2015 Global Digital IQ® Survey
September 2015

Lessons from digital leaders
10 attributes driving stronger performance



pwc

Will your digital strategy drive top-line growth or real disruption?

Since 2007, our unique research has asked one simple question: What actions can leaders take to confirm their digital investments deliver and sustain value? To get to the answer, we study the practices and performance of global companies, drawn from the experience of nearly 2,000 business and technology executives. This year we have identified 10 critical attributes that correlate with stronger financial performance.

Top-performing companies are more deliberate in their digital strategy, innovation, and execution. They are more likely to have CEO commitment, strategic clarity, and shared understanding. They are more apt to take a broad view when applying technology and identifying sources of innovation. And they are more prone to being skilled at turning their data into insight, proactive in cybersecurity, and consistent in measuring outcomes from digital investments. Those organizations that displayed these attributes—our Digital IQ® leaders—were twice as likely to achieve more rapid revenue and profit growth as the laggards in our study.



In addition to establishing the direct linkage between digital investment and corporate performance, our research revealed important trends about the nature of disruption and the barriers organizations face in its wake.

1. Digital for today's business—not tomorrow's.

Despite the market fervor, companies are not investing in technology to disrupt their own or other industries. They are almost entirely focused on applying digital to grow their existing business models and the short-sighted view is cause for concern.

2. Yet plenty of disruption occurring inside of organizations.

Leadership's desire to capitalize on digital technology is so strong that it's disrupting the enterprise operating model, as evidenced by shifting spending patterns, new digital roles, and undefined working relationships.

3. And companies are held back by a slow-tech approach.

Staying ahead of both market and internal disruption requires thinking and acting more like a nimble startup. Companies need to accelerate productive cross-functional relationships, how they learn and partner, and skills development.

Our Digital IQ findings have never been more relevant. As organizations continue to invest heavily in digital technology, and customers, employees, shareholders, and boards raise their expectations, management teams are under pressure to translate that considerable investment into real returns. We believe that, first, leaders must have a clear understanding of today's digital climate. Only then will they be equipped to set themselves up for superior performance in their current business—and ones they have yet to reimagine.



Digital IQ leaders are twice as likely to achieve rapid revenue and profit growth as the laggards in our study.

What do the digital signs reveal about your business?

Our research reveals clear signs that 2015 is a tipping point. While we see some regional differences across the globe, business leaders are poised to unlock real competitive advantage through their digital investments. Here's why:

CEOs are all-in.

The vast majority (86%) of CEOs we spoke with in our annual survey felt it was crucial to champion the use of digital technologies.[1] Are they walking the talk? Yes, according to the nearly three-quarters of business and IT executives in our Digital IQ survey. Even more telling is the significant uptick we've seen over the last two years: just 57% said their CEO champions digital in 2013, compared with 71% in 2014, and 73% this year. A regional standout here is the Middle East where 84% of executives point to a CEO champion in their organization.

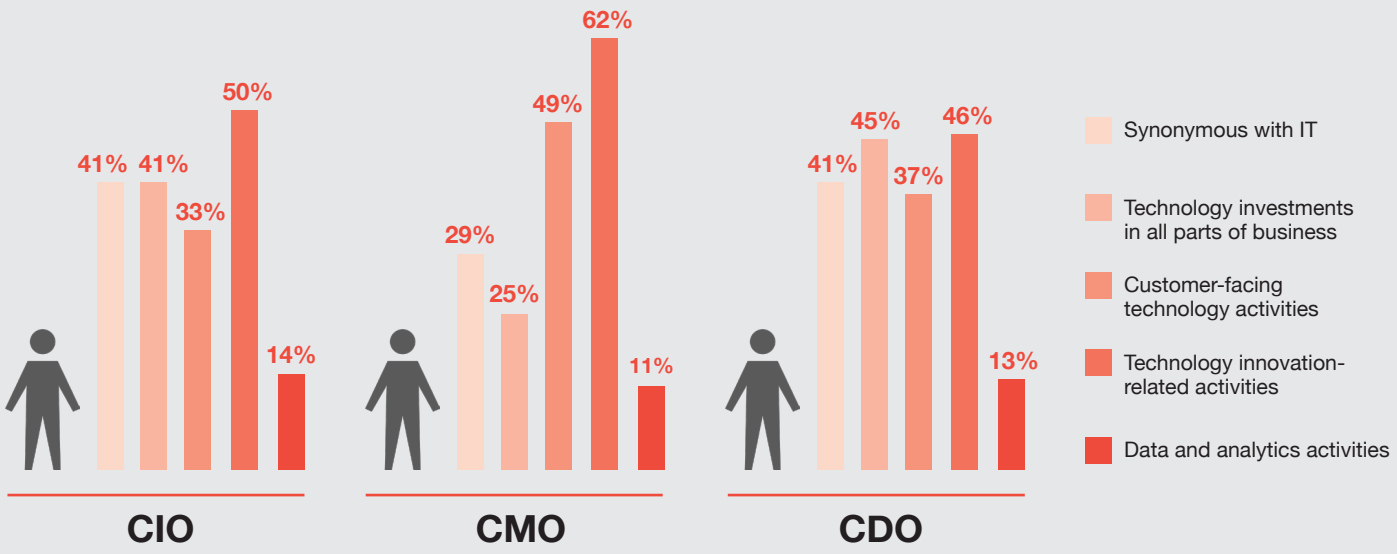
Aggressive investment is occurring.

The CEO mandate is influencing significant investment in digital: Nearly one-third of respondents (31%) say their companies are investing more than 15% of revenue into technology investments that span all areas of the business, not just IT. This is considerably higher than the single-digit spending forecasts that technology analysts typically make. Regionally, executives in Africa (42%) and Southeast Asia (40%) are most likely to be investing more than 15% of revenue.

Confidence continues to rise.

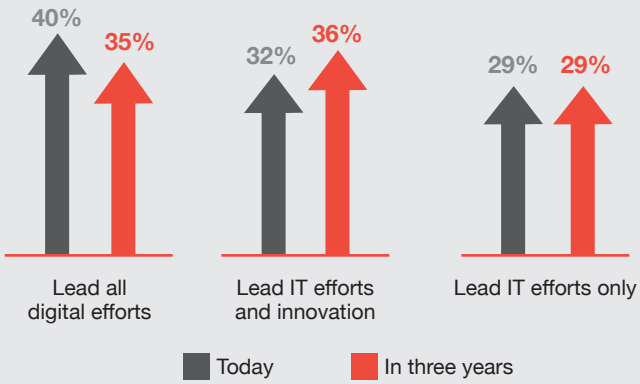
Two-thirds of respondents rate their companies as having a strong Digital IQ, slightly up from 64% last year. Executives in Asia (64%), Scandinavia (59%), and Western Europe (54%) are less confident.

Digital disconnect: how leaders see digital



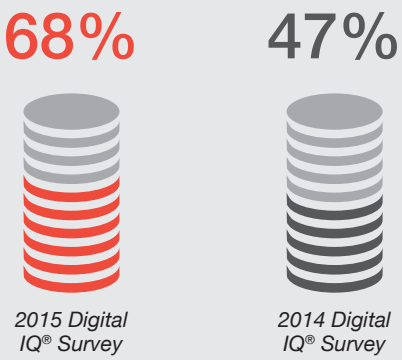
Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988
Q: How does your organization define digital? Select up to two statements that best describe your company.

CIO back to the back office?



Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988
Q: Which of the following best describes your CIO's key responsibilities today? In three years?

Tech investment increasing outside of IT



Source: PwC, *2015 Global Digital IQ® Survey, 2014 Digital IQ® Survey*; Bases: 1,988, 1,494
2015: Q: In the last 12 months, what percentage of your organization's digital enterprise budget was spent in the following areas?; 2014: In the last 12 months, of all the spending in your organization on technology, what approximate percentage of it was spent in the following functions?

Lack of a common definition.

We asked executives to choose the two most-apt definitions of digital for their business. While the majority (53%) think of it as the activities related to technology innovation, and a large share (41%) see it as the investments made to integrate technology into all parts of the business, a sizable number define it as IT (37%) or customer-facing activities (36%). CIOs and CDOs tend to be on the same page, but CMOs have different priorities and expectations. The regional picture is also mixed, with Central and Eastern European executives most often viewing digital as IT, while those in North America (48%) and the Middle East (69%) most often view it more broadly.

New and evolving roles.

Where enterprise technology used to be the sole domain of the Chief Information Officer (CIO), there's a shift happening in many organizations, with the traditional CIO role fragmenting across new and existing leaders. Some companies are appointing Chief Digital Officers (CDOs) to lead digital transformation efforts, as evidenced by a forthcoming PwC Strategy& study, *Digitizing the business: The 2015 Chief Digital Officer Study*. Executives in our survey indicate that while many CIOs predominantly lead all digital efforts today (40%), there will be a drop-off in three years' time (35%). At the same time, executives say they expect the CIO will ramp up the internal focus on IT and innovation from 32% today to 36% in three years. In some regions the marginalization of the CIO role is even more pronounced: In North America (44% today), CIOs who have responsibility for digital across the business is expected to sharply drop to 31% in three years.

Distributed technology spending.

The majority of spending (68%) is now coming from budgets outside of IT's, a significant increase from 47% the prior year. In Central and Eastern Europe (73%) and North America (71%), an even greater share of spending is happening outside of the CIO's control. And just who's ultimately responsible for investments also has changed, with the CEO (34%) at the forefront, followed by the CIO (27%), the CDO (14%), and the CFO (13%). CIOs in North America and Western Europe are more likely to be responsible for digital investment, while in the Middle East it is CDOs.



We see signs that digital is creating significant disruption inside of organizations.

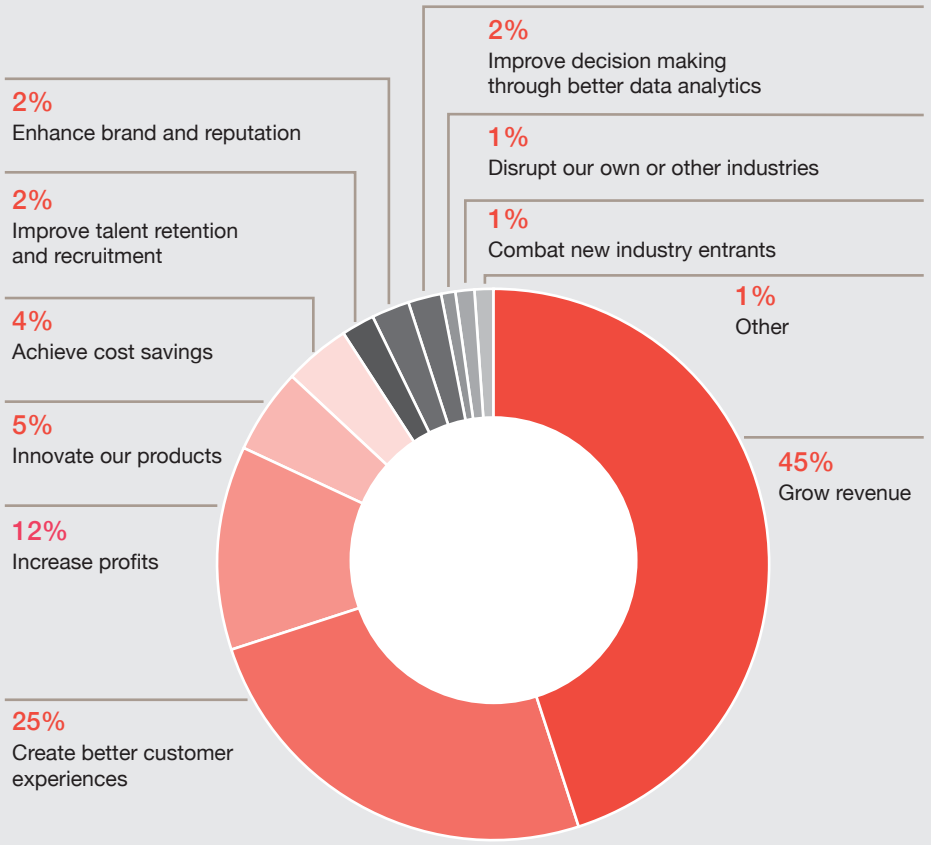
Chasing digital value: what businesses really want

Collectively, these signals tell us that businesses have raised the stakes when it comes to digital. There's plenty of talk about disruption, and what it takes to challenge the status quo. But, in fact, that's not where companies have put their time or money. Just 1% of executives said their number-one expectation for digital was to disrupt their own or other industries. (When asked to rank the top-three ways digital will provide value to the business, the number rises to 8%.)

Instead, they seek more immediate returns: 45% say the top priority is growing revenue; 25% expect digital to create better customer experiences, and 12% see it increasing profits. In short, digital is a way to grow today's business, not necessarily tomorrow's.

Leaving aside questions of short-sightedness—for now—we wondered: Are they succeeding? Have they focused their efforts in the most effective way, especially given the hypercompetitive environment in which they find themselves? According to a recent study by PwC Strategy&[2], executives continue to reiterate their pursuit of growth, but they also admit to lacking confidence in their ability to achieve targets.

Disruption is top of mind—but bottom of investment priorities



Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988
Q: What value do you expect from your digital enterprise investments? Select the top three in ranked order. First-ranked.



Digital IQ

10 attributes that fuel your digital growth engine

01

Our CEO is a champion for digital.

02

The executives responsible for digital are involved in setting high-level business strategy.

03

Business-aligned digital strategy is agreed upon and shared at the C-level.

04

Business and digital strategy are well communicated enterprise-wide.

05

We actively engage with external sources to gather new ideas for applying emerging technologies.

06

Digital enterprise investments are made primarily for competitive advantage.

07

We effectively utilize all the data we capture to drive business value.

08

We proactively evaluate and plan for security and privacy risks in digital enterprise projects.

09

We have a single, multi-year digital enterprise roadmap that includes business capabilities and processes as well as digital and IT components.

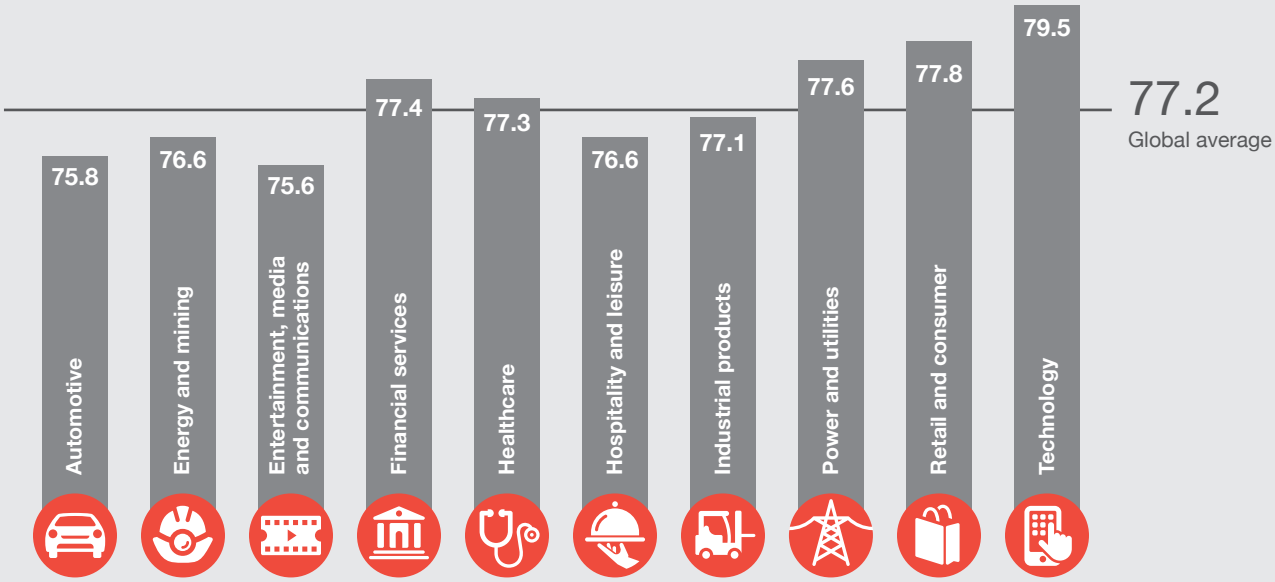
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We consistently measure outcomes from our digital technology investments.

What's your Digital IQ?

Our Digital IQ analysis reveals that despite high confidence in their capabilities, companies fall short in linking digital to tangible gains. But there is a path forward. Based upon the responses from the nearly 2,000 executives in our survey, we analyzed more than 25 factors, spanning strategy, innovation, and execution. Ultimately, we isolated the 10 attributes that correlate with stronger financial performance; collectively these make up our overall Digital IQ score. Companies with high Digital IQs (those in the top quartile) were twice as likely to achieve rapid revenue growth and profit growth as the laggards in our study.

Our Digital IQ score provides a consistent way to assess how well organizations are capturing the value they expect from technology investments—in particular the growth that so many seek. We use Digital IQ as a tool for quantifying and benchmarking how well positioned companies are to realize returns—as individual organizations, within an industry, or compared with other peer groups. While the overall score is directionally important, the real strength of Digital IQ comes when evaluating scores for each of the 10 attributes to identify differences in a company's digital understanding, priorities, and gaps.



Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988



Sharpen digital strategy—from the boardroom to the breakroom

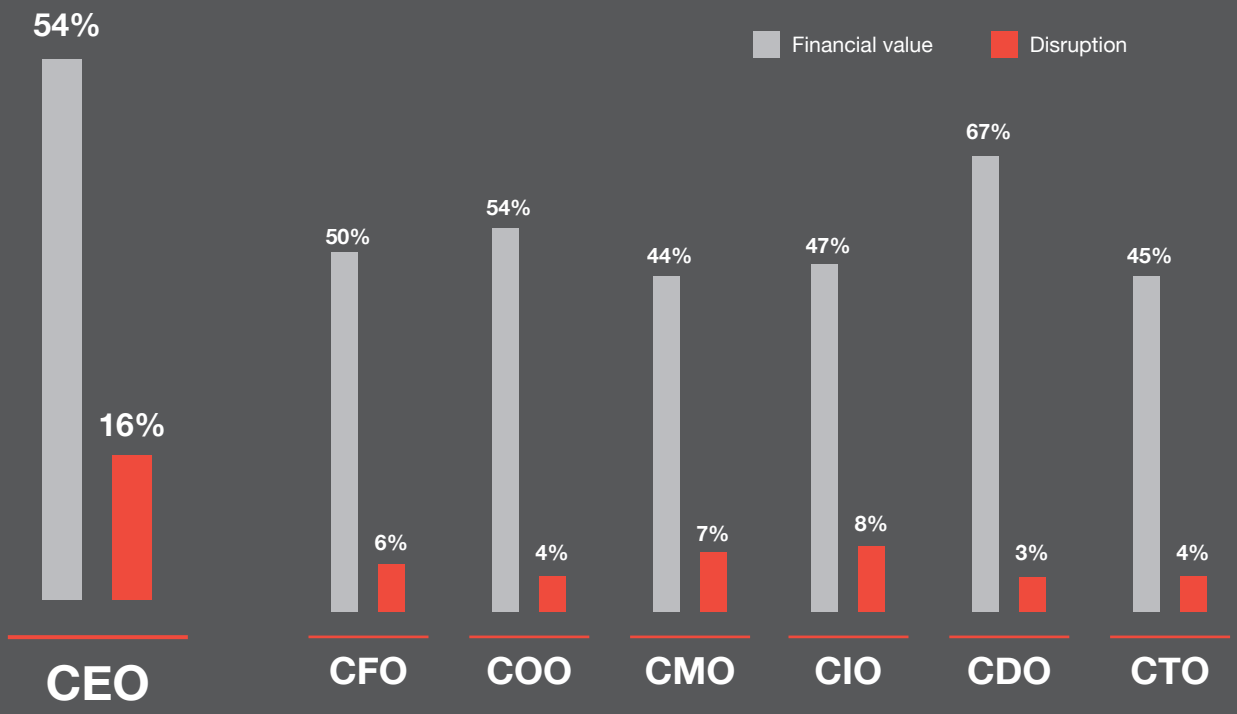
Given the strategic importance of digital, it follows that four of the 10 Digital IQ attributes fall within the strategy pillar. The foremost is CEO leadership, which must be backed up with ownership by the digital leader and rest of executive team, then the ongoing engagement with the rest of the organization.

01

CEO champion

Tracking the relationship between CEO leadership and technology value has been an area of Digital IQ study since its inception. In fact, we identified a correlation between a CEO champion and stronger financial performance back in 2007 with our inaugural study. The CEO is the natural leader as the focus on technology has shifted from operational efficiency to growth, and the stakeholders and conversations have changed. CEOs have ambitious expectations for digital, prioritizing disruption much more highly than the rest of the executive team. Company boards are also more engaged in digital strategy. In our forthcoming *2015 Annual Corporate Directors' Survey*, due in October 2015, we've found that boards are spending more time discussing technology strategy and issues (especially cybersecurity). While more directors (25% this year, up from 18% in 2012) now meet with the company's CIO at every formal board meeting, this signals an opportunity for CEOs and their digital leaders to expand the discussion beyond cybersecurity.

CEOs have disruption on the radar, but did rest of exec team miss the memo?



Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988; Q: What value do you expect from your digital enterprise investments? Select the top three in ranked order. (Grow revenue, increase profits; disrupt own or other industries; combat new industry entrants.)

02

Digital leaders set strategy

CEOs may set the tone and vision for digital, but those responsible for operationalizing digital, often the CIO or CDO, are instrumental in setting high-level business strategy. This is especially true in companies where digital leaders are responsible for a significant share of the business. For some organizations, one effective way to foster co-development of strategy is through new organizational structures. A global healthcare company, for example, created a digital council that brings together the company's dozen CIOs and CMOs. Instead of tackling issues in their respective business units, they work together on both digital strategy and execution. To truly be effective such a council must be collaborative and cross-functional, made up of those in both IT and business roles.

03

Executive team engaged

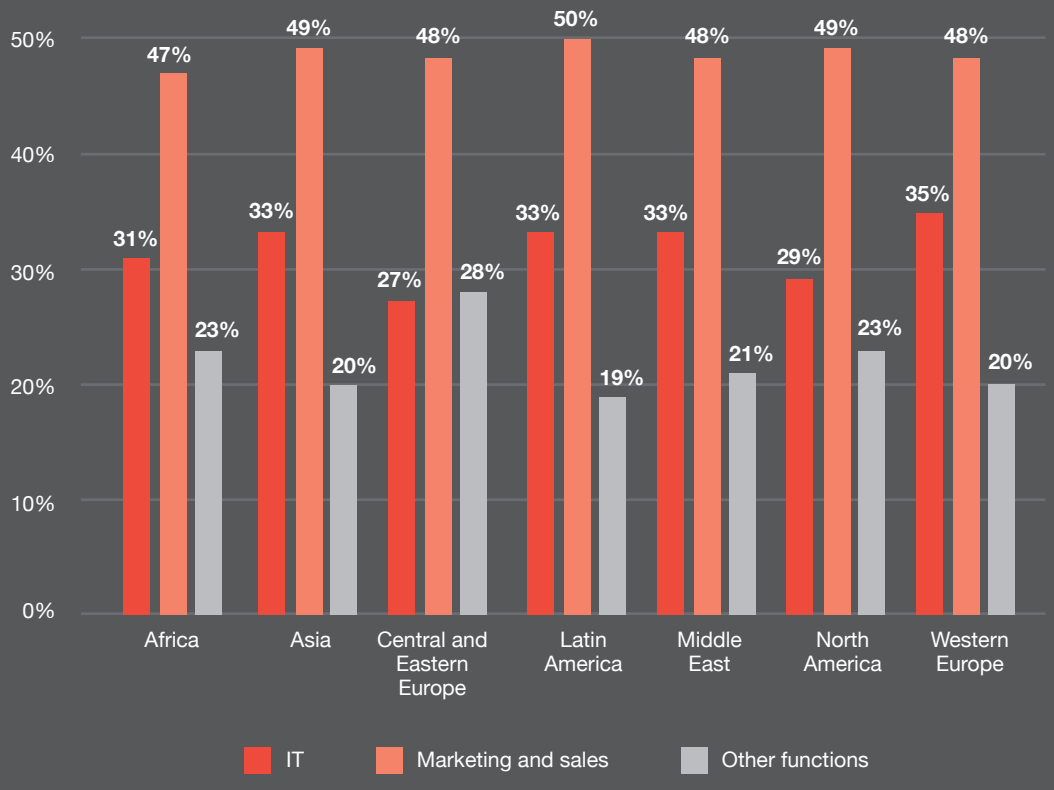
Beyond the CDO and CIO, the rest of the C-suite must also weigh in on—then buy-in to—the strategy. Being on the proverbial same-page means there's greater likelihood to maximize investments, enabling the organization to identify areas of overlap and bring to light any resource gaps that could derail efforts. As we've seen in the last several years of our study, productive relationships among the executive team are essential to maximizing value from investments. This collaboration is especially vital when it comes to the CIO and CMO. Companies may have their work cut out for achieving a productive partnership: This relationship is the weakest one of the nine relationship pairs we track, with 54% rating it as strong; in comparison, a strong CIO-CEO relationship comes in at 70%.

04

Strategy-sharing across the organization

Finally, strategy isn't complete without engagement by everyone in the organization. We've seen the importance of this simple but powerful practice over the last three years. While today 69% of companies say that business and digital strategies are shared enterprise-wide, it hasn't always been this way. Last year companies put that figure at 55%, and the prior year it was just 50%. Business leaders are often using technology to help them get the word out and mobilize employees around the strategy. They're filming videos, taking to social media, and leveraging smartphones, not only to share the strategy but to create a dialogue about how it affects their employees.

Digital spending for customer efforts surpasses IT



Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988
Q: In the last 12 months, what percentage of your organization's digital enterprise budget was spent in the following areas? *Cateogry mean.*



Accelerate innovation with an expansive view of sources but a diligent business focus

While many considerations guide a company's innovation strategy for shorter-term growth and longer-term differentiation, there are two key factors that inform Digital IQ: looking for innovation in new and unexplored places, then decisively acting upon those that are most competitively advantageous.

05

Outside-in approach

Top-performing companies take an outside-in approach to innovation, leveraging the considerable knowledge base of other innovators, such as vendors or customers, to uncover and apply new ideas for using technology. They're also more likely to evaluate many emerging technologies, characterizing their approach to adoption as one that's technology-driven (69% vs. 50% for other companies), as opposed to influenced by the business or vendors. Our analysis also revealed that companies more keenly focused on business model innovation—the 8% of companies looking to disrupt their own or other industries—take an even more rigorous outside-in approach. They have a broad view of innovation and continually look for opportunities to digitize the business. Seventy-one percent of digital disruptors do this, compared with 63% of other companies.

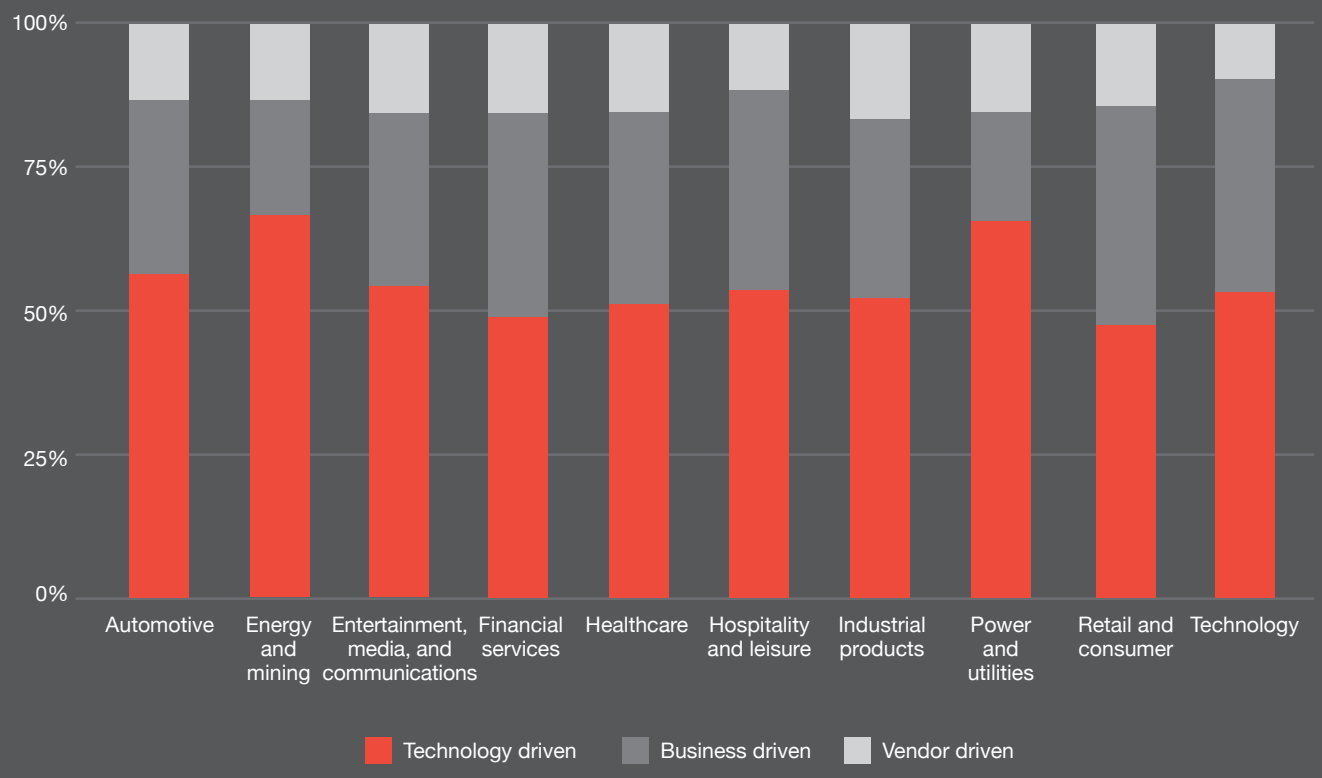
71% of digital disruptors continually look for opportunities to digitize the business, compared with 63% of other companies.

06

Driven by competitive advantage

Actively engaging and learning from many outside sources creates an opportunity for market differentiation. With so many potential ideas, you must filter and prioritize those that hold the most promise for the business. The emerging technologies that land on each company's short-list will vary widely, but those that executives see as being most strategically important in three to five years are cybersecurity, data mining and analysis, data visualization, digital delivery, and private cloud. We also see less mainstream choices like NoSQL databases, sensors for instrumenting the business, and enterprise wearables as important bets for competitiveness.[3]

Tech advances most influence emerging technology adoption



Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988
Q: How do you characterize your approach to adopting new and emerging technologies?



Amp up execution with critical capabilities and a digital roadmap

While a company's capabilities must be in lock-step with its business strategy, and will be just as distinctive, two capabilities are integral to Digital IQ: how you utilize data and how you act upon cybersecurity and privacy are both considered competitive necessities. Additionally, strong Digital IQ is also tied to having a multi-year digital roadmap and a way to consistently measure progress on the journey.

07

Effective use of business data

Getting value out of the data you capture often means using it to guide strategic decisions like how to grow the business or whether to collaborate with competitors. And executives admit it's a real challenge in their organizations. More than challenges with capturing data, they cite behavioral and skills barriers, such as understanding which data to use and how it benefits their role, nearly as much as issues with data quality or accuracy.[4] Top-performing companies see more potential in making use of their data than lower-performing ones. They see the most promise in third-party data (78%), cloud application data (70%), social media data (69%), and location-aware data (64%).

08

Proactive cybersecurity

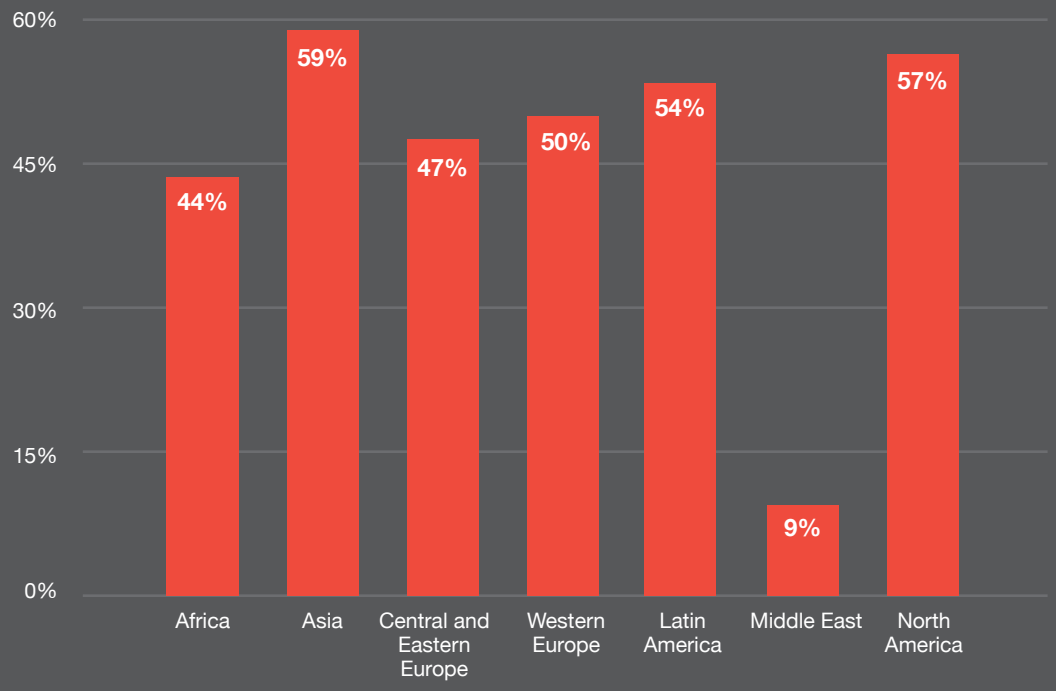
Keeping pace with security and privacy issues is another ongoing challenge, and one that all companies contend with in their ecosystems. As they add new technologies, customers, partners, devices, and data, there are ever more interdependencies and risks to address. That's the baseline today. What's different when it comes to Digital IQ is the level of proactivity. Businesses need to consistently think about how their cybersecurity strategies can help build brand, competitive advantage, and shareholder value. Top-performing companies are more likely to proactively evaluate and plan for security and privacy in digital enterprise projects. They also feel more prepared to manage these risks (80%), compared with lower performers (64%). One way leading companies do this is by routinely including risk managers and security leaders in conversations about new product and service development, especially those taking advantage of emerging technologies like the Internet of Things.

09

Digital roadmap

Rallying the business around a single, multi-year roadmap is another key practice that we've been tracking since the inception of Digital IQ. It's crucial to have the longer term strategic plan at the forefront to help balance the more tactical, year-to-year priorities that always arise in the annual planning and budgeting process. Here, we've seen progress bottom out as digital has become more pervasive in the enterprise while at the same time also more fragmented. Today, 53% of companies have a comprehensive roadmap that includes business capabilities and processes, as well as digital and IT components. Four years ago that figure was at 63%. The skills piece of the roadmap is a serious challenge for many companies. Just 55% of executives said their organization had all the technology skills needed to deliver on their enterprise vision.

Where are we headed? Businesses often lack a cohesive digital roadmap



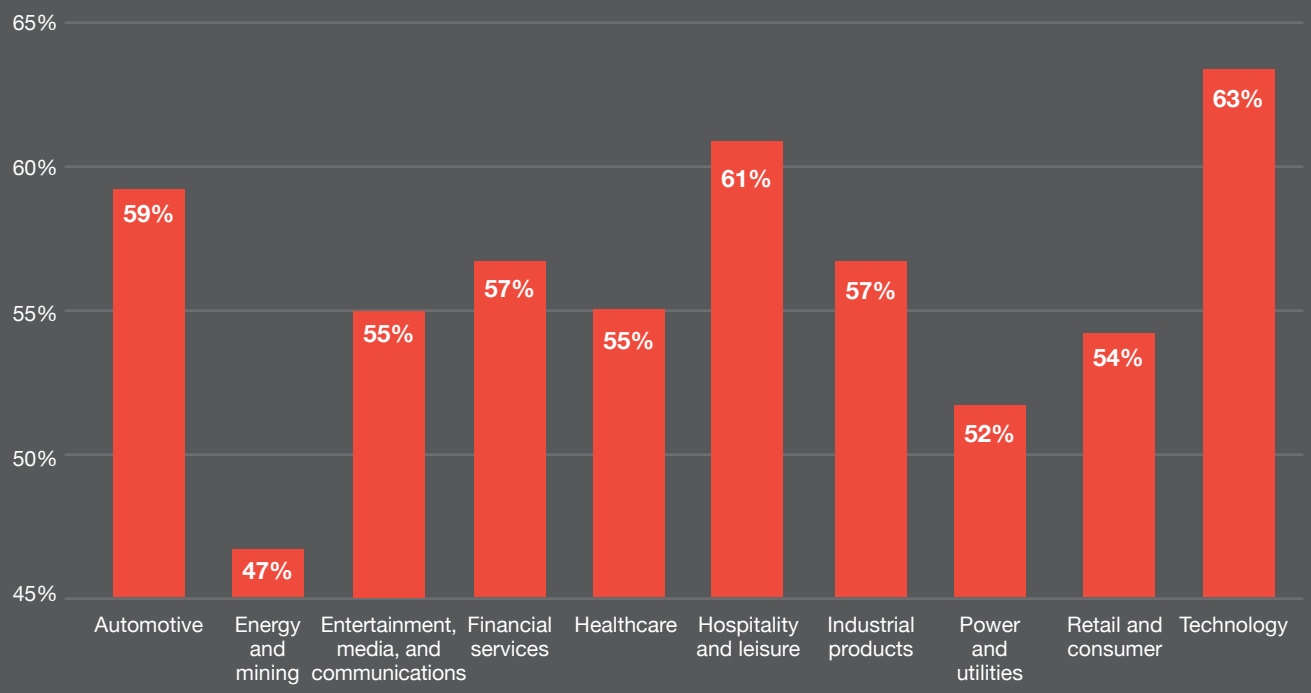
Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988
Q: To what extent do you agree with the following statements about your operating model? We have a single, multi-year digital enterprise roadmap that includes business capabilities and processes as well as digital and IT components.

10

Consistent measurement

Business leaders demand to see the value they're achieving from digital investments. Top-performing companies lead lower-performing ones here again (79% vs. 72%). Demonstrating this requires a combination of traditional metrics (like ROI) to track against growth goals, as well as newer ones for measuring more disruptive investments. Boards, in particular, are taking a strong interest here. They're expanding their focus from solely risk-based metrics to more broad-based "cybermetrics," homing in on the 10 to 15 most meaningful for the company, such as trends identified as a result of data capture activities impacting company strategy.[5]

Tech skills one of biggest barriers to reaching digital goals



Source: PwC, *2015 Global Digital IQ® Survey*; Base: 1,988
Q: To what extent do you agree with the following statements about organization and skills? We have all the technology skills we need to execute our digital enterprise vision.

Next steps for raising your Digital IQ

Businesses have fully embraced digital, and they expect their investments to drive growth and create competitive advantage. Our Digital IQ analysis of nearly 2,000 executives demonstrates that the goal is attainable—if business leaders take a systematic approach to their efforts. First, get a personal baseline of where you think your organization stands with our Digital IQ assessment. Then, consider these next steps:

1. Dig in to your Digital IQ.

Take the assessment with your business and IT leadership team. We recently conducted a customized Digital IQ benchmark of 125 global leaders of a large industrial company. While their Digital IQ score was quite strong, exploring each of the 10 attributes revealed that they were significantly behind in the way they communicate and develop a shared digital vision.

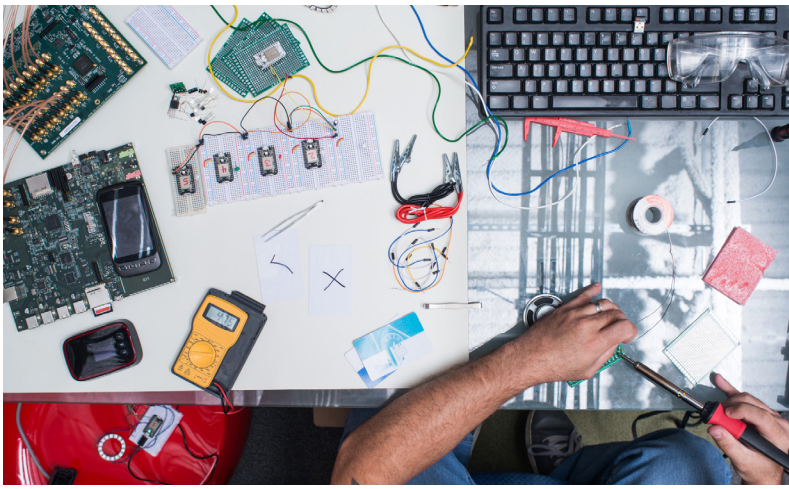
2. Conduct a digital strategy workshop.

Use the session to evaluate the areas for improvement surfaced by your survey of company leaders. Also discuss and develop a shared perspective on the:

- role of digital investments
- leadership and organizational roles needed to drive digital, including responsibilities of the CDO, CIO, CMO, and other key executives
- other internal disruptions that are occurring but aren't being directly addressed, such as the organization's increasingly distributed but uncoordinated technology spending

3. Start a digital dialogue.

Consider an enterprise-wide Digital IQ benchmark to serve as a way to begin engaging around digital strategy with the full organization. Also think about how to use technology—video, internal social media, and mobile—to continue the digital conversation.



4. Develop a disruption strategy.

Create an explicit strategy and approach regarding disruption. We are working with an energy company with a strong desire to apply digital technologies to reinvent their business years into the future. However, when asked to articulate the attributes of such a future business, they gravitated back to more incremental goals, such as getting value from all of the data they collect and improved operational efficiencies, which are important but not disruptive.

5. Expand your ecosystems.

You can't excel at digital growth, disrupt markets, or keep up with tech talent alone. Digital innovation is emerging from places your organization doesn't likely frequent, such as startup incubators, university labs, open source projects, and maker communities. Now is the time to seek out and experiment with an expanded set of the right relationships to keep your ideas and skills fresh and flowing.

Find out your company's Digital IQ at www.pwc.com/digitaliq

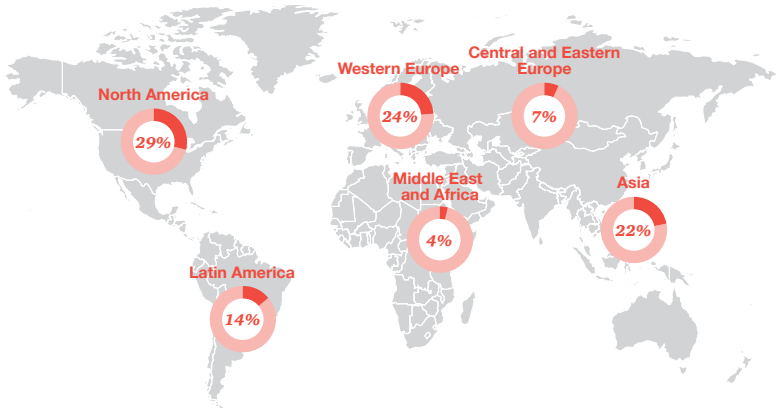
End notes

1 PwC, *18th Annual Global CEO Survey*, January 2015.
2 Strategy&, *2015 Growth Survey*, June 2015.
3 PwC, *Digital IQ: Three surprising digital bets*, January 2015.
4 PwC, *Global Data & Analytics Survey 2014: Big Decisions*™, September 2014.
5 PwC, *Achieving excellence—Cybermetrics: what directors need to know (Audit Committee Excellence Series)*, September 2015.

About PwC's Digital IQ research

We've been conducting Digital IQ since 2007 and this year marks our seventh annual survey of business and IT executives globally. This year's survey was conducted July through September 2015 and included 1,988 respondents from 51 countries. Responses were aggregated into 7 regions and 10 industries. Respondents were evenly divided between IT and business leaders. Reflective of the distribution of respondents globally, 21% work in organizations with revenues of $1 billion or greater and 52% have revenues between $500 million and $1 billion.

Global survey respondent breakdown



www.pwc.com/digitalIQ

To have a deeper conversation about Digital IQ:

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