Beyond the digital frontier: Mapping your future

Digital transformation demystified

DIGITAL TRANSFORMATION HAS BECOME A RALLYING CRY FOR business and technology strategists. To those charged with mapping the future, it promises a triumphant response to the pressures and potential of disruptive change. Yet all too often, companies anchor their approach on a specific technology advance. To fuel impactful digital transformation, leading organisations combine technology with other catalysts of new opportunities—from emerging ecosystems to human-centered design and the future of work. Why? Because the technology trends that inspire digital transformation efforts don't take place in a vacuum. They cross-pollinate with emerging trends in the physical and social sciences and in business to deliver unexpected outcomes. Developing a systematic approach for identifying and harnessing opportunities born of the intersections of technology, science, and business is an essential first step in demystifying digital transformation, and making it concrete, achievable, and measurable. It is time to move beyond the frontier of random acts of digital.

Digital technology is now so ubiquitous and affordable that many people are using it with little or no learning curve to create new business models and pursue opportunities that never existed before. Its influence spans industry, geography, cultural, and demographic boundaries. We use digital in our personal lives to entertain ourselves, schedule our days, and stay connected with friends and family. In business, it expands capabilities and disrupts sectors and business models. In broader society, digital is reengineering the way government works—and is redefining cultural norms.

But what exactly is digital? And how does one reconcile its formidable potential with the hyperbole and empty rhetoric often used to describe it? In corporate boardrooms, *digital* has become an umbrella term for any strategy that uses innovations to drive disruption and new opportunities. In IT organisations, CIOs and their teams define it in terms of specific technologies. In this final chapter

Only 1/3 of Deloitte's *2018 global CIO survey* respondents reported having an enterprise digital strategy.

of *Tech Trends 2019*, we will try to unpack this often-misunderstood term—and discuss how using more precise verbiage, adopting disciplined approaches, and making investments with a bounded scope and measurable outcomes can help transform your digital efforts from explorations of shiny emerging technology into long-term strategies that inspire confidence.

Let's start with the word *digital*. Seasoned technology veterans often bristle at the way this term was co-opted in the early 2010s and used as shorthand for emerging channels such as mobile, social, and the evolution of the web. Soon mobile app development, responsive web, social listening, and even cloud were flying the digital flag. Yet savvy organisations realised that this was an artificial construct that obscured digital's real value proposition: the use of emerging technologies to reimagine the entire business.

Today, we refer to the pursuit of that business-critical value proposition as *digital transformation*. Simply put, digital transformation is the process of future-proofing one's organisation. It typically begins with leaders and strategists defining new ambitions—often in the broadest of terms. They frequently cite high-profile examples of how companies used digital innovation to disrupt established markets and business models: Netflix in video rentals; Amazon in bookselling and then mass retail; Airbnb in the hospitality industry. The list goes on. As call-outs in keynote speeches, these examples are useful. But digital transformation can and should be just as concerned with modest and immediate ambitions as it is with broadly reimagining the future. For example, reengineering individual business units and processes, or creating opportunities for specific products and customers can have a more immediate impact on long-term competitiveness. By adopting a strategy of putting smaller, more tightly scoped offerings into the market quickly and successfully, organisations can incrementally achieve an end-state business ambition.

The mistaken belief that digital transformation requires a grand, enterprise-encompassing vision causes a fair amount of consternation among technology leaders, largely because so few organisations have one. In Deloitte's *2018 global CIO survey*, only one-third of the 1,400 executives surveyed reported having an enterprise digital strategy.[1]

What's more, many of those with digital strategies in place have made only minimal progress executing them. Recently, *MIT Sloan Management Review* and Deloitte surveyed 4,300 managers and executives globally to learn more about their digital journeys. Only 30 percent of respondents said their digital transformation journeys were "maturing." The rest described their efforts as being in the "early" or "developing" stages.[2]

But there is hope. By following a more prescriptive approach to shaping their ambitions, organisations can focus their digital efforts with precision while building an engine for bringing digital products and services to market rapidly and at scale. Over time, successfully realised digital ambitions—each with a positive income statement—will grow in number and ultimately make an enterprise-wide impact. This is the secret to the digital success stories we showcase throughout *Tech Trends 2019*, from the investments Walmart is making as it thinks more like a startup,[3] to Maersk's development of a new digital backbone,[4] to Anthem's move to a platform-based AI engine and beyond.[5] It can work just as effectively in organisations of different size and scale, and in different industries, operating across the globe.

Driving catalysts to market

Discussions of digital transformation frequently begin and end with technology. Although emerging technology does play a critical role in transformation strategies, it should not be the center of the universe upon which the entire conversation is anchored. There are other crucial drivers to consider. One common characteristic of the organisations we have spotlighted in this report is their ability to apply technology advances to their pursuits of new opportunities, whatever those opportunities may be. We've seen Pfizer take this approach with its finance organisation,[6] Cargill with its IT function,[7] and Nationwide with its marketing mission.[8]

In the context of digital transformation, we describe technology advances that companies use to turbocharge their pursuits of new opportunities. Like their chemical counterparts, these technology catalysts can amplify and accelerate reactions without being consumed by them. The following seven digital transformation catalysts warrant exploration:

- **Connectivity.** Think of the ecosystems, competition, and new market dynamics that could develop among established and emerging players. Explore concepts of *borderless* and *boundaryless*—how new combinations of evolving actors across industry, sector, government agencies, functions, departments, and market segments could create value through sophisticated models of collaboration and competition.
- **Experience innovation**. This powerful catalyst involves taking a human-centered approach to designing and reimagining experiences across touchpoints with all key stakeholders, including customers, citizens, employees, business partners, prospects, recruits, and ecosystem players.
- **Cybersecurity.** How can modern approaches to security and privacy advance your pursuits of new opportunities? The cybersecurity catalyst becomes even more relevant as you develop new assets, repurpose legacy assets, and expand trust zones. New approaches to cyber include protecting potentially valuable intellectual property and customer and employee information, putting in place mechanisms for vigilance to detect threats and changes to risk profiles, and deploying resilient responses in case of incidents.
- **Risk.** This catalyst focuses on understanding, navigating, and potentially shaping external regulations and evolving statutes. It also involves exploring scenario planning and evolving strategic responses to operational and financial risk, geopolitical stability, and macroeconomic forces. Increasingly, risk approaches also take into account potential ethical and social ramifications of investment and innovation priorities.
- **Real-time data intelligence.** Strategy-focused organisations now consider data an elemental value driver in the new world order. Harnessed as a digital catalyst, it can provide a competitive edge to organisations that can analyse divergent data sources and streams in real time, and disseminate critical insights seamlessly within and across organisational boundaries.
- **Automation.** As the traditional workplace boundaries between human workers and machines blur, organisations should reevaluate which jobs and skills they will need in their digitally transformed operations. They should also determine whether there are alternative ways to achieve desired outcomes. Increasingly, automation is becoming one of the main alternative levers that organisations can use to achieve those outcomes while at the same time modernising their operations and fundamentally transforming how work gets done.
- **Game-changing technology.** In a way, this last catalyst is the spiritual home for everything we discuss in *Tech Trends 2019*. As you create a road map for using game-changing digital technologies to transform your enterprise, use the opportunity to eliminate the divides that have long existed between information technology, operational technology, and product technology. Together, these three areas comprise the game-changing technologies that serve as your organisation's digital backbone.

Technology horizons

As this is a report on technology trends, let's double-click on the *game-changing technologies* catalyst. Digital transformation strategies should extend across time horizons, taking into account today's possibilities, those coming soon, and those that may emerge farther down the road. *Tech Trends* has always focused on a sweet spot that we call "horizon 1.5": the technologies and opportunities that we expect to mature in the next 18 to 24 months. These innovations are undoubtedly important, but without the proper context they can look like a parade of shiny objects. In chapter 1, we provide some of that needed context with our discussion of fundamental technology forces past, present, and future.[9] The foundational role these macro forces play in digital transformation is important, but it is only part of the contextual story. Another part is the advancements taking place now in research, science, and applied technology. We don't know when these efforts will bear fruit, but it's safe to assume that when they do, the impact could be profound.

There's a clear need for a unified view of the landscape of potential technologies, organised by both the macro forces described in chapter 1 and by their relative horizons of influence. The construct in figure 1 is neither exhaustive nor gospel truth, especially since the timing can vary widely by use case and scenario. But it does convey our confidence that in a world of seemingly infinite unknowns, it is possible to focus attention on a meaningful collection of known technologies and catalysts that, taken together, can help you shape your ambitions, focus your investments, and chart a path to tomorrow. While the trends, technologies, and catalysts listed do not form a definitive recipe for success, it's key that they—like the macro forces and trends discussed in this report—are important and *knowable*. Looking beyond the digital frontier involves thinking more broadly, both in the present and in the future, to give yourself an advantage that you do not have today.

Playbook for reinvention

The stage has been set. The directive is clear. Now what? Leading organisations are adopting a repeatable, disciplined approach to make digital transformation real. Importantly, their goal is not about creating glorified proofs of concepts or spinning up random acts of incremental digital to substitute activity with progress. Indeed, they are working to inspire new opportunities and launch offerings into the market rapidly, successively, and at scale. Along the way, they will be laying the foundation they will need to *imagine, deliver,* and *run* the future.

- **Imagine.** The first step is getting the right focus, quickly setting ambitions, and charting a path to success with a deliverables road map. This process involves sensing, scanning, and scouting the market to uncover trends and establish the initial hypothesis of potentially untapped or trapped value. That value can exist anywhere along the scale of use, from improving the *way* you do business, to completely rethinking the businesses you are in. Linking value to offerings that are used in the market is a key next step. Iterations are measured in days, putting in place a new cadence for "enterprise agility," and helping set the pace for a new way of working. User journeys, customer stories, and moment maps bring to life new ideas, along with immersive labs to showcase the potential of new technologies and techniques. The road map should light up relevant in-flight initiatives, allowing disjointed, disparate pilots to be shown as part of one unified ambition that the entire enterprise will share. Importantly, as you imagine the digital transformation path ahead, you should also consider the impact new ambitions, technologies, and offerings may have on your current and future talent models (see sidebar, "Group loops and the future of work.")
- **Deliver.** The next step requires getting the concept right—and putting your ambition in

motion by moving from early ideas to fully tested, refined, and validated offerings rolled out to live concerns in the market or the enterprise. Customer and employee ethnographic research can help shape the effort, as can a consistent approach to distilling ideas into the products and services, and the enabling capabilities required. There are two other components that are essential at this stage: a digital foundry for agile delivery of new technology and product teams focused on preparing existing core systems, data, interfaces, and operations for the reimagined offerings.

- **Run.** Some digital initiatives overlook one of the most important aspects of digital transformation: how to scale and then support fledgling ideas and innovative new offerings. As we examine in the *NoOps in a serverless world* chapter, designing autonomics and platform architectural principles into new solutions is a good first step.[10] But to consistently achieve scalability, it is important to establish common standards for product scalability and support across all dimensions of a digital transformation effort. This can help all teams align on a common terminology approach, whether they are focused on marketing, end-user support, release planning, or developing mechanisms to measure value and return. Keep in mind, however, that as your organisation's road map expands and you stand up additional teams, you should continue to enforce common standards and approaches in order to maintain architectural and platform integrity across agile design and development efforts, and in all platform dependencies.

The key is to iterate rapidly through these facets to get offerings into the market as quickly as possible. As the road map expands, more of the technology portfolio can adopt the *imagine-deliver-run* construct, leading to a broader footprint across the organisation and a corresponding shift in cultural dynamics. Remember, your goal should not be simply exploring or transactionally doing but, rather, embracing and embedding the digital mindset into business, operating, and customer models.

GROUP LOOPS AND THE FUTURE OF WORK

Any discussion of digital transformation's role in your company's future inevitably turns to its impact on human workers and legacy talent models. What role, if any, can humans play in a world of robotics, artificial intelligence, and machine learning? As it turns out, the roles that individuals *and groups* will play as their companies move beyond the digital frontier will likely be as important as ever.

As examined in a recent ***Deloitte Review article*** on human-cognitive collaboration, companies increasingly recognise that cognitive technologies are most effective when they *complement* humans, not replace them.[11] Manufacturers such as Airbus and Nissan are finding ways to use collaborative robots, or "co-bots," that work side by side with workers in factories.[12] Amazon now has 100,000 robots in operation,[13] which has shortened training for holiday workers to less than two days.[14]

Moreover, there is a growing recognition that some cognitive tools require human oversight. The need for human involvement complicates the widely held view that AI, for example, will automate everything. If anything, humans and their innate skills seem to be growing *more* important as the need to devise, implement, and validate AI solutions becomes widespread. Indeed, despite the recent surge of interest in AI, automation, and robotics, respondents to Deloitte's ***2018 Global Human Capital Trends survey*** predict tremendous future demand for human skills such as complex problem-solving (63 percent), cognitive abilities (55 percent), social skills (52 percent), and process skills (54 percent). While 65 percent also predict strong demand for technical skills, research shows that the technical skills to create, install, and maintain machines account for only a small fraction of the workforce.[15]

Understanding the unique capabilities that machines and humans bring to different types of work and tasks will be critical as the focus moves from automation to the redesign of work. Leading organisations are working hard to put humans in the loop: rethinking work architecture, retraining people, and rearranging the organisation to leverage technology to transform business. The broader aim is not just to eliminate routine tasks and cut costs but to create value for customers and meaningful work for people.

And not just individuals. In a recent interview in *Deloitte Review*, Thomas W. Malone, founding director of the MIT Center for Collective Intelligence, says that the idea of putting "humans in the loop" typically assumes that computers will be doing most of the work, which is not the most useful way to approach the issue. Humans working together in groups—for example, companies, armies, or families—are responsible for the greatest achievements in history. "So rather than start with the 'human-in-the-loop' concept of one person, one computer," says Professor Malone, "let's start with the human groups we've used to accomplish almost everything and add computers into those groups. When we do that, computers can use their specialised intelligence to do the things they do better than people; and people can use their general intelligence to do everything else. In other words, we need to move from thinking about 'humans in the loop' to 'computers in the group.'"[16]

OPPORTUNITY ON THE HORIZON

LET'S EXPLORE HOW TWO BUSINESS TRENDS CAN BE REALISED THROUGH A COMBINATION OF TECHNOLOGIES AND MACRO FORCES.

ADVISER APPS AND THE FUTURE OF MOBILITY

Today, ride-hailing companies act as network orchestrators, connecting people requiring a service with those offering that service. Yet in the near future, applications that aggregate and analyse transportation information from a broad array of service providers will likely advise individuals about their options for moving from point A to point B. For example, a mobility-advisor app might coordinate ridesharing among friends, neighbors, or those connected through social media. Or it could provide integrated location, pricing, and scheduling functionality for car-, bicycle-, and scooter-sharing services, or public transport.

These and a host of other possibilities offer a preview of what the future holds for mobility—and the role digital transformation will play in that future. As more organisations begin to set up digital mobility infrastructure, develop and test autonomous technologies, and reengineer the in-vehicle experience, it appears likely that an integrator will emerge to connect autonomous vehicles and other modes of transit to the end consumer.[17] In the near future, fully realised *mobility adviser applications* may be able to deliver a seamless intermodal transportation experience, providing easy access, exemplary in-transit experience, a smooth payment process, and overall customer satisfaction. These adviser apps could take into consideration customer preference, traffic data, and other circumstances to arrive at the most convenient and cost-effective mobility plan—whether that entails a shared car, a train, a bike, or a combination of them.

There will likely be both customer-facing and asset-owning dimensions to mobility management. And while the two roles are distinct, in practice a company could fill both of them simultaneously. The mobility adviser directly interfaces with the customer, who will expect a customised experience that relies on the adviser app's ability to execute trip planning, adjust routes to allow for traffic and disruptions, and handle payments. A variety of technology companies that collect consumer business data (for example, venue information and activity information) could work with the mobility management companies and end-consumer businesses to enhance the user's experience. Social networks may further enhance the user experience by suggesting consumer preferences to shape the journey. And navigation providers will look to optimise routes using prime data from environment and weather companies.

For companies working in the current horizon to deliver the future of mobility, that means developing:

- **Mobility data collection.** This enables tailored route suggestions, including the ability to store and access vast amounts of information safely and reliably. Sensors can collect information on everything from intersection status and traffic jams to travel time measurement and CO_2 emissions. Value to the user will likely come through the integration of this information into smarter route suggestions.
- **Predictive analytics.** This technique can be used to match user preferences with travel recommendations. Mining vast quantities of real-time data on the environment as well as user habits will help orchestrate a seamless flow across the ecosystem.
- **User control.** This includes design and deployment of intuitive customer interfaces, although

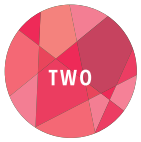
the proliferation of apps may find this capability dispersed among the users themselves.

- **Automated procurement, vehicle tracking, and smart routing/scheduling.** This can help fleet operators deploy a range of vehicles to match user preferences, manage vehicle upkeep and storage, and autonomously match supply to demand.[18]

These and other *future of mobility* technologies will be grounded in many of the catalysts that drive digital transformation. For example, mobility adviser applications will create networks of transportation resources whose real-time interactions are made possible through advanced connectivity. Real-time data intelligence gleaned from divergent data sources will act as the lifeblood of mobility systems. And, of course, new approaches to cybersecurity will be critical as user data volumes grow dramatically and mobility networks redraw the boundaries of vendor and user trust zones. Experience innovations will offer highly personalised user interfaces and interactive digital capabilities that meet and anticipate unique user expectations. For example, your mobility adviser should be able to offer tailored route recommendations based on your travel history, current conditions (traffic, weather), time of day, and pricing preferences. Working with retailers, they could suggest stops along the way based on your preferences and offer targeted ads and coupons ("Your favorite coffee shop is just a three-minute detour away. Here's a coupon for $1 off. Would you like to stop?").

In the two-to-five-year time horizon, edge computing could be crucial for matching real-time supply (buses, rideshare vehicles, bikes) with demand (consumers). To the extent that mobility advisers can gather data and perform predictive analytics closer to the source, they may be able to provide a superior service (faster response times to consumers) and more efficiently manage the overall network. Facial recognition and biometrics could enable seamless ticketing across different modes of transportation, as well as access to shared driverless vehicles. Finally, smart contracts could be used to maintain multiparty relationships with the various mobility providers on the adviser's platform (rail operators, e-scooter services, ride-hailing providers, etc.), establishing the terms and conditions of participation and payment.[19]

CARE TRAFFIC CONTROL AND THE FUTURE OF HEALTH



The health care industry exemplifies how future-focused organisations can move beyond the frontier of technology hype by deploying disciplined digital transformation strategies.

The challenges and annoyances that many patients face as they seek medical care seem all too familiar. Long waits for appointments, frustrating registration procedures, gaps in care, unclear post-visit treatment plans—these and similar inefficiencies often conspire to make patient journeys feel like obstacle courses. Among numerous operational challenges fueling these inefficiencies is managing the volume of human and material resources required to provide effective patient care. Because actionable statistics on how these resources are deployed are often scarce in hospitals, clinics, and physicians' offices, improving utilisation, shortening turnarounds, and lessening caregiver downtime can be daunting tasks.

The good news: The health care sector is poised to embark on a far-reaching digital transformation journey that could help providers reduce chronic operational inefficiencies and optimise the use of expensive resources. In one approach that is gaining traction with some providers, a care traffic control (CTC) platform uses cognitive analytics to monitor operational and performance data in real

time, predict risks, and recommend turnarounds. For example, it can predict congestion and make recommendations to certain front-line clinicians to prioritise discharges.

The CTC platform, which replicates best processes used in hotels and airlines to increase capacity and reduce variability, monitors data continuously to optimise the flow and utilisation of resources. Importantly, the CTC system can coordinate moving parts to reduce operational variability before, during, and after patient visits.

- **Before the visit.** In some instances, physicians will be available to provide patient care remotely using telemedicine systems, eliminating the need for some patients to visit hospitals.

  Patients will be able to fill out short algorithmic questionnaires, helping clinicians proactively address concerns and determine whether a patient needs to schedule a visit with a physician. Nurses can then interpret results and triage accordingly. If a patient needs to come in, the clinician has more information available, reducing the amount of time needed for the visit.

  Meanwhile, some patients—particularly those requiring door-to-door assistance, wheelchair-accessible vehicles, and stretcher rides—may miss medical appointments because of transportation issues. With a CTC system, these rides, whether on-demand or scheduled, can be efficiently coordinated and integrated into workflows—for example, authorisation, care coordination, and billing.
- **During the visit.** Once a patient is registered, a sensor-driven experiential wayfinding application on her mobile phone guides her from registration, to exam rooms, to labs and pharmacies, then back to her car. Along the way, the hospital might also use the patient's location within the care facility to initiate key operations. For example, when the system detects that a patient has entered the parking lot, it alerts the pharmacy to prepare an infusion kit, reducing clinician downtime and patient waiting time.

  Some patients may be at risk for exceeding their expected length of stay simply because they have not received the proper ancillaries, such as blood work or imaging. A care traffic control system can nudge clinicians and administrators via text or some other modality to prioritise ancillaries for patients scheduled to be discharged soon.

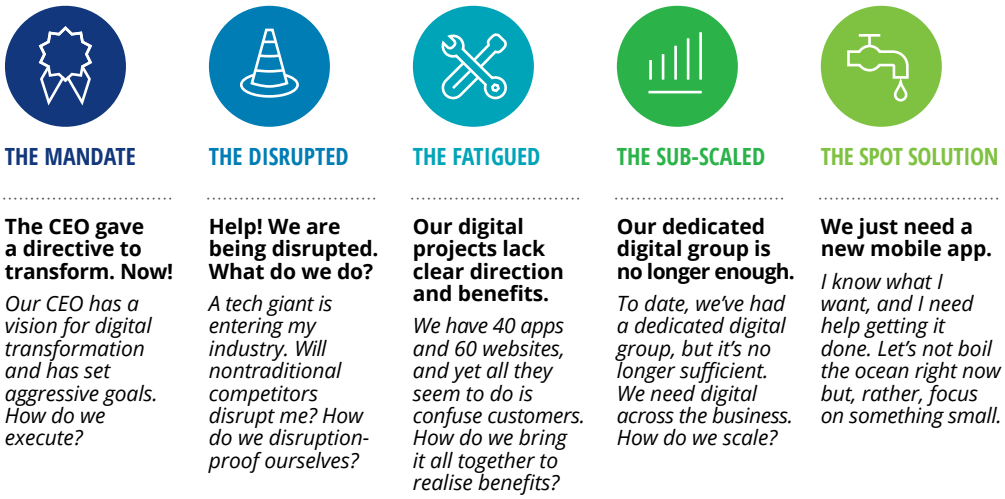
  During flu season, hospital emergency departments can quickly become overwhelmed by patients seeking treatment. Advanced analytics that leverage third-party data sources such as public health data or online searches can help predict surges in flu cases and accelerate discharges or transfers of noncritical patients from emergency care to accommodate a surge.
- **After the visit.** Positive outcomes often depend on patient adherence to treatment plans. Yet some treatment regimens can be complex and difficult to follow. In the near future, clinicians may use prescriptive analytics to analyse each patient's individual risk propensities—for example, medical history or social determinants—to determine whether that individual might struggle to follow post-discharge treatment plans. For those who are at risk, clinicians will be able to monitor patients more closely, personalise some treatment regimens to mitigate risk, or intervene as needed. A number of technologies might come into play here. Care-plan navigation tools might alert caregivers if a patient misses a treatment step. These tools range from mobile applications that guide patients through their regimens to chatbots that follow up with patients to identify why they missed the step, and offer guidance on how to get the treatment plan back on course.[20]

ARE YOU READY?

Clearly, there is a need to move faster, be bolder, and to elevate the concept of *digital* from empty wisdom to actual investments. Yet despite this strategic urgency, digital transformation efforts can lose momentum for any number of reasons. Many organisations don't feel confident they can execute against the digital agendas they develop. In the MIT/Deloitte survey, respondents cited risk aversion, ambiguity brought on by constant change, and buying the right technologies as among the biggest challenges affecting their companies' ability to compete in a digital environment.[21]

FIGURE 2

How do you feel about it?



Source: Deloitte analysis.

What does it take to succeed? Certain behaviours, attitudes, and actions can make the difference between a successful transformation and another shelved initiative:

- **Think exponential.** Set bold goals, and then work steadily to achieve them. Along the way, if you fail, fail fast and maintain your momentum. Eventually, bold goals become even bolder achievements.
- **Create agile execution.** Learn to develop and try ideas in short iterative sprints with empowered teams. Treat digital initiatives like R&D. *Agile* means more than a software delivery method—embrace enterprise agility in its fullest form.
- **Acquire capabilities to catalyse the culture.** M&A, partnerships, co-investment techniques, and creative hiring of edge teams can introduce new sparks of ideas and stem cells for needed expertise, especially in areas such as design thinking, creative skill sets, and emerging technology.

- **Protect the people.** Ring-fence digital teams from layers of bureaucracy, policies, or other compromises not found in a startup culture.
- **Build an inspiring environment.** Developing ideas that will fundamentally change your business is hard in a cubicle farm or windowless meeting room. A dedicated space that is flexible, open, and encourages collaboration helps bring out the best in your people.
- **Put the customer first.** Don't compromise on the customer experience. Make customer value and delighting the customer the number one priority, even for back- and mid-office-focused initiatives.
- **Stay open to change.** Beware institutional inertia and the status quo. Some of the most steadfast, seemingly immutable aspects of your business may be prime candidates for reinvention. New opportunities require an openness to ways of thinking and doing that can challenge the accepted wisdom of how things "should be done." Encourage all stakeholders to think beyond their silos, channels, and current market perspectives. Broader changes to your organisation, processes, and platforms may be needed for maximum impact.
- **Design creatively.** Design thinking with an emphasis on human-centered experience is the new differentiator in digital and in business. Invest accordingly.
- **Focus on value.** Don't get distracted by digital shiny objects. Focus on revenue, key metrics, and follow the money. Dismiss ideas that digital transformation is beyond measurement and accountability. Embrace ideas that lend themselves to tangible, material, measurable results.
- **Leadership mandate.** Executives should be engaged in the definition, oversight, and communication of a vision and strategy. Moreover, they should empower teams to make decisions, giving them enough autonomy to experiment—and even fail-to-learn when needed.

When it's time to roll up your sleeves, IT and the business should work together to decide what technologies are needed across the enterprise and ecosystem. IT should make sure that technology decisions and innovative thinking can be scaled with minimal risk. Likewise, experienced technology professionals should confirm that the company's core systems can support a new technology before enthusiastic stakeholders enter into a licensing agreement. It's not enough to imagine a new tomorrow. You have to get there from the realities of today.

BOTTOM LINE

Mapping your digital future is no small order. But if you can be deliberate about sensing and evaluating emerging technologies, considering the nontechnology forces unlocking new opportunity, and creating a series of well-defined but aspirational ambitions, you can make the unknown knowable. And this can create the confidence and construct to embrace digital, while setting the stage to move beyond the digital frontier.

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