Unlocking success in digital transformations

Digital transformations are even more difficult than traditional change efforts to pull off. But the results from the most effective transformations point to five factors for success.

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As digital technologies dramatically reshape industry after industry, many companies are pursuing large-scale change efforts to capture the benefits of these trends or simply to keep up with competitors. In a new McKinsey Global Survey on digital transformations, more than eight in ten respondents say their organizations have undertaken such efforts in the past five years.[1] Yet success in these transformations is proving to be elusive. While our earlier research has found that fewer than one-third of organizational transformations succeed at improving a company's performance and sustaining those gains,[2] the latest results find that the success rate of digital transformations is even lower.

The results from respondents who do report success point to 21 best practices, all of which make a digital transformation more likely to succeed. These characteristics fall into five categories: leadership, capability building, empowering workers, upgrading tools, and communication. These categories suggest where and how companies can start to improve their chances of successfully making digital changes to their business.

Transformations are hard, and digital ones are harder

Years of research on transformations has shown that the success rate for these efforts is consistently low: less than 30 percent succeed.[3] This year's results suggest that digital transformations are even more difficult. Only 16 percent of respondents say their organizations' digital transformations have successfully improved performance and also equipped them to sustain changes in the long term. An additional 7 percent say that performance improved but that those improvements were not sustained.

Even digitally savvy industries,[4] such as high tech, media, and telecom, are struggling. Among these industries, the success rate does not exceed 26 percent. But in more traditional industries, such as oil and gas, automotive, infrastructure, and pharmaceuticals, digital transformations are even more challenging: success rates fall between 4 and 11 percent.

Success rates also vary by company size. At organizations with fewer than 100 employees, respondents are 2.7 times more likely to report a successful digital transformation than are those from organizations with more than 50,000 employees.

The anatomy of digital transformations

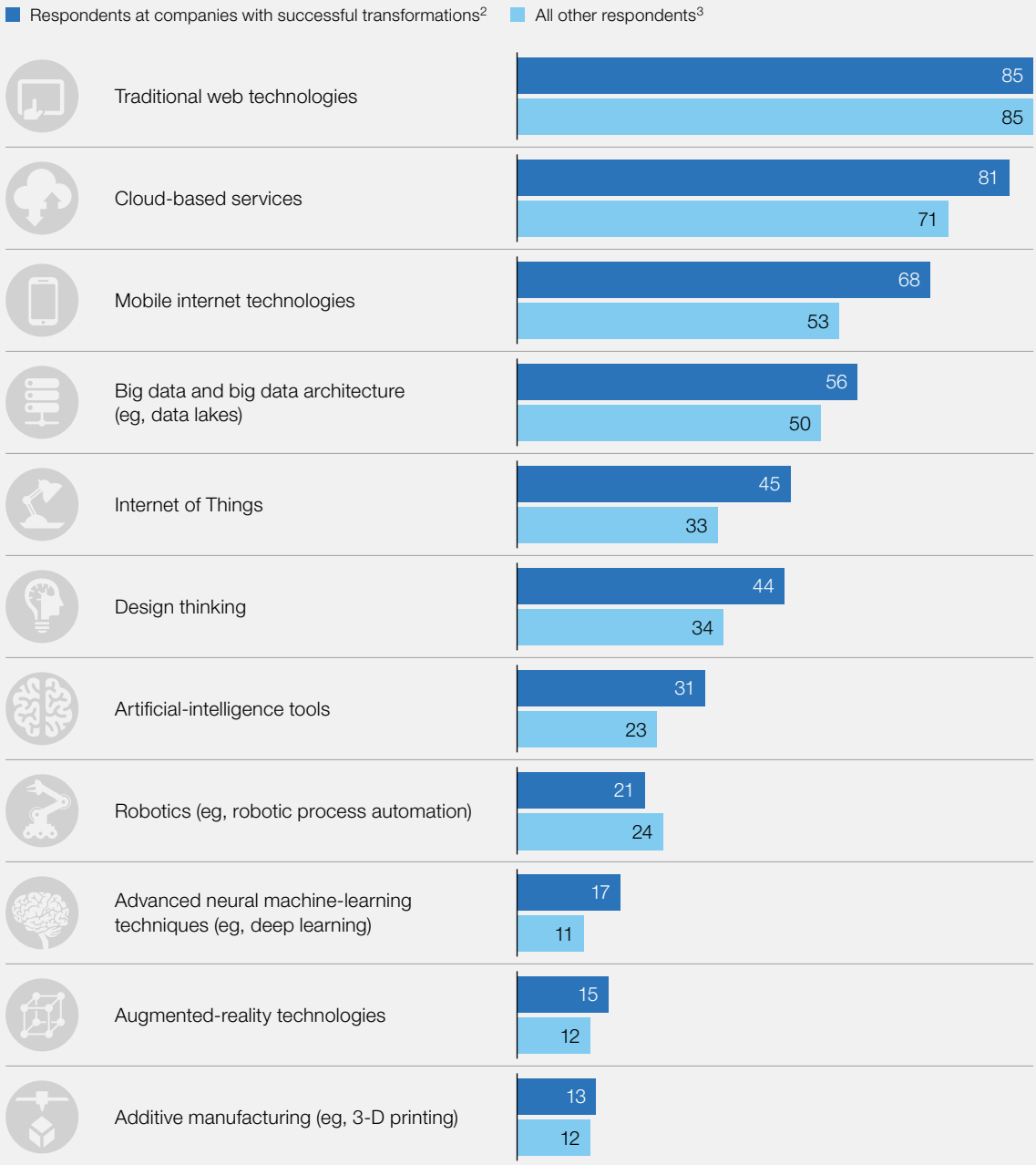
Whether a change effort has succeeded or not, the results point to a few shared traits of today's digital transformations. For one, organizations tend to look inward when making such changes. The most commonly cited objective for digital transformations is digitizing the organization's operating model, cited by 68 percent of respondents. Less than half say their objective was either launching new products or services or interacting with external partners through digital channels. Digital transformations also tend to be wide in scope. Eight in ten respondents say their recent change efforts involved either multiple functions or business units or the whole enterprise. Additionally, the adoption of technologies plays an important role across digital transformations. On average, respondents say their organizations are using four of 11 technologies we asked about, with traditional web tools cited most often and used in the vast majority of these efforts.

At the same time, the results from successful transformations show that these organizations deploy more technologies than others do (Exhibit 1). This might seem counterintuitive, given that a broader suite of technologies could result in more complex execution of transformation initiatives and, therefore, more

Exhibit 1

Organizations with successful transformations deploy more technologies than others do.

Digital technologies, tools, and methods currently used by organizations, % of respondents[1]



[1] Respondents who answered "other" or "don't know" are not shown.
[2] Respondents who say their organizations' transformations were very or completely successful at both improving performance and equipping the organizations to sustain improvements over time, n = 263.
[3] n = 1,258.

opportunities to fail.[5] But the organizations with successful transformations are likelier than others to use more sophisticated technologies, such as artificial intelligence, the Internet of Things, and advanced neural machine-learning techniques.

The keys to success

Having these technologies on hand is only one part of the story. The survey results indicate how, exactly, companies should make the technology-supported changes that differentiate successful digital transformations from the rest (Exhibit 2).

Our research points to a set of factors that might improve the chances of a transformation succeeding (see sidebar, "Twenty-one keys to success").[6] These factors fall into five categories:

- having the right, digital-savvy leaders in place
- building capabilities for the workforce of the future
- empowering people to work in new ways
- giving day-to-day tools a digital upgrade
- communicating frequently via traditional and digital methods

Having the right, digital-savvy leaders in place

Change takes place at all levels during a digital transformation, especially when it comes to talent and capabilities. Nearly 70 percent of all respondents say their organizations' top teams changed during the transformation—most commonly when new leaders familiar with digital technologies joined the management team.

Indeed, adding such a leader is one of the keys to transformation success. So is the engagement of transformation-specific roles—namely, leaders of individual initiatives and leaders of the program-management or transformation office who are dedicated full time to the change effort. Another key to success is leadership commitment. When people in key roles (both the senior leaders of the organization and those in transformation-specific roles) are more involved in a digital transformation than they were in past change efforts, a transformation's success is more likely.

Exhibit 2

When key factors are in place, respondents are up to three times more likely to report successful digital transformations.

Success rate of digital transformations,[1] by key factors,[2] % of respondents

[1] Respondents who report success say their organizations' transformations were very or completely successful at both improving performance and equipping the organizations to sustain improvements over time; n = 263.
[2] Out of 21 key factors of success, determined by Total Unduplicated Reach and Frequency (TURF) and Shapley analyses. These analyses were used to make commensurate comparisons of best practices within a digital transformation, which were tested by using different types and structures of questions.
[3] Includes respondents who either agreed (somewhat or strongly) that a given statement describes the transformation or selected a given practice as true of the transformation.
[4] Includes respondents who either disagreed (somewhat or strongly) that a given statement describes the transformation or did not select a given practice as true of the transformation.

Other results indicate that when companies achieve transformation success, they are more likely to have certain digital-savvy leaders in place. Less than one-third of all respondents say their organizations have engaged a chief digital officer (CDO) to support their transformations. But those that do are 1.6 times more likely than others to report a successful digital transformation.

Building capabilities for the workforce of the future

The survey results confirm that developing talent and skills throughout the organization—a fundamental action for traditional transformations[7]—is one of the most important factors for success in a digital change effort.[8] Of our 21 keys to success, three relate to the workforce's digital capabilities. First is redefining individuals' roles and responsibilities so they align with a transformation's goals, which can help clarify the roles and capabilities the organization needs. Respondents are 1.5 times more likely to report a successful digital transformation when this practice is in place.

Two other keys relate to engaging the specific roles of integrators and technology-innovation managers, who bridge potential gaps between the traditional and digital parts of the business. People in these roles help foster stronger internal capabilities among colleagues. Integrators are employees who translate and integrate new digital methods and processes into existing ways of working. Because they typically have experience on the business side and also understand the technical aspects and business potential of digital technologies, integrators are well equipped to connect the traditional and digital parts of the business. For their part, technology-innovation managers possess specialized technical skills and lead work on a company's digital innovations.

Beyond these three keys for success, we found that companies with winning transformations have a better-funded and more robust approach to talent than others do. Transformation success is more than three times likelier when respondents say their organizations have invested the right amount in digital talent.

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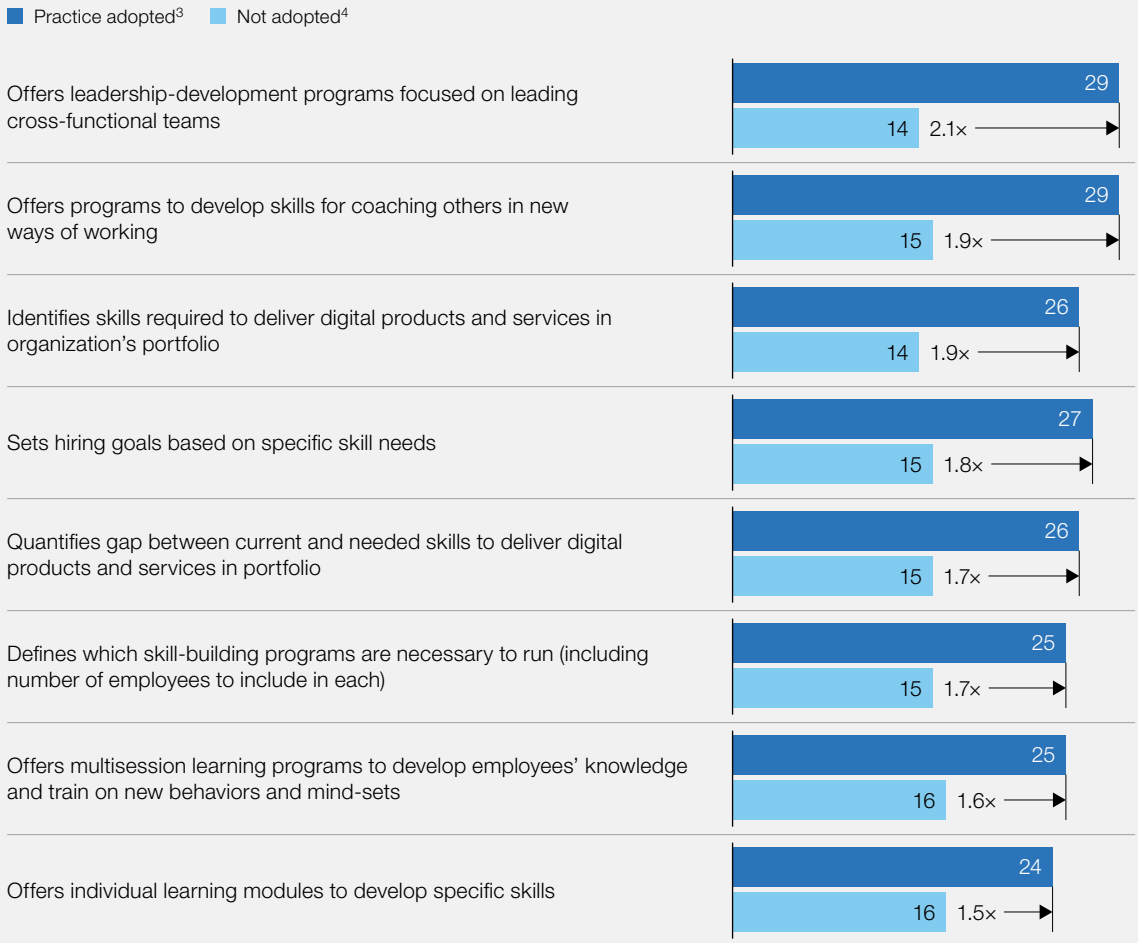
Success is also more likely when organizations scale up their workforce planning and talent development (Exhibit 3). For example, 27 percent of respondents report successful transformations when their companies set cross-functional or enterprise-wide hiring goals based on specific skill needs—nearly twice the share of respondents whose organizations do not.

Exhibit 3

At companies with enterprise-wide workforce-planning and talent-development practices, success is more likely.

Success rate of digital transformations,[1] by adoption of organization-wide workforce and talent practices,[2]
% of respondents



[1] Respondents who report success say their organizations' transformations were very or completely successful at both improving performance and equipping the organizations to sustain improvements over time; n = 263.
[2] Question was not asked of respondents who say their organizations significantly underinvested in digital talent during their transformations.
[3] Includes respondents who said that a given practice has been adopted in more than 1 function or business unit, or organization-wide, since the transformation began.
[4] Includes respondents who said that a given practice has not been adopted in more than 1 function or business unit, or organization-wide, since the transformation began.

During recruitment, using a wider range of approaches also supports success. Traditional recruiting tactics, such as public job postings and referrals from current employees, do not have a clear effect on success, but newer or more uncommon methods do. Success is at least twice as likely at organizations that run innovative recruiting campaigns (such as having recruits play games or find hidden messages in source code as part of the recruiting process) or host technology conferences or "hackathons."

Empowering people to work in new ways

Digital transformations require cultural and behavioral changes such as calculated risk taking, increased collaboration, and customer centricity, as our previous research has shown.[9] In this survey, the results suggest two primary ways in which companies with successful transformations are empowering employees to embrace these changes.

The first is reinforcing new behaviors and ways of working through formal mechanisms, long proved as an action that supports organizational change. One related key to transformation success is establishing practices related to working in new ways. Respondents who say their organizations established at least one new way of working, such as continuous learning or open work environments, as part of their change efforts are more likely than others to report successful transformations. Another key is giving employees a say on where digitization could and should be adopted. When employees generate their own ideas about where digitization might support the business, respondents are 1.4 times more likely to report success.

A second approach to empowering workers is ensuring that people in key roles play parts in reinforcing change. Success depends on both senior leaders and those engaged during the transformation.[10] One related factor is encouraging employees to challenge old ways of working. Respondents who say their senior leaders and the people engaged in transformation-specific roles do this are more likely than their peers to report success (1.5 times more for senior leaders and 1.7 times more for those in key transformation roles). Another factor for success relates to risk taking. Success is more likely when senior leaders and leaders who are engaged in the transformation all encourage employees to experiment with new ideas—for example, through rapid prototyping and allowing employees to learn from their failures. A third key to success is people in key roles ensuring that their own units are collaborating with others when working on transformations. When respondents say their senior leaders and those in transformation-related roles have done so, they are 1.6 and 1.8 times, respectively, more likely than others to report success.

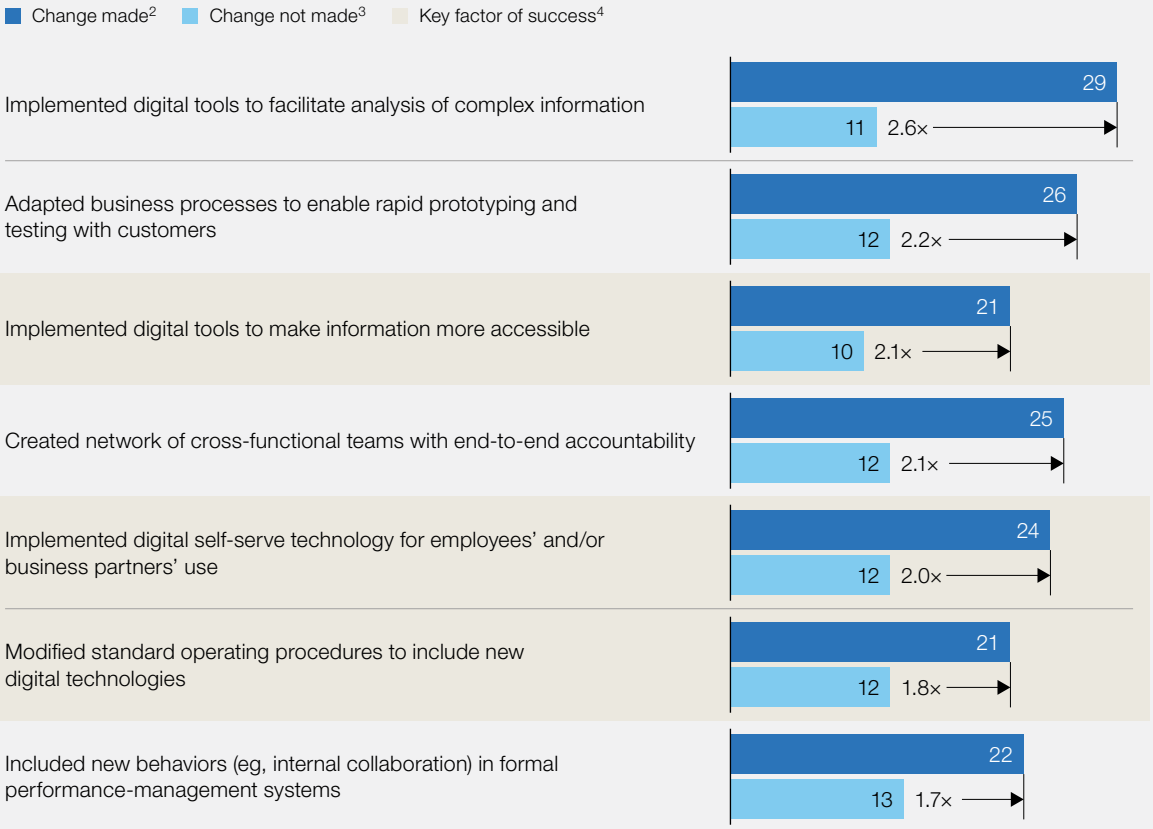
Giving day-to-day tools a digital upgrade

For organizations to empower employees to work in new ways, the survey findings show how, and by how much, digitizing tools and processes can support success. We asked respondents about seven structural changes their organizations had made since the transformations began (Exhibit 4). Three of these changes—each of which involves making the use of digital tools a new organizational norm—emerged as keys to success.

Exhibit 4

Respondents whose companies have made the use of digital tools a new organizational norm are more likely to report success.

Success rate of digital transformations,[1] by structural changes made since transformations began, % of respondents



[1] Respondents who report success say their organizations' transformations were very or completely successful at both improving performance and equipping the organizations to sustain improvements over time; n = 263.
[2] Includes respondents who said their organizations have made a given change since the transformation began.
[3] Includes respondents who said their organizations have not made a given change since the transformation began.
[4] Out of 21 key factors of success, determined by Total Unduplicated Reach and Frequency (TURF) and Shapley analyses. These analyses were used to make commensurate comparisons of best practices within a digital transformation, which were tested by using different types and structures of questions.

The first key is adopting digital tools to make information more accessible across the organization, which more than doubles the likelihood of a successful transformation. The second is implementing digital self-serve technologies for employees, business partners, or both groups to use; transformation success is twice as likely when organizations do so. A third key, focused on technology in company operations, is organizations modifying their standard operating procedures to include new technologies. Beyond these factors, an increase in data-based decision making and in the visible use of interactive tools can also more than double the likelihood of a transformation's success.

Communicating frequently via traditional and digital methods

As we have seen in traditional change efforts, clear communication is critical during a digital transformation. More specifically, one key to success is communicating a change story,[11] which helps employees understand where the organization is headed, why it is changing, and why the changes are important. At organizations that follow this practice, a successful transformation is more than three times more likely. A second key is senior leaders fostering a sense of urgency for making the transformation's changes within their units, a practice where good communication is central. Other results suggest that when communicating change stories, successful organizations tend to relay a richer story than others do. The elements with the greatest influence on success are clear targets for organizations' key performance indicators and clear communication of the transformation's timeline (Exhibit 5).

We also found that using remote and digital communications to convey the transformation's vision does a much better job of supporting success than in-person or traditional channels. When senior managers and initiative leaders use new digital channels to reach employees remotely, the rate of success is three times greater.

Looking ahead

While respondents say that many digital transformations fall short in improving performance and equipping companies to sustain changes, lessons can be learned from those who report success. The survey results suggest steps companies can take to increase their chances of success during a transformation:

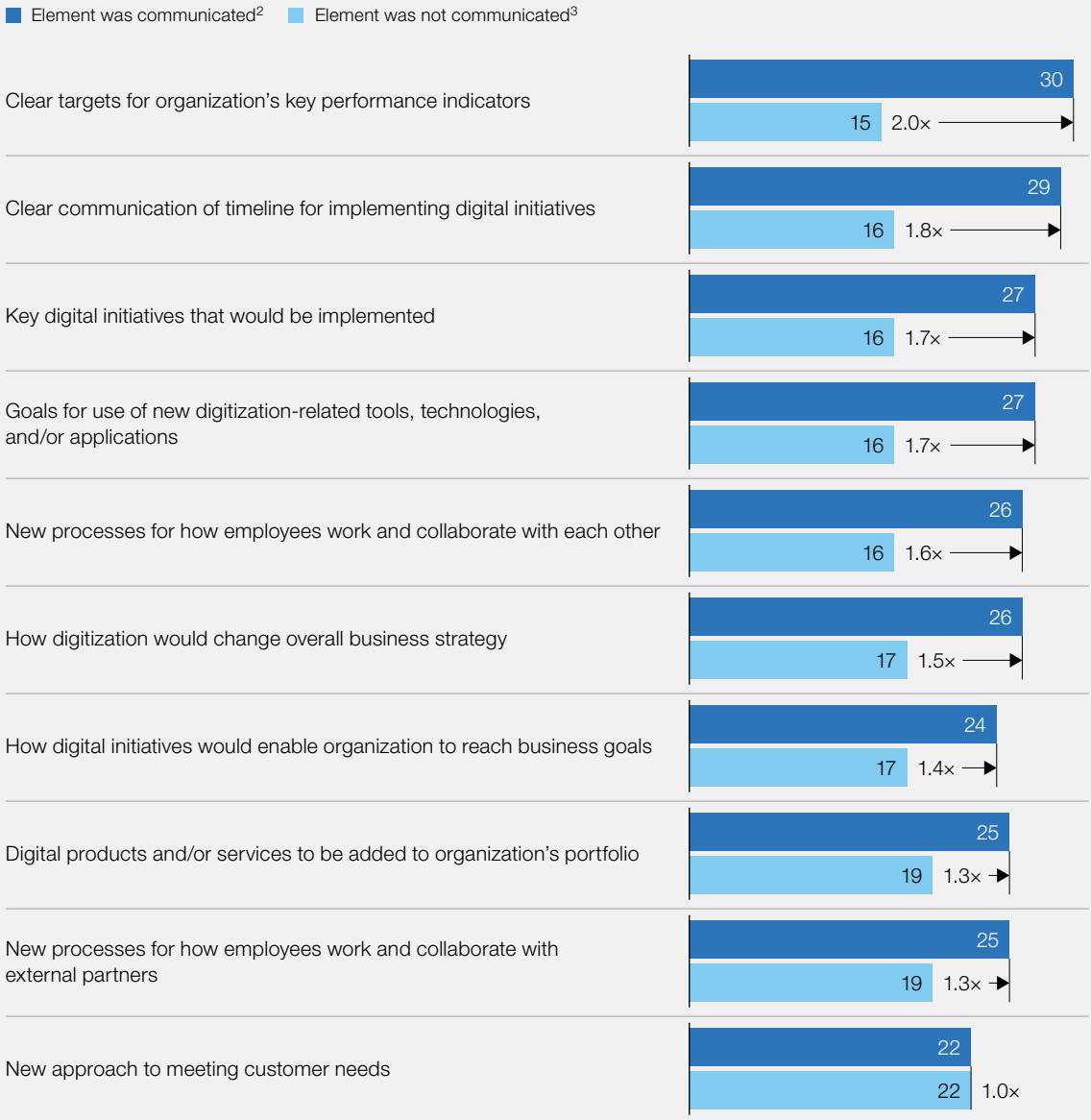
- *Reimagine your workplace.* The results show that success requires both digital-savvy leaders and a workforce with the capabilities to make a digital transformation's changes happen, which other McKinsey research also confirms.[12] The workforce implications of digitization, automation, and other technological trends are significant, and companies will need to invest in and hire for radically different skills and capabilities. Whether or not an organization has already begun a digital transformation, it is important for all companies to think critically about the ways in which digitization could affect their businesses, in the near and longer term, and the skills they will need to keep up. One critical step is for organizations to develop clear workforce strategies to help determine the digital skills and capabilities that they currently have—and will need—to meet their future goals.

- *Upgrade the organization's 'hard wiring.'* As digital requires new ways of working as well as changes to the organization's overall culture, employees must be empowered to work differently and keep up with the faster pace of business. The implementation of digital tools and upgrading of processes, along with the

Exhibit 5

The elements of a change story that most support success are clear targets for key performance indicators and communication of the transformation's timeline.

Success rate of digital transformations,[1] by change-story elements communicated, % of respondents



[1] Respondents who report success say their organizations' transformations were very or completely successful at both improving performance and equipping the organizations to sustain improvements over time; n = 263.
[2] Includes respondents who said their management teams communicated a given change-story element during the transformation.
[3] Includes respondents who said their management teams did not communicate a given change-story element during the transformation.

Twenty-one keys to success

Out of 83 practices that were tested in the survey,[1] the following are those that best explain the success of an organization's digital transformation:

1. Implement digital tools to make information more accessible across the organization.
2. Engage initiative leaders (leaders of either digital or nondigital initiatives that are part of the transformation) to support the transformation.
3. Modify standard operating procedures to include new digital technologies.
4. Establish a clear change story (description of and case for the changes being made) for the digital transformation.
5. Add one or more people who are familiar or very familiar with digital technologies to the top team.
6. Leaders engaged in transformation-specific roles encourage employees to challenge old ways of working (processes and procedures).
7. Senior managers encourage employees to challenge old ways of working (processes and procedures).
8. Redefine individuals' roles and responsibilities so they align with the transformation's goals.
9. Provide employees with opportunities to generate ideas of where digitization might support the business.
10. Establish one or more practices related to new ways of working (such as continuous learning, open physical and virtual work environments, and role mobility).
11. Engage employees in integrator roles (employees who translate and integrate new digital methods and processes into existing ways of working to help connect traditional and digital parts of the business) to support the transformation.
12. Implement digital self-serve technology for employees' and business partners' use.
13. Engage the leader of a program-management office or transformation office (full-time leader of the team or office dedicated to transformation-related activities) to support the transformation.
14. Leaders in transformation-specific roles get more involved in developing the digital transformation's initiatives than they were in past change efforts.
15. Leaders in transformation-specific roles encourage their employees to experiment with new ideas (such as rapid prototyping and allowing employees to learn from their failures).
16. Senior managers get more involved in digital initiatives than they were in past change efforts.
17. Leaders in transformation-specific roles ensure collaboration between their units and others across the organization when employees are working on transformation initiatives.
18. Senior managers ensure collaboration between their units and others across the organization.

19. Engage technology-innovation managers (managers with specialized technical skills who lead work on digital innovations, such as development of new digital products or services) to support the transformation.

20. Senior managers encourage their employees to experiment with new ideas.

21. Senior managers foster a sense of urgency within their units for making the transformation's changes.

[1] The survey tested for best practices in a digital transformation by using different types and structures of questions. To make commensurate comparisons of each practice's impact on the likelihood of transformation success, Total Unduplicated Reach and Frequency (TURF) and Shapley value analyses were run. TURF analysis was conducted among respondents reporting successful transformations to identify the most common combinations of the 83 practices tested in the survey. This analysis was carried out by determining the proportion of respondents agreeing with or selecting at least one practice, then calculating the incremental value of including or excluding each practice. Shapley value analysis was then applied to the TURF output to rank the practices by their average expected marginal contribution to the likelihood of a successful transformation. The 21 keys to transformation success are the practices with the highest Shapley values.

development of a nimbler operating model—that is, the hard wiring of the organization—will support these changes. Of course, leaders have important roles to play, too, by letting go of old practices (command-and-control supervision, for example). Since not all leaders will have the experience to support or enact such changes, dedicated leadership-development programs could help leaders and employees alike to make the necessary shifts in mind-sets and behaviors.

- *Change the ways you communicate.* Good communication has always been a key success factor in traditional change efforts, and it is just as important in a digital transformation. In a digital context, companies must get more creative in the channels they are using to enable the new, quicker ways of working and the speedier mind-set and behavior changes that a digital transformation requires. One change is to move away from traditional channels that support only one-way communication (company-wide emails, for example) and toward more interactive platforms (such as internal social media) that enable open dialogues across the organization. Another key to better communication is developing more concise—and even tailored—messages for people in the organization, rather than lengthier communications. ■

[1] The online survey was in the field from January 16, 2018, to January 26, 2018, and garnered responses from 1,793 participants representing the full range of regions, industries, company sizes, functional specialties, and tenures. Of them, 1,521 have been part of at least one digital transformation in the past five years at either their current or previous organizations. To adjust for differences in response rates, the data are weighted by the contribution of each respondent's nation to global GDP.

[2] "How to beat the transformation odds," April 2015, McKinsey.com; "The people power of transformations," February 2017, McKinsey.com.

[3] We define a successful transformation as one that, according to respondents, was very or completely successful at both improving performance and equipping the organization to sustain improvements over time. In our 2016 survey, the rate of success was 20 percent; in 2014, 26 percent; and in 2012, 20 percent.

[4] Jacques Bughin, Laura LaBerge, and Anette Mellbye, "The case for digital reinvention," *McKinsey Quarterly*, February 2017, McKinsey.com.

[5] For more on the implementation of digital technologies and solutions, see "How the implementation of organizational change is evolving," February 2018, on McKinsey.com.

[6] The survey tested for best practices in a digital transformation by using different types and structures of questions. To make commensurate comparisons of each practice's impact on the likelihood of transformation success, Total Unduplicated Reach and Frequency (TURF) and Shapley value analyses were run. TURF analysis was conducted among respondents reporting successful transformations to identify the most common combinations of the 83 practices tested in the survey. This analysis was carried out by determining the proportion of respondents agreeing with or selecting at least one practice, then calculating the incremental value of including or excluding each practice. Shapley value analysis was then applied to the TURF output to rank the practices by their average expected marginal contribution to the likelihood of a successful transformation. The 21 keys to transformation success are the practices with the highest Shapley values.

[7] Tessa Basford and Bill Schaninger, "The four building blocks of change," *McKinsey Quarterly*, April 2016, McKinsey.com.

[8] For more on technology's implications for talent and skills development, see James Manyika, "Technology, jobs, and the future of work," McKinsey Global Institute, May 2017, on McKinsey.com.

[9] Julie Goran, Laura LaBerge, and Ramesh Srinivasan, "Culture for a digital age," *McKinsey Quarterly*, July 2017, McKinsey.com.

[10] The survey asked which of the following roles were engaged by the organization to support the execution of the digital transformation: initiative leaders, integrator roles, leaders of the program-management or transformation office, technology-innovation managers, chief digital officers, and coaches.

[11] For more on change stories, see Carolyn Aiken and Scott Keller, "The irrational side of change management," *McKinsey Quarterly*, April 2009, on McKinsey.com.

[12] For more, see James Manyika and Kevin Sneader, "AI, automation, and the future of work: Ten things to solve for," McKinsey Global Institute, June 2018, on McKinsey.com; Jacques Bughin, Peter Dahlström, Eric Hazan, Susan Lund, Amresh Subramaniam, and Anna Wiesinger, "Skill shift: Automation and the future of the workforce," McKinsey Global Institute, May 2018, on McKinsey.com; and Pablo Illanes, Susan Lund, Mona Mourshed, Scott Rutherford, and Magnus Tyreman, "Retraining and reskilling workers in the age of automation," McKinsey Global Institute, January 2018, on McKinsey.com.

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