



**Harvard
Business
Review**

ANALYTIC SERVICES

Pulse Survey

WINNING THROUGH CHANGE IN THE DIGITAL ECONOMY



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Companies on the journey to a transformed, digital future are discovering that the divide between the old and new way of doing business is a lot wider than it looks from the edge. But the gap in performance between digital masters and also-rans makes it worth the effort and risk. A transformed digital business reinvents operational processes, turns business models upside down, and delivers innovative and personalized experiences to customers.

Successfully bridging the gap between the old and the new doesn't happen with a few mouse clicks. It requires a clearly defined vision and a recognition that transformation will mean changes in organization, technology, and culture. It's successful when a company embraces ongoing change to thrive on it.

Information technology is no longer limited to a supporting role in the enterprise; digital strategy is critical to business strategy. Digital masters are led by a team, including the CEO, who understand this important distinction. These companies recognize that investments in technology alone won't make a company entirely digital. How it's applied matters.

Transforming to a digital enterprise means harnessing the power of contextual interactivity—that is, providing the right information at the right time. It also means focusing on digitizing the back office—the people and processes that unlock operational performance and agility.

Digital leaders recognize that the solutions to today's business challenges can't be solved alone. Those who've made the successful transition have done so by developing an ecosystem of collaborative experts, empowering technology, and transformative ideas that have helped them accelerate change. That's what DXC Technology does. Drawing on our extensive suite of world-class offerings, our expertise as a vendor-independent technology services provider, and our network of more than 250 partners, we help companies accelerate the pace of digital transformation, modernization, and innovation. We define, build, and implement technology solutions that deliver business agility and speed. We can migrate organizations to a new digital platform, reengineering workloads into new operating styles that include applications, cloud, data analytics, cybersecurity, mobility, and automation.

All companies face a digital divide, but they don't have to cross it alone. With more than 60 years of experience in the technology industry, DXC has deep industry expertise and talent, with 155,000 professionals in more than 70 countries. We help companies harness the power of technology innovation so they may thrive on change and successfully bridge the digital divide.

WINNING THROUGH CHANGE IN THE DIGITAL ECONOMY

By creating a culture of rapid but sustainable change, organizations turn technology-driven disruption into business advantage.

Companies around the world anticipate the need for massive change over the next five years, as “digital” permeates all aspects of their business, according to a new global survey by Harvard Business Review Analytic Services.

Already in the midst of disruption, the 376 business leaders surveyed in this report said they expect this pressure to accelerate and intensify. At the same time, they worry that organizational inertia and resistance to change will hold them back.

This report examines what digital leaders are doing to move their organizations forward and offers guidance for business and technology leaders in all industries. The shift starts with creating and broadly communicating a compelling digital strategy, but it also demands changes to organizational structures, systems, and processes. And because digital demands new skills, aptitudes, and ways of working, it requires a greater investment in employee support and culture change.

Currently, around a third of respondents (32%) say their organization is not very digital, meaning that less than a quarter of their products, operations, and business models depend on their ability to exploit digital information and technologies. More than a third (39%) are moderately digital, and 29% are very digital, with more than half of products, operations, and business models dependent on their ability to exploit digital information and technologies. [FIGURE 1](#)

Survey respondents—from primarily large organizations in financial services, manufacturing, technology, health care, retail, and many other industries—say their organizations must go through substantial or extensive change to become even more digital over the next five years. Twenty-nine percent (29%) anticipate the need for extensive change, while another 50% anticipate substantial change.

While respondents overwhelmingly see the need for change, they acknowledge the reality of organizational inertia and resistance. Only a small percentage (7%) say their organization is extremely open to change, with another 35% saying their organization is somewhat open to change. In an open-ended question about what worries them most about their company’s ability to survive and thrive in an increasingly digital world, a majority talked about the need to change faster, and their organization’s inability to do so. This is of grave concern, given the need for transformation.

HIGHLIGHTS

79%

WILL UNDERGO EXTENSIVE OR SUBSTANTIAL CHANGE OVER THE NEXT FIVE YEARS

89%

ARE CREATING NEW ORGANIZATIONAL STRUCTURES AND TEAMS TO SUPPORT DIGITAL

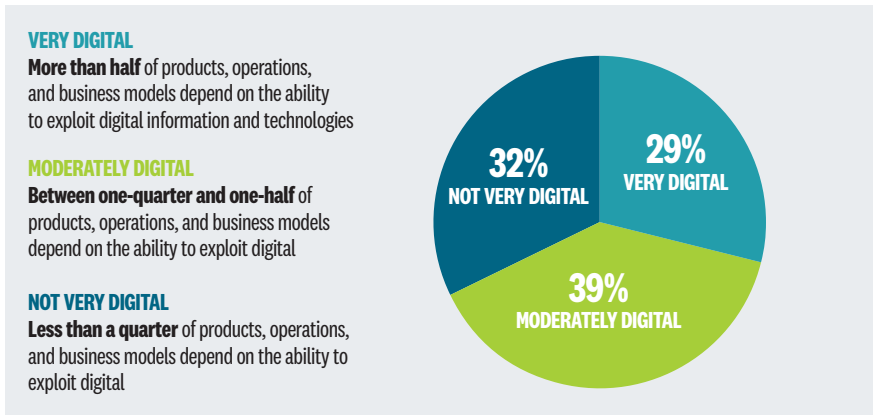
46%

SAY THEY NEED TO MAKE SIGNIFICANT CHANGE TO THEIR PORTFOLIO OF PARTNERS

FIGURE 1

DIGITAL MATURITY

How digital is your organization?

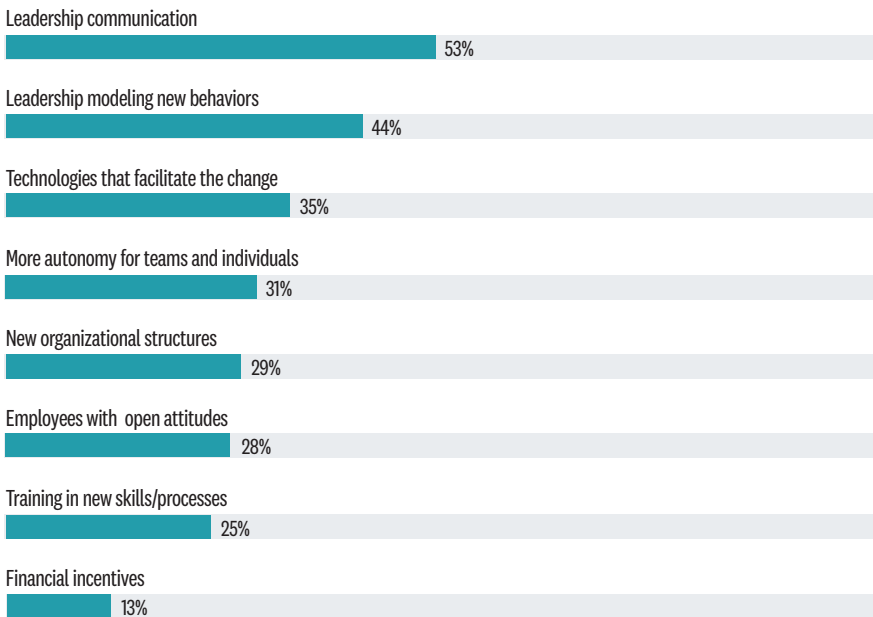


SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JULY 2017

FIGURE 2

WHAT FACILITATES CHANGE

Which of the following have been most instrumental in creating a change-embracing organization/culture?



SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JULY 2017

Where Are We Going?

People can't change what they don't understand. Leaders must create a sense of purpose and a common understanding by defining and communicating a compelling strategy for the digital economy. While more than three-quarters (78%) of the very digital companies have taken this step, only 40% of the not-very-digital have done so.

"The first thing is to build a common language around what the digital strategy means for different parts of the organization," said Pontus Siren, partner at Innosight, a consulting firm advising enterprises on innovation strategy. This means explaining why digital is important to the company, what different terms mean, and what the framework is. "It has to get to the folks outside the strategy development group."

Indeed, a majority of respondents (53%) say that communication from leadership about the need for change is one of the three most effective means of building a change-embracing culture—more than any other factor. **FIGURE 2** That varied little by respondents' digital maturity.

But strategy and communication are just the beginning.

Most respondents (89%) are creating new organizational structures and teams to support digital operations and business models, with more than a fifth (22%) doing so to a great extent rather than just in pockets of the organization. Very digital organizations are twice as likely as the not-very-digital to be doing this to a great extent, at 37% versus 14%.

Typically this starts with cross-functional project teams that form to address a particular opportunity or challenge, according to Jeanne W. Ross, principal research scientist at the MIT Center for Information Systems Research. "The biggest thing we're seeing is the emergence of cross-functional teams that have some concept of minimum viable product (MVP), rapid iteration, user-centered design, and customer co-creation." Indeed, these approaches seem to

When companies **bring together people** with deep industry knowledge and people with analytics skills, creative skills, policy knowledge, and more—that’s when you see innovation jump because people **think about problems differently**.

be well-established at respondents’ organizations, with 60% using agile approaches to development, 51% employing design thinking, and 42% using an MVP approach.

Digital innovation also means working with and exploiting data in completely new ways. “Data is the new currency,” said Ari Lightman, professor of digital media and marketing and director of the CIO Institute at Carnegie Mellon University. But being able to extract value from the wealth of diverse data sets that companies now have access to requires creating “experimental sandboxes to explore the data. Traditional product development organizations are learning from the digitals, employing MVP, and getting products out in beta.”

To launch a transformation effort, Ross recommends that companies start with a single team “with your best people on it. Learn everything you can learn from them, then go on to the next one.... Companies that go after it in a big way are going to have trouble” because not all teams work well. The value of these teams comes not just from the different knowledge bases of their members but from their diversity of perspective, thought, and experience. Creating a high-performing team with people who may not have worked together before doesn’t just happen; it’s something that has to be cultivated and managed.

When companies bring together people with deep industry knowledge and people with analytics skills, creative skills, policy knowledge, and more, “that’s when you see innovation jump because people think about problems differently,” said Lightman.

“Being able to communicate data to different people is a skill set that they learn. Doing that, they come up with richer, more impactful, more implementable solutions.”

Digital teams also have to adopt a mindset of experimentation, according to Lightman. “Having rigidity doesn’t work,” he said. “Having resiliency and adaptability works.”

Different Models for Different Outcomes

Not all digital efforts will require the same degree of organizational change. Siren suggests a framework of core (applying technology to the basics of the business), customer, and business model, with each having different degrees of impact. While the information technology organization can generally handle area one (core) on its own, “area three—business model change—requires mastering both the digital transformation discipline and the innovation discipline,” Siren said. “Development teams, governance structures, and leadership roles are all quite different.” The members of these dedicated teams are carefully selected with a mix of expertise in technology, strategy, and business development.

Ultimately, Ross believes that organizations as a whole will have to undergo significant change to operate in the digital economy. “Traditional silos don’t work,” she said. “In almost every case, the whole point is to integrate across those silos.” At the same time, she said, “It would be a huge mistake to redesign organizational structures” based on preconceived notions of what they should look like. “That doesn’t allow



SUCCESSFUL COMPANIES ARE TAKING A TEST-AND-LEARN APPROACH TO THEIR ORGANIZATIONAL STRUCTURES AS WELL AS TO THEIR PRODUCT DESIGN.

for learning, and suggests we know more than we know at this point.” Successful companies are taking a test-and-learn approach to their organizational structures as well as to their product design.

Coca-Cola FEMSA, the largest franchise bottler of Coca-Cola beverages in the world, set the stage for this learning two years ago when it created centers of excellence (COEs) to drive transformation in each of its functional or process areas, including supply chain, distribution, commercial, finance, HR, and information technology. These COEs are responsible for innovation, transformation, and process governance, and they work closely with the four operating units in Mexico, Brazil, Central America, and the Philippines to roll out new initiatives.

In the past, IT just provided direct services to the operating groups, according to chief information officer Hector Calva. “Today everything is aligned with the COEs,” he said. Calva oversees the company’s innovation group, as well as the day-to-day operations of IT. One group works in a bimodal fashion, with day-to-day IT responsibility and links to the COEs. This new structure has dramatically increased the speed at which the company moves new capabilities from proof of concept to pilot to a scaled-up full rollout, Calva said. “Now it takes six months to roll out a new release where it used to take us a year.”

Meredith Whalen, senior vice president of research at IDC, agrees that digital efforts will eventually be embedded throughout the business. “But that’s tricky,” she said. To get there, organizations will have to figure out “how to get all the separate lines of business working together; they have to understand they have to change. This starts at the top with leadership communication. Then you have to have someone who is an agent of change to push the digital mission and bust through the silos”—like a chief digital officer.

To get there, IDC has identified four models for driving digital transformation. “Certain structures are more appropriate depending on where an organization is on its journey,” Whalen said (see box).

Given the dynamic nature of the shift to a digital economy, it would seem desirable for organizational structures to be more fluid than fixed. Yet 42% describe their organizational structure as extremely or somewhat fixed, rating it 1 to 4 on a 10-point scale, where 1 is extremely fixed and 10 is extremely

IDC’s Four Digital Archetypes

DIGITAL SPECIAL PROJECT TEAM

Good for kick-starting digital efforts

OFFICE OF DIGITAL TRANSFORMATION

A centralized group that provides governance, and works with functional areas and lines of business to formalize digital strategy

EMBEDDED DIGITAL BUSINESS

Embeds digital programs and resources throughout the company. Often works in tandem with a centralized office

DIGITAL BUSINESS UNIT

For organizations that need to break with the current business model to achieve the required focus

fluid. Only 24% see their organizational structures as somewhat or very fluid (7 to 10 on a 10-point scale). The more digital the organization, the more fluid its structures are likely to be. Very digital organizations were almost four times as likely as not very digital companies to be somewhat or very fluid (42% versus 11%). **FIGURE 3**

Flexibility and adaptability are crucial as companies experiment with new models, according to Whalen. Digital leaders should always be thinking, “Is this safe to try?” she said. “If we roll something out and it doesn’t work, can we roll it back again?”

Customer Insight and Working from the Outside In

One area where many respondents appear to be doing well: more than half (52%) say their organization is either somewhat or very effective at sensing and responding quickly to changes in their market/industry in order to move in a new direction (i.e., in response to new competition, new customer expectations, new regulations, etc.).

Whalen views this as a key factor in the digital economy. “Digital companies are adopting an outside-in approach, leveraging feedback from their ecosystem of stakeholders to evolve their offerings and business models,” she said. Doing this effectively involves the entire organization, not just marketing and customer groups. “You have to look at all the various things that affect the customer,” she said, “including logistics and accounting—all have to be thought about and put together in a customer journey that’s good for them.”

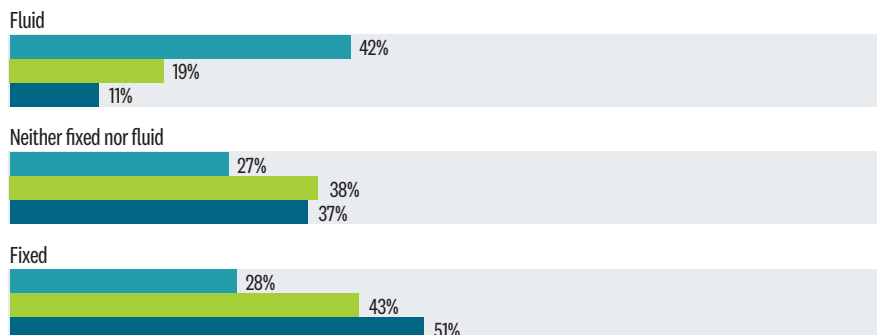
To do that, organizations are employing design thinking and customer journey maps, and changing their KPIs to include measurements that span the organization, such as net promoter score (NPS). About half of respondents (51%) are taking the outside-in approach even further, making full use of assets and capabilities that are available in the cloud, from outside talent and from ecosystem partners.

FIGURE 3

FIXED OR FLUID ORGANIZATIONAL STRUCTURES

How fixed or fluid are your organizational structures?

● VERY DIGITAL ● MODERATELY DIGITAL ● NOT VERY DIGITAL



SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JULY 2017

The Impact on IT Systems, Organization, and Partners

There’s no question that legacy IT systems are too slow and rigid for digital business. As companies modernize their IT infrastructure, they are looking to gain flexibility, scalability, and—above all—speed. Combined with an outside-in approach to business, this increasingly means cloud and an API/services-based infrastructure.

Coca-Cola FEMSA has been transforming its architecture and platforms along with its business processes, using more cloud and tying together end-to-end services while ensuring stability, scalability, and speed. “We’re becoming an online company,” said Calva. “We have to be able to support our businesses through digital.” This includes a greater reliance on data and analytics, and of course, enforcing security. “The integration layer is critical,” he said. “We’re building the right platform to integrate cloud and on-premises systems and handle a lot of transactions.”

FLEXIBILITY AND ADAPTABILITY ARE CRUCIAL AS COMPANIES EXPERIMENT WITH NEW MODELS.

Today, as more businesses take advantage of the **internet of things** to improve operations, the walls between IT and the operational technology organization are melting.

Organizations have been modernizing their operational backbones for years, says Ross. In order to gain the desired flexibility while controlling costs, she advises CIOs to build not just a service platform but also a set of digital services to go along with it. Currently, “only 5% of large organizations have architected a digital services platform with reusable business components,” said Ross, who has been studying technology platforms and the operational backbone for over 15 years.

Another 26% have created the service level, but not the reusable components that make developing new offerings fast and efficient. Ross views this as a problem, leading to an excess of one-off applications. “It’s just the next generation of spaghetti,” she said, adding that IT people understand that having too many apps is a problem of both efficiency and effectiveness, but people in the lines of business want ultimate flexibility.

At the same time that IT organizations are rebuilding their company’s core, they’re affected by changes in Siren’s other two areas as well (customers and business models). The focus on customers that started some 10 years ago brought IT and the marketing department closer together. Today, as more businesses take advantage of the internet of things (IoT) to improve operations, the walls between IT and the operational technology (OT) organization are melting as well. In a full third of respondents’ organizations, IT and OT are part of the same organization. In another 44%, they are separate organizations but collaborate on a regular basis.

With IT also being incorporated into new products, services, and business models, it’s not surprising that a similar percentage (46%) say that IT and product development collaborate closely—though they remain separate organizational units. Only 16% say they are part of the same organization.

Whalen sees IT organizations changing in other ways, particularly at leading firms. “They’re flattening and forming self-governing teams that can move from one project to another,” she said. This ties back to the customer-focused, outside-in approach, she added, as they are better able to move to where the business need is. “If employees are tied in, then teams can self-direct as they understand what needs to change.” Tapping into cloud resources facilitates this as well.

This innovation approach to IT is still the exception rather than the norm. Overall executive confidence in internal IT is mixed, with only 17% viewing their own IT organization as being extremely capable of executing their company’s digital agenda and another 45% seeing them as moderately capable.

Over a third (36%) believe their internal IT organization is not at all capable of executing the digital agenda, and rate it 1 to 4 on a 10-point scale. Again, this varies dramatically based on organizations’ digital maturity. Forty-three percent (43%) of respondents at very digital companies view their IT organization as extremely capable compared with only 4% of the not-very-digital. Conversely, 61% of not-very-digital firms view their IT organization as not at all capable. **FIGURE 4**

Respondents have similar mixed feelings about their current vendors and partners, and anticipate making significant changes over the next five years. Close to half (46%) say they need to make a significant change to their portfolio of partners in multiple areas of their business, swapping out between 25% and 50% of these relationships, and another 9% say they’re rethinking just about

everything and anticipate extensive change of more than 50%.

In part this reflects changes in the marketplace, with technology customers shifting their spending to new digital offerings. As quickly as established vendors work to become “digital” providers themselves, this inevitably takes time. And that’s not the only thing at work. As organizations develop new business models, they need their suppliers to provide a different level of support. “They have to change the way they engage with customers,” said Whalen. “They have to focus on the business outcomes and be seen more as a partner in the transformation.”

That said, transformation entails risk on many fronts, and unless a CIO is unhappy with a particular relationship, most would rather work with existing partners than add yet another element of risk into the mix, according to Whalen.

Timing and Payoff

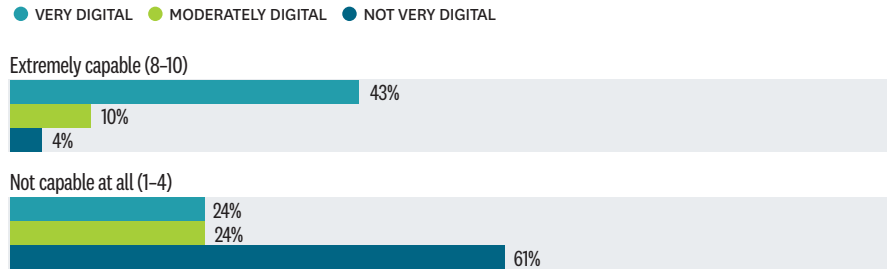
IDC predicts that three-quarters of organizations will have digitally transformed by 2027—in just 10 years. Ross is not so sure. “If we’re talking about looking for examples of companies that are doing this brilliantly, in the way we imagined, I’d be very surprised if in 10 years this still won’t be the exception rather than the norm.”

Still, if business leaders start seeing real returns from these investments, they’re likely to accelerate. Coca-Cola FEMSA has seen “increased market share and sales in some territories,” said Calva. More than half (55%) of the very digital companies say they have experienced a significant financial lift from their digital efforts. This compares with only 20% of moderately digital organizations and just 6% of the not-very-digital. **FIGURE 5** To catch up, these organizations will have to determine which area will provide the greatest return for their business—digitizing their core operations, creating a new kind of customer engagement, or innovating around new digital products and business

FIGURE 4

EXECUTING THE DIGITAL AGENDA

How capable is your organization’s IT group at executing the digital agenda?

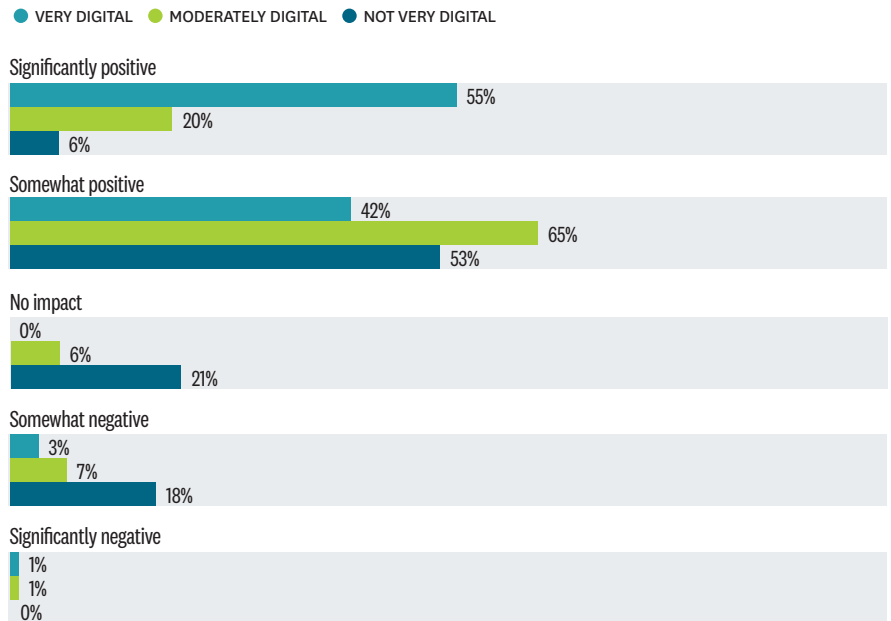


SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JULY 2017

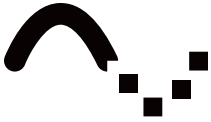
FIGURE 5

FINANCIAL IMPACT

What is the impact of your organization’s digital efforts on financial performance?



SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JULY 2017



DIGITAL TRANSFORMATION DEMANDS LEADERSHIP, ORGANIZATIONAL RESTRUCTURING, INVESTMENTS IN PEOPLE AND INFORMATION TECHNOLOGY INFRASTRUCTURES, NEW RELATIONSHIPS INSIDE AND OUTSIDE THE ORGANIZATION, AND OVERCOMING INERTIA AND RESISTANCE TO CHANGE.

models—and then provide the means to get there. For many, this is a big ask. With no guarantees of immediate ROI, many boards and leadership teams are taking a more conservative, wait-and-see approach.

Companies with a long history have an advantage in this regard, according to Siren, as they’ve managed through technology-driven disruption before. “GE, Procter & Gamble, Johnson & Johnson, Shell—they have a multigenerational perspective and DNA. Digital is just another type of technology, doing to our mental power what the internal combustion engine did to our muscle power, as McAfee and Brynjolfsson said in *The Second Machine Age*. It’s a means to an end.” Consequently, these organizations understand that returns may not come in the current CEO’s tenure—look at GE, for example. “They know it’s going to take a long time to pay off; having that kind of perspective is very powerful.”

Digital transformation demands leadership, organizational restructuring, investments in people and IT infrastructures, new relationships inside and outside the organization, and overcoming inertia and resistance to change. Above all, it requires flexibility. “Business leaders need to reevaluate their strategic goals, vision, and culture on a regular basis,” said Lightman. Whether this transformation takes one decade or more, they should “get in the practice of doing this over and over again.”

The main difference between this and previous technology disruptions is that it’s immediately global and much faster moving. According to Siren, “The requirement to adapt is more urgent.” The winners will be early out of the starting blocks but also pace themselves for the long haul. The trick will be to both accelerate change and create a culture that can sustain that over time.

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) completed the survey.

COMPANY SIZE/REVENUE

ALL HAVE REVENUES OF \$500 MILLION OR MORE

| | | |
|--------------------------------|-------------------------------|---------------------------|
| 38% | 25% | 37% |
| \$500 MILLION - \$2 BILLION | \$2 BILLION - \$10 BILLION | \$10 BILLION OR HIGHER |

KEY INDUSTRY SECTORS

| | | | | | | | |
|------------|---------------|--------------------------------|-------------|------------------------|-------------------|-----------|--|
| 16% | 11% | 10% | 9% | 7% | 6% | 6% | OTHER INDUSTRIES WERE REPRESENTED BY 5% OR LESS OF THE TOTAL RESPONDENT BASE |
| TECHNOLOGY | MANUFACTURING | BANKING AND CAPITAL MARKETS | HEALTH CARE | CONSULTING SERVICES | ENERGY/ UTILITIES | RETAIL | |

JOB FUNCTION

| | | | | | | | |
|---------------------------------|-----------------------|------------------------------|--|------------|---|-----------|---|
| 16% | 10% | 9% | 9% | 8% | 8% | 7% | OTHER FUNCTIONS WERE REPRESENTED BY 6% OR LESS OF THE TOTAL BASE |
| GENERAL/EXECUTIVE MANAGEMENT | STRATEGIC PLANNING | MARKETING/ COMMUNICATIONS | SALES/BUSINESS DEVELOPMENT/ CUSTOMER SERVICE | CONSULTING | R&D/INNOVATION/ PRODUCT DEVELOPMENT | IT | |



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