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Digital Doesn't Have to Be *Disruptive*

The best results
can come from
adaptation rather
than reinvention.



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MORLINGHAUS



STRATEGY

No

Near the end of a long lunch overlooking tranquil Lake Geneva, a senior vice president at a leading global company confessed to us: “We have a dozen committees on digital transformation; we have digital transformation initiatives; we are going full steam on digital transformation...but no one can explain to me what it actually means.”

At a very basic level, the answer is simple: The much-used term simply means adapting an organization’s strategy and structure to capture opportunities enabled by digital technology. This is not a new challenge—after all, computers and software have been around for decades and have brought changes both to products and services and to how we make and deliver them. But the point the SVP was making is that it has become increasingly difficult for a company to translate that answer into an action plan. Computers today can fit in your pocket or on your wrist, and the software applications that run on them increasingly enable the automation of tasks traditionally done by humans (such as managing expenses), the virtualization of hardware, and ever more targeted product and service customization. What’s more, these apps can reach people everywhere: Sensors embedded in devices and interfaces permit the real-time feed of data, allowing even more informed decision

making and machine-driven recommendations. In short, digital technology is no longer in the cordoned-off domain of IT; it is being applied to almost every part of a company’s value chain. Thus it’s entirely understandable that managers struggle to grasp what digital transformation actually means for them in terms of which opportunities to pursue and which initiatives to prioritize.

Faced with this reality, it’s not surprising that many managers expect digital transformation to involve a radical disruption of the business, huge new investments in technology, a complete switch from physical to virtual channels, and the acquisition of tech start-ups. To be sure, in some cases such a paradigm shift is involved. But our research and work suggest that for most companies, digital transformation means something very different from outright disruption, in which the old is swept away by the new. Change is involved, and sometimes radical replacements for manufacturing processes, distribution channels, or business models are necessary; but more often than not, transformation means incremental steps to better deliver the core value proposition.

In the following pages we draw on the insights we have gathered—from interviews with more than 60 companies and from the hundreds of senior leaders with whom we have interacted while teaching—to dispel some critical myths about digital transformation and to offer executives a better understanding of how businesses need to respond to the current trends.

MYTH

Digital requires radical disruption of the value proposition.

REALITY

It usually means using digital tools to better serve the known customer need.

SOME MANAGERS BELIEVE that to achieve a digital transformation, they must dramatically alter their company’s value proposition or risk suffering a tidal wave of disruption. As a result, at the start of many digital transformations,



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companies aspire to be like Apple and try to find a new high-tech core product or platform that will serve brand-new customer needs. Although some might succeed, we believe that the customer needs most companies serve will look much the same as before. The challenge is to find the best way to serve those needs using digital tools. As the senior executive of Galeries Lafayette, a high-end French fashion retailer, told us, "This is another modernization. We have been around for more than 100 years, and we have had to undergo other changes in our history, such as the arrival of hypermarkets, shopping malls, specialty chains, fast fashion, brands becoming retailers, and finally e-commerce."

The shipping container company Maersk provides a good example of what this executive meant. The costs of shipping are affected by global trade barriers and inefficiency in international supply chains. The industry also suffers from a lack of transparency. These are familiar challenges. What digital did for Maersk was provide a new way of overcoming them. The company partnered with IBM and government authorities to deploy blockchain technology for fast and secure access to end-to-end supply chain information from a single source. The technology, coupled with an ability to receive real-time sensor data, allows trustworthy cross-organization workflows, lower administrative expenses, and better risk assessments in global shipments. This shift allows Maersk to serve its core customers better. But Maersk has not been transformed into Google. It remains a company whose value proposition is providing a fast, reliable, cost-efficient shipping service—one with the potential to be more streamlined and transparent, thanks to a smart leveraging of digital technology.

Another good example is the Russian airline Aeroflot, which has transformed itself from one of the world's worst airlines into one of the best, with a Net Promoter Score that rose from 44% in 2010 to 72% in 2016 and a passenger load that grew from 64.5% in 2009 to 81.3% in 2016, according to company data. How? The airline used digital technology to significantly improve core activities: operations, reporting, passenger booking, scheduling, and customer care. Specifically, it created dashboards that provide management with an instant overview of more than 450 key performance indicators. The company also aggregates information from sensors installed on the planes, allowing visibility into aircraft performance and preventive maintenance and thereby reducing operating costs. The PR department was even able to lower its headcount, because responding to journalists' inquiries about company data now requires less effort: It's all available on the dashboard. In addition, Aeroflot repurposed the digital architecture created to run the main airline to simultaneously run a low-cost carrier—something few other airlines have succeeded in doing. Once again, nothing has altered the company's *raison d'être*: It remains a passenger airline, selling seats on planes to many different destinations. It's just a more efficient and user-friendly one through the use of digital tools.

This is not to say that disruption doesn't occur. Make no mistake: Things are changing quickly, and companies that do nothing will be either disrupted or at a minimum outcompeted by those that transform using digital tools. But even in the classic industries where disruption strikes hardest, the story is always a little more complicated when you look below the surface. Whether you are disrupted or not always

IDEA IN BRIEF

THE PROBLEM

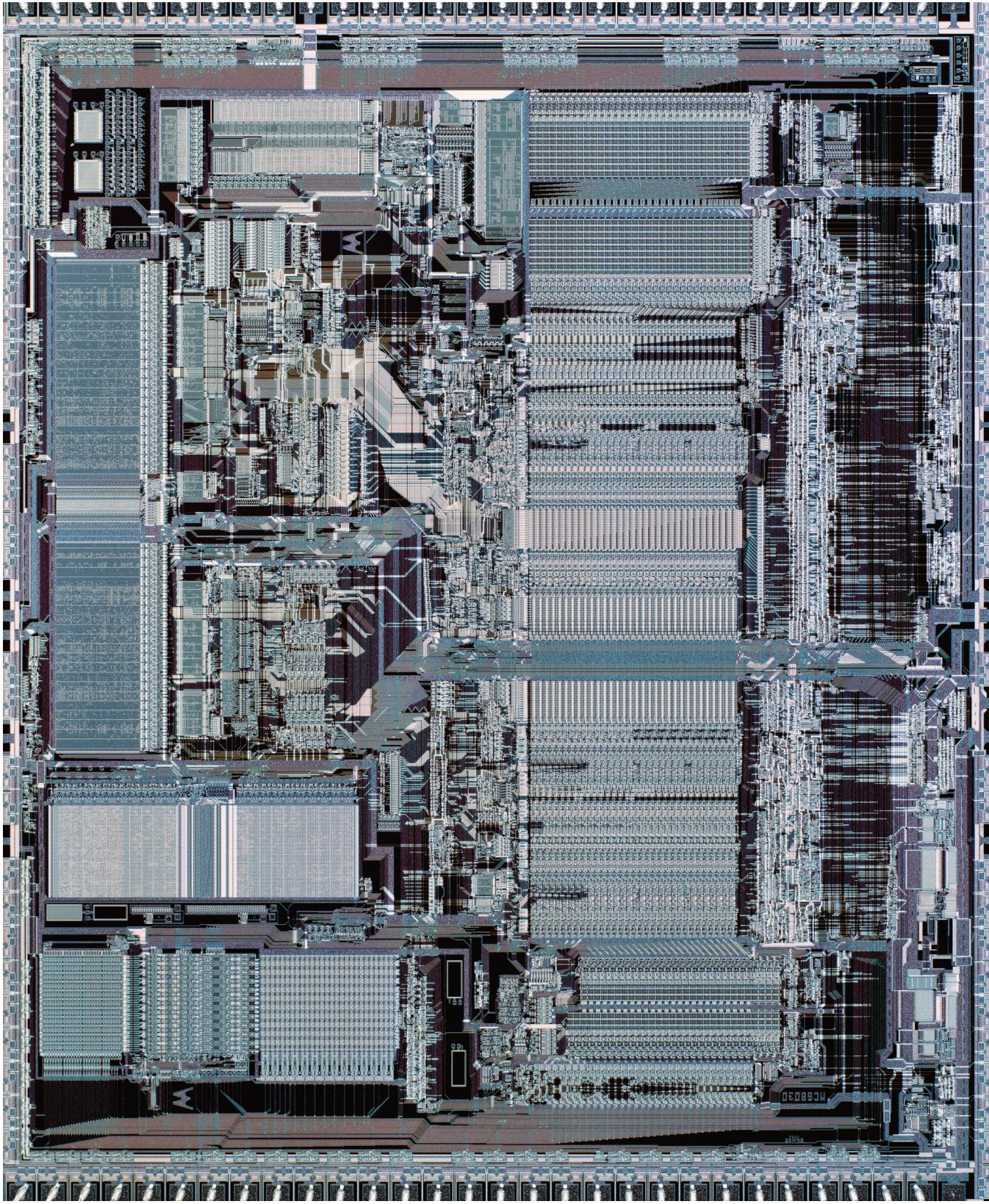
Many managers believe that digital transformation involves a radical disruption of the business, new investments in technology, a complete switch from physical to virtual channels, and the acquisition of tech start-ups.

WHY IT HAPPENS

Digital technology is being applied to almost every part of company value chains, making it difficult for managers to identify priorities.

HOW TO FIX IT

The authors dispel five critical myths about digital transformation and offer executives a better understanding of how to respond to current trends.



ABOUT THE ART

In a series called *Computerwelt*, the photographer Christoph Morlinghaus reveals the hidden microcosms of microprocessors, each of which measures no larger than a grain of rice. The photos make a technology visible that would otherwise go unnoticed.

**STRATEGY**

depends on the job you do for customers. If an incumbent can use digital tools to meet customers' needs better than a disruptive new entrant can, it will still prosper.

Take the taxi business. Uber's impact on taxis is one of the most frequently cited examples of digital disruption. The public remembers taxi drivers' striking around the world—notably including in Paris, our hometown—in the face of what seemed to be an existential threat to their livelihoods. But today taxi companies in Paris are thriving.

G7 is a traditional taxi company founded in 1905. It once had a reputation in Paris, as did many other taxi companies, for its drivers' rudeness. Fast-forward to the present: Like Uber, G7 has developed an app that allows customers to book a taxi. The app offers various service levels: sharing, regular cab, green (hybrid or electric), van, and VIP. You can use the app to hail a car from the curb, or you can jump into one standing at the corner, and you can pay the driver with the app using his or her four-digit code.

But G7 differs from Uber in some important ways: Its drivers are better trained, the cars are cleaner, and you can prebook a ride for exactly the time you want it, instead of in a 15-minute window. More important, although a G7 might be slightly more expensive on average than an Uber, it is vastly less expensive when you most need it: Uber imposes surge pricing, multiplying your fare twofold, threefold, or even eightfold, while G7's prices remain constant. It's clear that Uber's arrival forced traditional taxi companies to improve their service: G7 drivers now take etiquette lessons. But it's hard to argue that the advent of digital necessitated a wholesale reinvention of G7's value proposition.

Likewise, the hotel business has been among the industries most threatened by the rise of digital technologies, first from OTA (over-the-air) players like Expedia, next from platforms like Airbnb, and now from search providers like Google. When we interviewed Marriott's CEO, Arne Sorenson, about the impact of digital technologies, he didn't downplay the threat. "The digital forces are clearly very revolutionary and powerful and can be frightening at times," he said. "We are in an absolute war for who owns the customer."

Sorenson emphasized that technology would be a major factor in winning the war: "We have to make sure we are using technology to be more efficient in our operations, deliver service, and create a great loyalty digital platform,

but also make sure we have a platform that is big enough and delivers value to our customers so that they book directly with us. We are not going to out-Google Google, but we want to make sure we have a community of folks who can relate to us. It must be through a digital platform. But that platform is about engaging our customers." And that is something Marriott has always done. Although it has launched platforms to compete with Airbnb and drive customers directly to its own site, it's also focusing on what it does best—delivering a great hotel and customer experience. Those who have stayed with Marriott or its sister company Starwood know they're unlikely to get the luxurious mattress and bedding these hotels are famous for at a typical Airbnb.

Understanding that digital transformation does not change the reason your business exists will help you identify the technologies you should focus on. Managers who believe that digital disruption requires wholesale reinvention of the core business end up running in a thousand directions. But if the challenge is simply to better address their customers' jobs to be done, they will most likely focus on the technologies that have the greatest effect on their customers (such as customer experience or relationship synergies) or their core capabilities (such as cost synergies). Your company, just like Maersk, Aeroflot, and G7, can probably continue to serve the same core customers even in the digital era. And the needs of those customers won't change—although digital will certainly provide a better way of catering to them.

MYTH

Digital will replace physical.

REALITY

It's a "both/and."

THERE IS NO doubt that digital often enables the elimination of inefficient intermediaries and costly physical infrastructure. But that doesn't mean the physical goes away entirely. In fact, as has been well documented, many retailers are finding ways to create a hybrid of physical and digital that taps into the advantages of each. And it's not just retailers—the same trend can be seen in many other consumer-facing businesses.



In retail, Galeries Lafayette provides a classic example. Despite intense competition from online stores, GL recognizes the importance of physical proximity to the customer, which only a brick-and-mortar store can offer. Both models have advantages: Physical helps build an emotional relationship with customers, while digital (especially AI) helps better understand customers' needs. Whereas in the past companies focused too much on the product and not enough on the customer, hybrid models can put the customer at the center of the business.

To ensure that it builds both an understanding of and an emotional connection with customers, the company is seamlessly blending the physical and digital worlds in its new store on the Champs-Élysées. The store will carry a curated selection of luxury items, and it will be staffed by salespeople hired for their ability to interact with visitors to the store, their expertise in fashion and style, and their facility with social media. These staffers, known as personal shoppers or personal stylists, will establish emotional relationships with their customers, making the physical store an initial customer attraction and touch point. Shoppers can then embark on digitally enabled transactions. The new technology will also help salespeople "remember" customers and their preferences and identify individualized perks that will appeal to them.

GL has already gone partway down this road at its flagship Boulevard Haussmann store, where employees are equipped with tablets. Customers come to the store having obtained—through online searches—a lot more information about some products than the salespeople have. The tablets allow employees to quickly browse the online catalogue and become equally well informed.

Shoppers value a physical store visit because they can see and feel actual products. They can reserve items online and try them out in the store without obligation. Alternatively, they can buy products online and simply pick them up in the store. In either case, salespeople must understand how to act like personal shoppers, and the product and customer data they have enables them to do so.

Many digital-first brands are converging on the same path. Bonobos, for example, which was born pure digital, now uses physical stores to let customers try on clothes. After a purchase the clothes are mailed directly from a

centrally managed inventory. Warby Parker, another digital native, also now uses physical stores to create welcoming customer experiences. Like GL, these retailers are serving needs that digital meets poorly—creating emotional connections and dealing with the challenges of fitting clothing or eyewear—while using technology to leverage data and achieve cost efficiencies.

We're seeing something similar in the energy sector. Several electric utility companies in Europe have effectively combined the advantages of physical and digital in their connected home systems, which contain smart thermostats and a variety of sensors and detectors. Google and Amazon have entered the market for smart home devices, but utilities have the advantage of engineers (or selected contractors) who back the smart thermostats' value proposition—and customers trust those people to do installation, maintenance, and repair. Some of these companies enable preventive maintenance: If a sensor indicates that a heating system is about to break, the customer is alerted through the thermostat and can schedule an engineer's visit in advance. The same alert helps the engineer understand the problem before the visit and arrive with the right equipment to fix it. This seamless integration of physical and digital can significantly reduce visits and parts used while granting the customer peace of mind.

TUI UK, a travel agency, has also turned to a hybrid of physical and digital. Initially it occupied a very precarious place—its industry is broadly viewed as being disrupted. But as it embarked on a digital transformation, the company discovered that although many customers wanted to make their travel plans digitally, they also wanted to interact with people in retail locations, asking questions and becoming comfortable with complex itineraries.

MYTH

Digital involves buying start-ups.

REALITY

It involves protecting start-ups.

OFTEN COMPANIES TRY to access new technologies or ideas by acquiring start-ups and then integrating them. This approach risks killing the start-up's culture and chasing away the talent acquired during its creation. Smart companies prefer to build hybrid relationships with start-ups—strong enough to learn and find synergies but weak enough to avoid destroying the culture. So even though they may own the start-ups, they allow them to operate as semi-independent businesses.



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Avnet, a \$19 billion global technology solutions provider, is a good example. The company made two important digital acquisitions: Hackster.io, a platform that allows makers from around the world to post their ideas for new products (such as sensors to monitor city noise and pollution levels, augmented reality headsets, and baby oxygen monitors), and Dragon Innovation, a start-up that helps companies bridge the gap between made-for-prototype and industrial-scale electronic products. These companies operate as semi-independent entities and interact with Avnet through Dayna Badhorn, its vice president for emerging businesses. Her role is to protect the acquired companies from the inefficiencies—such as excessive planning and slow product development cycles—of the parent organization while helping Avnet learn agility and the importance of doing quick experiments. Hackster and Dragon Innovation call her their guardian angel.

The importance of a guardian angel is underlined by Galeries Lafayette's experience with its start-up accelerator, Lafayette Plug and Play, in which several big traditional retailers, including Richemont, Carrefour, Lagardère Travel, and Kiabi, are partners. Although GL executives spend a lot of time interacting with start-ups in the accelerator, the company struggled at first to translate such interactions into tangible projects inside GL, because no project leader was assigned to follow through. The situation has improved since GL appointed a manager to fill that role. GL does not buy start-ups from the accelerator (to avoid killing their innovative culture), so having someone to permanently liaise with them helps it maintain close relationships with accelerator members and implement the resulting initiatives. The other corporate members have followed suit, and their uptake of collaborations has improved as well.

In each case a guardian angel fights to take advantage of the best of both organizations, not only helping the start-up hold fast to its mission (which is what motivates much of the talent to stay) but also linking it to the mission of the larger organization while protecting the start-up team from all the bureaucracy and reporting that traditionally eat up company time. Meanwhile, the big company can take full advantage of the start-up's ideas, processes, culture, and technology.

MYTH

Digital is about technology.

REALITY

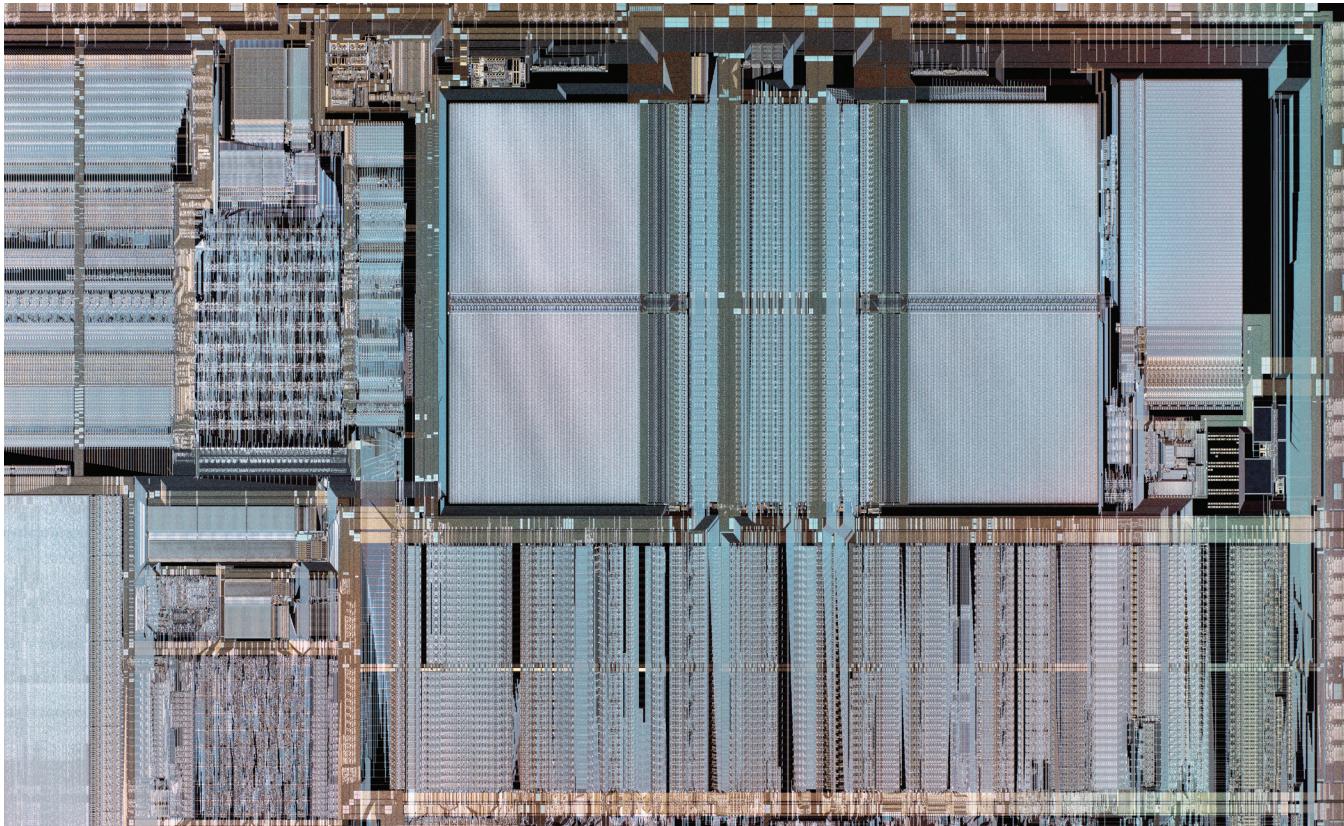
It's about the customer.

MANAGERS OFTEN THINK that digital transformation is primarily about technology change. Of course technology change is involved—but smart companies realize that transformation is ultimately about better serving customer needs, whether through more-effective operations, mass customization, or new offers. Because digital enables—even demands—the connection of formerly siloed activities for this purpose, the company must often reorganize both people and technology.

In practice this may mean changing structure—for example, in situations where a more agile structure is merited, creating internal squads with the capabilities and authority necessary to follow projects from beginning to end. Although a squad is a team, it differs from most big-company teams in being empowered to solve key problems quickly, as an entrepreneur would.

The credit card giant Mastercard has a systematic process for building such squads, overseen by Mastercard Labs. Employees from various functional areas can submit ideas to qualify for three stage awards: Orange Box, Red Box, and Green Box. The Orange Box gives employees a chance to explore their ideas and pitch them. Recipients of this award receive a \$1,000 prepaid card and coaching to develop a presentation about solving a specific customer problem. At the Red Box stage people turn an idea into a concept: The team receives \$25,000 for testing, prototype development, and research and a 90-day guide outlining the steps needed to refine the concept. The Green Box was designed to create a commercialized product from an official incubation project inside the labs. At this stage team members leave their jobs for six months to work on the project.

One major global bank, ING, teaches an important lesson about getting such squads to work in more-traditional organizational structures. It recognized that to assign the right employees to cross-company initiatives, and to keep them from staying too long on an initiative that should be



cut, it needed to support these intrapreneurs in transitioning between roles. It has developed a set of internal processes called PIE: P for *protect*, meaning that employees who leave their jobs to work on a squad project can return to those jobs if the initiative fails; I for *independence*, meaning that squad members have their own resources and can make their own decisions; and E for *encouragement*, meaning that if the squad is successful, its work will be widely celebrated in the company.

Of course, it must also be OK for these squads to fail. Failures, even relatively late ones, should not jeopardize a career. As ING CEO Ralph Hamers explains, “We have to be honest about failures. We also have to be honest about all that we learned in the process and that by using a different approach, we learned these lessons in a fraction of the time it takes competitors.”

There’s a framing aspect as well. As the Norwegian telecom giant Telenor (for which Nathan has done consulting) makes its digital transformation, it has experimented with job definitions. Instead of designating individuals as product owners—people who oversee functions and P&L—it now calls them project *managers*, responsible for designing the customer journey. This shift encourages them to operate like mini-CEOs, externally focused on the customer problem and able to work quickly across internal boundaries to deliver a solution.

Finally, it’s important to recognize that transitioning to squads can be a painful process. In a radical example of such reorganization, ING eliminated divisions and functions and instead embraced an agile organizational structure with squads tasked to deliver improved customer journeys. When it reorganized, over a weekend, all the employees were fired and had to reapply for their jobs, through the lens of the customer need they solved. With the help of these and similar initiatives, ING plans to reduce its head count in the Netherlands and Belgium by 30%–40% over a five-year period. Not all transitions will be so dramatic, but in most cases some friction is inevitable when jobs are redefined.

MYTH

Digital requires overhauling legacy systems.

REALITY

It's more often about incremental bridging.

DIGITAL TRANSFORMATION MAY ultimately require radically altering back-end legacy systems, but starting



Experience suggests that attempts to replace multiple complex, mission-critical systems all at once nearly always end in disaster.



with a sweeping IT overhaul comes with great risks. Smart companies find a way to quickly develop front-end applications while slowly replacing their legacy systems in a modular, agile fashion. This can be achieved by building a middleware interface to connect the front and back ends, or by allowing business units to adopt needed solutions today while IT transforms the back end in an ambidextrous manner. Over time the pieces of the legacy system can be decommissioned, but progress in meeting customer needs doesn't have to wait until then.

For example, when TUI embarked on its digital transformation, it faced a difficult challenge: Its business operations in retail, telephone, and online were geographically and operationally separate, and back-end reservations systems in the UK were 35 years old. Technology was critical for the company at the time: The rise of Expedia and other OTA channels was threatening to totally disrupt the travel agency business. In this context it was very tempting for TUI to start its digital journey with a sweeping IT overhaul. But experience suggests that attempts to replace multiple complex, mission-critical systems all at once nearly always end in disaster. Instead, in the words of Jacky Simmonds, who was part of the leadership team, “the key was to envision the ideal customer journey and then see how it could make business sense through a digital lens.”

Rather than embark on a complete overhaul, TUI developed a three-year plan to replace its technology, initially working with bespoke solutions to focus on a better customer experience. The company used this time to learn from customers what they wanted in a digital world. It then connected the front-end application to the legacy back end with a middleware interface. Next it divided the back end into modular subsystems and slowly replaced them, adding front-end functionality with each step. Every time the company upgraded a component of the back end or the front end, it first tested it in one market and then iterated the prototype to improve it before working with other business units.

Although TUI decided not to roll its reservations system out more broadly, given the diversity of its markets, a coherent digital strategy allowed the markets to work together, maximizing the investment in technology. The company has enjoyed a decade of steady growth throughout its digitization of the customer journey.

The bridging role of middleware interfaces is particularly apparent in the financial services sector. In 2015 the European Parliament adopted a new Directive on Payment Services (PSD2). One of the objectives of the legislation was to enable third-party developers to build applications and services around a financial institution. If an individual is unhappy with the bank's money-transfer fees, PSD2 makes it easier for that person to use alternative services provided by a third party. Instead of waiting to change the legacy infrastructure to address the challenges of PSD2, institutions such as Deutsche Bank and the Hungary-based OTP have focused on building APIs (application programming interfaces) that allow them to connect external providers, such as TransferWise and the AI-enabled wealth adviser Wealthify, to their legacy infrastructure.

We aren't suggesting that large companies can ignore the need to update legacy systems forever. However, postponing your digital transformation until you can update them fully or all at once is dangerous. If you break the problem into modules and create a middle-layer interface, you can maintain operational stability for the core of the organization while experimenting with satisfying customer needs.

FOR MOST COMPANIES, even those truly threatened by disruption, digital transformation is not usually about a root-and-branch reimagining of the value proposition or the business model. Rather, it is about both transforming the core using digital tools *and* discovering and capturing new opportunities enabled by digital. Each company we have described has incorporated different digital elements in its business model, and not all the changes were disruptive or intrusive. The keys to success have been a focus on customer needs, organizational flexibility, respect for incremental change, and awareness that new skills and technology must be not only acquired but also protected—something the best traditional companies have always been good at. ☺

HBR Reprint R1904F



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