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TAKE CONTROL OF YOUR DIGITAL FUTURE

By Vanessa Lyon and Anne-Françoise Ruaud

COMPANIES TODAY UNDERSTAND THAT digital transformation is no longer an option. As markets, business models, and customer expectations evolve by the minute, firms face a stark choice: transform or die. But because such transformation can be tremendously hard, many businesses are tempted to use the wrong approach—allowing external vendors to drive the effort.

Yes, outsourcing can help you access new capabilities and tools. But a digital transformation isn't something a company simply can plug in. Firms that look at transformation purely from a technical perspective struggle to achieve the speed, scale, and scope that a full-blown, fully effective digital overhaul requires. Too often, initiatives fizzle after the pilot stage. New digital applications aren't used as expected—or at all. Productivity gains that seemed certain at the outset never materialize.

Successful transformation is as much about people and processes as it is about technologies. That's why businesses must take a

comprehensive and systemic approach that focuses on all three dimensions simultaneously. The best way to do this is from the inside. An external vendor may know a technology but won't likely understand how a business, not to mention its culture, works at the deepest level. Without a rich internal perspective, companies can't easily achieve the kind of fast, at-scale transformation that provides a competitive advantage. Businesses need applications that are “just right” for users; the ability to extract value from data throughout the organization; and processes and organizational structures that fit with new technologies—and vice versa.

Instead of outsourcing their digital transformation—and in turn the fate of the business—companies need to develop the capabilities that let them take full control of it. Our work with companies across a range of industries revealed five key things they must master to unlock the full potential of their digital future. It also shed new light on why some businesses stumble at the threshold.

Escaping the Complexity Trap

Surprisingly, productivity growth has generally not kept pace with the growth in IT spending. This despite the fact that technological progress has been shown as a key driver of productivity growth—a finding that won economist Robert Solow the Nobel Prize in 1987. Yet the computer age has—so far, at least—seemed to contradict Solow’s theory.

Experts continue to debate what causes this “productivity paradox” and whether it is temporary or permanent. But one idea is particularly compelling: while companies have made massive investments in technology, they haven’t focused on true integration—that is, integrating tools with the way people actually work. As a result, companies regularly fall into what’s known as the complexity trap. They deploy sophisticated tools and platforms that they ultimately don’t use effectively or simply avoid in favor of more informal “shadow” processes. This, in turn, leads to overly complicated information systems or to organizations that adapt poorly to the new tools. Either way, expected productivity gains fail to materialize, and in the most severe cases, entire systems—and investments—are abandoned.

Fortunately, digital technologies and methods are supremely flexible. They enable businesses, end users, and IT departments to work interactively to design applications and user journeys that are “just right,” and to adapt processes accordingly. In short, the transformations that emerge from the digital era itself may well spell the end of the complexity trap.

In our work across many industries, we’ve seen companies unlock significant value from digital, with massive impact in terms of margin improvement, revenue growth, and employee engagement. While these businesses are quite dissimilar, they all have taken a holistic approach to transformation, tackling the three key dimensions—people, process, and technology—simultaneously. (See the sidebar.) These companies deploy new technologies, user interfaces, and data architectures in a way that reflects how people work. At the

same time, they adapt their existing processes and organizational structures to unleash the full potential of new tools and platforms.

Consider one leading industrial conglomerate we worked with whose CEO understood that to stay competitive, industrial firms would need to transform into software and analytics companies. By leveraging data—whether about customers or equipment on the factory floor—companies could quickly identify and respond to patterns that revealed opportunities and trouble spots. To spur such a change, the CEO transformed his large, established company into one that thought—and worked—like a startup. It adopted an agile culture that stressed experimentation, learning, and iterating. It created several digital “centers” to foster deeper collaboration among software engineers, digital specialists, and industry experts. It brought all of its digital capabilities, tools, and data into a single organization.

Significantly, the company did not simply deploy new technology. It factored in how people worked—and identified changes in processes and organizational structure that could help them work better, be more productive, and, ultimately, create more value in a digital world. Together these moves helped the business develop new, successful digital offerings. Thanks to this approach, within five years the company’s digital offerings accounted for 15% of the company’s revenue—up from less than 5% before the start of the transformation.

So how, exactly, can your company ensure that kind of success?

Five Things Companies Need To Do Well

By developing five capabilities internally, your business can achieve a true digital transformation—one that occurs at a speed, scale, and scope that bring real competitive advantage. Granted, our list might feel intimidating to even the strongest management team. In fact, COOs we’ve met question how feasible such changes

A SYSTEMIC APPROACH TO UNLOCKING DIGITAL'S POTENTIAL

Most companies today view digital as a pathway to growth. But spotting the road is one thing; propelling along it is quite another. Many businesses struggle to unleash the value of digital, yet others have met—and even exceeded—their expectations. How did they do it? Here are some insights from three different success stories.

The Consumer Goods Company. In its massive trove of customer and business data, a consumer goods company saw potential value—and plenty of it. But unlocking that value would require significant digital capabilities. Not only did the company require a new digital architecture to more efficiently and effectively use data, it also needed a carefully thought-out plan for integrating its people and processes. The company looked into training and data access rights as well as the kind of impact that data could—and should—have on decision making. In the end, the company's systemic approach enabled more than 50,000 employees to access the company's data, increasing usage and spurring new applications for that information. The company also deployed new digital tools and methodologies, such as digital modeling and simulation, and data-driven decision making became the norm. The upshot? Decisions in every aspect of the business—from product development to marketing—are now backed up by data analysis.

The Card Payment Company. A key player in its field, this card payment company saw competitors—traditional rivals as well as internet-based upstarts—utilize digital technologies to launch successful new products. Determined to retain its frontrunner status, the company transformed itself by deploying innovative customer-centric digital capabilities. For example, it employed persona-based use cases and

big data analytics to develop offers more closely tailored for—and more relevant to—specific types of customers. It also deployed a more modern, flexible IT architecture to help launch new business applications. And by embracing new marketing models, as well as partnerships in areas like social media, the company learned to interact with the outside world in ways the world now preferred—while gaining insights that could prove valuable when developing new products. Since launching its digital effort, the company has seen a significant and recurrent top-line impact of hundreds of millions of dollars per year.

The Fast-Moving Consumer Goods Company. A series of pilot programs convinced the leaders of this business that digital technologies could transform its marketing efforts. But the company didn't simply deploy new tools and methods. It also reimagined its operating model and the way its marketing professionals worked and were organized. Replacing a curriculum that had changed little in 40 years, the company offered more than 3,000 of its marketing staff a new coaching and up-skilling program. It also created organizational structures to foster and increase collaboration between business functions and with digital agencies. Since launching its digital initiative, the company has gained better control over its media strategy, but it has also seen more quantifiable results: it doubled its return on investment of digital marketing spend; reduced costs by 30%; increased its audience reach by a factor of four; and achieved a 50% higher engagement level.

actually are. And they're not the only ones with doubts. CIOs might be uncertain about their ability to transform a landscape of older, not easily adaptable legacy systems, especially if the required skills and knowledge are in short supply. And HR heads—who are already fighting tough battles to attract and retain digital talent—may question the efficacy of any “solution” to the recruitment challenge.

The good news is there are ways to help develop each of the five capabilities internally—and unlock the full potential of digital.

STICK TO CLEAR BUSINESS OBJECTIVES, EVEN AS THE DIGITAL ENVIRONMENT EVOLVES

For all the benefits the digital era brings, it also carries uncertainty. Along with continually evolving technologies—through advances in performance and miniaturization—come rapid changes in customer expectations, market standards, and the competitive landscape. Your company might feel challenged, therefore, especially if it's used to developing and launching new products or services in a traditional three- to five-year cycle. You'll still need to meet midterm business objectives, yet an evolving, uncertain environment means you must also maintain tactical flexibility.

The key to acquiring such flexibility is a test-and-refine approach. (See “[The Digital Imperative](#),” BCG article, March 2015.) Product designs—and, ultimately, prototypes—should go through frequent cycles of testing and then incorporating feedback. And the process shouldn't end with a product's release. Instead, continually seek customer reactions to identify potential improvements. In effect, the details—unknown at the outset—are revealed and integrated as you go along.

Companies that do a good job working toward a future that is hard to see share certain traits. They maintain a portfolio of opportunities. They work in an open environment and within an ecosystem of partners—the better to fuel their innovation engine. They look ahead when making choices. They communicate to employees

and partners a clear overall purpose and a framework of priorities and guiding principles. Such communication keeps everyone aligned across the company while enabling flexibility in daily operations. And without fail, they define the criteria for success—and evaluate all business decisions against them.

ACQUIRE DIGITAL SKILLS DESPITE A TALENT SHORTAGE

Not surprisingly, the demand for digital products has created a shortfall of talent—and not only on the technical side, where many new jobs are needed, such as data scientists and developers. Increasingly, business-side roles also are acquiring a digital flavor. Sales representatives, for example, need to learn how to use predictive tools and data analytics to better target customers.

Your company can pull different levers to help bridge the skills gap. It can, for instance, build up its talent base through acquisitions of other businesses, particularly startups. But developing the skills of existing employees will be key. These are your critical assets, the people who know the business best. What's more, businesses that make skills development a priority can reignite the “technical pride” of IT and engineering teams—which smooth the way to digital transformation.

All of this points to the need for companies to renew their social contract with employees, the implicit deal that defines the duties and obligations of both employer and employee. More than previous generations, today's workers seek purpose and autonomy in their jobs. If you can empower and inspire your people, you will bring out their best while reducing attrition.

In a digital world, the role of your managers needs to change too, as digital tools offer teams more autonomy. By acting more like coaches than controllers, managers will help teams adopt new tools and ways of working, while drawing on the wealth of information that is accessible. Moreover, such managers will need to provide employees with regular feedback and promote a culture of experimentation.

SIMPLIFY DECISION MAKING

Most large companies today function, at best, with a one-month decision clock. Committees meet every four weeks or so to make vital decisions about the business. But today's digital-native companies simply make decisions at the moment they need to make them. In such agile environments, teams take ownership of their projects and are empowered to make decisions, which in turn enable companies to move much more quickly, often rolling out solutions within weeks rather than months.

To shift into digital speed, then, look closely at your company's decision-making processes and tackle the bottlenecks. For instance, a global automotive player with whom we worked discovered that monthly meetings and multi-layered processes hampered the company's decision-making agility. So the company streamlined its processes for digital, notably by implementing weekly business-decision committees for every division. It tasked each committee, comprising a senior business lead for digital and his or her IT counterpart, with building a long-term digital portfolio, prioritizing initiatives, keeping project delivery on track, and maximizing end users' adoption. To boost the pace of initiatives, the pair owns the digital budget for the business unit and is empowered to make investment decisions. The result of this new model? A double-digit margin increase for the company.

ACCELERATE THE DELIVERY OF CUSTOMER-FOCUSED APPLICATIONS

Two powerful approaches that your company can use both internally and externally—agile methodologies and human-centered design—align nicely with user needs and preferences. Agile methodologies emphasize speed and flexibility. They include frequent iterations, short timelines, and minimum viable products. They stress continuous testing and feedback cycles, which give developers the ability to implement changes as needed. So if user requirements evolve during development—no rare event in the digital era—products can evolve with them.

Human-centered design, meanwhile, puts the user front and center when companies are creating new products, platforms, and interfaces. Like agile methodologies, such design involves frequent testing and feedback, with designers typically creating numerous prototypes, watching how testers respond, and making tweaks to better align with user behaviors and needs. This approach proves especially useful for companies creating internal digital solutions that employees actually use—and use effectively. Companies that treat employee-users like customers, seeking their feedback on prototypes and pilots and incorporating it into new iterations, wind up with digital solutions that not only work, but *work for employees*.

Consider the experience of an industrial company that sought digital technologies to reduce the amount of time plant supervisors spent walking between their desks and the workshops. Using agile methodologies and human-centered design, developers created an intuitive tablet-based app that provided, in real time, the specific KPIs that supervisors used to manage their teams. With this anywhere, anytime dashboard of metrics, supervisors now spend less time “commuting” and more time on value-generating tasks. Within six months of its initial launch, the company rolled out the app to several hundred users at a number of sites; within a year and a half of the launch, the app will be fully deployed to 3,000 people. Significantly, the company has continually refined the app in response to user feedback.

BUILD ON EXISTING IT SYSTEMS—EVEN THE MOST RIGID ONES

Traditional companies often have to find ways to connect new digital applications to legacy systems that, while crucial for running the business, can be old and complex. Integrating them with new platforms, services, front-ends, or sources of data is rarely seamless. Compounding the challenge, different business units and departments usually have their own systems and associated data. So deploying a slick new application—or leveraging data stored across the company—can become a grueling task.

If your company is pursuing its digital ambitions in a legacy environment, think about adopting a flexible, staged approach. (See “[Generating Value While Transforming Insurers’ Legacy Technology](#),” BCG article, December 2016.) That way you can renovate your company’s legacy IT while boosting its digital quotient for immediate value creation. In a staged approach, you first build the data foundations for a digital transformation; in effect, decoupling data from specific systems and sources and creating a single data layer. Using this data layer, you can then reimagine and automate many processes, improving the customer journey—and experience—while boosting efficiency. Savvy companies will also make use of APIs (application programming interfaces) and modular architecture, which enable you to integrate new front-ends and applications more easily.

It might take you several years, but in the end this process of incrementally renovating your IT landscape can result in a digital-ready environment for your company—with minimal disruption to the business.

TODAY’S DEMAND for digital talent and skills presents businesses with a unique opportunity to mobilize and repurpose workforces to catch the digital wave. Although transformation is never simple, many companies have accumulated vast—and valuable—experience. They know the business and its processes and goals inside out, and this knowledge will serve them well as they implement change.

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