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# Raising your Digital Quotient

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Following the leader is a dangerous game. It's better to focus on building an organization and culture that can realize the strategy that's right for you.

**With the pace of change** in the world accelerating around us, it can be hard to remember that the digital revolution is still in its early days. Massive changes have come about since the packet-switch network and the microprocessor were invented, nearly 50 years ago. A look at the rising rate of discovery in fundamental R&D and in practical engineering leaves little doubt that more upheaval is on the way.

For incumbent companies, the stakes continue to rise. From 1965 to 2012, the “topple rate,” at which they lose their leadership positions, increased by almost 40 percent<sup>1</sup> as digital technology ramped up competition, disrupted industries, and forced businesses to clarify their strategies, develop new capabilities, and transform their cultures. Yet the opportunity is also plain. McKinsey research shows that companies have lofty ambitions: they expect digital initiatives to deliver annual growth and cost efficiencies of 5 to 10 percent or more in the next three to five years.

To gain a more precise understanding of the digitization challenge facing business today, McKinsey has been conducting an in-depth diagnostic survey of 150 companies around the world. By evaluating 18 practices related to digital strategy, capabilities, and culture, we have developed a single, simple metric for the digital maturity of a company—what might be called its Digital Quotient, or DQ. This survey reveals a wide range of digital performance in today's big

<sup>1</sup> Deloitte Center for the Edge, *2013 Shift Index metrics: The burdens of the past*, 2013, [dupress.com](http://dupress.com).

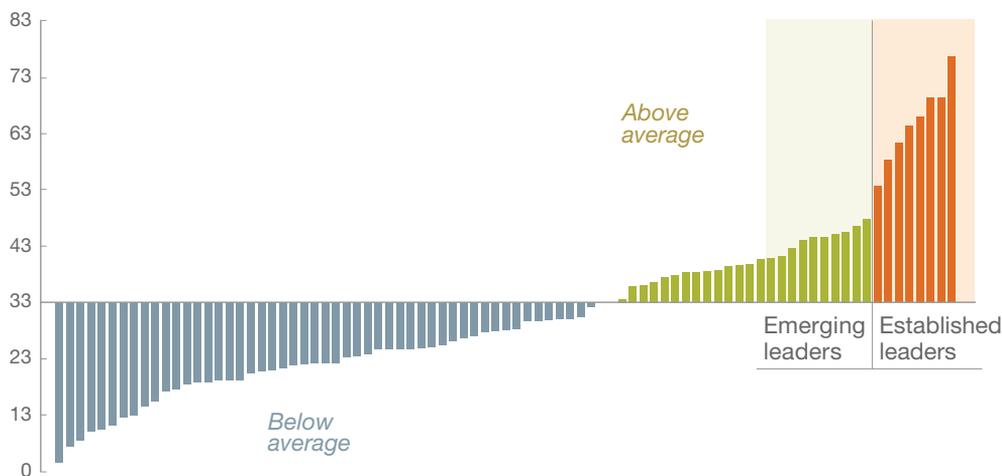
corporations (exhibit) and points to four lessons in which we have increasing confidence:

- First, incumbents must think carefully about the strategy available to them. The number of companies that can operate as pure-play disrupters at global scale—such as Spotify, Square, and Uber—are few in number. Rarer still are the ecosystem shapers that set de facto standards and gain command of the universal control points created by hyperscaling digital platforms. Ninety-five to 99 percent of incumbent companies must choose a different path, not by “doing digital” on the margin of their established businesses but by wholeheartedly committing themselves to a clear strategy.
- Second, success depends on the ability to invest in relevant digital capabilities that are well aligned with strategy—and to do so at scale. The right capabilities help you keep pace with your customers as digitization transforms the way they research and consider products and services, interact, and make purchases on the digital consumer decision journey.

Exhibit

## An assessment of the digital maturity of big corporations reveals a wide range of performance.

DQ (Digital Quotient) score



- Third, while technical capabilities—such as big data analytics, digital content management, and search-engine optimization—are crucial, a strong and adaptive culture can help make up for a lack of them.
- Fourth, companies need to align their organizational structures, talent development, funding mechanisms, and key performance indicators (KPIs) with the digital strategy they’ve chosen.

Collectively, these lessons represent a high-level road map for the executive teams of established companies seeking to keep pace in the digital age. Much else is required, of course.<sup>2</sup> But in our experience, without the right road map and the management mind-set needed to follow it, there’s a real danger of traveling in the wrong direction, traveling too slowly in the right one, or not moving forward at all. We hope this article will help leaders steer organizations effectively as they make the transition to becoming more fully digital enterprises.

## 1. Getting the strategy right

Executives must arrive at a common vernacular for what “digital” means for them.<sup>3</sup> Then, the starting point for success is developing a clearly defined, coherent digital strategy that’s fully integrated with the overall corporate one. Without this deep alignment, any subsequent intervention is bound to fall short. Yet companies struggle to get their digital strategy right. Among the 18 practices in our DQ diagnostic, those related to strategy show the biggest variance between digital leaders and more average-performing companies. One obstacle is the exposure and publicity (and, commonly, the big market valuations) that surround the most visible players in today’s digital landscape. These companies include pure-play disrupters, such as Nespresso and Uber, and ecosystem shapers, such as John Deere and Schibsted. Impressive as disrupters and shapers might be, those two strategies are feasible for only a select few.

<sup>2</sup> For a more detailed look at the areas where change must occur, see Driek Desmet, Ewan Duncan, Jay Scanlan, and Marc Singer, “Six building blocks for creating a high-performing digital enterprise,” forthcoming on mckinsey.com.

<sup>3</sup> For more, see David Edelman and Karel Dörner, “What ‘digital’ really means,” forthcoming on mckinsey.com.

Companies get their digital strategy right by answering three important questions. First, where will the most interesting digital opportunities and threats open up? Second, how quickly and on what scale is the digital disruption likely to occur? Third, what are the best responses to embrace these opportunities proactively and to reallocate resources away from the biggest threats? The vast majority of companies will address this third question through more targeted strategic responses, including these:

[A smaller-scale disruption of your own business model to enter a new space or redefine an existing one.](#) Shenzhen-based Ping An Bank, for instance, founded the digitally centered Orange Bank to target younger consumers of financial services with simple, high-return products and a one-minute account sign-up—all without traditional branch networks or complex product portfolios.

[Fast-following to ride the wave and capture some of the value created by an industry's evolution.](#) The UK department store John Lewis deployed thoughtful, targeted “clicks and mortar” levers to make it possible for a highly loyal and attractive customer base to order from its website and get deliveries at stores and company-owned grocery outlets in their local communities.

[Aggressively reallocating resources from digitally threatened assets to more digitally interesting ones.](#) Bauer Media Group, in Germany, has systematically reallocated resources away from potentially vulnerable analog media assets to develop a portfolio with a digital advantage. Its overall revenue base has shrunk, but its topline growth is materially higher, and its market capitalization has better equity multiples.

[Boosting the effectiveness of existing business models through digital approaches and tools.](#) To help visitors at Disney resorts and theme parks, the Walt Disney Company, for example, developed a suite of digital tools. These include the FastPass+ service, which allows visitors to reserve access to theme-park attractions, and the MagicBand, a tech-enabled wristband that facilitates reservations and customer routing at Disney World. Roughly 50 percent of Disney World's visitors elect to wear it. The more efficient routing helped the

resort's Magic Kingdom to host about 3,000 more guests each day of the 2013–14 holiday season.<sup>4</sup>

Clearly defining the best-fitting digital strategies is important, in part, because successful ones give rise to differentiated management practices: if you get the strategy right, the managerial interventions become clearer and vice versa. Consider the following examples:

- A bold long-term orientation counteracts short-term financial-performance imperatives and frees companies to take calibrated risks and to invest at scale in digital initiatives and the IT architecture.
- Direct integration with the strategy puts digital at the center of the business, fostering natural forms of internal collaboration as well as corporate governance that places digital topics alongside other business requirements. Strategic priorities and investment decisions are now part of the same process.
- A relentless focus on customer needs helps companies innovate constantly where it matters most. While data from early adopters sometimes does mislead businesses that try to serve them, more often than not their behavior soon begins permeating the mass market. That's especially true if multigenerational links can be made through consumer use cases (for instance, direct consumer videoconferencing, texting, and e-chats).

Once companies have arrived at a clearly thought-out strategy, they must commit themselves to it wholeheartedly. The days of tinkering at the edges are gone.

## **2. Capabilities at scale**

For digital success, certain capabilities—especially those that build foundations for other key processes and activities—are more important than others. Foremost among them are the modular IT platforms and agile technology-delivery skills needed to keep pace

<sup>4</sup> Michelle Baran, "Magic Kingdom gets attendance boost from RFID bracelets," *Travel Weekly*, February 6, 2014, [travelweekly.com](http://travelweekly.com); and Dan Peltier, "Half of Walt Disney World visitors now enter wearing MyMagic+ wristbands," *Skift*, May 7, 2015, [skift.com](http://skift.com).

with customers in a fast-moving, mobile world. The IT platforms of most companies we surveyed have major gaps, reflecting (and reinforced by) a widespread failure to prioritize digital initiatives within broader IT and capital-expenditure investments.

What further separates high performers in our survey is their ability to engage customers digitally and to improve their cost performance in four areas.

### Data-empowered decision making

High-performing digital companies distinguish themselves by keeping pace as their customers undertake the digital consumer decision journey.<sup>5</sup> For example, they anticipate emerging patterns in the behavior of customers and tailor relevant interactions with them by quickly and dynamically integrating structured data, such as demographics and purchase history, with unstructured data, such as social media and voice analytics. These companies skillfully assess the available resources, inside and outside the business, and bring them to bear on issues that matter to their markets.

For example, in 2012, Reckitt Benckiser, a maker of popular cold and flu remedies, used search data from the medical website WebMD (with almost 32 million monthly visitors at that time) to track cold and flu symptoms across the country and anticipate where outbreaks were likely to occur. Then the company released targeted geography- and symptom-specific advertising and promotions (including an offer for free home delivery) in those places. Along with a strong cold and flu season, this initiative helped Reckitt Benckiser, during one four-week period, to increase its US sales of cough and cold products by 22 percent, compared with the previous year.<sup>6</sup>

### Connectivity

A closely related skill is connectivity. Digital leaders embrace technologies (such as apps, personalization, and social media) that help companies establish deeper connections between a brand and its customers—and thus give them more rewarding experiences. Such connections can also deeply inform product development.

<sup>5</sup> See Edwin van Bommel, David Edelman, and Kelly Ungerman, “Digitizing the consumer decision journey,” June 2014, [mckinsey.com](http://mckinsey.com).

<sup>6</sup> Emily Steel, “Reckitt targets flu sufferers online,” *Financial Times*, November 5, 2012, [ft.com](http://ft.com); and Jack Neff, “Flu gives Reckitt, Johnson & Johnson a shot in the arm,” *Advertising Age*, January 14, 2013, [adage.com](http://adage.com).

For example, Burberry’s Art of the Trench campaign, launched in 2009, encourages customers to visit its online platform and upload photographs of themselves in trench coats. Fellow shoppers and fashion experts then comment on the photos and “like” and share them through email, as well as social-media outlets. Users can also click through to the main Burberry site to shop and buy. These innovations are becoming ever more deeply embedded in the company.<sup>7</sup> Burberry may not have gotten everything right, but, overall, this approach—combined with other innovations—helped the company to double its annual total revenue in six years.

### Process automation

Top-performing digital players focus their automation efforts on well-defined processes, which they iterate in a series of test-and-optimize releases. Successful process-automation efforts start by designing the future state for each process, without regard for current constraints—say, shortening turnaround time from days to minutes. Once that future state has been described, relevant constraints (such as legal protocols) can be reintroduced.

Using this approach, a European bank shortened its account-opening process from two or three days to less than ten minutes. At the same time, the bank automated elements of its mortgage-application process by connecting an online calculator to its credit-scoring models, which enabled it to give customers a preliminary offer in less than a minute. This system cut costs while significantly improving customer satisfaction.<sup>8</sup>

### Two-speed IT

Today’s consumer expectations put a new set of pressures on the IT organization as legacy IT architectures struggle with the rapid testing, failing, learning, adapting, and iterating that digital product innovations require. Our diagnostic shows that leading companies can operate both a specialized, high-speed IT capability designed to deliver rapid results and a legacy capability optimized to support traditional business operations.

<sup>7</sup> Mercedes Bunz, “Burberry checks out crowdsourcing with The Art of the Trench,” *Guardian*, November 9, 2009, [theguardian.com](http://theguardian.com); and Harriet Walker, “Digging trenchcoats: What makes Burberry our boldest brand?,” *Independent*, February 23, 2013, [independent.co.uk](http://independent.co.uk).

<sup>8</sup> See Shahar Markovitch and Paul Willmott, “Accelerating the digitization of business processes,” *McKinsey on Business Technology*, May 2014, [mckinsey.com](http://mckinsey.com).

This IT architecture and, in certain cases, the IT organization itself essentially function at two different speeds. The customer-facing technology is modular and flexible enough to move quickly—for instance, to develop and deploy new microservices in days or to give customers dynamic, personalized web pages in seconds. The core IT infrastructure, on the other hand, is designed for the stability and resiliency required to manage transaction and support systems. The priority here is high-quality data management and built-in security to keep core business services reliable.

One UK financial institution used this two-speed approach to improve its online retail-banking service. The bank opened a new development office with a start-up culture—an agile work process tested and optimized new products rapidly. To support this capability for the long term, the company simultaneously evolved its service architecture to accelerate the release of new customer-facing features.<sup>9</sup>

### **3. A fast, agile culture**

While strong skills are crucial, companies can to some degree compensate for missing ones by infusing their traditional cultures with velocity, flexibility, an external orientation, and the ability to learn. While there is more than one way to build such a culture, many companies with high scores on the DQ diagnostic have succeeded by adopting test-and-learn approaches drawn from software-development movements such as DevOps, continuous delivery, and agile. Once, these were confined to the periphery of the business environment. Now they bring a cooperative, collaborative disposition to interactions between talented workers at its core. Previously siloed functions, departments, and business units can learn a new spirit of cohesiveness.

These test-and-learn approaches incorporate automation, monitoring, community sharing, and collaboration to unify previously isolated functions and processes into a fast-moving, product-oriented culture. By promoting shared ownership of

<sup>9</sup> See Henrik Andersson and Philip Tuddenham, “Reinventing IT to support digitization,” May 2014; and Oliver Bossert, Jürgen Laartz, and Tor Jakob Ramsøy, “Running your company at two speeds,” *McKinsey Quarterly*, December 2014, both available on [mckinsey.com](http://mckinsey.com).

technology initiatives and products, such environments democratize data, minimize complexity, facilitate the rapid reallocation of resources, and enable reusable, modular, and interoperable IT systems.<sup>10</sup> To set this kind of culture in motion, executives can focus their efforts on four key areas.

### External orientation

As companies develop their collaborative cultures, they position themselves to participate more meaningfully in broader networks of collaboration, learning, and innovation. The shaping role in these networks, or ecosystems, may be beyond the reach of most incumbent companies. But they can play other value-creating roles by performing specific modules of activity, such as production or logistics, within a more broadly orchestrated ecosystem.

Collaboration beyond the boundaries of companies need not occur only in a broadly orchestrated setting. Companies can also benefit from smaller-scale collaborations with customers, technology providers, and suppliers. In addition, they can mobilize workers they themselves don't employ—the distributed talent in networks of shared interest and purpose. SAP, for instance, mobilized the user community it developed to help launch its NetWeaver software.

All this requires digital leaders to recognize what they're good at themselves and what others might do better and to improve their ability to partner collaboratively with people and institutions. They must also be able to separate the real opportunities, threats, and emerging collaborators and competitors from hype-laden pretenders.

### Appetite for risk

Our DQ research finds that digital leaders have a high tolerance for bold initiatives but that executives at laggards say their cultures are risk averse. Although established companies may not be likely to shape or orchestrate broad ecosystems, they must still face up to the implications of disruptive forces in their markets and industries—and the risks that arise in dealing with them. In a world of more data and less certainty, companies have to make decisions and respond to disrupters all the earlier and the more decisively.

<sup>10</sup> For more about DevOps, see Satty Bhens, Ling Lau, and Shahar Markovitch, "Finding the speed to innovate," April 2015, on mckinsey.com. For more about agile cultures, see Paul Willmott, "Want to become agile? Learn from your IT team," forthcoming on mckinsey.com.

## Test and learn—at scale!

At the heart of agile cultures is the test-and-learn mind-set and product-development method, which can usefully be applied, or translated, to nearly any project or process that incumbents undertake. Instead of awaiting perfect conditions for a big-bang product launch or deferring market feedback until then, digital leaders learn, track, and react by putting something into the market quickly. Then they gauge interest, collect consumer reactions, and pursue constant improvements. Rigorous data monitoring helps teams quickly refine or jettison new initiatives, so that such companies fail often and succeed early.

Nordstrom’s Innovation Lab, for example, launches customer-facing initiatives in a series of one-week experiments. To build an app that helps customers shop for sunglasses, the innovation team set up temporary camp in the retailer’s flagship Seattle store. There, it mocked up paper prototypes and had shoppers tap through them as you would a live version. Customers shared feedback on the features they found most helpful and pointed out problematic or unintuitive elements in the prototype. Coders used that information to make real-time adjustments and then released a new live version of the app for customers to test-drive on the spot. After a week of continual tweaking and re-releasing, it was ready for the store’s sales associates.<sup>11</sup>

## Internal collaboration

Teamwork and collaboration are important in any context, digital or otherwise. Wharton’s Adam Grant says the single strongest predictor of a group’s effectiveness is the amount of help colleagues extend to each other in their reciprocal working arrangements.<sup>12</sup> But collaborative cultures take on even greater importance as companies look to boost their DQ, since many lack the established digital backbone needed to unify traditionally siloed parts of the organization, from customer service to fulfillment to supply-chain management to financial reporting.

Less than 30 percent of the 150 companies we’ve surveyed say they have a highly collaborative culture. The good news is that there’s

<sup>11</sup> Nordstrom, “Nordstrom Innovation Lab: Sunglass iPad app case study,” YouTube video, September 28, 2011, youtube.com.

<sup>12</sup> See Adam Grant, “Givers take all: The hidden dimension of corporate culture,” *McKinsey Quarterly*, April 2013, mckinsey.com.

plenty of room for improvement. Some of it comes from technology: by moving into cloud-based virtualized environments, for example, companies can provide appropriate contexts where teams come together and participate in collaborative experimentation, tinkering, and innovation. In this way, they can learn and make decisions quickly by evaluating data from customer experiences.

## 4. Organization and talent

Beyond strategy, capabilities, and culture, leading digital companies use a wide set of coherent practices in talent, processes, and structure.

### Talent connections

High-DQ companies sometimes feel the need for a digital leader on the executive team who combines business and marketing savvy with technological expertise. But while executive leadership is important, the most critical thing is midlevel talent: the “boots on the ground” who can make or break digital initiatives and are ultimately responsible for bringing products, services, and offers to market.

In today’s environment, finding that talent isn’t easy. To facilitate the search, companies should recognize that, in many instances, digital competency matters more than sector knowledge, at least in the early stages of a digital transformation. Only 35 percent of digital talent in the companies we analyzed had digital experience outside them.

High-DQ companies are also creative about training and nurturing talent. A number of years ago, for example, P&G launched an employee swap with Google to shore up P&G’s search engine–optimization skills, while the Internet giant gained a deeper knowledge of marketing.<sup>13</sup> Such opportunities build competency while expanding the methods and possibilities open to companies that take advantage of them.

Companies must also nurture digital talent with the right incentives and clear career paths. Here, some incumbents may have more advantages than they realize, since these young people seem eager to

<sup>13</sup> Ellen Byron, “A new odd couple: Google, P&G swap workers to spur innovation,” *Wall Street Journal*, November, 19, 2008, [wsj.com](http://wsj.com).

help iconic brands in fashion apparel, luxury cars, newsmagazines, and other categories to reach digital audiences. When that's done well, companies establish a virtuous cycle: the nurturing of good talent attracts more of it, allowing organizations to build quickly on the initial foundation to secure a stable of digital leaders. That critical mass, in turn, serves to draw in similar candidates in the future.

### Real-time monitoring

Leading digital companies track and communicate digital key performance indicators frequently—in some cases in real time. They measure those KPIs against digital priorities and make sure senior management reviews and manages their performance.

When Starbucks rolled out a new point-of-sale system, for example, managers videotaped transactions and interviewed employees to fine-tune the checkout process. That feedback allowed the company to trim ten seconds off any mobile or card-based transaction, allowing employees to process sales more quickly and saving customers 900,000 hours of time in line each year.<sup>14</sup>

### Nontraditional structures

While no one answer works for all companies, high-DQ businesses carefully and deliberately build organizational structures that reflect where they are in the digital transformation. Some acknowledge that the core business cannot transform itself fast enough to capture new digital growth. For example, many successful traditional media organizations have carved out their digital businesses from more mature content operations.

Axel Springer used its digital business model as the dominant organizing principle in its recent reorganization—an approach that promotes the emergence of the distinct culture, performance-management system, and governance that growing digital businesses require. In the meantime, Axel Springer's strong legacy businesses can adapt and evolve to master the new digital landscape separately.

Finally, some incumbents—such as L'Oréal and TD Bank Group—have created centers of excellence and appointed chief digital officers. Others, like Burberry, operate governing councils charged

<sup>14</sup> Adam Brotman and Curt Garner, “How Starbucks has gone digital,” interview by Michael Fitzgerald, *MIT Sloan Management Review*, April 4, 2013, [sloanreview.mit.edu](http://sloanreview.mit.edu).

with thinking big and ensuring that senior leadership buys into the digital plans. These structures often change over time as companies evolve. What might start out as a newly incubated competency, such as social media, eventually matures and becomes integrated into the broader business.



The journey to digital maturity requires a whole-hearted commitment from a company's leadership and a sustained investment in people, capabilities, technology, and cultural change. To get started, an organization must be honest about its DQ, clear about its long-term strategic opportunity, and open to iterating and refining solutions along the way. ○

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