

A HARVARD BUSINESS REVIEW ANALYTIC SERVICES REPORT



**Harvard  
Business  
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# WHAT IS HOLDING BACK THE DIGITAL REVOLUTION?

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### Making Digital Work

While the future may already be here for digital, it is very unevenly distributed. Despite the reach of digital and analytical technologies and the opportunities they offer, many organizations have yet to generate the expected impact; Genpact research indicates that around 67 percent of all digital investments yield suboptimal results.

Similar to non-technology enterprise innovations, the road to generating tangible digital impact presents obstacles. The intriguing news revealed by this Harvard Business Review Analytic Services study is that budget is not the top challenge. However, organizations are being held back by more ingrained challenges as they cannot experiment quickly, face inflexible legacy systems, and are unable to work across silos or connect their front-office initiatives across the middle and back office.

Examining the characteristics of digital pioneers—those companies that are seeing significant impact from their digital initiatives—provides unexpected insights and direction. Compared with other respondents, these leaders are addressing their organizations' cultural and change management needs by articulating a vision for digital, nurturing a risk-taking culture, and enabling quick experimentation. They are also far more likely to align digital interventions with corporate objectives.

Our experience shows that embracing a Lean Digital approach can help achieve business outcomes. By combining design thinking methods that focus interventions on making a material impact on the end user, with leading technologies and Lean practices that embrace end-to-end process design and navigate the challenge of legacy operations, companies are extending the power of digital from front to back office—and making digital work.

The findings in this research are critical reading for any business before it makes a transformation investment that hinges on new technology. To further explore your organization's ability to deliver impact from digital interventions and compare the results against your peers', the Lean Digital Ratio offers a useful diagnostic and companion to this study: [ratio.genpact.com](https://ratio.genpact.com).

#### **The Genpact Research Institute**, part of Genpact—Generating Impact

The Genpact Research Institute is part of GE-spinoff Genpact, a global leader in digitally-powered business process services.

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# WHAT IS HOLDING BACK THE DIGITAL REVOLUTION?

## INTRODUCTION

As digital transformation steps front and center as a primary source of competitive advantage, the vast majority of companies aren't yet scoring major gains from their digital efforts. Although organizations are increasing the amount of time and money they put into winning the digital race, a Harvard Business Review Analytic Services study found that only about one-third of executives say that their digital transformation efforts are having a significant impact.

What is holding back progress? To find out, the study asked respondents to assess the impact of digital technologies on the organization's ability to achieve positive business outcomes. The research found two distinct groups: digital leaders (companies where respondents rank the impact 8 to 10 on a 10-point scale) and digital strivers (organizations that report much weaker impact from the use of digital technologies).

Comparing the two groups found that the barriers standing in the way of successful digital transformation are not what many executives might expect. Budgets, for example, aren't the biggest stumbling block. Only about 30 percent of digital leaders and strivers report that insufficient budgets hamper digital progress. Overcoming the challenges of legacy systems and organizational silos also aren't hallmarks of digital leaders. Businesses at the head of digital transformation are no more likely to have surmounted these challenges than anyone else has.

Instead, companies at the head of the digital pack achieve their results by tackling company culture issues far better than other organizations do. For example, digital leaders are far more likely than digital strivers are to have created a compelling vision for the use of digital technology. They have also mastered change management techniques and are the most adept at encouraging risk taking, experimenting quickly, and using digital technologies to drive speed through agility.

The impact of technology on digital leader companies goes far beyond achieving efficiencies and cost savings. Digital technologies anchor the ability to achieve growth in existing market segments and to expand into new ones. Digital leaders are also much more likely to leverage digital technologies to launch new products and business models.

But the playbook is still missing a critical piece of strategy. Most companies, even those garnering the greatest impact from digital investments, still lack a corporate-level systematic process to pinpoint where the company can add value to customers and manage the process of creating solutions with clearly defined metrics and governance. Only a minority of companies have this capability in place.

The shortfall manifests itself in the inability to align front- and back-end operations to meet customers' increasing expectations of speed, convenience, and simplicity. Although many companies score points with customers through investments in customer-facing touch points, customer satisfaction with the end-to-end experience almost always falls far short of expectations in all but the most digitally successful enterprises.

## **SURMOUNTING THE BARRIERS THAT MATTER**

Business leaders often wring their hands over what appear to be the nearly intractable challenges of organizational silos and legacy systems. One of the most surprising findings in the study was that digital leaders face these challenges as much as digital strivers do. For example, 50 percent of digital leaders struggle with legacy systems and 52 percent of digital strivers do as well. [figure 1](#)

Pascal Visée, a nonexecutive and independent advisor and former chief enterprise support officer at Unilever, points out that although most companies have large enterprise legacy systems, digital leaders aren't waiting to resolve all the system issues before moving forward. "Digital leaders realize that they need to invest in cloud-based technologies such as sales-force automation," he says. "The most forward-looking companies also understand that they will have to eventually integrate these with existing CRM systems. But they aren't leaving their sales forces behind until they figure out how to integrate everything."

Filippo Passerini, a business advisor and former CIO at Procter & Gamble, firmly believes that trying to resolve legacy system issues without plans for digital transformation can easily go nowhere. "If you start with the goal of eliminating legacy systems, the process can easily become one like standardizing data: It can go on forever unless there are clear end points of what needs to be standardized, when, and why."

Organizational silos are another obstacle that digital leaders struggle with to the same degree as digital strivers do—47 percent of digital leaders cite this barrier and 52 percent of digital strivers say they face it also. Brad Power, a researcher and expert in digital transformation, observes that digital leaders use small product component teams to manage digital efforts and address fast-moving markets. These teams operate as semi-independent units with direct contact with customers and often report directly to senior executives. As a result, organizational structures and silos fade into the background and are replaced by units focused on the continuous improvement of products and services.

## **THE PRIMACY OF CULTURE**

Culture is where digital leaders encounter far fewer barriers than digital strivers do. Only 24 percent of digital leaders, versus nearly 50 percent of digital strivers, say their organizations lack a corporate vision for the use of digital technologies. Digital leaders also have more expertise in change management and are able to mobilize their organizations to take advantage of digital opportunities.

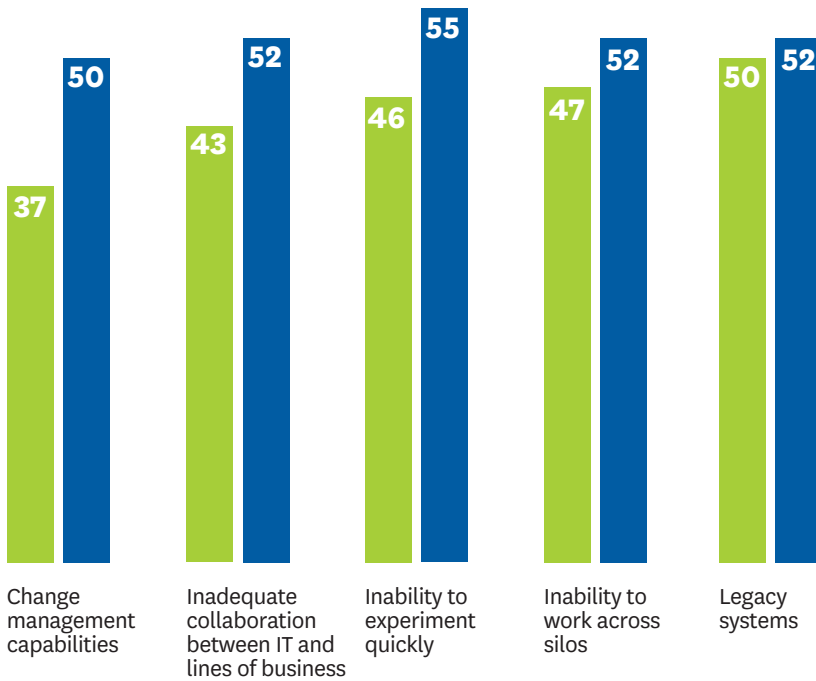
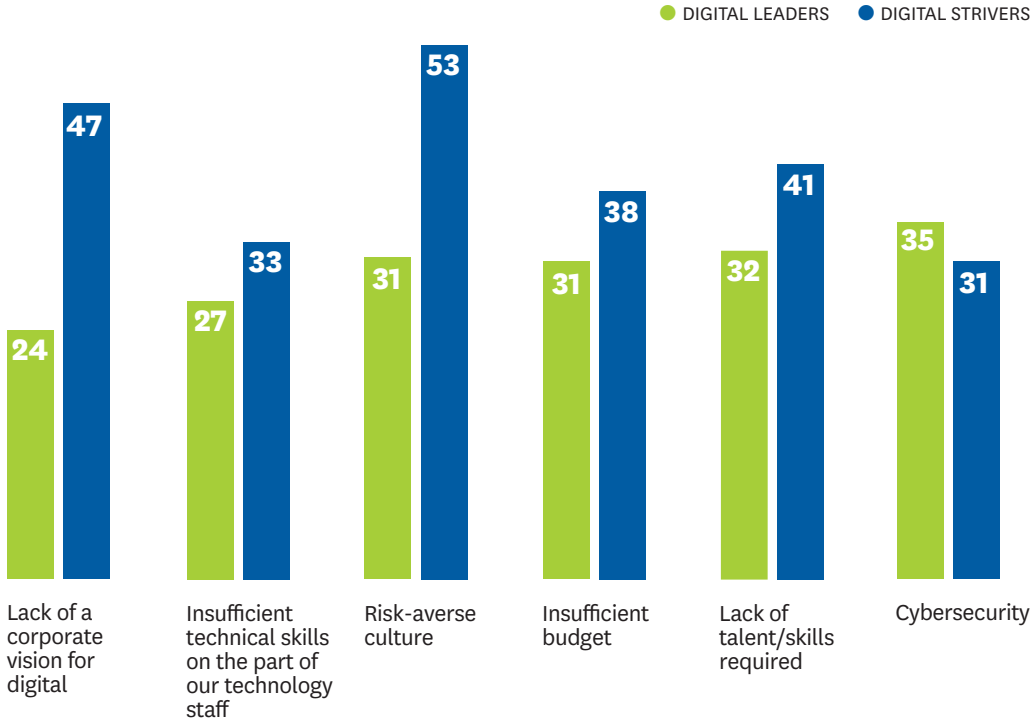
Digital leaders may also be more adept at conducting experiments quickly; 55 percent of digital strivers, versus 46 percent of digital leaders, say that the inability to experiment quickly is a barrier. Power adds that the testing and release processes of many IT organizations hamper quick experimentation. "Companies like Amazon and Google use a fast-cycle, iterative development process and release as many as 100 updates a day," he says. "Most IT organizations, however, are still focused on batch processing, and experiments can take months instead of days."

Finally, organizations at the head of the digital race are far less likely to have risk-averse cultures—31 percent of leaders versus 53 percent of strivers. Samir Bagri, director of global finance

FIGURE 1

### BARRIERS TO DIGITAL TECHNOLOGY USE

To what extent is each of the following a barrier to your organization's use of digital technologies?



business services at Delphi Automotive, says that businesses can foster greater appetites for risk by clearly defining the company's risk tolerance and rewarding employees for making intelligent bets even if they don't pan out. But he also points out that businesses need to pave the way for game-changing technologies that can be perceived as risky. As an example, he cites the use of robotic automation that organizations may not be prepared for and fear using.

## **ACHIEVING A BROAD SPECTRUM OF BUSINESS OUTCOMES**

As technologies such as analytics, social media, and mobility strengthen a company's ability to understand its customers and interact with them anytime and anywhere, digital leaders are at the forefront of achieving market-related business outcomes. [figure 2](#)

More than 75 percent of digital leaders strongly agree that digital technologies have helped their organizations increase market share. Only 30 percent of digital strivers say the same. More than 80 percent of digital leaders, versus 35 percent for digital strivers, strongly agree that digital technologies have increased business in existing market segments.

The same digital capacity to understand customers and interact with them is also playing a major role in creating innovations that open up new market opportunities. Nearly 80 percent of digital leaders, versus 30 percent of non-leaders, say digital technologies have helped create new market segments.

Bagri points out that historically large-scale enterprise technology investments, such as ERP systems, were traditionally driven by a partnership between IT and finance and focused on cost savings. "IT waved the banner of improved efficiency and capabilities," he says. "At the same time, finance saw the potential cost savings. It was a potent match that put technology in the service of reducing costs."

According to Bagri, the success of companies like Google and Amazon has brought marketing, R&D, and sales to the digital strategy table. These functions are increasingly using that position to advocate for the use of digital technologies to achieve market-related business outcomes.

The observation is borne out by the survey results. [figure 3](#) Digital leaders are much more likely to place digital bets on product and business innovation. For example, nearly 80 percent of digital leaders are using digital technology to launch new products and services. Only 39 percent of digital strivers are. Similarly, 66 percent of digital leaders, versus 26 percent of digital strivers, use technology to create and launch new business models.

As [figure 2](#) shows, the operational side of the equation isn't getting the short shrift, however. Eighty percent of digital leaders strongly agree that their use of digital technologies has improved their company's utilization of assets. Only 39 percent of digital strivers hold the same opinion. Similarly, 70 percent of digital leaders say digital technologies play a significant role in reducing costs. Only 43 percent of digital strivers report the same impact.

Power sees software's central role in how businesses define themselves as a driver of success on both the cost reduction and business innovation fronts. Power participated in the research that led to the publication of Michael Treacy and Fred Wiersema's *The Discipline of Market Leaders*. Since the book's 1995 publication, many companies have embraced its premise that there are three dimensions of competition—operations, products, and customer intimacy. Businesses can't compete in all three and must choose one as their primary competitive advantage. However, software and technology companies have demonstrated that the trade-offs are not necessary. "We are

FIGURE 2

## ACHIEVING A BROAD SPECTRUM OF BUSINESS OUTCOMES

Please rate the impact of digital technologies on each of the following in your organization.

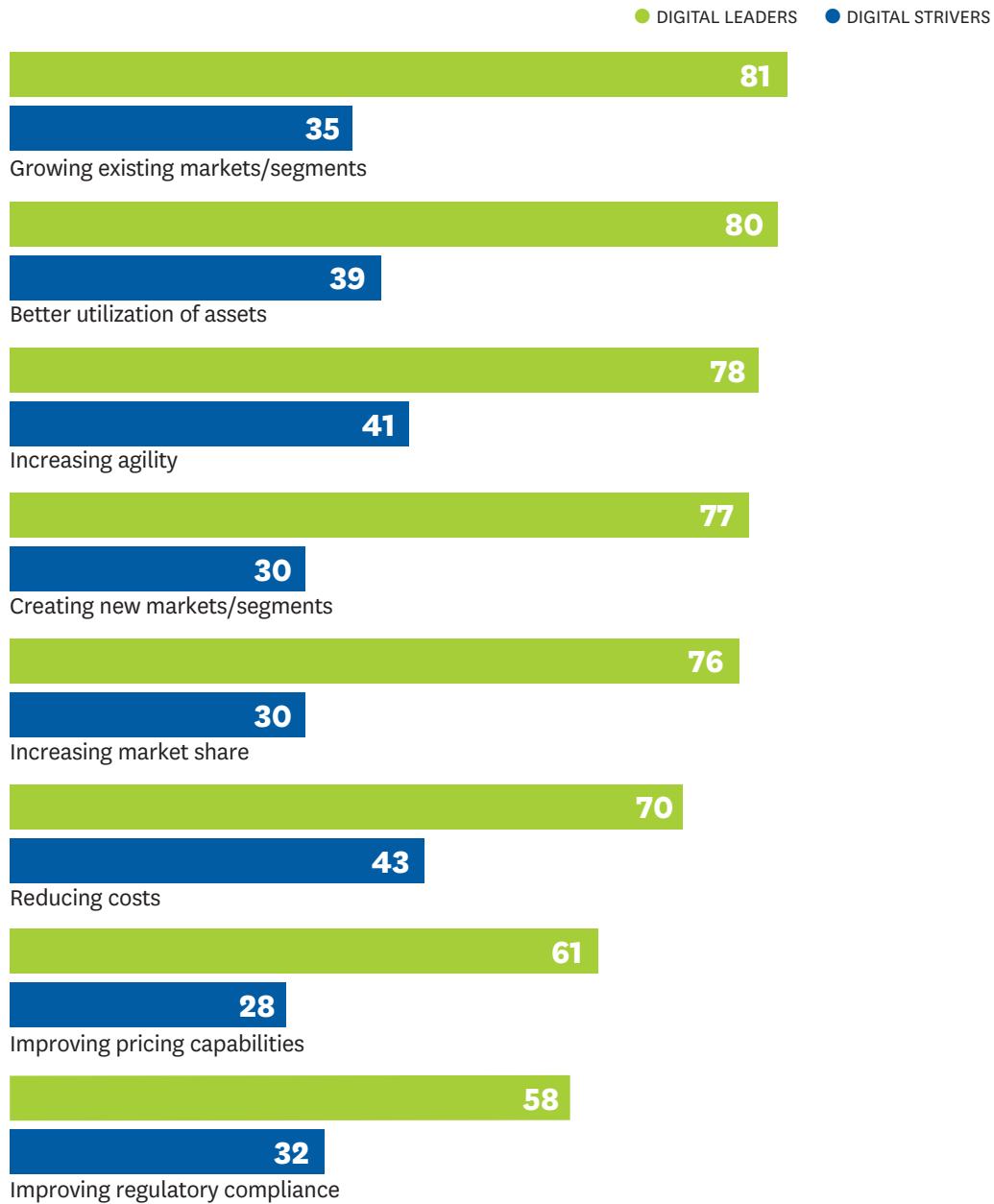
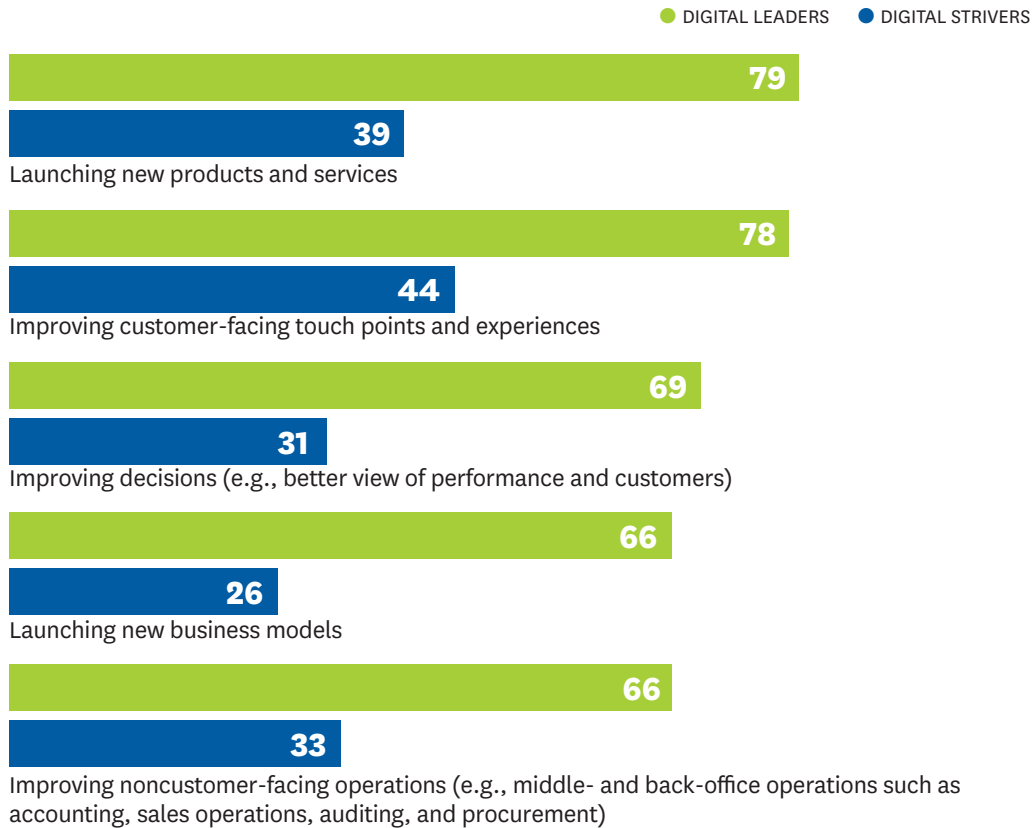


FIGURE 3

### DIGITAL TECHNOLOGY SUPPORT

To what extent is your organization currently supporting each of the following with digital technologies?



starting to see a gold rush of companies such as GE and Tesla defining themselves as the software companies of their industries,” he says. “Companies such as Amazon and Google are showing that businesses can master innovation, customer intimacy, and efficiency at the same time.”

### THE ELUSIVE END-TO-END GOAL

Most organizations don’t have a systematic enterprise-level process with clearly defined metrics and governance in place to design and implement digitally enabled solutions that are aligned with business outcomes. Although some digital leaders are more likely to have such processes, they are a minority, 40 percent, even among their own ranks. On the part of digital strivers, the number is a scant 11 percent.

Visée says that the challenge stems from how digital transformations are typically approached. They often start as board-level discussions, and implementation is usually pushed down to the functional and business unit levels. “Senior executives are often the missing layer,” he says. “If the organization’s top executives aren’t charged with the effort, there is no system in place to drive digital development and ensure that investments are targeted to areas where they will have the greatest impact.”



Unilever is a case in point, according to Visée. Technology investments at Unilever were dispersed across individual functional and business units, and each set its own priorities and budgets. “We decided to switch the process around,” he says. “Instead of the majority of technology innovation monies being spent at the local level, corporate management took charge of most of the budget.”

The switch forced senior executives to agree on where the biggest digital impact could be had. For example, marketing was struggling to find the right formula to use mobile to attract customers with capabilities such as location-based technologies. “We decided that marketing and customer development were the priorities,” he says. “The corporate-level process helped shift the focus from the back office to the customer and build back from their needs and make the necessary trade-offs to improve the customer experience.”

The lack of an enterprise-level development strategy and process can also make it extremely difficult to integrate middle- and back-office functions and ensure that they deliver on the promise of convenient and simple experiences for customers. Forty-five percent of respondents overall say that their organizations are significantly supporting middle- and back-office functions with digital technologies. But only 21 percent strongly agree that these functions provide experiences that meet customer expectations. The picture improves only slightly with digital leaders: 36 percent, versus 13 percent of digital strivers.

Visée believes that elevating digital transformation to the senior executive ranks goes a long way in solving this challenge as well. “Once you have a corporate perspective, you can take a holistic view of business,” he says. “You can then design the entire process to deliver what it needs to.”

## **FOCUS ON VALUE**

Passerini points out that technology planning processes often start with technologies and then assess what they can do for the business. “The process is backward,” he says. “Everything needs to start with a clear articulation of what value the business needs to create. The organization can then turn to technology to help create that value.”

Passerini argues that digital technologies can create value in three primary ways: accelerating processes by automating them, standardizing processes to accelerate cycle times and drive scale, and improving decision-making capabilities. To illustrate, he describes Procter & Gamble’s need to reduce the cycle time of getting consumer feedback on new package designs. The company analyzed the current process and discovered that it took several weeks to create physical mock-ups of product packages to test. By applying virtual reality and modeling, designers were able to cut the cycle time by several weeks. This required, among other things, creating and maintaining an online library of competitive product package designs that designers could immediately access for comparison purposes.

“We started by defining a source of value,” says Passerini. “We then looked at how the process could be simplified to provide that value. After those steps, we looked at the technology options. In this case, we were able to use an off-the-shelf solution.”

## **CONCLUSION**

The mandate to transform digitally is rising to the top of corporate agendas. Digital technologies are changing the face of how companies interact with customers and how their businesses operate. However, even though competition is intensifying, only a small number of companies say they are achieving significant results from their use of digital technologies.

This small cadre of companies is placing different bets than other companies do. These organizations aren't waiting for every legacy system issue to be solved before moving forward with digital investments. By using cross-functional teams and moving digital transformation to the corporate level, they aren't stymied by silos. They have also mastered the cultural change and are able to mobilize their organizations to make digital transformation happen. But most organizations have another step to take. They need to make sure that the design of technology-enabled solutions clearly addresses customer pain points and/or business outcomes and the solutions are created with processes that have clear metrics and governance.

## **METHODOLOGY AND PARTICIPANT PROFILE**

A total of 376 respondents drawn from the *Harvard Business Review* audience of readers (magazine/ newsletter readers, customers, HBR.org users).

### **SIZE OF ORGANIZATION**

Only organizations with 1,000+ employees took part in the survey. Twenty-five percent were in organizations with fewer than 5,000 staff, 66% were in organizations with more than 10,000 staff, and the remaining 9% having 5,000 to 9,999 people. Sixty-nine percent of companies had 2015 revenues of \$1 billion or more.

### **SENIORITY**

A fifth (23%) of respondents were executive management or board members, just over a third were senior management (37%), a quarter (26%) were middle management, and 16% came from other levels.

### **KEY INDUSTRY SECTORS**

Fourteen percent were in health care or pharma/ life sciences, 13% were in consulting/business services, 13% were from consumer goods and retail, financial services and manufacturing each provided 12% of respondents, 8% were in high tech, 6% were in telecommunications; and 5% were in energy/utilities. Other sectors were each represented by 4% or less of the respondent base.

### **JOB FUNCTION**

Twenty-three percent were in sales/marketing, 19% of respondents were in operations or management, 11% were from IT, and 8% were from consulting. Other functions were represented by 6% or less of the base.

### **REGIONS**

Thirty-nine percent of respondents were from North America, 30% were from Europe, and 19% were from Latin America. MEA provided 5% and 4% South/Central America.



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