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Is Your Business Ready for a Digital Future?

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BY GERALD C. KANE, DOUG PALMER, ANH NGUYEN PHILLIPS AND DAVID KIRON

FOR THE 2015 SUPER BOWL football game, McDonald's Corp. hatched an ambitious marketing plan — to give away an item related to every commercial airing during the game. The catch was that McDonald's managers didn't know what products were going to be advertised during the game. Some were surely going to be big-ticket items, such as automobiles, while others — like alcohol — would be illegal to give away as part of a contest.

Pulling off this feat required the company to assemble a digital newsroom where McDonald's employees from marketing and legal teams, representatives from the company's various advertising agencies, as well as employees from the company's enterprise social technology provider, New York-based Sprinklr, could engage with the environment as it unfolded. McDonald's ambitious marketing goal required real-time reactions and monitoring and analysis of social media trends, as well as on-the-spot decision making to produce the best spending decisions about which products to give away to maximize exposure cost-effectively. The project brought together employees from various departments and business partners to work together during the most expensive and high-profile advertising hours of the year in the United States. The effort was largely successful, drawing 1.2 million retweets, including some from high-profile celebrities such as Taylor Swift, and becoming a globally trending topic on Twitter.

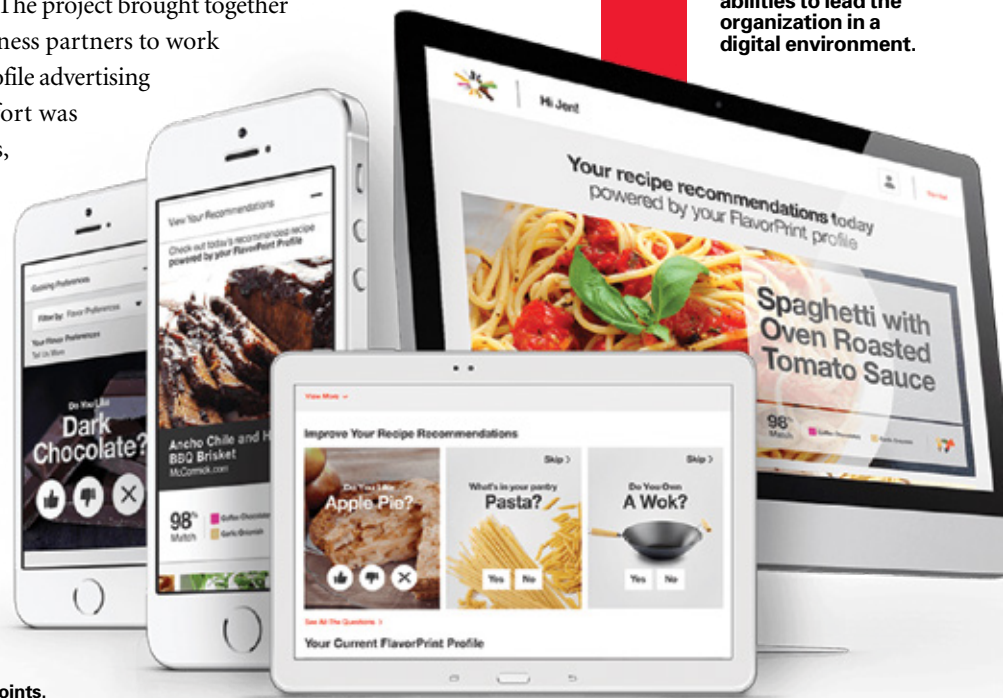
In reflection, Lainey Garcia, manager of brand reputation and public relations at McDonald's, noted of the effort: "I think for me, the biggest takeaway was the power of integration. You can accomplish amazing things when you have all those pieces working together collectively in a holistic way, and when you're putting all of your resources together. I really think it's almost

McCormick & Co. Inc., a 126-year-old spice and flavor manufacturer, developed a FlavorPrint algorithm that represents the company's flavors as a vector of 50 data points.

THE LEADING QUESTION
How are digital technologies changing the way companies do business?

FINDINGS

- ▶ **Simply implementing or using digital technologies is not enough.**
- ▶ **The key to successful digital transformation is less a question of technology than of strategy, culture and talent development.**
- ▶ **Many survey respondents question whether their company's leadership has the skills and abilities to lead the organization in a digital environment.**



what Ray Kroc, our founder, would always say, ‘None of us is as good as all of us together,’¹ and I think it really brought that to light.”

To achieve this level of integration, McDonald’s had to employ multiple digital technologies and reconfigure its internal communication and operational processes, as well as its relationship with business partners. While this one-time, real-time event could be managed from a temporary digital newsroom, McDonald’s successful Super Bowl initiative wasn’t accomplished only on Super Bowl night. The company, which the CEO has acknowledged initially lagged some competitors in incorporating new digital technologies into its restaurants,² has been working for the past two years to transform itself into an organization that, enabled by digital technologies, can be more agile, experimental and collaborative.

As the McDonald’s Super Bowl project illustrates, successfully incorporating today’s digital technologies requires companies to work in new ways. To explore how digital technologies are changing the way companies do business, *MIT Sloan Management Review* and Deloitte³ surveyed more than 4,800 respondents and interviewed 19 business and thought leaders. (See “About the Research.”) Our central question: How are companies using digital technologies — such as social media, data and analytics, mobile devices and cloud computing — to compete and operate differently?

Using results from this quantitative and qualitative data, we provide insights regarding the state of digital business and help managers understand some of what they need to know and do to navigate and benefit from these trends.

A key concept that drove our research is *digital business maturity*. We asked survey respondents to “imagine an ideal organization transformed by digital technologies and capabilities that improve processes, engage talent across the organization, and drive new and value-generating business models” and then to rate their company against that ideal on a scale of 1-10, with 1 being the farthest from that ideal and 10 being the closest. (See “Rating an Organization’s Digital Maturity.”) Forty-five percent of respondents placed their companies in the middle or “developing” group (ratings 4-6), while 29% put their companies in the higher “maturing” category (ratings 7-10). The remaining 26% placed their companies in the lower “early” (ratings 1-3) group. (See “About the Research” for an explanation of how we defined digital business maturity.)

Perhaps the most important overarching insight from our research is that the key drivers of digital transformation are not the digital technologies themselves. While we found some differences in technology usage by respondent companies across high and low digital maturity and by companies across industries, there was far less difference than we expected in the types of digital technologies implemented and the extent to which they were used. Instead, we found greater differences between high- and low-maturity companies across the business aspects of the companies — in particular, strategy, culture and talent development. These differences represent an important distinction between companies with high and low digital maturity and offer insights for executives.

The Importance of Digital Strategy

Simply implementing or using digital technologies is not enough. For example, listening to Twitter data alone is inadequate. Companies must know what to listen for, how to analyze and interpret the data, and how to respond. What’s more, they must then be able to act quickly on the information the platform provides. In general, effective digital strategies are less about acquiring and implementing

ABOUT THE RESEARCH

To understand the challenges and opportunities associated with the use of social and digital business, *MIT Sloan Management Review*, in collaboration with Deloitte, conducted a survey of more than 4,800 business executives, managers and analysts from organizations around the world. The survey, conducted in the fall of 2014, captured insights from individuals in 129 countries and 27 industries and involved organizations of various sizes. The sample was drawn from a number of sources, including MIT alumni, *MIT Sloan Management Review* subscribers, Deloitte Dbriefs webcast subscribers and other interested parties. In addition to our survey results, we interviewed business executives from a number of industries as well as technology vendors to understand the practical issues facing organizations today. Their insights contributed to a richer understanding of the data.

As part of the survey, we asked respondents to rate the maturity of their organization’s digital business practices on a scale of 1-10: “Imagine an ideal organization transformed by digital technologies and capabilities that improve processes, engage talent across the organization, and drive new and value-generating business models. How close is your organization to that ideal? (1=‘Not at all close’ and 10=‘Very close’)” Organizations whose respondents rated their organization’s digital business practices as 1-3 were categorized as “early”; 4-6 were categorized as “developing”; and 7-10 were categorized as “maturing.”

the right technology than about reconfiguring your business to take advantage of the information these technologies enable. Companies must bring together a variety of digital technologies integrated across people, processes and functions to achieve an important business advantage.

Our data suggest that effective strategy is actually more strongly associated with digital maturity than technology use. Nearly 40% of respondents from the least digitally mature companies (which we call “early-stage companies”) reported that their company uses digital technologies to a moderate or great extent, but only 15% reported that their company actually has a clear digital strategy. In contrast, 88% of respondents from digitally maturing companies said that their company uses digital technologies to a moderate or great extent, while 81% reported having a clear digital strategy. While there is a 48-percentage-point difference in technology usage between the two groups, the difference in strategy clarity is a dramatic 66 percentage points.

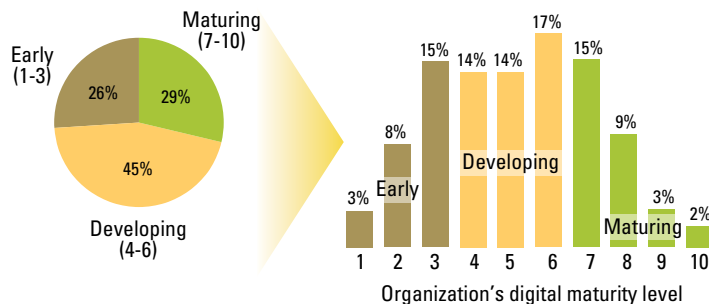
The objectives of a company’s digital strategy also differ depending on digital maturity. We find that, regardless of maturity level, the vast majority of surveyed companies want to use digital technologies to improve customer interactions. What differentiates the most mature companies, however, is a willingness to use digital to transform their business more broadly. In our survey results, digitally maturing companies were 35 percentage points more likely than early-stage companies to report that “transforming the business” (business processes and/or business models) is a major goal of their digital strategy. (See “How Digital Strategy Objectives Vary,” p. 40.)

How do companies go about developing an effective digital strategy? Benn Konsynski, the George S. Craft Distinguished University Professor of Information Systems and Operations Management at Emory University, suggested one route to strategic digital thinking that may be a bit counter-intuitive. Rather than assessing the current digital landscape and plotting your organization’s next steps, he advised the opposite approach:

Work backward, not forward — the future is best seen with a running start. Ten years ago, we

RATING AN ORGANIZATION’S DIGITAL MATURITY

We asked respondents to imagine an ideal organization transformed by digital technologies and capabilities that improve processes, engage talent across the organization, and drive new and value-generating business models. Their responses reflect how close they believe their organizations are to that ideal, on a scale of 1-10, with 10 representing the highest level of digital maturity and 1 the lowest.

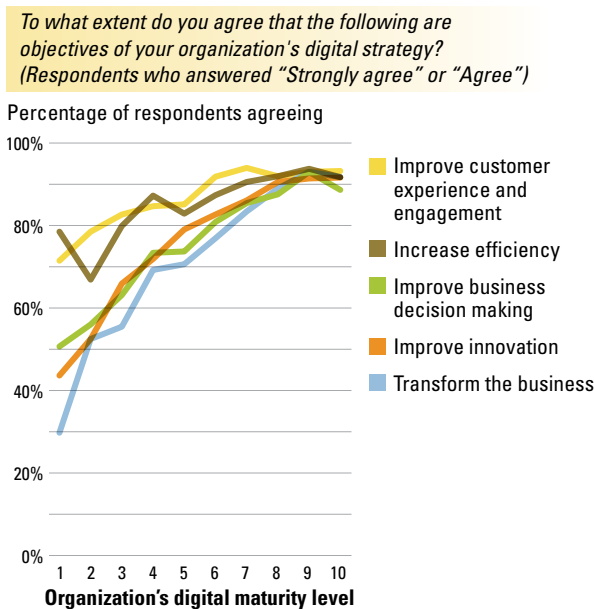


would not have predicted some of the revolutions in social or in continuous or predictive analytics capabilities by attempting to predict the evolution of existing technologies. So, I'd rather start from the standpoint of rethinking business and rethinking commerce and challenging patterns of social interactions and then work back into how those capabilities are made available or enriched by the digital trends. New capabilities make new solutions possible — and desired solutions demand new emergent capabilities.

As an example, Konsynski cited McCormick & Co. Inc., a 126-year-old spice and flavor manufacturer based in Sparks, Maryland.⁴ Recognizing that personalization is likely to be a key feature of the future digital environment, McCormick developed a FlavorPrint algorithm that represents the company’s flavors as a vector of 50 data points. Today, McCormick uses the FlavorPrint algorithm to recommend recipes, but the company’s vision stretches far beyond such modest applications. Once the flavors are digitized, McCormick can begin to tailor the flavors to account for regional, cultural or personal preference distinctions. McCormick can create a saltier salt or a spicier pepper depending on who wants it, for what purpose and where they live. The technology has shown such promise that McCormick recently spun off FlavorPrint into its own technology company, Vivanda Inc., with former McCormick CIO Jerry Wolfe as its founder and CEO.⁵

HOW DIGITAL STRATEGY OBJECTIVES VARY

Across the board, organizations are using digital technologies to improve efficiency and customer experience. However, higher-maturity organizations differentiate themselves by using digital technologies to transform their business.



Of course, predicting the future is a significant challenge for all companies and therefore requires pragmatism. John Halamka, CIO of health care provider Beth Israel Deaconess Medical Center in Boston, Massachusetts, acknowledged the challenge of predicting the future for health care IT. He noted that most business leaders simply don't know what their technology needs will be five years from now:

So how do you get a set of crisp requirements and specifications that are going to be foundational to an IT project? Do you try to get together, bottom up, a bunch of people and skate where the puck is going to be? You guess! So in effect, what I have to do across 22,000 employees, 83 [network] locations, 4,000 doctors and two million patients is try to take a best guess at what the future will be. So that's sort of strategy issue number one.

In other words, companies that want to capitalize on digital trends should not start by researching or acquiring technology. You might not even start with a rigorous analysis of today's business problems. Instead, start by envisioning the impact digital technologies are going to have on your industry, particularly your customer experience over the next

decade or more. A long-term vision of where your business needs to go that considers the organizational impact on your people, processes and technology can allow you to reverse-engineer the future and help identify the practical steps and priorities for today. The goal of this approach is to avoid capitalizing on the state of current technology for short-term advantage, only to realize later that it moved you faster in the wrong direction.

Culture and Transformation

Our research also suggests that organizational culture is critically important to effectively leveraging digital technologies in the workplace. One of the factors respondents said is most important to effectively leverage digital technologies is the "willingness to experiment and take risks." They also reported that this trait is among the most lacking in their organizations — something reported by 52% of respondents from early-stage companies and even by 36% in the maturing group. (See "The Key Abilities Companies Lack.")

B. Bonin Bough, senior vice president, chief media and e-commerce officer for Mondelez International Inc., the global snack food spinoff of Kraft Foods Inc., spoke of technology companies' ability to tackle this challenge:

They've been able to unlock something that's a totally new mindset and approach. Part of it is this notion of iteration, this notion of constantly reinventing the core, constantly cannibalizing what you did before, and the fear that their space moves so fast that you can't sit and wait. We [non-tech companies] have to begin to bring that attitude into our businesses. And so we have to, in a lot of respects, shift culture [and] cultural mindset.

The relationship between organizational culture and digital technologies requires a certain mindset, and it may require a shift in your existing mindset before you can leverage digital technologies effectively. For example, Mohamed-Hédi Charki, an associate professor at EDHEC Business School in France, is a researcher studying the impact of a digital collaboration platform in a European cosmetics company. He noted that changing the siloed culture of the company was the biggest challenge associated with the

implementation of the company's social collaboration platform. In fact, the CEO believed that the company's siloed culture was a barrier to collaboration and creativity. The company is still coming around and learning to use the tool to communicate and collaborate more effectively.

However, we also found examples where the technology itself began to change the culture of the organization. A relatively small business-to-business telecommunications company, trying to overcome the challenge of being a fairly small player in a very competitive market, began an initiative that encouraged employees to become brand ambassadors, empowering them to communicate via social media on behalf of the company. To do this, the company provided formal social media training for employee volunteers. It also offered clear, simple guidelines for how employees should communicate about the company on social media employing a "use your best judgment" approach. On all company memos, the company provided preapproved examples of how employees might share the information in various social media channels.

The result did not simply accomplish the stated goal of higher recognition in the marketplace for the company. It also had the unanticipated effect of spawning a positive cultural shift in which the employees were more connected to the company, engaged with the brand and aware of the organization's digital strategy.

Even if you start a digital initiative in one small part of the division, its effects can begin to creep into other areas of the organization. Such a sentiment was echoed by Carlos Dominguez, president and COO of enterprise social technology provider Sprinklr:

The platforms start to get deployed, and all of a sudden, employees say, "Hey, we need a customer relationship management system and we need to provide the connectors to it." At that point, you've got to start engaging with the CIO, who controls that infrastructure. It starts to become a different animal, because more people and departments begin to get involved. They're asking, "What's your security policy? How do you do this?" So this platform that could have started anywhere in the company is suddenly unifying everything.

Developing Digitally Savvy Talent

Another factor distinguishing the most digitally mature companies from the least is the development and training of digitally savvy talent. Respondents from companies across all maturity levels reported a lack of certain key skills. The major difference, however, is in what the companies are doing about it. Only about 19% of surveyed employees from companies that are in the early stage of digital maturity agreed or strongly agreed that their organizations provide them with the resources or opportunities to obtain the right skills to take advantage of digital trends. This contrasts with 76% of employees from maturing digital companies.

Consistent with the results seen elsewhere in our research, the skills and abilities that respondents indicated are most important for leveraging digital technologies are not purely technical. Respondents — regardless of company maturity level — indicated that the most important ability necessary for taking advantage of digital trends is "knowing the business and being able to conceptualize how new digital technologies can impact current business processes/models." This ability was also identified by the highest percentage of respondents as lacking in their organizations.

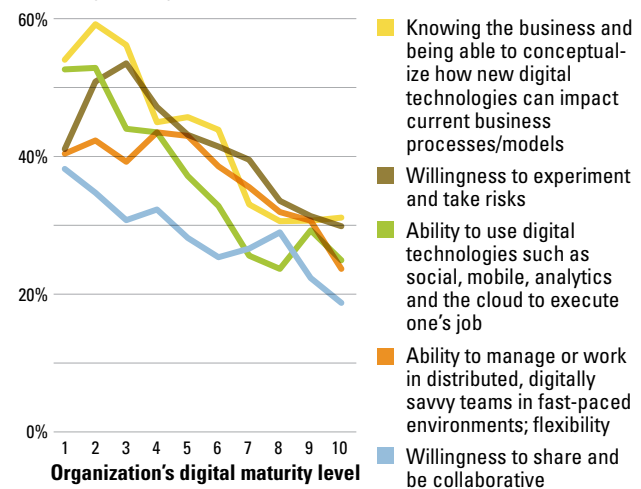
Hiring managers are beginning to recognize and respond to these changes. For example, when asked

THE KEY ABILITIES COMPANIES LACK

Survey respondents indicated that having both business and technology knowledge as well as being willing to experiment are areas that represent digital business challenges for many organizations.

Which of the following skills or abilities are most lacking in your organization? (Select up to three.)

Percentage of respondents



what types of skills she looks for in new hires, Perry Hewitt, chief digital officer of Harvard University, said, “We often seek agility over specific skills. And interest and aptitude in addition to demonstrated track record. We look for people who are ‘data-informed and mission driven’ — striking a balance between serving the mission of the institution and having robust digital skills.”

Many survey respondents also questioned whether their company’s leadership has the skills and abilities to lead the organizations in a digital environment. In fact, only 44% of respondents said that their organization’s leadership has sufficient skills and experience to lead their organization’s digital strategy. These responses varied substantially by digital maturity levels — with only 15% of employees from early-stage organizations and 76% from maturing organizations believing their leaders have sufficient skills and expertise to lead their organization’s digital strategy. Even in the developing maturity group, the numbers are unsettlingly low, with less than 40% of respondents indicating that they believe their organization’s leaders have sufficient skills and expertise for the task. (See “Employees’ Perspectives on Digital Leadership.”) What’s more, these leaders may not recognize their own deficiencies: Our survey found that the higher in the organization respondents work, the greater their confidence in the ability of the organization’s

executives to lead its digital strategy. While this could have to do with senior executives knowing their own skill and ability levels better than their employees know them, it still raises the likelihood that these capabilities aren’t being clearly demonstrated or communicated to the broader organization.

One way of overcoming this lack of skills at the leadership level is to hire executives from technology companies. David Mathison, founder and CEO of the CDO Club, a global professional community of digital executives, noted that many organizations are recruiting from the technology sector to obtain the requisite skills to lead in the digital age. He said:

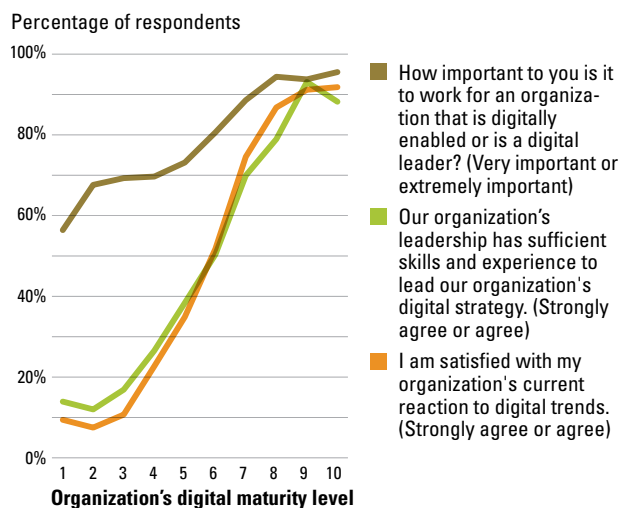
What we’re seeing now is that a majority of chief digital officers are coming up through general management ranks, particularly from technology companies. The new, first-ever CDO at McDonald’s, Atif Rafiq, was most recently general manager of Kindle Direct at Amazon. Before that he was general manager at Yahoo! and founding member of the corporate strategy and business development groups at AOL. Individuals working at digital native organizations, maybe as a GM, somebody who has P&L responsibility, are being pulled into a variety of sectors ... to figure out how to digitally transform a company.

The Threat of Employee Dissatisfaction

While employees are not necessarily confident in the ability of their leadership to digitally transform the organization, they are more optimistic about digital technologies themselves. Ninety-one percent of survey respondents across industry sectors, company size and region agreed or strongly agreed that digital technologies have the potential to fundamentally transform the way people in their organization work. Surveyed employees also widely reported the importance of using digital technologies for their work. Eighty-five percent of respondents said that the ability to use digital technologies is important for their job; that number is relatively stable across digital maturity levels, varying only a little more than 10 percentage points between respondents from companies in the maturing and early levels.

EMPLOYEES’ PERSPECTIVES ON DIGITAL LEADERSHIP

Many survey respondents from companies at early-stage and developing digital maturity levels are not satisfied with the way their organizations are responding to digital trends. Such attitudes likely have implications for recruiting and retaining talent.





Seventy-eight percent of employees across our survey said it is either very important or extremely important to work for a digitally enabled company or a digital leader.

What's more, more than half of our respondents indicated that their companies are using digital technologies to a moderate or great extent, and more than 70% said that these digital technologies are impacting their job today. While 82% of our respondents indicated that their organizations view technology as an opportunity, only 26% of all respondents said that their organizations view it as a threat. This optimism, of course, is not entirely logical. If digital technology can increase your organization's operational performance, it can certainly do the same for your competitors.

It may come as no surprise that more advanced digital companies see greater opportunity in digital technologies than do less digitally advanced companies. Yet what may be surprising is that the percentage of organizations that view digital technologies as a threat is virtually identical, regardless of a company's level of digital sophistication. The very companies that should be most concerned about the threat digital technologies pose to their business may not be.

Our survey findings could have important implications for a company's ability to attract and retain talent in an increasingly competitive global market. Respondents expressed a strong preference for working for a digitally mature company. Seventy-eight percent of employees across our survey said it is either very important or extremely important to work for a digitally enabled company or a digital leader.

A surprisingly high number of respondents are dissatisfied with how their companies are reacting to digital trends overall. While 81% of surveyed employees from digitally maturing companies are satisfied with their organization's response to digital trends, only a paltry 10% of employees from early-stage companies are. Perhaps most telling is that even employees in developing-stage companies are not satisfied with their organization's response to digital trends, with only 38% of employees in those organizations reporting satisfaction. Employees

currently working for a company with low or even moderate digital maturity may move to a more digitally mature company if given the opportunity. These data portend a potential flow of talent toward digitally enabled and mature companies.

Steve Milovich, senior vice president of global human resources and talent diversity and senior vice president of employee digital media at the Walt Disney Co., had one explanation for this low satisfaction with many organizations' response to digital trends. He noted that most employees use sophisticated social media platforms and interact with companies using seamless digital technologies in their personal life, but things become decidedly more difficult when they come into work: "When we started this journey, we had a gap that existed between how someone interacted with relative ease in their personal life — to tap on an app and do his online banking or to quickly look up the weather where they lived — and how they interacted at work."

Disney is making great strides in overcoming this gap, allowing its employees to interact with the company and their coworkers through more sophisticated mobile interfaces to do employee reviews, find onsite conference rooms and apply for new jobs within the company. The company now receives many requests for new apps from within the company, and Disney is trying to prioritize the most important and create a digital road map for the future. The irony here, of course, is that Disney is one of the world's leading companies for using digital technologies to interact with customers but is only now applying this expertise to interact with its own employees with the same level of digital sophistication. If a digitally innovative and mature company such as Disney is facing these issues, it is very likely that other companies are doing so as well.

Next Steps

As companies continue to advance on their digital journey, it is important to recognize that digital is



Success will depend less on the technologies themselves — and more on your company's ability to implement them innovatively by rethinking strategy, culture and talent.

more than a technology to implement. Instead, digital requires a corporate shift in mindset that companies of all sizes and sectors need to embrace to position themselves to successfully compete now and in the future. Consider the following questions as you prepare to lead your organization into a digital future.

1. Do you have a digital strategy for the future that considers the full organization? If you don't, begin working on one now. If you already have a strategy, does it deal with implementing current technologies or preparing for future ones? Have you clearly communicated that strategy to your employees so they can become ambassadors and better lead the change? If the answer to any of these questions is no, then reevaluating your strategy needs to be priority one.

2. Is your company culture allowing your digital initiatives to succeed? Are you fostering collaboration and experimentation? Do your digital initiatives require a cultural shift to achieve their full potential? Could different digital technologies or approaches help bring about that cultural shift?

3. Does your organization have the talent and skills that you need? Are your employees being given the opportunity to obtain the right skills to succeed in a digital environment? Do your digital leaders have the right blend of business and technology skills? If not, how are you going to go about acquiring those skills — both for individuals and for the organization as a whole? Looking beyond your own sector to technology companies may be an option.

4. What do employees need to succeed? How might your company's existing digital infrastructure be impeding your employees' ability to succeed in a changing competitive environment? Can your employees meet their professional needs through the digital technologies available to them through your organization?

As you consider your company's digital strategy, keep in mind that the road map you develop will shift as technology advances and your competitors execute their own digital strategies. While it may be very difficult to predict future technologies, business success will depend less on the technologies themselves — and more on your company's ability to implement them innovatively by rethinking strategy, culture and talent.

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REFERENCES

1. P.S. Harris, "None of Us Is as Good as All of Us: How McDonald's Prospers by Embracing Inclusion and Diversity" (Hoboken, New Jersey: John Wiley & Sons, 2009).
2. J. Maze, "McDonald's Service Push Includes Big Digital Spending," Nation's Restaurant News, December 12, 2014, www.nrn.com.
3. As used in this document, "Deloitte" means Deloitte Consulting LLP and Deloitte Services LP, which are separate subsidiaries of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.
4. G.C. Kane, "Are You Ready for the Certainty of the Unknown?" March 10, 2015, sloanreview.mit.edu.
5. K.S. Nash, "Tech Spin-off From Spice Maker McCormick Puts CIO in the CEO Seat," The Wall Street Journal CIO Journal, April 1, 2015, www.blogs.wsj.com.

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