures."

Despite these technology-centric demands, many IT executives also manage to engage in a variety of business activities. For instance, as Figure 1 shows, 45 percent said they currently spend time aligning IT initiatives with business goals. Ken Grady, CIO and director of IT at New England BioLabs in Ipswich, Mass., is among those who work hard to collaborate with his business counterparts.

Grady says he has regular conversations with the business managers at the biotech company and spends "a significant amount of time understanding their challenges and different aspects of the business." Grady also makes it a point to explain how IT can support key business strategies and promotes IT's ability to implement new initiatives and innovations.

This type of business engagement strikes a chord with many IT executives. When the survey respondents were asked how they would like to spend their time in the coming years, all the top desired activities were directly related to business-focused roles rather than IT upkeep. However, in a sign of the disconnect between the daily IT reality and the ideal, the top desired role— "identifying opportunities for competitive differentiation" wasn't even among the top five current activities of the IT executives surveyed.

The surveyed IT executives believed that, given the chance, they could be valuable contributors to business choices and strategies. Among the respondents, 78 percent rated their knowledge of the business as either "excellent" or "good" and 66 percent said their receptiveness to new ideas coming from



FIGURE 1. Current and desired areas of focus for IT executives

Top IT executives desire to spend more time identifying business opportunities, improving the IT/business partnership, and driving business innovation and strategy.

	Focus in Current Role	
#1	Improving IT operations/systems performance	48%
#2	Implementing new systems and architectures	47 %
#3	Aligning IT initiatives with business goals	45%
#4	Cultivating the IT/business partnership	40%
#5	Leading change efforts	38%

Would Like to Spend More Time — Next 3 to 5 Years

#1	Identifying opportunities for competitive differentiation	48%
#2	Cultivating the IT/business partnership	42 %
#3	Driving business innovation	41%
#4	Aligning IT initiatives with business goals	35%
#5	Developing and refining business strategy	32%



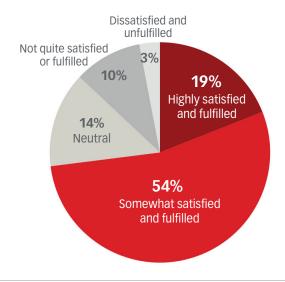
business units was "excellent" or "good." Even so, many felt stymied by factors outside their control. When asked if they had the budget to support and enable new business ideas, 57 percent said their available budget was only "fair" or "poor." Even more respondents, 62 percent, said the same about their staffing levels.

Most CIOs and other IT executives find their jobs appealing, despite the many challenges they face. As shown in Figure 2, nearly one-fifth of the survey respondents said they are highly satisfied and fulfilled in their current roles, and another 54 percent said they are somewhat satisfied and fulfilled. Still, dealing with the mixed bag of IT responsibilities and restrictions has nearly one-quarter of the respondents expressing little or no enthusiasm about their jobs.



FIGURE 2. IT executive job satisfaction

Fewer than one in five IT leaders are highly satisfied and fulfilled in their current roles. 54% are somewhat satisfied.



» Business continues to set shortsighted priorities

When evaluating the progress CIOs have made in becoming business influencers, it's easy to put all the credit for their successes—as well as the blame for their failures—solely on the shoulders of the CIOs themselves. When it comes to business and IT alignment, however, it should be obvious that IT executives need strong business partners. Unfortunately, judging from the survey results, many business executives and line-ofbusiness units may not be doing everything they can to foster more-strategic relationships with their IT peers.

When the surveyed IT executives were asked to describe how their companies' business stakeholders viewed the IT organization, only 10 percent said they were perceived to be

"business peers" engaged in developing, not just enabling, business strategy. Even fewer of the business stakeholders, just 4 percent, were thought to perceive IT as a "business game changer" that serves as the primary driver of the enterprise's competitive future. Meanwhile, the IT respondents said that nearly 30 percent of the business stakeholders still consider the IT department to be merely a "cost center."

This constrained perception of IT was further evidenced in the top IT mandates the survey respondents said they receive from line-of-business units. The top mandate, cited by 47 percent of the respondents, was "drive costs down." By contrast, "improve time to market"—a mandate that reflects the type of business benefits IT can deliver—was identified by just 26 percent of the respondents.

Bill McCown, director of IT at Houston-based C&J Energy, is one of the IT executives still fighting an uphill battle to bolster his department's profile and perceived value. "Most people in my position strive and hope to be viewed as a strategic partner at the business table," but, he says, "it is not happening here."

Part of McCown's challenge springs from the fact that C&J Energy, now a public \$1.1 billion oil field services company, was a private firm with fewer than 100 employees not long ago. It didn't have much of an internal IT staff and instead relied on a service provider to do little more than keep a server up and running. Now, even after going public and becoming a significant enterprise, the company hasn't fully changed its narrow perception of IT.

When McCown came to C&J, in early 2012, the company had 12 offices and operations employees in each office were making unilateral decisions about such things as office data connections. As a result, McCown says, the 12 offices probably had 15 telecom vendors. He has since made progress in getting the business units to understand the helpful role the IT department can play, but he reports that he is still "struggling to get them to involve us more."

To further his cause, McCown is showing C&J's businesspeople that IT is making a concerted effort to understand the oil business. "It has helped quite a lot to go into operations meetings and use language they use," he says. "When I get the opportunity, I search these guys out and ask them to explain this stuff to me. If they're not too busy, most of them are happy to do that."

As McCown's situation suggests—and in spite of the institutional obstacles and wide-ranging technological demands they face—most CIOs and other IT executives believe they can help their organizations become more competitive and innovative. Part of this impact will come by helping their companies differentiate themselves by exploiting emerging technologies. As illustrated in Figure 3, the survey respondents have particularly high hopes for the business benefits of mobile technology and business intelligence and analytics.

More broadly, the IT executives who responded to the survey said they are engaged in a variety of innovation projects that will help move the business forward in the coming years. The top such effort, general technology iteration and evolution, garnered





FIGURE 3. Technologies for driving company differentiation

Mobile technologies, BI/analytics and collaboration tools are identified as the top technologies that will help IT leaders to differentiate their companies over the next several years.

Top Technologies that Will Help to Differentiate the Company

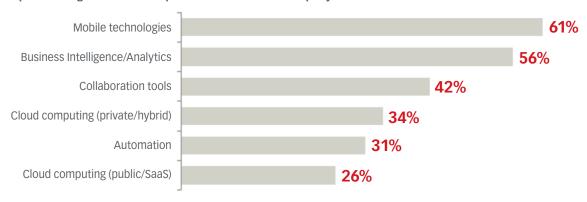




FIGURE 4. IT innovation projects aim to drive business benefits

Technology iteration and innovation is the most common type of innovation project IT has planned over the next few years.

Innovation Projects IT is Focusing On to Move the Business Forward



mention by 65 percent of the respondents. As shown in Figure 4, at least 40 percent of the respondents also cited three other types of innovation projects currently receiving their attention.

» Business/IT collaboration should be the default, not the exception

Many IT executives are already taking steps to help identify new business opportunities within their organization. As shown in Figure 5, for example, nearly 60 percent of these executives said they communicate regularly with line-of-business leaders. Still, depending on a reader's perspective, it's possible to see the percentages in Figure 5 as representing either a glass half full or a glass half empty. For instance, the fact that more than

40 percent of the survey respondents *don't* interact regularly with their line-of-business peers is cause for concern.

In another measure of the business/IT dynamic, new IT projects are initiated more often by business champions approaching IT than by IT approaching business, according to the survey. Business units "always" initiate IT projects 19 percent of the time and "often" initiate them 58 percent of the time. IT-initiated projects are only slightly behind, with 14 percent in the "always" category and 54 percent in the "often" category.

Arguably, the ideal model for IT project initiation would be a collaborative process in which IT and business representatives jointly identify new projects and opportunities for innovation. Such a collaborative approach "always" happens just 16 percent of the

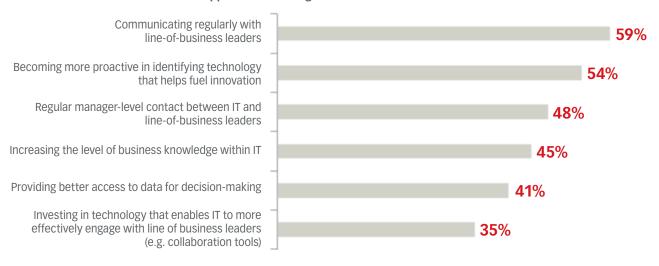




FIGURE 5. How IT seeks out business opportunities within the organization

Most often, IT seeks out new business opportunities by keeping the lines of communication with business open, and by becoming proactive in identifying technology that can help to fuel innovation.

How IT Seeks Out Business Opportunities at Organization



time and "often" just 48 percent of the time, however. Given the tight synergies and dependencies between business and IT, organizations would be wise to ensure that a significant percentage of their IT project launches always involve a collaborative process.

Organizations also need to consider other changes to their corporate culture and practices. One example: Almost by definition, meaningful business innovation and differentiation require some level of risk taking. Enterprises that hope to use IT to achieve these objectives must create a culture that—within reason—encourages experimentation and exploration. Judging from the survey results, most companies have a long way to go in this regard.

When asked which day-to-day activities the IT organization places significant emphasis on, 80 percent of the survey respondents cited "meeting current customer needs." The next-highestrated tasks were "stressing process and structure" (42 percent), "analyzing and planning" (31 percent) and "exploiting what you already know" (28 percent).

This emphasis on process, structure and planning is understandable, given—as noted earlier—the essential need to keep IT infrastructure up and running efficiently. But what may be lost with this emphasis on the known and the tactical? Just 16 percent of the survey respondents said the IT organization places significant emphasis on "hypothesizing and learning," 11 percent on "rewarding experimentation" and 10 percent on "exploring the unknown." How can IT leaders hope to drive innovation when they spend so little time pushing the technology and business envelope?

Grady, the New England BioLabs CIO, says, "I do have a mindset around experimentation and innovation that fit the business culture here, but IT hasn't had that culture. That's a big part of what I'm trying to drive. How do we experiment, and how do we produce results?"

» Have the CIO's title and role grown stale?

The fact that, 20-plus years on, the CIO position is still often more tactical than strategic raises some tough questions. Among the most fundamental is whether the CIO position itself is in need of a makeover. A significant number of the surveyed CIOs and IT executives indicated that that may be the case.

When asked what might be an appropriate job title for the CIO three years from now, only a small minority suggested sticking with chief information officer. Among the more popular alternatives were variations on chief innovation officer, chief solutions officer and chief integration officer. The last suggestion alludes in part to the fact that, with private and public cloud services on the rise, many IT executives are becoming integrators and coordinators of multiple internal and external services, rather than builders of them.

Perhaps the history of the CIO position, and the established assumptions about this role in many organizations, can be overcome only by retiring the CIO title and creating a new executive position. Most of the CXO-level positions—CEO, CFO and COO—carry with them commonly understood responsibilities and powers. The CIO, position, by comparison, has been something of a cipher at this executive level, with roles and





FIGURE 6. IT's daily tasks focus on the known and the tactical

Respondents indicate that, on a day-to-day basis, their roles are typically defined by process, structure and planning (rather than learning, experimentation and exploring the unknown.)

Significant emphasis

80%	Meeting current customer needs
42 %	Stressing process and structure
31%	Analyzing and planning
28 %	Exploiting what you already know
25 %	Allowing freedom and flexibility
20%	Anticipating future customer needs

responsibilities that vary considerably from organization to organization and with tactical demands that often overshadow more-strategic functions.

Yet CIOs who are achieving real traction have learned to delegate keep-the-lights-on activities to direct reports and to operate as full-fledged businesspeople. Tim Elkins, CIO of Dallasbased PrimeLending, notes that CIOs should act as members of the business team, right down to their practice of building business plans.

"When you come in with a business plan from a technology perspective, it's typically a new angle or a new wrinkle the typical businessperson won't come in with," Elkins says. "It's never perfect and never fully accepted as is, and it gets tweaked by the people you're working with, but for me that's literally how I view it: Come up with a plan; share your plan. You may not always hit, but at least be working toward a bigger and better future. For me, that's where you'll start to be seen as a strategic partner and a business partner, not just an IT person."

In the end, whether the title remains *chief information officer* or becomes a more business-centric moniker, the existing CIO job position must continue to break free from its IT-centric focus. In today's world, IT is business and business is IT. Organizations

that continue to organizationally and conceptually isolate the two will fall behind competitors that treat IT and business as merely different sides of the same coin.

» The time for incremental progress is long gone

Given the imperative to establish IT executives as full strategic partners, companies can't afford to keep "discovering" the need to build stronger bonds between the IT department and business units. No doubt, organizational change is difficult, as should be evident to anyone who has attempted to shift the balance in IT work from mostly tactical to mostly strategic. The time to start realizing that shift is now for any company hoping to achieve competitive differentiation.

>> Summary

As noted earlier, CIOs and other IT executives can't hope to drive the necessary changes on their own. Still, these executives must take a leadership role in helping their organizations break free from established patterns and assumptions. A necessary first step in this process, of course, is for IT executives to fully understand their company's business operations and objectives. And that understanding can't be static. It requires regular and meaningful communications with business leaders and managers.

Such consistent and systematic IT/business communication will help build the relationships and the trust necessary to truly raise IT's strategic profile and impact. To that end, the communications can't entail just a flow of information from business to IT. IT executives need to help their business peers understand how technological innovations—be they cloud computing, smartphones, big data or some yet-to-emerge advance—can have a direct bearing on productivity, efficiency, revenues and competitiveness.

Fortunately, some technological advances can also help IT jettison some of its more onerous and time-consuming tactical activities. A transfer of some internal IT operations to third-party cloud providers, for example, can lessen deployment and maintenance burdens, and the automation of manual IT processes can permit more time for strategic explorations and planning.

To fully take advantage of these and other opportunities, however, CIOS—and the organizations for which they work—must completely commit to delivering on a vision of IT/business integration that is now close to 30 years old. There needs to be institutional recognition at every level of an organization of the strategic value of IT. For their part, CIOs and other top IT executives must finally become both business leaders and technology leaders, since there is now barely any difference between the two. ■

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