



Transformational CIOs JUGGLING innovation + operations

The CIO role is growing more **critical** to the business and more **complex** to inhabit, as top IT executives simultaneously battle cybersecurity **threats**, increasing business **demands** and **challenges** to their control.

BY STEPHANIE OVERBY



With the **extreme** focus on enterprise digital transformation, most companies today are in a state of technology flux. At the same time, IT organizations are faced with a host of tactical challenges — from defending against increasingly sophisticated cybersecurity threats to incorporating the proliferation of cloud com-



puting offerings and evolving IT delivery models.

It's little wonder that an overwhelming number of IT leaders — 88 percent — say that their role is becoming increasingly challenging, according to CIO.com's 2016 State of the CIO survey. Even more telling, 71 percent of the 571 IT leaders surveyed said it's difficult to strike the right balance between innovation and operational excellence in this business environment.

Consider the case of Jack Belcher. He became the first CIO of Virginia's Arlington County more than 15 years ago and has established himself as both a change agent and a capable tactician. His accomplishments range from setting up an emergency operations center after the attack on the Pentagon on Sept. 11, 2001, to a revenue-generating

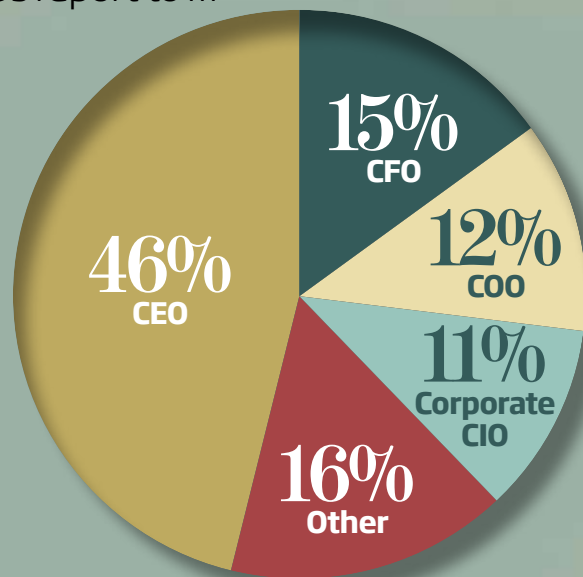
move last year to make the county the first in the D.C. area to sell access to its high speed broadband network to federal agencies and other organizations. "Our emphasis is innovation," Belcher says, "but maintaining operational excellence is creating a great amount of stress on existing resources."

It's a sign of the post-recession, pregrowth times. But for IT

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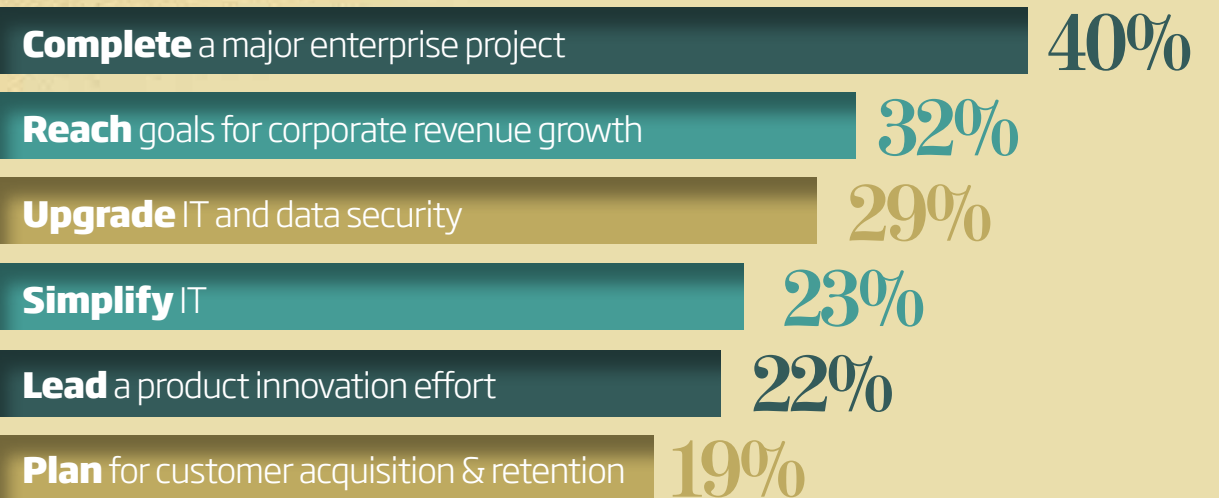
DIRECT LINE to the TOP

CIOs report to ...



WHAT the CEO WANTS

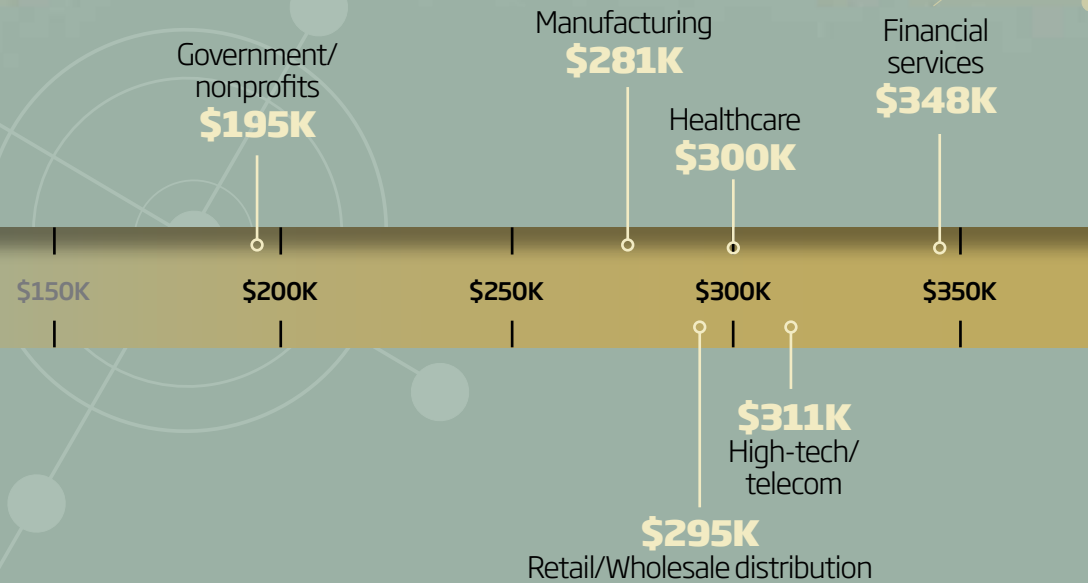
The CEO's top priorities for the CIO in the coming year:



MULTIPLE RESPONSES ALLOWED

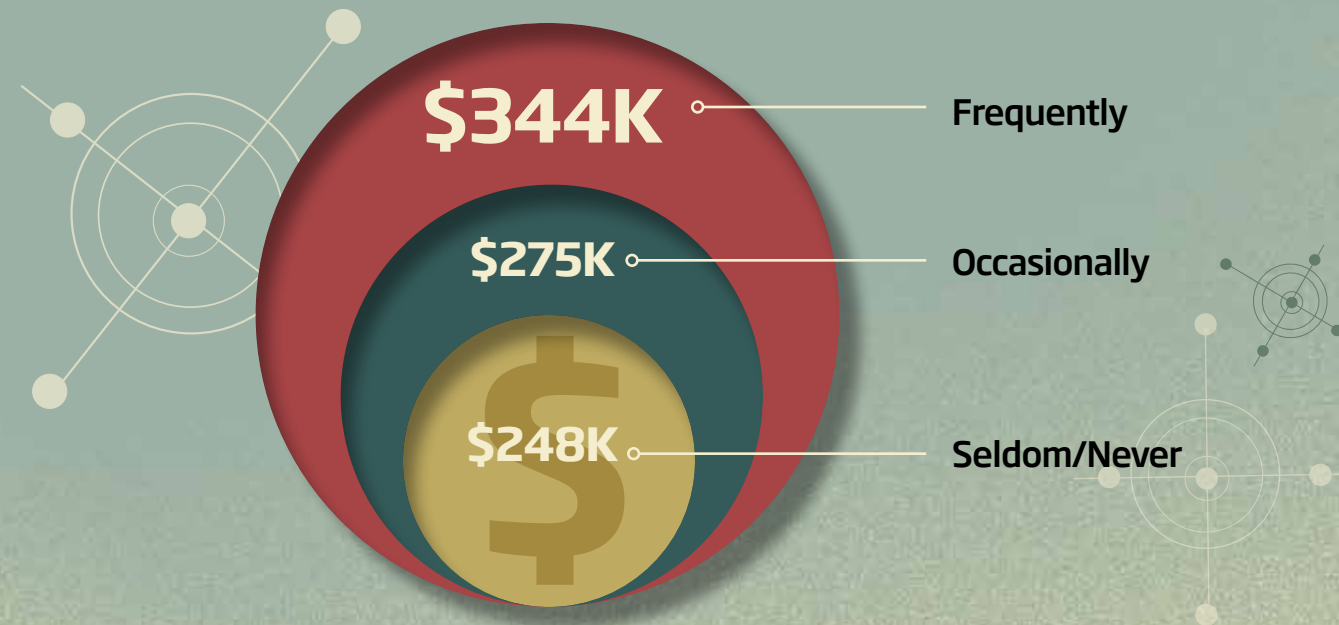
IT PAYS TO FOLLOW THE MONEY

Average CIO **salaries** by industry.



IT PAYS TO KNOW YOUR CUSTOMERS

Average salaries for CIOs who meet with **external** customers ...



leaders like Belcher, who continue to emphasize their transformational and strategic roles, successfully managing diverse challenges could ultimately cement a partnership role with the business and pave the way for IT to increase its impact on business outcomes.

Alignment is table stakes

In our State of the CIO survey, 45 percent of the respondents described themselves as transformational, meaning they're focused primarily on implementing new systems and architectures, leading change efforts and aligning IT with business goals. The rest were split (27 percent each) between functional CIOs and strategic IT leaders.

The relationship between business and IT continues to be of primary importance: 52 percent of those surveyed said that alignment with business goals is a key focus. That's down from 54 percent last year and 82 percent in 2008, indicating that CIOs likely have

established some good governance processes for maintaining that closer connection with the business. Likewise, just 35 percent of the IT leaders surveyed said they spend their time cultivating the IT-business partnership, versus 43 percent last year and 69 percent in 2008. "I think [alignment] is now expected," says Kelly Olsen, CIO and head of corporate programs at the U.K.'s NHS Property Services.

While CIOs may not have to devote as much time as they once did to developing and maintaining relationships with their business stakeholders, collaboration between IT and the business may be even more important in 2016. Line-of-business and functional leaders are making more decisions about IT spending than ever before — at a greater level than CIOs anticipated even a couple of years ago. In 2014, respondents to the State of the CIO survey predicted that IT would directly control an average of 66 percent

of technology spending in their companies in three years time. But respondents to this year's survey reported they control an average of just 57 percent of technology spending. "Spending outside of IT is increasing in line with the appetite for new technology solutions," says Belcher.

But that may not be a bad thing — as long as CIOs maintain influence over how technology is ultimately deployed. "The decision-making or budgets [may] come from other functions, however I believe this is how it should be," says Olsen. "The owner of the deliverable — the beneficiary — should be the major stakeholder and fund the project."

CIOs who maintain strong partnerships with business leaders preserve IT's influence, regardless of whether they control the actual spending. The evolving relationship between IT and marketing offers some insight into this phenomenon. In 33 percent of companies, marketing has its own technology budget. Most CIOs are involved in purchasing decisions about marketing technology at some level. But they play a bigger role at companies where IT is considered a business partner or leader than they do when IT is viewed as a cost center or service provider: 71 percent of respondents from companies where IT is viewed a business partner or

leader said they're involved with approving marketing technology purchases, and 64 percent said they're involved in making the final vendor selection. Moreover, 60 percent of those CIOs report that their relationship with marketing has become more collaborative in the past three years, compared with 44 percent of respondents at companies where IT is considered a service provider and 35 percent at companies where IT is thought of as a cost center.

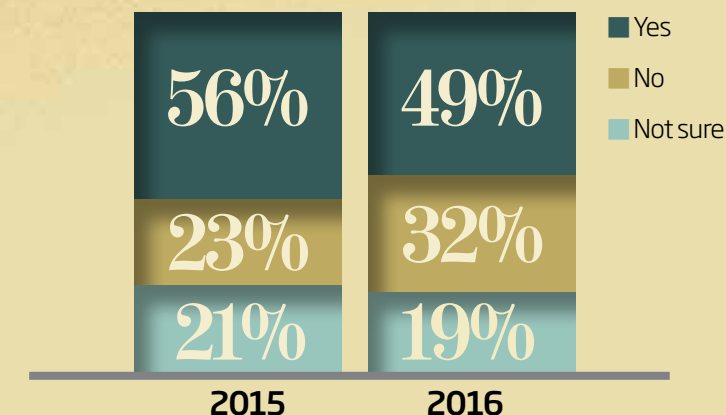
"The best scenario has been one that sees the CIO consulting with all line-of-business managers and budget holders leading up to end-of-financial-year budget requests," says former CIO and independent



METHODOLOGY CIO's 2016 State of the CIO Survey was conducted among the CIO brand audience and was fielded online in the summer and fall of 2015. To be considered qualified, respondents must have identified themselves as the head of IT for their company or a division within it. Respondents were offered a PDF of the survey results as an incentive for completing the survey. Results are based on 571 qualified responses. The margin of error on a sample size of 571 is +/- 4.1 percentage points. Percentages on single-selection questions may not add up to 100 because of rounding.

IT SKILLS SHORTAGE EASING?

Will your organization experience any IT skills shortages during the next 12 months?



BIGGEST CHANGES

In which areas do you expect to have the most difficulty finding people with the appropriate skills?

| | 2015 | 2016 | |
|----------------------------|------------|------------|----------|
| Big data/BI and analytics | 39% | 38% | ↓ |
| Security/risk management | 30% | 31% | ↑ |
| Appdev/programming/DevOps | 27% | 28% | ↑ |
| Mobile technologies | 27% | 19% | ↓ |
| Business-IT liaison | 21% | 22% | ↑ |
| Project management | 19% | 18% | ↓ |
| Cloud services | 18% | 20% | ↑ |
| Database administration | 15% | 14% | ↓ |
| Internet of Things | 11% | 16% | ↑ |
| Customer experience | 10% | 12% | ↑ |

technology consultant Creagh Warren. “This allows CIOs to approach the business and ask what they would like in the coming year and develop a solution — and a business case — together.”

Over the years, the State of the CIO survey has revealed increases in the percentage of CIOs focused on functional activities at times when IT has faced urgent operational concerns or threats. This is one of

ing that IT staffs — and their leaders — are wading into the weeds.

The percentage of CIOs who report that they’re spending time managing IT crises rose from 19 percent last year to 27 percent this

cybersecurity is a focus, up from 31 percent in 2015. Following back-to-back years of high-profile breaches and headline-worthy hacks, corporate boards are focusing on cybersecurity as a financial, operational

CIO ROLE TODAY

Which of the following activities best characterize your focus and how you spend your time today?



MULTIPLE RESPONSES ALLOWED

CIO ROLE OF THE FUTURE

Which of the following activities would you like to spend more time on in the next 3 to 5 years?



MULTIPLE RESPONSES ALLOWED

Time to roll up your sleeves

As important as IT-business interaction are some seemingly operational issues with potentially outsized strategic impact.

those times. In addition, business demands have increased in number and complexity, while staffing levels have not similarly risen, says Belcher. Therefore it’s not surpris-

year, a level not seen since 2008. In particular, this year’s survey shows a sharp rise in IT leaders’ attention to security management: 46 percent of IT executives said

and reputational risk. Security is also the operational activity that strategic CIOs are most likely to spend time on. “It is a constant battle to stay ahead of security issues,

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—JOE SHERIDAN, CIO, SOAVE ENTERPRISES

from phishing emails to more significant breaches,” says Olsen.

Despite the increased attention on cybersecurity, just 37 percent of the respondents to this year's survey said security is tightly integrated with IT strategy, while 47 percent said it's only loosely integrated. In addition, one-third said they spend less than 5 percent of their budgets on security.

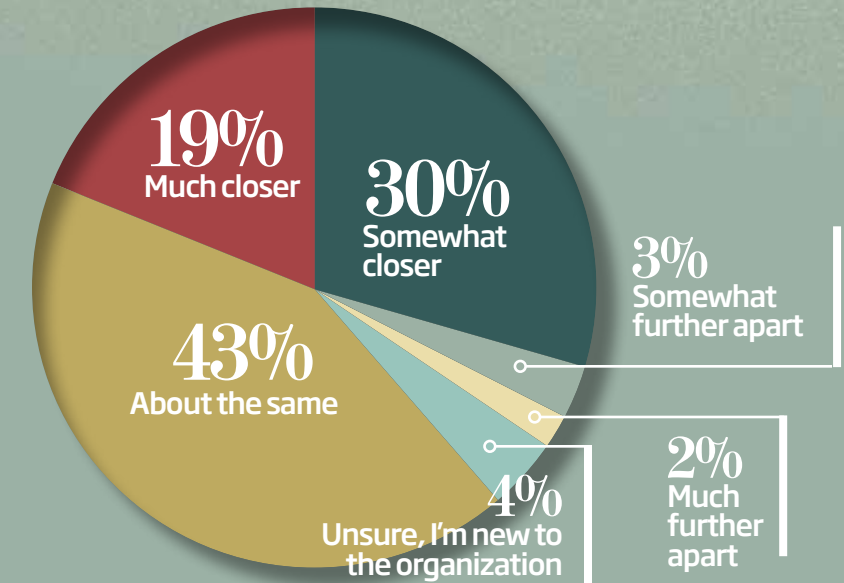
“Unfortunately, most organizations are more reactive when it comes to security,” says Joe Sheridan, CIO of diversified holding company Soave Enterprises.

“Security needs to be part of a good IT strategy, which includes auditing what is in place today and looking at how to continuously improve. Budgeting for the right tools is only part of the equation.”

According to our survey, companies spend an average of 12 percent of their IT budgets on security, but how business stakeholders perceive IT influences the size of the security budget. Companies where IT is viewed as a business partner or a leader spend significantly more on security than do organizations where IT is considered a cost

BEGINNING OF A BEAUTIFUL FRIENDSHIP?

How has the CIO-CMO relationship changed at your organization in the last 3 years?



IT'S ROLE IN MARKETING SPENDING

How are you involved in purchase decisions regarding the marketing technology stack?



MULTIPLE RESPONSES ALLOWED

Digital transformation requires *business* and *IT* to work together

IT market research and advisory firm IDC predicts that two-thirds of CEOs at Global 2000 companies will have digital transformation at the center of their corporate strategies in the next 24 months. Those that don't will find themselves struggling to respond to changing market demands; they will also find it difficult to stay profitable, IDC predicts.

"The successful digital transformation of an enterprise is highly dependent on a close and effective working relationship between the IT organization and the lines of business," says Meredith Whalen, IDC senior vice president, IT Executive and Industry Research.

To find out how well organizations are set up to succeed in the digital economy, IDC asked IT and line-of-business (LOB) executives about their relationship in its annual CIO and Line of Business Sentiment surveys. While

viewpoints differ on how closely aligned the two organizations are, both parties point to progress and agree that IT has an important role to play in transforming the organization.

Differing points of view
More than half (53 percent) of the 150 IT executives surveyed said they view their relationship with business units as "tight." That sounds promising, but the feeling isn't mutual. Only 36 percent of the 300 LOB executives surveyed said they see it the same way. Another 29 percent of LOB executives said the relationship is "nonexistent" or reported that they see "two organizations working in parallel worlds."

However, tech leaders and LOB executives agree that IT has taken steps to enhance the relationship in the past year. Both groups cite improved IT governance, agile development techniques and efforts to work more closely to prioritize IT projects.

Despite the progress, differences remain. IT leaders place more value on IT's efforts to learn the business than do LOB executives. Business executives, however, are appreciative of the flexibility IT has introduced. And business people cite "self-service IT" and IT professionals being more flexible in discussing new ideas with the business as top improvements made in the past year.

What's next?
The rise of chief digital officers has left some IT professionals feeling unsure about the future. Nonetheless, LOB executives do see IT playing a key role in digital transformation. According to IDC's study, these are the top three ways IT organizations can contribute to digital transformation initiatives:

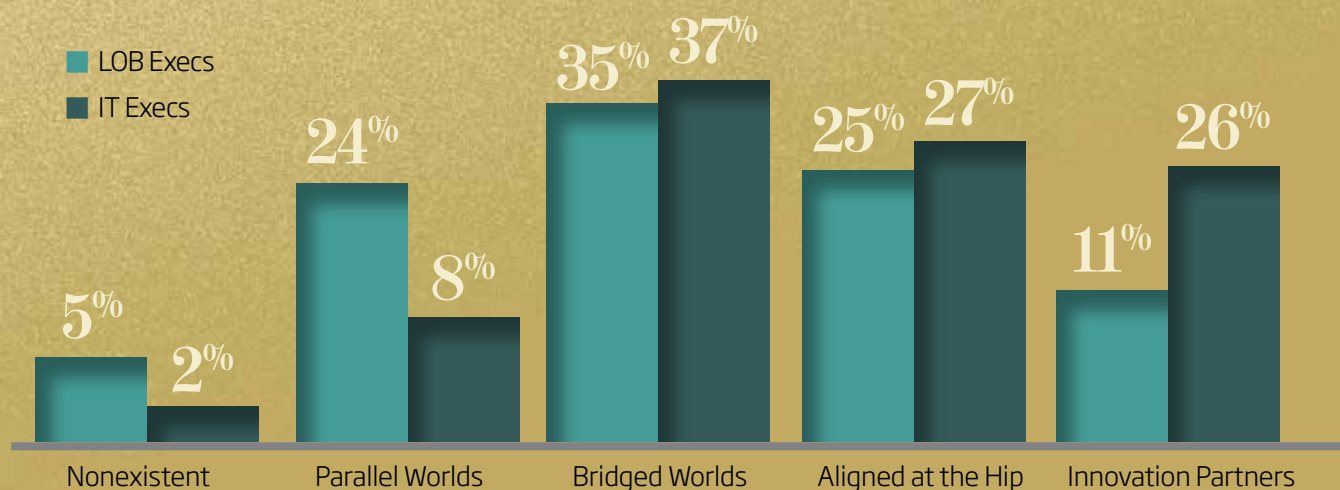
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- Identify which parts of the business could be transformed through the use of technology.
- Identify emerging technologies that could accelerate digital transformation.
- Manage digital project implementations.

-CIO.com staff

How do you view the relationship between IT and the lines of business?

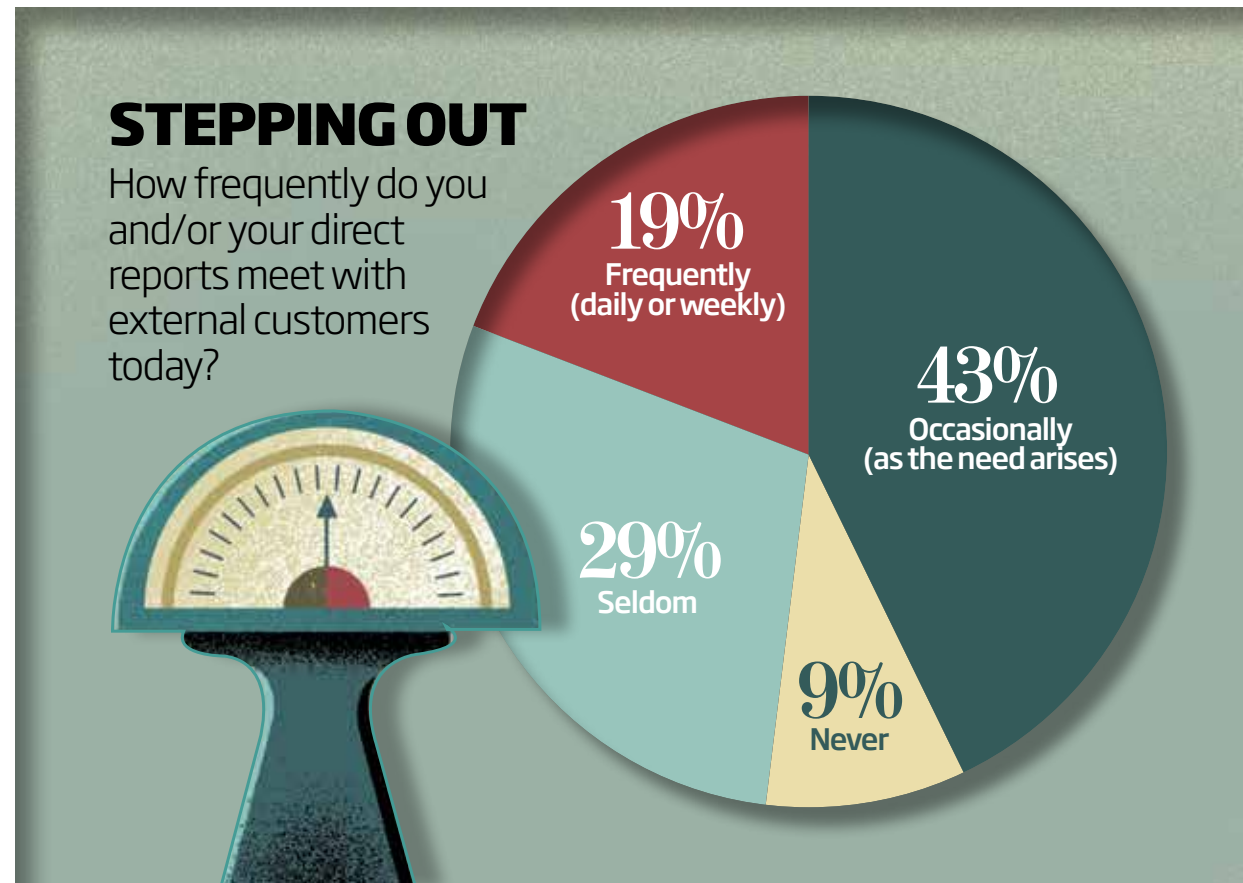


53% of the 150 IT execs polled said their relationship with the lines of business is "tight." Only **36%** of the 300 LOB execs surveyed said they see it that way.

SOURCE: IDC, 2015

center or service provider. Still, even for IT leaders who have integrated IT and cybersecurity strategies, security is a problem they can't entirely spend their way out of. Belcher says security is "an integral part" of Arlington County's digital strategy. But, he adds, "we realize we can never spend enough on security, [and] with competing demands we are limited in what we can spend. Ask my CISO."

Other tactical activities that are among the top focus areas for survey respondents include improving IT operations and systems performance (cited by 49 percent of those polled), implementing new systems and architecture (41 percent), and cost control and expense management (39 percent). But while tactical in nature, these activities could pave the way for future innovation and growth. "Infrastructure and software projects seem to be the mode of operation lately," says Sheridan, noting that the next few years will be



"critical in planning for the future, as baby boomers retire and the next wave of managers and innovators require a strong technology strategy be in place."

What drives IT spending

CIOs say the most significant business initiatives driving IT investments in 2016 will be increasing

operational efficiency, improving customer experience and transforming existing business processes. The technologies driving spending will be cloud computing, security and risk management tools, and big data and analytics systems. And that's just a start.

"Our businesses are demanding more attention in every area,"

says Sheridan. "We are actually in a transformational change period over the next calendar year that will include addressing each of these types of initiatives."

Survey respondents who described themselves as strategic CIOs said their IT investments are most likely to be driven by business initiatives to introduce digital revenue streams (30 percent), improve agility (32 percent), and improve the customer experience (49 percent) — although the latter is also highly important to functional and transformational CIOs.

Transformational CIOs are most likely to report business process transformation (cited by 40 percent) as a business need. Meanwhile, although operational efficiency is a priority for everyone, functional CIOs are more likely than their counterparts to have it on their agendas: 54 percent of them said it is a priority.

And what do CEOs want? In our survey, 40 percent (down slightly

from last year) of IT leaders polled said CEOs are looking for IT to complete a major enterprise project, 32 percent said the boss's priority is to have IT help reach a corporate revenue goal, and 29 percent (up significantly from last year) said the mandate is to upgrade IT and data security.

One to grow on

While IT executives understand the need to balance operational demands and risks with strategy and transformation, they're looking forward to a near future when they can turn more of their attention to innovation and business results. Asked what they were likely to spend their time on in three to five years, 68 percent said they would be focused on growth-oriented activities. And they're looking forward to the change of pace: 51 percent of IT leaders surveyed said they'd like to spend more time driving business innovation, 41 percent said they hoped

The *importance* of being *strategic*

The vast majority of IT leaders say the CIO's role is becoming more important: 84 percent of State of the CIO survey respondents agreed with that assessment. But CIOs who spend more time on transformational or strategic activities were more likely to share that view than were functional IT leaders: 87 percent of the first two groups agreed, versus 78 percent of the latter.

Strategic and transformational CIOs are also more likely to consider their jobs to be rewarding: About 70 percent of them said they felt that way, versus just under 50 percent of functional CIOs.

Meanwhile, functional IT leaders were more likely to report negative interactions with the rest of the company: 60 percent said they feel blamed when other departments miss their goals, 40 percent said other departments view them as an obstacle, and 29 percent said they feel that the CIO is being sidelined. These IT executives are also concentrated among the 28 percent of companies where respondents said IT is undervalued, underused or misunderstood.

Strategic CIOs, in contrast, are more valued by their employers. Regardless of company size, they are paid an average of \$167,000 more than functional CIOs and \$127,000 more than transformational CIOs. Strategic CIOs are also more likely to report directly to the CEO. *-S.O.*



to work on identifying opportunities for competitive differentiation, and 37 percent chose developing and refining business strategy.

But CIOs who want such roles must make sure they are seen as real partners in the business, and that still isn't the case: 43 percent of respondents said the business views IT as a service provider and just 27 percent who said IT is seen as a business partner. Moreover, 20 percent said IT is considered a cost center and just 11 percent said IT is viewed as a business leader.

"Now that we are in a post-recession phase of growth, IT's involvement as a business partner and business leader has become more of a requirement," says Sheridan. "We are taking the necessary steps to strategize our next steps alongside our business partners and are finding the need for IT's partnership continues to increase." ■

Stephanie Overby is a regular contributor to CIO.com.