

EXCLUSIVE RESEARCH FROM

A blue-tinted photograph of a group of business professionals in a modern office setting, gathered around a table and looking at documents. The scene is brightly lit with large windows in the background.

EXECUTIVE SUMMARY

2017

State of the CIO



2017 State of the CIO

AS COMPANIES ACCELERATE THE SHIFT INTO THE ERA OF DIGITAL BUSINESS

CIOs are finally able to devote more time and energy to strategic and transformational activities, despite the on-going requirement to maintain oversight of IT operations, according to the 2017 State of the CIO survey of 646 IT leaders.

Evolution of the CIO Role

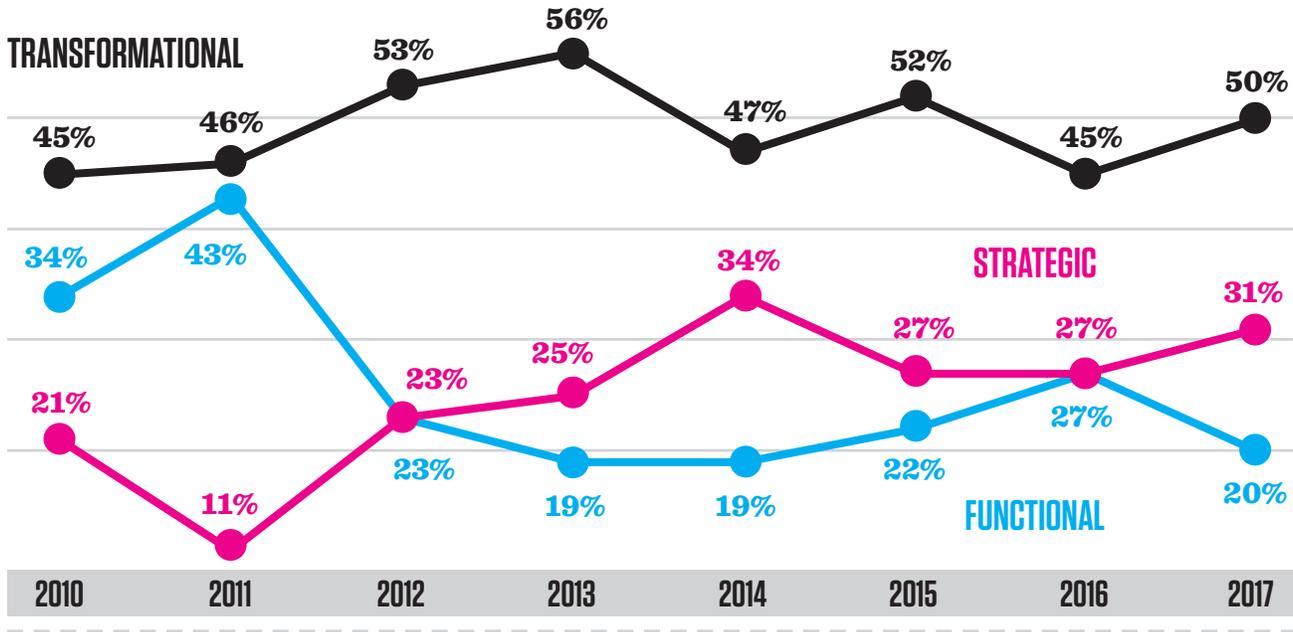
Just like in 2016, the CIO role still covers a lot of ground, requiring IT leaders to strike the right balance between crafting technology strategy and driving business innovation while overseeing routine IT functional tasks such as cost control, vendor negotiation, crisis management, and operational improvements. As a result, 87% of CIOs think the role is more challenging than in the past, down a percentage point from last year.

Looking out at the three- to five-year horizon, CIO respondents foresee spending less time on functional duties—7% compared to 20% currently—an indication that improvements in automation and a growing dexterity with the bi-modal role will afford CIOs the opportunity to concentrate more fully on higher-value, high visibility activities. Nevertheless, it remains a challenge to handle both sets of responsibilities, with 72% of respondents acknowledging the struggle to juggle business innovation and operational excellence requirements.

The on-going shift has had a dramatic change on how CIOs view their role. Only 20% of respondents to the 2017 State of the CIO survey self-described as functional this year, down notably from the 27% in 2016. At the same time,

CIOs INCREASINGLY SPENDING TIME ON STRATEGIC ACTIVITIES

Which of the following activities best characterize your focus and how you spend your time in your current role?



half of respondents to this year’s survey identified with the transformational CIO role, up from 45% in 2016, and 31% of respondents classified their role as strategic this year, up from 27% in the 2016 survey. CIOs are happily embracing their evolution from order taker and implementer to strategist and business enabler: Sixty-three percent of transformational CIOs and 71% of strategic CIOs categorized the work as more rewarding compared to only 46% of CIOs still saddled with mostly functional duties.

Cyber security, which was cast in the spotlight last year due to a spate of high-profile data breaches, gained even more prominence this year, becoming one of the top three CEO priorities for CIOs. Yet instead of adding to CIOs’ already full plate of functional duties, security has morphed from a standalone set of workflows and practices into a strategic initiative. Slightly more than half (51%) of respondents to the 2017 State of the CIO survey said security and IT strategy is tightly integrated today compared to only 37% in 2016. As a result, even functional CIOs are spending less time on security management activities—41% compared to 46% of respondents to the 2016 survey.

While CIOs are making great strides securing a strategic place in the enterprise, there is lingering uncertainty from line of business (LOB) about the scope of their role. LOB leans on CIOs to identify business needs, make recommendations, and perform risk assessments, with 41% of LOB respondents to the 2017 State of the CIO survey referring to their CIO as a strategic advisor and another 22% calling them a business consultant. At the same time, however, LOB seems less clear on IT's role in new business initiatives: Only 27% of LOB respondents said IT is actively recommending technology solutions

(compared to 64% of CIOs), 24% felt IT is successfully collaborating with LOB on building a business case (compared to 59% of CIOs), and 31% acknowledged IT's hand in developing technical requirements (compared to 49% of CIOs).

63%

**of LOB see
CIOs as
strategic
advisors/
consultants**

Some of the ambiguity lies with the fact that LOB sees the CIO role as more diverse, split between innovation activities, identifying emerging technologies to accelerate digital transformation, and project management. CIOs, on the other hand, see innovation as their primary charter, with 41% of CIO respondents focused on identifying business opportunities for digital transformation.

The Spotlight Pays Off

CIOs' increased visibility, particularly among the C-suite and customers, is starting to bear fruit. Nearly half (46%) of CIOs now report in to the CEO, the same as last year and the highest since 2004. IT leaders in enterprise companies are more likely to have a diversified chain of command, with 16% reporting into the COO and 15% reporting into the Corporate CIO, compared to 8% and 2% respectively in SMB organizations, the 2017 State of the CIO survey found. Moreover, CIOs identifying as strategic are more likely to report to the CEO — 54% compared to 45% of transformational CIOs and 39% of their functional counterparts. In fact, CIOs who identify as functional are more likely to report into the CFO (29%) compared to their transformational (19%) and strategic (9%) CIO peers.

While the enterprise CIO pay grade took a hit — \$306,300 this year in total compensation, including bonuses and stock options, compared to \$400,000 in 2016—SMB CIOs were paid more, \$214,020 on average compared to \$190,000 last year. Not surprisingly, CIOs in financial services companies were the highest paid of any industry surveyed, earning \$340,780 annually, on average, while government/non-profit CIOs took home the smallest pay checks, at \$170,650. Total compensation for strategic CIOs came in at \$319,470, with transformational CIOs earning \$251,210, and functional CIOs taking home \$205,908, on average. Despite the wide range, CIO salaries were far higher across the board than LOB respondents', which averaged \$126,360.

33%

**Spend time
driving
business
innovation
UP FROM 26%
LAST YEAR**

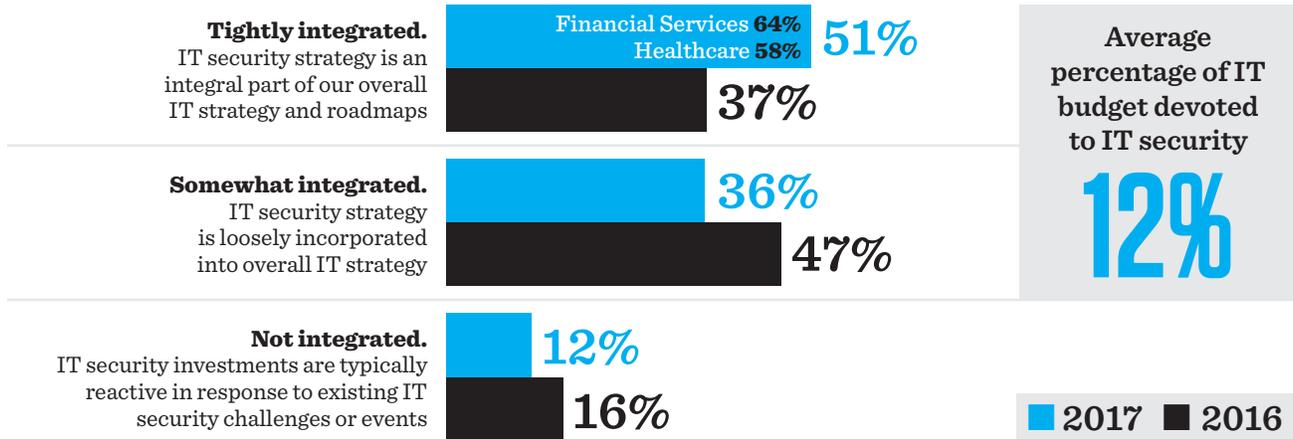
CIOs are also getting much more face time with customers and the board of directors. Sixty-one percent of CIOs are communicating with the board, up from 58% last year, and slightly higher among strategic and transformational CIOs. On the customer front, 76% of CIO respondents said they met frequently or occasionally with customers compared to 62% last year. Transformational (71%) and strategic (83%) CIOs were more likely to engage with customers compared to only 57% of functional CIOs. In addition, CIOs in the manufacturing space were less likely to be customer-facing (56%) than any other industry sector, the survey found.

How They Spend Their Time

CIOs are spending more time on transformational activities such as aligning IT initiatives with business goals (53%) and cultivating the IT/business partnership (38%), and at enterprise organizations, there is even greater emphasis on these activities compared to SMB companies. At the same time, there is a growing commitment to strategic endeavors like driving business innovation (cited by 33% of CIOs this year compared to 26% in 2016) and identifying opportunities for competitive differentiation, at 21% in 2017 compared to 16% last year. Functional duties account for less of the CIO agenda, including security management, now at 41%, down from 46% last year, and managing IT crises, at 19%, down from 27% in 2016.

SECURITY INCREASINGLY INTEGRATED WITH IT STRATEGY

How tightly integrated are IT security strategy and IT strategy at your organization today?



Strategic activities are much more prevalent (78%) in the retail/wholesale/distribution industry compared to the rest of the sectors, particularly those of financial services (61%), government/non-profit (58%), and manufacturing (46%). Those CIOs meeting frequently with external customers are also much more likely to spend their time on strategic initiatives (69%) compared to their counterparts that seldom have any customer interaction (52%).

Over the next year, CEOs’ top objectives for CIOs also play into their rising stock as a strategic partner. Much like last year, CEOs are looking to CIOs to help drive corporate revenue growth (32%), upgrade IT security infrastructure (32%), and to simplify IT (31%), the 2017 State of the CIO research found. Enterprise CEOs are more likely to task CIOs with enabling global expansion (22% vs. 16% of SMBs) and leading a merger or acquisition (19% vs. 12% SMBs). Moreover, CEOs are also more likely to call on strategic CIOs to grow corporate revenue (36% compared to only 23% of functional CIOs), lead product innovations (37% vs. 18%) and acquire and retain customers (33% vs. 11%).

While security remains a top priority for IT, the day-to-day aspects of managing security have eased up as the discipline has become tightly integrated into the overall IT strategy. Slightly more than half (51%) of respondents to 2017

State of the CIO survey said security and IT strategy is tightly integrated today compared to only 37% in 2016. Within the next three years, that number jumps to 80%, and more executives are getting involved with security planning, including LOB. In addition, IT security now represents an average of 12% of the total IT budget, according to survey respondents. Of all the industry segments, financial services (64%) and healthcare (68%) are most likely to have tightly integrated IT and security strategies, in part because of the strict regulatory climate governing both sectors.

51%
**Security and
IT strategy
tightly
integrated
UP FROM 37%
LAST YEAR**

Beyond the stepped up focus on security, IT investments are being directed toward business initiatives such as improving customer experience (40%), transforming existing business processes (40%), increasing operational efficiency (35%), and growing the business (33%). Although IT and LOB are more closely aligned than in the past, there are variations in how they rank each of these top business objectives. For example, LOB ranked customer experience third, cited by 26% of LOB respondents while increasing operational efficiency was its top priority, at 36%. While 26% of IT respondents were driven to bolster cybersecurity protections, only 20% of LOB were onboard with that priority, and LOB ranked improving profitability (24%)

fifth, while that driver didn't make it onto IT's list.

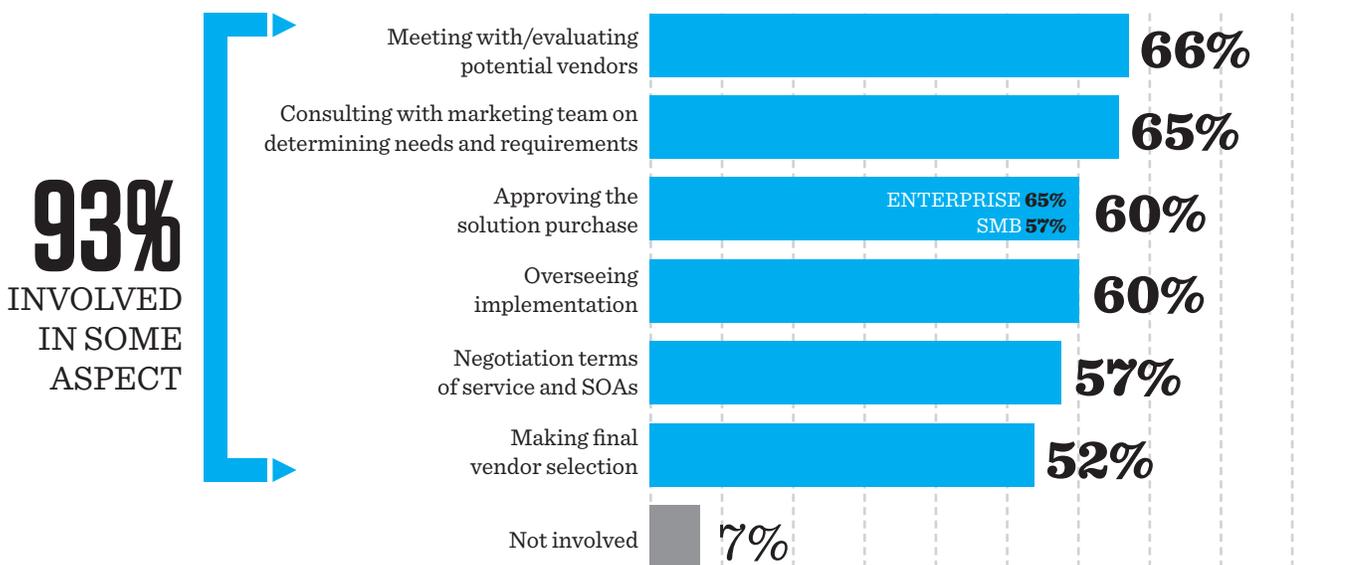
There are also slight differences in business drivers for tech investment depending on the CIO role. Functional CIOs are much more likely to indicate increasing operational efficiency (41%) and cybersecurity (33%) as a business driver while strategic CIOs are more likely to cite improving customer experience (45%), growing the business (42%), and introducing new revenue streams (27%). Those CIOs getting face time with customers are more likely to cite customer experience (43%) as a business driver compared to IT heads who seldom or never (34%) meet with customers.

From a technology standpoint, IT leaders ranked big data/business analytics (33%), cloud computing (28%), security/risk management (23%), and enterprise applications (23%) as top investment drivers. All of those were of more significance for enterprise companies compared to SMBs, however, application development ranked much higher on the list for SMBs (21%) compared to enterprise companies (17%). In contrast to functional CIOs, strategic CIOs were much more likely to identify big data/business analytics (40% vs. 24%), customer experience technology (23% vs. 10%), and marketing technologies (13% vs. 5%) as investment drivers.

Once again, LOB and IT were not exactly on the same page with technology choices. Big data/business analytics was the top initiative for IT heads, cited by 33% compared to only 16% of LOB, which ranked it fourth. Marketing technologies (19%) and social media/collaboration (10%) were ranked second and eighth on LOB’s technology to-do list, while neither made the Top 10

CIOs SHOW STRONG INVOLVEMENT IN MARTECH PURCHASES

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

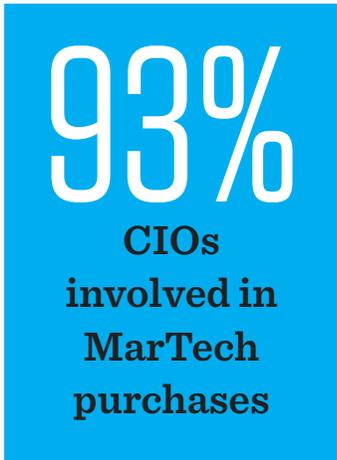


ranking for CIOs.

Budgets and Partnerships Bloom, But Talent Is Tight

Tech budgets have been steadily rising for the last five years and this year saw more of the same. Fifty-six percent of respondents to the CIO Tech Poll: Tech Priorities 2017 survey expect their IT budgets to increase and 31% expect them to stay the same. Enterprise organizations are projecting a 4.8% bump in their 2017 IT budgets while SMB companies expect a meatier increase of 8%. IT still retains direct control over the technology spend at 54% of responding companies, although that’s down three points from 2016. Over the next three

years, however, that number is expected to rebound to 57%.



While other groups have budgets earmarked for technology investments, the allocation remains fairly consistent year over year according to the 2017 State of the CIO study. Operations (40%), marketing (38%), and finance/accounting (29%) are the groups most likely to have their own IT budgets, although the number goes down slightly for enterprise organizations. For example, 34% of marketing departments in enterprise companies have an IT

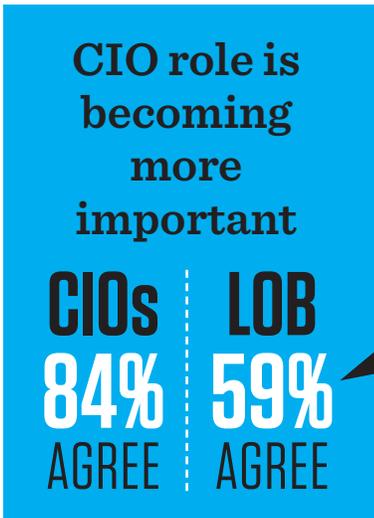
budget compared to 42% in SMBs.

In most cases, CIOs are actively involved in making marketing technology purchasing decisions—66% meet and help evaluate vendors, 65% consult to help determine needs and requirements, and 60% approve the solution purchase. In addition, strategic CIOs are much more likely to have final say over vendor selection on tech purchases—64% compared to 49% of transformational CIOs and 43% of functional CIOs. Nevertheless, the process is mainly collaborative with IT and marketing working together to determine business needs (67%), identify technology requirements (58%), and meet and evaluate potential vendors (59%). As a result of this tighter partnership, 46% of CIOs say the CIO/CMO relationship has gotten much or somewhat closer, although LOB has a slightly different interpretation with only 30% seeing such levels of

improvement.

An area that remains a struggle for CIOs is the on-going skills shortage. Sixty percent of responding CIOs said they are experiencing a skills crunch, a significantly higher number than last year at 49%. Data science/analytics, security/risk management, and enterprise software are the key areas where talent is tight, with data science/analytics being a bigger gap for enterprise companies (41% vs. 35% for SMBs) as well as security (34% vs. 27% for SMBs).

Despite Alignment, LOB Still Lacks a 360 Degree View



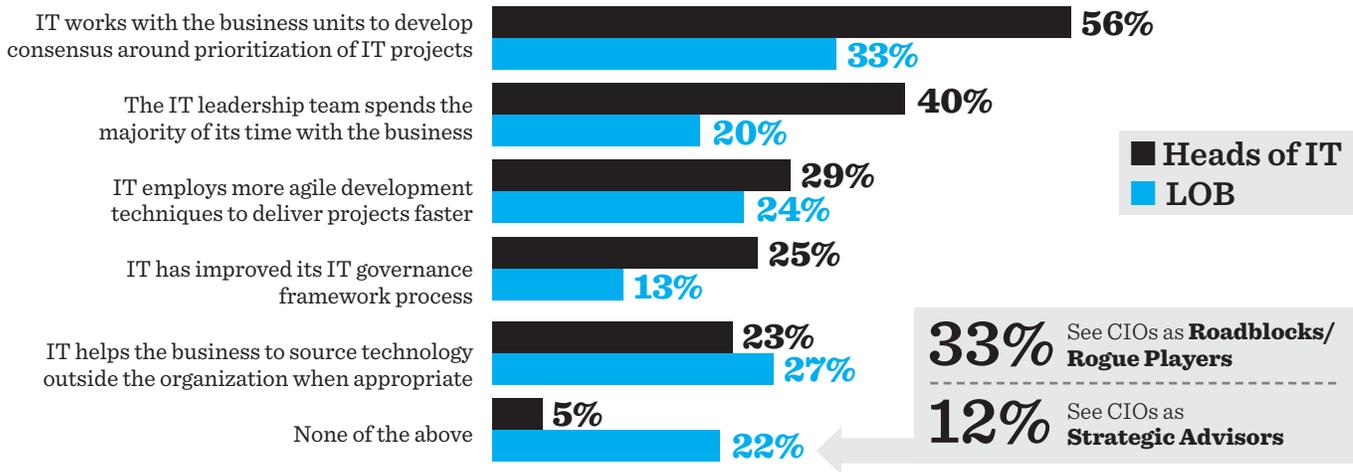
Despite their differences, LOB and CIOs have developed a strong partnership, with LOB routinely calling on CIOs as a strategic advisor and consultant for evaluating business needs and technology choices in addition to helping with risk assessment. But LOB also sees CIOs playing a more diverse role that encompasses innovation (24%) as well as project management (23%), technology (20%), and security (14%). In comparison, CIOs see their role more focused on innovation (41%) with those other responsibilities further down on their list of priorities.

There are also differences in how LOB and CIOs envision the CIO role with indications that LOB is not fully aware of the scope of the CIO’s responsibilities and the on-going requirement to wear multiple hats. When it comes to new business initiatives, CIOs see their role as recommending technology solutions (64%), collaborating with LOB on the business case (59%), and developing technical requirements (49%), a perspective shared by 27%, 24%, and 31% of LOB respectively.

Moreover, while 84% of CIOs say the role is becoming more important to the business, only 59% of LOB agrees and 21% are unsure. Eighty-one percent of CIOs acknowledge a greater involvement in security than in the past, a sce-

IT HELPING TO PRIORITIZE TECH PROJECTS IMPROVES IT/BUSINESS RELATIONSHIP

What are the top 3 steps the IT organization has taken to improve its IT/Business working relationship in the past year?



nario cited by 66% of LOB with another 22% unsure exactly of the CIO’s role. The challenges of the bi-modal CIO role are also less apparent to LOB—87% of CIOs pegged the role as more challenging compared to only 60% of LOB with another 25% of LOB unsure about the growing complexity.

Specific CIO obstacles were also less likely to be on LOB’s radar screen. Forty-two percent of CIOs report having to fight turf battles with executive level peers, an obstacle cited by 31% of LOB with another 29% unsure. The perception of IT as an obstacle was cited by 36% of CIOs, but only 31% of LOB with another 15% unsure, and a significant 58% of CIOs feel their department is scapegoated by others when they miss their own goals, a problem recognized by only 13% of LOB with another 15% unsure. There is less of a gap of perception surrounding traditional IT functions like performing systems testing and QA (44% of CIOs vs. 17% of LOB) and providing a short list of IT suppliers for a solution (26% vs. 11%), indicating that CIOs need to do a better job conveying their role in more strategic initiatives.

To improve their working relationship, CIOs are helping LOB prioritize tech projects (56%), immersing themselves in the business (40%), and honing in on agile development techniques to deliver projects faster (29%). From LOB's perspective, prioritizing tech projects (33%), assisting in outside sourcing initiatives (27%), and using agile techniques to accelerate project deliverables (24%) are the top three steps the IT organization is taking to enhance their collaboration.

In the end, it is clear there is mutual respect between the heads of IT and LOB, even though CIOs need to do a better job promoting the scope of their strategic contributions. Even so, CIOs have come a long way from their roots as functional order taker and are now firmly established as a critical partner to the business and most significantly, as a key driver of digital transformation.

METHODOLOGY

CIO's 2017 State of the CIO Survey was conducted among the CIO brand audience. The 16th annual survey fielded online between September 7, 2016 and October 17, 2016 with the objective of understanding the current parameters of the CIO role and how it may be changing over time. 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 646 qualified responses. The margin of error on a sample size of 646 is +/- 3.8 percentage points. Percentages on single-select questions may not sum to 100% due to rounding.

A broad range of industries are represented including government & non-profit (17%), manufacturing (15%), financial services (12%), high-tech (11%), retail, wholesale and distribution (9%), business services (9%) and healthcare (6%).

A version of CIO's 2017 State of the CIO Survey was conducted among Line of Business (LOB) management in the U.S. This survey fielded online between September 22, 2016 and September 24, 2016 with the objective of understanding the LOB decision maker perspective regarding the CIO role and how it may be changing over time. To be considered qualified respondents must have identified themselves as employed in a Director or higher role in an executive or non-IT line of business function.

Results are based on 200 qualified responses. The margin of error on a sample size of 200 is +/- 6.9 percentage points.