

DIGITAL TRANSFORMATION

Bringing Digital Transformation to Your Organization

Successful change calls for both strategy and clarity — particularly for how employees should apply new digital tools.

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CONTENTS

SPECIAL COLLECTION

Bringing Digital Transformation to Your Organization

1 Building Digital-Ready Culture in Traditional Organizations By George Westerman, Deborah L. Soule, and Anand Eswaran

11 5 Musts for Next-Gen Leaders

By Amit S. Mukherjee

15 Five Rules for Leading in a Digital World

By Deborah Ancona

Building Digital-Ready Culture in Traditional Organizations

Getting your company into digital shape doesn't mean dumping everything that has made it strong.

BY GEORGE WESTERMAN, DEBORAH L. SOULE, AND ANAND ESWARAN

ven though traditional companies find much to admire and learn from in the cultures of born-digital companies, some born-digital qualities are cause for concern. Amazon.com, for instance, launches new businesses quickly and drives repeated efficiency gains in operations. However, it is less admired for what can be seen as uncompromising relationships with publishers, partners, localities, and workers. Uber is revered for its ability to innovate services with agility. But many observers are dismayed by the ways it has seemed to dismiss regulators, exploit drivers, and, in a set of highly publicized incidents, fail to protect workers and

customers from harassment.1

When Jonas Samuelson became CEO of Stockholm-based home appliance maker Electrolux in 2016, he wanted to reignite innovation and growth by building a faster, more digital-ready organizational culture. Yet many of the practices of Silicon Valley did not seem appropriate for his 100-year-old company or the social and business culture of Scandinavia. Samuelson couldn't ask 55,000 employees to work 70-hour weeks and couldn't incentivize them with millions in stock options. He couldn't fire people just because their core skills started to age. He couldn't constantly redesign the company's processes and products — Electrolux makes hardware, not software, and customers expect to keep their products for many years. However, he could drive a culture shift that would energize employees to generate more innovation and profitable growth. He believed strongly that this could change Electrolux for the better without losing what was already terrific about the company.2

Electrolux is not alone in this quest. Many companies are trying to embrace aspects of digital culture without exposing themselves to the less desirable elements



THE LEADING QUESTION

What does it take for legacy companies to become more agile and innovative?

- *They can start by understanding the four key values of digital culture: impact, speed, openness, and autonomy.
- *They can then adopt or refine several critical practices, including rapid experimentation, self-organization, data-driven decisionmaking, and an obsession with customers and results.
- *But companies needn't (and shouldn't) sacrifice integrity, stability, employee morale, or their heritage in the transformation process.

of Silicon Valley startups. Consumer electronics and appliances giant Haier has spent years transforming its culture in pursuit of greater speed and innovation while maintaining the efficiency and stability of its traditional manufacturing and logistics processes. KBC Bank is adapting to fight fast-moving fintech entrants while complying with strict European privacy and employee protection regulations. Leaders of Schneider Electric are pushing culture changes to play a major role in the rapidly evolving internet of things while still being a reliable provider of devices upon which thousands of office buildings and data centers depend.

For many legacy companies, culture change is the biggest challenge of digital transformation. How can a company become more agile and innovative without alienating its best employees or wrecking the best of its existing practices? And what does it mean to have a digital-ready culture?

We've been studying these questions for the past three years. (See "About the Research.") Based on our findings, we've developed a framework to guide traditional companies in any industry. The process begins with understanding the four critical values of digital culture: impact, speed, openness, and autonomy. It then involves adopting or refining a set of digital-ready practices, grounded in these values, which will shape employee actions and organizational performance. We also offer suggestions for getting started.

Contrary to much that's been written, incorporating the best of digital culture into a legacy culture doesn't mean sacrificing integrity, stability, employee morale, or a company's heritage. And traditional companies aren't the only ones that can benefit from this framework. The insights also apply to startups striving to become mature and thriving businesses for the long haul.

Defining Culture

Culture is what happens when the boss leaves the room. This workplace truism is particularly useful for leaders contemplating a significant culture shift. Often described as "the way we do things around here," culture is a set of values and norms that guides human interactions. It's present in the espoused values of management, the unspoken assumptions of employees, and the commonly accepted behaviors that have helped an organization succeed in its chosen environment.

The good thing about culture is that it provides coherence and continuity. The bad thing about culture is that it can root a company in past practices that no longer fit a changing world.

Culture is harder to change than strategy, because much of it is unconscious. What's more, leaders need to understand a company's prevailing culture before seeking to modernize it. If they suddenly direct people to do things that run counter to deeply held values, rational discussions can quickly devolve into moral diatribes.

ABOUT THE RESEARCH

To understand cultures in digital and traditional companies, we engaged in two stages of research. First, we interviewed executives and employees at more than two dozen digital and in-transition companies, asking them to describe how they work, without focusing on specific values or practices. We also read numerous accounts of digital companies and reviewed the extensive literature on organizational culture in traditional companies. Qualitative analysis comparing and contrasting across sources enabled us to discern a small set of values and related practices that are common across digital and transitioning organizations. We reviewed this framework of digital values and practices with employees and executives in digital and traditional companies for face validity.

Subsequently, we surveyed employees in over 500 digital and traditional companies about the extent to which these values and practices are typical of behavior in their organizations. Each measure of values and practices was composed of multiple items. Values were tougher than practices to survey, since respondents often simply agree with every positive statement. We got around this obstacle by presenting respondents with competing positive values and asking which was more important to their company. For example, we asked people to locate their company on a scale from valuing speed to valuing perfection. To supplement our questions about digital values and practices, we also asked about traditional practices related to integrity, stability, and rules orientation. We statistically aggregated responses to get a score for each of the values and practices. Finally, we asked respondents about different aspects of their organizations' relative performance so that we could empirically link culture elements to performance.

THE FOUR KEY VALUES OF DIGITAL CULTURE

How closely do your company's values match?

IMPACT

Change the world radically through constant innovation.

SPEED

Move fast and iterate rather than waiting to have all the answers before acting.

OPENNESS

Engage broadly with diverse sources of information and insight. Share advice and information openly rather than keeping knowledge to oneself.

AUTONOMY

Allow people high levels of discretion to do what needs to be done rather than relying on formally structured coordination and policies.

It's equally important that legacy leaders understand exactly which digital values and practices they hope to embrace. At first glance, it seems that there are many values to choose from. At one point, Netflix published a deck of over 100 slides to describe its culture. But a few core values, such as high performance, freedom and responsibility, and context over control, drive the practices that power the company's innovation and growth.³ Boston-based software company HubSpot has a similarly thick "culture code" deck, but a few characteristics stand out. The company "commits maniacally" to its mission and metrics. It always strives to "obsess over customers." The company is "radically and uncomfortably transparent" and asks employees to be "unreasonably selective about our peers." These dictums reinforce a harddriving, constantly innovating workplace culture.4

Microsoft has redefined its culture around fostering a growth mindset in both individuals and groups. Company leaders worked extensively to shift from solely rewarding people for their individual contributions to recognizing the importance of leveraging the work of others. Other important changes include championing curiosity, actively seeking to drive greater diversity and inclusion, and fostering a "one company" approach over a confederation of fiefdoms.

The Four Key Values

A slew of books and articles purport to reveal the cultural secrets of digital titans. Yet behind this tower of corporate babble, we find a small shared set of cultural elements that are essential to help companies become agile, innovative, and fast-growing.

We reviewed the management literature on culture, examined published frameworks and stories

of digital companies' cultures, and interviewed dozens of executives to identify a small set of self-consistent values and practices of digital culture. We then conducted a survey of more than 500 digital and traditional companies to validate the culture framework and assess how the various elements of digital culture correlate with different types of self-reported performance. Ultimately, four key values of digital culture stand out: impact, speed, openness, and autonomy. (See "The Four Key Values of Digital Culture.")

Recognizing the immense scalability of digital solutions, digital leaders typically focus on creating impact, assuming that profit will follow. At their best, these companies revolutionize how people and organizations interact, reinvent industries, and break the power of entrenched gatekeepers. The other three values support that mission. Speed helps companies stay ahead of competitors and keep up with rapidly changing customer desires. Openness encourages employees to challenge the status quo and work with anyone who can help them achieve their goals quickly. Autonomy gives people the freedom to do what's right for the company and its customers without waiting for formal approval at every turn. Together, these values can foster an engaged, empowered workforce where employees feel a personal responsibility to constantly change the company - and often the world.

How Practices Bring Values to Life

The values of high-performing digital companies frame their essential practices: rapid experimentation, self-organization, data-driven decisionmaking, and an obsession with customers and results. (See "The Spectrum of Digital and Traditional Practices.") Our research shows that these practices reinforce one another when they're all in place, creating a unified culture that is an effective expression of the four key digital values.

Here's one way to look at this: Autonomy means that workers have the latitude to focus on the tasks that they believe matter most to customers. They can experiment rapidly without fear of failure, increasing the chances for truly novel outcomes. So why don't successful digital companies turn into unmanageable collections of solo artists reaching for the moon? By valuing openness and striving for big impact, these companies encourage people to seek out relevant data and expertise wherever it resides. To achieve speed and impact, workers selforganize quickly to conduct experiments and achieve their goals, without worrying about a collaborator's title, function, or organizational affiliation. Moreover, openness, even to counterpoints or critical perspectives, leads to individuals and teams having more information and producing more effective solutions. The emphasis on data and results, meanwhile, drives accountability, encouraging persistent striving for customer-focused, scalable results. This system of interrelated values and digitally enabled practices can be remarkably effective when management gets it right.

Traditional companies tend to share their digital counterparts' focus on customers and results. They

differ culturally in how they aim to minimize problems through strict rules, drive integrity into all daily behaviors, and work to create stability for stakeholders. While some digital natives might deride this combination as stodgy and bureaucratic, not *all* traditional practices need to be eliminated in the quest for digital culture. In fact, it becomes clearer every day that stability and integrity are qualities to be prized.

Amazon, for example, was seen historically as cultivating a high-pressure and argumentative work environment, believing that only the fittest should survive for the long run. But that approach, which led to poor press and high turnover among certain groups, is starting to change: By experimenting with more schedule flexibility and explicit support for more gender balance, the company is now beginning to set a less cutthroat, more inclusive tone. 5 Google, too, realized that more stability for employees can benefit the company's stability; after internal analytics showed that new mothers were leaving at higher rates than other employees, it boosted family leave policies, reduced on-call demands, and achieved a 50% reduction in attrition among these employees.⁶ After HubSpot developed a reputation as a difficult place to work, with long hours and insensitive "graduation" announcements for terminated employees,7 the founders made changes to build more empathy into the company's culture.8

THE SPECTRUM OF DIGITAL AND TRADITIONAL PRACTICES

Here's what culture typically looks like in digital and traditional organizations. Practices range from rapid experimentation to strict rule adherence, with some overlap between the extremes.

DIGITAL PRACTICES TRADITIONAL PRACTICES Rapidly Self-Driving Obsessing Focusing Acting with Seeking Strictly decisions conforming organizing over on results integrity stability experimenting with data customers to rules Collaborating Continually Being honest, Aiming for Constantly and Collecting and Maintaining Seeking to fluidly across striving for behaving reliability and systematically functional, using accurate continual focus avoid problems measurable ethically, and predictability experimenting, data to make on meeting striving for in stakeholder and maintain geographic, hiresults instead learning from decisions and the stated and reliability erarchical, and of just propositive outinteractions, the results, and solve problems unstated needs through rules organizational cesses and comes for all operations, quickly applying of current orientation boundaries to stakeholders and employee new insight promises and potential get things done work life customers



The greatest advantage of digital companies is the speed with which they create and test innovations. Traditional businesses must try to cultivate such habits within a framework of datadriven decision-making.

As for integrity, a series of headlines over the past few years has made clear that some digital-native companies need to become more principled. Facebook has been widely criticized for its perceived indifference about user data privacy and informed consent. At Uber, weak policy enforcement on harassment led to a public scandal and, ultimately, the departure of the CEO.⁹ Autonomy, experimentation, and self-organization can drive marvelous innovation but, in the absence of sound guidance, can also lead to abuse.

Cultivating a Digital-Ready Culture

The challenge, then, is to develop the elements of digital culture to promote innovation without sacrificing integrity and stability. It's a worthy goal. In fact, our research on more than 500 digital and traditional companies shows that striving for integrity and stability in a company's culture does not hurt self-reported measures of innovation, profitability, and customer satisfaction. That's good news for traditional companies, maturing digital companies, and millennial workers who now care as much about growing families and communities as they do about growing businesses. Instead of ditching all past practices, traditional companies should try to create a digital culture that embraces the best of their legacy. We highlight three principles for making this happen. (See also "Principles for Creating the Culture You Need," p. 64.)

Build the practices that set digital companies apart. The greatest advantage of digital companies is the speed with which they create and test innovations. Traditional businesses must try to cultivate habits of rapid experimentation and self-organization within a framework of data-driven decision-making. These practices may feel alien to companies whose structures, values, and governance rules were designed for cautious stability. Yet our analysis shows that rapid experimentation

and self-organizing strongly drive measures of self-reported performance, including growth and innovation. Moreover, organizations can't experiment effectively without the data to measure change.

Preserve practices that promote integrity and stability. Your customers, employees, regulators, and shareholders deeply appreciate these qualities and the practices that support them. As we noted above, companies managing for integrity and stability report performance that is neither better nor worse than that of companies that do not. Yet the negative outcomes of omitting these practices have become apparent in many digital-native companies. That's why many successful digital businesses have begun to improve their integrity and stability practices as they mature.

Reorient important practices that are still optimized for the pre-digital world. The speed and interconnectedness of the digital world demands a new orientation to customers, results, and rules. Asking customers about their needs must be supplemented by anticipating customer desires and proactively experimenting to delight the customer. Infrequent and opaque performance evaluations must be replaced or supplemented by ongoing attention to transparent goals and performance metrics. Wherever possible, strict rules and controls must give way to broader guidelines and transparent monitoring. Employees who use rules to prevent change must be counseled to be more flexible. For example, Google requires employees to follow strong technical and data standards but encourages innovation that builds on those guidelines. Objectives and key results at the company, team, and individual levels are visible widely. This transparency encourages higher performance and improves collaboration.¹⁰

How DBS Bank Built a Digital-Ready Culture

One of Asia's largest banks, Singapore-based DBS, has undergone a radical turnaround. As recently as

PRINCIPLES FOR CREATING THE CULTURE YOU NEED

Become a digital-ready organization without sacrificing important values.

BUILD these digital practices:

Digital companies are typically stronger at rapidly experimenting, self-organizing, and driving decisions with data than are traditional organizations. The first two practices are associated with significantly better performance than peers and are impossible without the last.

- Encourage employees to conduct experiments quickly and often.
- Insist that experiments are well-designed, with control groups, clean treatments, and before/after measures.
- Encourage failing fast and sharing learnings.
- Give people the autonomy to create or participate in teams as they wish, including with external partners.
- Replace intuition with intentional testing.

PRESERVE these traditional practices:

Acting with integrity and seeking stability don't hurt performance. In fact, these practices turn out to be critical to attract and retain talent, shore up customer loyalty, and earn stakeholder confidence.

- Create guidelines that enable speed and autonomy without sacrificing integrity.
- Develop processes to rapidly identify places where guidelines are not being followed.
- Create easy ways to suggest changes to guidelines.
- Help employees keep their skills current through training and stretch assignments.

REORIENT these practices:

The fast pace and connectedness of today's digital environment require a fresh perspective on how to meet and anticipate customers' needs, drive accountability for results, and set rules that prevent abuses.

- Move from meeting stated customer needs to innovating to delight the customer.
- Think broadly about who your customers are or could be.
- Focus on results continually, not just in annual or quarterly performance reviews.
- Ensure that everyone understands the performance goals.
- Be transparent about performance at all levels, sharing information as broadly as possible.
- Instead of requiring formal compliance reviews of every action, grant people the autonomy to act quickly within clear guidelines.
- Adjust processes and tools to make it easier to act within guidelines than without.
- Encourage accountability at all levels.
- Actively and visibly discourage people who use rules to hold up necessary action.

2009, DBS was ranked last of the region's top five players in customer experience. Customers joked that DBS stood for "damn bloody slow." But, by 2013, through a constant focus on reducing process failures and improving speed and customer turnaround time, DBS ranked first in customer experience among the same group. 11

But that was just the beginning. As we learned in our discussions with company leaders over the years, 12 senior executives envisaged DBS as a leading digital company, not just a leading bank. Achieving this audacious goal would require further improvements in the company's technology platforms and product development processes. DBS also needed to foster a digital culture, improving its innovativeness without alienating its best customers or risking regulatory lapses.

CEO Piyush Gupta and CIO David Gledhill started promoting the idea of DBS as a 22,000-person startup. They visited major digital players globally to understand their corporate cultures and then

defined a set of values and practices to change the DBS culture. They wanted the existing customer focus to become a data-driven customer obsession. The company analyzed 250 customer and employee journeys to identify process issues and then built analytic models to improve those processes and enhance employee performance. For instance, by modeling demand in its ATM network, which, the company says, handled more transactions per month than any other bank in the world, DBS ensured that its ATMs never ran out of cash. Another model developed to predict salesperson turnover proved to be 85% accurate, allowing executives to intervene and have a conversation with the bank's top salespeople before they decided to leave.

DBS leaders also encouraged ideation and experimentation at all levels. They urged employees to identify ways to remove millions of hours of customer wait time. Strategy workshops, daily briefings, startup exchanges, and a variety of other supports drove more than 1,000 experiments, many of which

led to new products or improved services. The bank also redefined internal processes to build agility in IT units and product development teams. IT staff and business product owners now work closely together to rapidly develop, test, and refine products, increasing the speed and quality of product launches. The company has removed more than 250 million hours of annual customer wait time and more than a million hours of employee wait time. 13

In addition, leaders strove to build a learning organization where every worker can engage in continual self-improvement. Online and classroom training courses were expanded. Experiential learning opportunities such as hackathons, job shadowing, and immersion experiences helped employees gain greater understanding of DBS itself. Collaboration platforms, pop-up classes, innovation fellowships, "learning days," fast-paced PechaKucha sessions (essentially rapid-fire presentations), and other methods enabled peer-to-peer mentoring. Theme weeks, learning hours, reading clubs, and other gatherings helped make learning a ritual.

DBS has made great strides toward becoming a digital master. It rapidly launches digital innovations to meet a variety of voiced or unvoiced customer needs. Its customers are quickly shifting to cashless processes. New products, such as a gamified mobile app to help parents teach children about savings, both test market opportunities and connect customers more closely to the bank.

Another unforeseen opportunity emerged from the many process improvements identified by employees. Automation and process changes had reduced costs significantly, but two processes customer service and identity verification — still required employee actions. In India, DBS used chatbots and the country's biometric identity system, along with product simplification and some partnering, to create a digital bank that requires virtually no intervention from DBS employees. At near-zero marginal cost, the digital bank's processes make it possible to serve hundreds of millions of poor Indians who could not be served profitably by traditional banking processes.

Getting Started

Like DBS, many companies around the world are growing their digital cultures. While changing culture is never easy, we've identified the following steps to help you start growing strong cultural roots for a digital transformation.

Reframe the vision around radical impact. People in digital startups tend to have a sense of purpose that goes far beyond the walls of the office and motivates them to work hard and innovate. To start your digital culture transformation, create a vision that is bigger than your business. Nike doesn't just try to sell shoes; it wants to be part of its customers' lives. It wants to be part of the conversation around any sport, any time, in any channel. Nike knows how to sell shoes. But by promoting a richer conversation around sports, Nike gets closer to sports fans — its customers — by making them feel they are part of a community.

In the B2B world, Rio Tinto is redesigning mines with the goal that no miner will ever again work in a dangerous underground environment. By improving the lives of its employees, it also increases efficiency and profits. Other B2B companies are linking their work to end customers; employees feel more connected when they serve humans instead of companies. Schindler, for example, has shifted its vision from selling elevators and escalators to transforming urban mobility. At the office, apartment, or mall, Schindler aims to improve customer experience by having elevators that arrive when needed, provide a smooth and fast ride, and feature useful media and information. That vision helps employees see how they help people, not just buildings.14



Visibly promote new values and practices. As a leader, you must live the change you want from your company. Tout the new values loudly and often. Identify company stories that broadly inform and reinforce these values. Engage in open conversations so that employees can comfortably express their hopes, doubts, and fears about what might be lost, and so that unconscious beliefs can come into the open for discussion. For example, Microsoft CEO Satya Nadella encourages employees to transition from being know-it-alls to being *learn-it-alls*, underlining a new cultural emphasis on learning, openness, and empathy.¹⁵

Then you have to walk the walk. Explicitly highlight those arguments that need support from data. In meetings where managers make decisions based on experience or intuition, ask what experiments they might conduct to test their beliefs. Make key decisions based on a diverse set of perspectives, including those of customers or partners. When considering a major internal policy change in an area such as performance evaluations or budgeting, conduct visible pilots and experiments before doing a global rollout. Be transparent in rewarding people who engage in valued practices and in encouraging behavior change in those who don't. One or two high-profile stories can yield a long tail of conversations throughout the company.

Be selective in choosing where to start. Not every unit of a company needs a digital culture. Change is more urgent for units in dynamic environments like sales, marketing, or product development than for more stable areas like finance. Start in the unit or region that makes the most sense. Even if you believe you need to revitalize culture company-wide, as Microsoft and Electrolux do, feel free to pay more attention to some units than to others as you learn what works best in your company. Focusing on quick wins and

high-potential opportunities can build momentum for broader challenges later.

Consider creating a separate unit that can safely experiment with new modes of thinking and acting while staying connected to the rest of the organization. Seeing a new culture successfully take shape in this unit can break down resistance elsewhere in the organization. The digital units in companies as diverse as Nestlé, P&G, and Lloyds Banking Group, for example, started as concentrated sources of talent, tools, and culture to drive digital innovations and then began to diffuse those practices back to the main company.¹⁶

Give people the chance to make an impact. Even if they want to innovate, busy people often feel that they don't have time to do so. Google's 20% rule makes it clear that every employee has the opportunity and the expectation to innovate. But in practice, such policies don't reduce productive time by 15% or 20% but rather add an expectation that people will innovate on top of a full workweek. You can change the situation by providing opportunities for employees to contribute in small ways that have a huge cumulative impact. Innovation contests, hackathons, and recognition go a long way toward cementing the idea that innovation should be routine, not the exception. At DBS, employees were encouraged during normal work hours to identify conditions that make customers or employees wait or to suggest potential ways to reduce wait time, even if they couldn't solve those challenges themselves. At some companies, employees whose innovation suggestions are selected can get a temporary assignment to the team implementing the innovation before returning to their original roles.

Look to IT (where possible). Often, the best examples of rapid experimentation and self-organizing can be found in an unexpected place — the IT unit.

Even if they want to innovate, people often feel that they don't have time. Provide opportunities for employees to contribute in small ways that have a huge cumulative impact.



Shifting culture takes intense effort and sustained attention. It takes constant adjustment to ensure values and practices remain aligned even as the company's competitive demands change.

The best IT units have been experimenting with agile IT, where teams of tech and business people constantly self-organize and experiment to rapidly develop new enterprise software features. Whether they practice agility or not, great IT leaders understand what gets in the way of innovation and speed and have tools to help. They understand the difficulty of working with spaghetti-like legacy systems and can help you fix them.

Not all companies have great IT leaders or agile practices in IT. But if you think your company doesn't, then it's worth looking more closely to test your assumptions. You may find pockets of IT leaders who can help. If they can't, you may need to transform your IT unit and its leadership so that it can support the kinds of change you want to see in your company.

Provide the right tools. It's tough to make data-driven decisions without good data. It's also tough to work with people around the world without the tools that make collaboration easy. For example, your employees need effective ways to download data safely, collaborate smoothly across locations and time zones, examine their customer's journey in detail, or monitor a production process in real time. Make these tools part of everyday work, rather than just another password to remember. Don't set up your employees to fail by asking them to engage in 21st century practices using 20th century tools.

Be transparent about goals and performance. Is your company as transparent as your favorite digital company? Is it as successful? The answer to the first question shapes the answer to the second.

In many organizations, the operations group is more transparent than other divisions. Transparency around output, quality, and safety helps factory workers collaborate to fix problems and raise productivity. Showing real-time performance in IT operations increases uptime and employee engagement. In sales, transparency around individual and team performance helps every salesperson identify what she and her colleagues are doing to meet the unit's goals. In Chinese tech company Luculent, the front doors to many departments have screens showing the unit's real-time key performance indicators and performance to all passersby.¹⁷ Transparency can raise productivity, help teams police themselves, and build greater understanding and trust across units. Nonetheless, it can scare employees if they feel as though they're under constant surveillance. You can begin to overcome this resistance by defining KPIs that are truly meaningful and by clearly using the data for the agreed-upon purposes. But, in the long run, true transparency is possible only with a sustained effort led personally by a company's top leaders that emphasizes the value of performance and innovation while reinforcing trust.

No Silver Bullets

The most important word in *digital transformation* is not *digital*, but *transformation*. Launching technology projects is just the starting point. The ultimate goal is to move from building systems and processes to building capabilities — building a culture where innovation is the norm and where employees constantly seek learning and growth, making the most of the best new technologies and techniques.

The right culture for the digital age matches the speed and innovative nature of digital-native companies while avoiding the locker-room culture that can prevail at some of them. It promotes rapid experimentation with products and business models while staying true to valuable capabilities that help the company thrive.

Culture is a core executive responsibility, but there are no silver bullets. People offering simple answers for culture change don't know what they are talking about. Culture comprises a mutually reinforcing set of values and practices, only some of them conscious. Shifting culture takes intense effort and sustained attention. It takes constant adjustment to ensure values and practices remain aligned even as the company's competitive demands change. It takes continuous performance management at all levels. And it takes the commitment of everyone across the company to live by the culture you want to achieve.

Developing a digital-ready culture does not mean doing away with all that is good in a traditional company's culture. Instead, it's a matter of communicating the desired values and then introducing some new practices while fine-tuning others. You can develop the strengths of digital culture without sacrificing integrity and stability. Digital entrants are fast, but they rarely have the size and entrenched power of traditional companies. Combining a traditional company's assets and competencies with a digital-ready culture can be a winning formula for competing with fast-moving digital entrants in any industry.

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ffective leadership isn't ageless or immutable. Periodically, new technologies overturn established modes and sweep aside executives who don't adapt.

For most of the 20th century, after transformative technologies made it possible to measure the minutiae of human work, leaders concentrated on maximizing productivity and efficiency, many taking a command-and-control approach. But this autocratic style failed disastrously when upstart Japanese companies used newer technologies — focused on quality — to enter Western markets. In the mid-1980s, unwilling to make the organizational and leadership changes required by this shift in competition, American companies went bankrupt at rates not seen since the Great Depression. Those that survived augmented their long-standing functional silos with teams that enabled cross-functional collaboration, while their leaders learned to empower employees to make decisions.

Today, business is being transformed again — this time by digital technologies. They render some elite skills obsolete and widely distribute others; make work more thought-driven than muscle-powered; shed light on unpredictable customer needs that create disproportionate value; reveal information regardless of the merits of concealment; and affect — and are affected by — environmental conditions near and far. They also connect companies and employees by distributing work across geography and over time.

Current and aspiring leaders must respond to this new wave of change in five key ways.

Truly Champion Inclusivity Senior executives are (still) mostly white Western men — and they are the ones who identify and develop their companies' future leaders. Thus, their demographic profile, behaviors, and mindsets are self-reinforcing. People who don't conform — including women, LGBTQ employees, racial minorities, and those from different cultures and nations — get fewer opportunities to rise to senior leadership positions.

It's an anachronistic model. Digital technologies distribute mission-critical work to all kinds of employees from other organizations and distant cultures. They have also accelerated a widespread shift from physical work to knowledge work. This means if talented people feel estranged from their leaders, they can withhold intellectual contributions and even walk away.

I've surveyed 700 midtier to senior executives, mainly from multinational organizations, and conducted formal and informal interviews with top leaders and high-potential employees at select U.S., European, and Asian companies. My research suggests that leaders across the world are failing to motivate people who don't resemble them, ascribe to their traditions, or work in similar settings. To do better, leaders must shed their myopic leadership standards.

You can begin immediately by reassessing your language of leadership. What your culture considers essential for leaders others may consider irrelevant or

even undesirable. For example, the quintessentially male Anglo-Saxon attribute of "decisiveness" discounts the deliberative decision-making many others practice. All executives everywhere must be effective, but must they *really* be decisive?

Quickly Acquire Broad Knowledge For much of the last century, executives gradually broadened their narrow domains of expertise while climbing the many rungs to the top. Quality technologies reduced the number of rungs, but crossfunctional teams created alternate opportunities to learn. Whether advancement was vertical or latticed, extraordinarily difficult, usually serendipitous, challenges — "crucibles of leadership" — turned some executives into leaders.¹

By upskilling people and distributing work, digital technologies create many minicrucibles, compressing this development time. My research revealed that executives with far less experience than their predecessors now make consequential decisions. The impact of these decisions can traverse the globe instantaneously, not in days or weeks.

The best-trained armies have learned that narrow expertise doesn't help in such conditions, since, as retired top U.S. Gen. Stanley McChrystal opined, a "problem has a different solution on different days." Instead, as one top executive told me, leaders must "navigate the in-between spaces that experts avoid."

Another added that to prevail in high-stakes minicrucibles, where "noise and extraneous factors [are] far more important than manageable change," they must learn rapidly.

Traditional education and jobs, still driven by the logic of prior technological eras, don't prepare aspiring leaders to do all that. So actively seek ideas that extend or even challenge your worldviews. Volunteer for ill-defined projects with big constraints, indistinct deliverables, and unclear personal incentives. Doing so may expand your options in future unfamiliar situations.

Collaborate More Intensively Traditionally, two relatively independent considerations drove collaboration within and between enterprises. Executives first identified external or internal business partners that possessed capabilities to support a defined strategy. They then used clear goals, charters, processes, work cultures, and in-person interactions to drive team-level collaboration between the businesses or units.

Digital technologies have scrambled that logic: Team-level collaborations now create new intellectual property that can open up unforeseen strategic options. The new challenge, as one CXO interviewee noted, is finding "diamond(s) in the rough. The technology is good enough, not necessarily great, but their people have the will to continue to fully polish it." In short, effective collaboration has become hard, ongoing work.

Complicating matters, collaborating groups are often globally distributed. Relative strangers must overcome asynchronous communications, divergent cultures, conflicting work processes, and other obstacles, usually without the beneficial impact of regular in-person contact. Indeed, most of the executives in my survey belong to teams that aren't colocated, with members who work in other business units, or at other companies, or abroad. And

they don't collaborate well under those conditions.

Executives must therefore embrace the tough challenge of building and continually bolstering collaborators' trust in one another — and in their companies' leadership teams. Ask yourself why strangers should trust you and your vision. What do you do before, at the start of, and during collaborative efforts to earn their trust? What do your digital bread-crumb trails convey about you before digital technologies connect you directly with others? Being trustworthy has a much bigger impact on collaborative success than making repeated, imprecise commitments to seeking win-win solutions.

4 Push Beyond Productivity and Nurture Creativity In pre-digital times, leaders focused largely on increasing revenues, reducing costs, and boosting return on investment. Those things still matter, but here, too, digital technologies are enabling change.

Creative thinking is increasingly important; satisfying *unpredicted* market needs generates disproportionate value. A 2010 IBM survey suggested that CEOs understood this: They ranked creativity as the top requirement for leaders.³ Indeed, "good work" now takes the form of new ideas, concepts, and models.

However, my survey revealed that executives pay inconsistent attention to the increased thought content of their work. They also don't adequately foster creativity and learning in others.

Perhaps their lived reality drives them: Research shows creative people are still *less* likely to become leaders.⁴ And although people espouse creativity, favoring practicality reduces the ability to recognize creative ideas.⁵

If you don't begin leading for creativity, sooner or later you will rightfully be blamed for that. And you can't lead for creativity by seeking uniformity. So stop doing that unless it's indisputably essential.



What your culture considers essential for leaders others may consider irrelevant or undesirable. For example, the male Anglo-Saxon attribute of "decisiveness" discounts the deliberative decision-making many others practice.



After embracing the formidable power of digital technologies, leaders must objectively assess them by answering three key questions: Is it feasible? Is it organizationally valuable? Is it humanly and socially usable?

Voice your own opinions last so others are encouraged to voice theirs. Finally, because modern creativity requires multiple inputs, create a culture of asking for and giving help freely.⁶

5 Become a Guardian of an Awesome Power Businesses are experiencing an epidemic of technology-driven crises. While each crisis may have an idiosyncratic cause, considering them collectively reveals that most are self-inflicted and hence preventable. While some of our best and brightest executives undoubtedly act malignantly, most are decent people who make two types of errors.

First, with a keen focus on disruption by competitors, they often ignore the digitally driven changes in work and organization described here. Second, they make one or more of the following flawed assumptions: that digital technologies always do good, don't err, serve only interests defined by their creators, give humans power over environments, and should replace human actions when possible. When making either error, leaders instigate or exacerbate crises by pursuing unachievable goals and failing to put essential protections in place.

Technophobes don't understand that no human in history has ever stopped any transformative technology. Technophiles chase every new shiny bauble (over half of my survey respondents said their companies primarily focused on technology when pursuing innovation). Neither approach will be fruitful.

After embracing the formidable power of digital technologies, leaders must objectively assess them by answering three key questions: Is it feasible? Is it organizationally valuable? Is it humanly and socially usable? Experts who can speak to this last question may be hard to find. Turn to near-future science fiction instead; it often presents realistic possibilities that may help.

COMPANIES ARE ALREADY starting to reframe their leadership standards. But doing this work will take time, because the new imperatives are not only

individually important but also mutually reinforcing. Collaboration enables organizations to benefit from inclusivity and breadth of expertise. All three enhance creativity, while guardianship helps shape viable goals.

Happily, aspiring leaders needn't sit on their hands while they wait for the leadership zeitgeist to change. Adopting these imperatives today can help prepare you for tomorrow.

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Five Rules for Leading in a Digital World

Times of rapid change call for a new leadership model.

BY DEBORAH ANCONA

or years now, everyone has been talking about VUCA, the U.S. military's acronym for the volatile, uncertain, complex, and ambiguous world we live in. However, we now have VUCA on steroids as we try to keep up with the increasing speed of change in a business environment where the amount of data generated doubles every two years, reflecting a 50-fold growth from 2010 to 2020.

To thrive in this landscape, organizations that have long been siloed and bureaucratic must become nimble and customer-centric, and command-and-control models must give way to distributed leadership.



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However, many leaders fear letting go. They don't want to lose power, which is integral to their identity in an organization. They also worry that chaos will ensue if they loosen the reins. And they tend to shy away from the unfamiliar — they know much more about bureaucracies than about the emerging organizational forms that will take their place.

Such fears often result in inertia. But leaders must evolve quickly or risk extinction.

In a rapidly changing world, people need to know who is leading them — that must be clearly articulated. Those leaders must possess the skills to track an evershifting environment and cultivate those skills in others. They need to create flexible teams that collaborate effectively with both internal and external partners. They must inspire their organizations to solve big problems. And they can't do all this alone — they need to bring in adaptive leaders at all levels, giving them autonomy to innovate but providing guardrails to prevent chaos. In our research at the MIT Leadership Center, my colleagues and I have found that executives and managers who do these five things in particular are best equipped to navigate what lies ahead.

Let's take a closer look at each new rule in the emerging leadership model.

Communicate your leadership signature. When things change, people crave leadership. They seek stability when they fear disorder. They want to feel confident about who is at the helm, steering through treacherous waters. But the romantic

notion of the leader who is there to take control isn't enough to assure them. They need to know your *leadership signature*: who you are as a leader and how you view and approach the job.

Most of us are "incomplete leaders" who excel at certain leadership capabilities and struggle with others.² The key is to understand and communicate your own unique way of leading given your experience, values, strengths, and personality. For example, Steve Jobs was the quintes-

quietly coaching and influencing? Do you encourage experimentation and innovation, or do you nurture areas of core strength? Second, ask people who work with you how they would describe your leadership, or take a 360-degree survey to collect data. Finally, consider the impact you have. Are you changing the culture? Driving results? Once your signature is clearer to you, tell stories and use images and anecdotes to communicate to others who you are.

customers, and experts to understand the issues on people's minds and potential pathways to success. He brought leaders from acquired companies to his management retreat so that everyone could engage in sensemaking about new technologies.

Like Nadella, leaders should think about what additional sensemaking they need to do to keep up with shifting markets, technologies, business models, and workforces.

Most of us excel at certain capabilities and struggle with others. The key is to understand and communicate your own unique way of leading given your experience, values, strengths, and personality.

sential inventor, pushing himself and others at Apple, Pixar, and NeXT to create innovative, sleek designs that wowed customers, even if he bruised people along the way as he strove for perfection. Eileen Fisher, founder of the clothing company by the same name, is a designer who studied the Japanese kimono to try to understand how to make comfortable, stylish women's clothing that will withstand the test of time. She is passionate about that and about promoting sustainability for the planet, and she rallies employees behind both goals to create meaning in her organization. Jobs was a visible leader who promoted himself as well as his products, while Fisher leads more quietly, setting direction and then letting go.

How do you discover your leadership signature? First, think about what you do day to day as a leader. Do you focus more on the tasks or on the people? Are you a visioning leader, visibly out front, or a leader who stays in the background,

Be a sensemaker. In a rapidly changing environment, sensemaking is more important than ever. A term coined by organizational theorist Karl

Weick, sensemaking refers to the process of creating meaning out of the messy world around us. This activity is triggered when something in our environment seems to have changed. We then try to make sense of what has happened by collecting data, learning from others, and looking for patterns to create a new map of what is going on. From there, we experiment with new solutions to learn how the system responds.

Satya Nadella, Microsoft's CEO, has been a sensemaker throughout his career at Microsoft. By changing jobs often, he learned about the overall processes and culture of the company. His curiosity about customers and technologies enabled him to read the changing landscape in which the company found itself. When he became CEO, he met with employees, Build X-teams. When asked what makes for effective team performance, most executives talk about the ideas spouted in team-building courses and written up in bestselling texts: setting clear goals, defining roles, establishing trust, improving interpersonal relations, and so on. But research shows that such guidelines are only half the story. In a fast-paced world where organizations are trying to shed their bureaucratic chains, leaders should also build a new kind of team, X-teams, to foster speed, innovation, and execution.³

These flexible teams don't just collaborate internally; they also link to knowledge, resources, and innovation partners in the outside world. You need them to do external sensemaking, to connect people within and across organizations, and to enable change beyond bureaucracy. Members of X-teams serve as organizational ambassadors to scout for talent and resources, align team activities with strategic goals, and coordinate tasks. By bringing people together for certain tasks - and switching people around from time to time they create a dynamic structure that can respond to new problems and opportunities that arise.

Organizations have created hundreds of X-teams around the world — teams that are bringing needed medications to Africa, finding new ways to test

Five Rules for Leading in a Digital World (Continued from page 9)

technologies, and creating a closer connection between customers and companies developing future products and services. The next time you assemble a team, think about what kinds of bridges you can build to facilitate innovation.

Replace toxic tendencies

with challenge-driven leadership. Toxic leaders are becoming increasingly common. You know who they are. They denigrate subordinates and have a reputation for being hypercritical. They can be aggressive, immoral, and insensitive. They hoard information, blame others, and promote themselves. Over time, other people and teams in their organizations begin adopting these same behaviors, which erode trust and reduce effectiveness.

Toxic leadership often stems from the dark triad of personality.⁴ Leaders who exhibit narcissism feel they are better and more deserving than others. They seek attention and are aggressive if threatened. Those who exhibit Machiavellianism do whatever it takes to hold on to power, build alliances, and keep secrets. Those who show psychopathy are callous, with no empathy or impulse control. Not all toxic leaders possess the whole triad, but I'm sure you've met enough to know how damaging even one or two of these qualities can be.

Toxic leadership can achieve results (higher productivity, say, or greater efficiency) in the short term. But over time, performance deteriorates as people start to realize how they have been manipulated and seek ways to cope with the negativity. Unfortunately, when things get tough, even leaders with the best intentions may slide into a more domineering or self-centered approach. The good news is that with self-awareness and some feedback, leaders can shed these tendencies and move toward

challenge-driven leadership.⁵ Instead of saying, "I'm great; follow me," we need leaders to bring people together around challenges to tackle.

NASA brought people together with the audacious goal of getting a man on the moon. Now, leaders are inspiring organizations to take on climate change, dementia, and social alienation, to name a few major problems. They need to think about how they can reframe their work around such challenges and leave their egos at the door.

Build the systems to make all this possible. Successful leaders in our changing times will need to construct, or "architect," organizations in which the above steps can take place. This will involve hiring and developing three types of leaders — those who are entrepreneurial, enabling, or themselves architecting — and giving them room to draw on their signature strengths as they carry out these functions.6

Entrepreneurial leaders are the engine of innovation. They take on the sensemaking needed to discover new products and processes while creating the X-teams to make them a reality. Enabling leaders have a broader perspective, so they can identify similar projects within the company and opportunities for collaboration outside. They coach the entrepreneurial leaders, who may be too junior to know how to bring their ideas through the organization. Architecting leaders cultivate systems, structures, and a culture that will allow people to explore possibilities and make decisions autonomously without veering into chaos. All three types of leaders help people meld bottom-up ideas with strategic priorities before subjecting internal pitches to a tough funneling process. The whole approach leads to better ideas with greater traction. We can see it working effectively at scientific

research company PARC and manufacturing company W.L. Gore & Associates;⁷ and we see it in many organizations that transition from bureaucracies to leadership at all levels.

THIS NEW MODEL of leadership means decoupling authority from formal positions and having everyone take on a strategic mindset. It means just-in-time structures and resources and a belief in collective intelligence. Leaders may find it tough to embrace the five rules, but doing so will allow them to unleash the talent of many in service of strategic innovation and organizational resilience.

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