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Six building blocks for creating a high-performing digital enterprise

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Digitization affects almost everything in today's organizations, which makes capturing its benefits uniquely complex. Here are the most important aspects that winning companies consider.

Few companies need to be sold on the benefits of digitization. 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.[1] Yet despite the often-substantial investments companies have made in digital initiatives, few see that kind of growth.

That's because getting the engine in place to digitize at scale is uniquely complex. Since digital touches so many parts of an organization, any large digital program requires unprecedented coordination of people, processes, and technologies. A strategy to increase revenue from high-value customer segments, for example, requires analytics-based insights into which purchasing journeys generate the most value, a clear vision and plan for how to capture that value, and technologies and tools to digitize interactions with customers. New capabilities and teams are also needed to manage and coordinate the delivery of those journeys across the organization.[2]

Of course, adapting over time has always been essential to corporate success. Yet while the average corporate life span has been falling for more than half a century—Standard & Poor's data show it was 61 years in 1958, 25 years in 1980, and just 18 years in 2011—digitization is placing unprecedented pressure on organizations to evolve. At the present rate, 75 percent of S&P 500 incumbents will be gone by 2027.[3] That means managing your transition to a digitally driven business model isn't just critical to beating competitors; it's crucial to survival.

Six building blocks

In our experience, companies that *have* successfully transitioned to become high-performing digital enterprises are able to orchestrate six building blocks: strategy and innovation, the customer decision journey, process automation, organization, technology, and data and analytics (exhibit). Now, not every digital initiative requires each building block to be developed and used to the same degree. Some blocks will also serve as more natural starting points, depending on a company's circumstances—for instance, a company whose IT constraints make it hard to deliver a cutting-edge customer experience will naturally want to focus on the technology and process elements first. But we've found that this framework provides executives with a coherent structure for thinking through and managing large-scale digital programs.

[1] Tanguy Catlin, Jay Scanlan, and Paul Willmott, "Raising your Digital Quotient," *McKinsey Quarterly*, June 2015, mckinsey.com

[2] For an in-depth examination of how companies can develop meaningful digital strategies and harness technology to drive performance, see Catlin, Scanlan, and Willmott, "Raising your Digital Quotient."

[3] Marla Capozzi, Vanessa Chan, Marc de Jong, and Erik A. Roth, "Meeting the innovation imperative: How large defenders can go on the attack," *McKinsey on Marketing & Sales*, July 2014, mckinseyonmarketingandsales.com.

Exhibit

Strategy and innovation

Digital strategy is intrinsic to business strategy today. In fact, 90 percent of digital leaders (versus 60 percent of all leaders) have fully integrated digital into their strategic-planning process. The best digital strategies don't rely on past analyses, but instead start fresh and carve out a vision based on where they believe value is likely to shift over the next three to five years (see sidebar, "Staking out your strategic position"). They assess at a

granular level where value is likely to be disrupted within their own business and market, and they isolate where and how they will compete. Effective digital strategies prioritize a handful of interventions where the business can exploit significant opportunities (and divest or reduce exposure in markets where value is declining), then craft a digitally enabled business model around them. That could mean creating a new way for customers to purchase a product, moving into new businesses, or exploiting competitive advantages such as proprietary data in new ways.

For example, one large retailer actively reviewed its portfolio and decided to divest its consumer-electronics business when it saw margins eroding. It then invested in an online retailer when it realized the strong growth trajectory of e-commerce in the sector. When GE identified a strategic goal it needed to work toward—making deeper connections with decision makers—it designed a company-wide social graph that tapped customer connections and relationships across its 300,000-strong employee base. That enormous internal network gave salespeople and account managers a significant leg up in forging new connections and provided marketing with a return that was about 350 times its investment.[4]

A digital strategy also increasingly blurs the boundaries between strategy and execution. In fact, 60 percent of digital leaders run strategy by experimentation through limited releases and prototyping, for example.

[4] John Dix, "How GE uses social tools to support its digital strategies," *Network World*, May 21, 2014, networkworld.com.

Staking out your strategic position

While the digital maturity of a sector or company has a large impact on an organization's approach, strategies tend to fall into the following five categories:

- *Evolvers* take actions to defend and exploit their current advantages and effective business models.
- *Market matchers* tap existing assets to evolve their operating model and consumer relationships, focusing on building capabilities to move quickly into new markets when they've been identified.
- *Digital strivers* use the advantages of digital to compete in existing markets and even disrupt their own models—for example, they apply digital tools to compete at lower prices across more channels and at scale.
- *Pure-play digital disrupters* enter new markets and redefine how to compete through price, experience, or product.
- *Ecosystem shapers* set the standards that define the competitive ecosystem and shape entire value chains.

Customer decision journey

Our research shows that organizations able to understand and skillfully act on complete customer journeys can reap enormous rewards: increasing customer satisfaction by up to 20 percent and revenue growth by 10 to 15 percent, and lowering the cost to serve by 15 to 20 percent.[5] Understanding those decision journeys and the fundamentally different ways that customers behave—from evaluating products to bonding with brands—is becoming the cornerstone for successful businesses.[6] That ability is likely to become an increasingly important differentiator, since nearly 50 percent of all business-to-business purchases will be made on digital platforms by the end of 2015,[7] and $2 trillion in retail sales will be influenced by digital by 2016.[8]

With so much data available, companies can become much more precise in their outreach to customers. By combining deep data analysis and ethnographic research, digital leaders can identify high-value microsegments, such as new mothers with full-time jobs who primarily shop online. Understanding how these customers make decisions—how they shop, for example, or what influences them—allows digital leaders to tailor their approaches. One major bank unlocked more than $300 million in profitability by tapping into underutilized customer data and delivering targeted marketing messages at various points in the purchase-decision process. The bank used the data to inform changes in marketing campaigns.[9]

Process automation

Business-process automation can result in massive competitive advantage because initial investments, when well implemented, can scale quickly without substantial additional costs. Over time, cost performance can improve by as much as 90 percent as the automation effort scales across formerly siloed functions, reducing redundant processes. New business models, in fact, are emerging as companies that create revenue from sales of physical assets evolve into service businesses that focus on data as an asset.

Digitizing processes has less to do with technology and more with how companies approach development. While there is often the assumption that process automation is a large project focused on a major platform, digital leaders in fact drive value quickly by focusing on a series of small but important solutions that target high-value customer journeys and expectations (for example, real-time availability and personalized treatment). This is more than just automating an existing process. Becoming digital often requires reinventing the entire business process to cut out steps altogether or reduce the number of documents required.

Automating processes at speed requires small teams employing agile development techniques to continuously build out elements of the product as prototypes, then testing and adapting them based on feedback, often within days or weeks. When well executed, digitizing processes can unlock significant value by compressing timelines and eliminating duplication or inefficiencies.

Yet digitizing is as much about customer satisfaction as efficiency. A leading energy player, for example, reduced by 40 percent churn among customers who moved houses by making

[5] Harald Fanderl and Jesko Perrey, "Best of both worlds: Customer experience for more revenues and lower costs," *McKinsey on Marketing & Sales*, April 2014, mckinseyonmarketingandsales.com.

[6] To learn more about customer decision journeys, see David Court, Dave Elzinga, Susan Mulder, and Ole Jørgen Vetvik, "The Consumer Decision Journey," *McKinsey Quarterly*, June 2009, mckinsey.com; and David C. Edelman, "Branding in the digital age," *Harvard Business Review*, December 2010, Volume 88, Number 12, pp. 62–9, hbr.org.

[7] Oskar Lingqvist, Candace Lun Plotkin, and Jennifer Stanley, "Do you really understand how your business customers buy?," *McKinsey Quarterly*, February 2015, mckinsey.com.

[8] Sucharita Mulpuru et al., *US cross-channel retail forecast, 2011 to 2016*, Forrester Research, July 2012, forrester.com.

[9] Edwin van Bommel, David Edelman, and Kelly Ungerman, "Digitizing the consumer decision journey," June 2014, mckinsey.com.

service renewal a simple two-click process accessible from the company's website. Similarly, a bank cut its cost per new mortgage by 70 percent and shortened preapproval times from several days to just one minute by digitizing its mortgage-application and decision processes.[10]

Organization

Companies know that rigid, slow-moving models no longer cut it. The challenge is to move toward a structure that is agile, flexible, and increasingly collaborative while keeping the rest of the business running smoothly. Successful incumbents become agile by simplifying. They let structure follow strategy and align the organization around their customer objectives with a focus on fast, project-based structures owned by working groups comprising different sets of expertise, from research to marketing to finance.

While companies often obsess about the "boxes and lines" of organizational structure, it's more important—and significantly more difficult—to focus on processes and capabilities. Having a clear view of what we call a company's Digital Quotient is a critical first step to pinpoint digital strengths and weaknesses and highlight those management practices that can bolster financial performance.[11] Some 65 percent of digital leaders have a culture that isn't afraid of risks, for example, and have a high tolerance for bold initiatives.

Many companies have set up incubators or centers of excellence during the early stages of a digital transformation to cultivate capabilities. To be successful, however, these capabilities need to be integrated into the main business. AT&T opened three AT&T Foundry innovation centers, in Dallas, Silicon Valley, and Tel Aviv, to serve as mobile-app and software incubators. Today, projects at these centers are completed three times faster than elsewhere within the company. And having tested that innovation model externally through its incubator, AT&T established a technology innovation council and a crowdsourcing engine to infuse best practices and innovation across the rest of the organization.[12]

Other companies, such as Nike, transform organically from within. The company has long recognized the need to have focused resources for digital initiatives, and it established a direct-to-consumer division that oversees both in-store and online activities. That function then created a dedicated e-commerce group with its own leadership structure, which has worked to deepen and expand its digital expertise, drive greater commerce for Nike online, and connect across the Nike organization to create market-beating consumer experiences, from the SNKRS app to the Nike+ community, which has tens of millions of users. Those efforts have paid off with double-digit e-commerce revenue growth rates and annual web sales topping $1 billion in summer 2015.

Regardless of what model a company chooses, the adage "what gets measured gets managed" still holds true. The most successful digital companies are zealous about metrics that focus on the customer journey, such as customer lifetime value, omnichannel behavior, and share of influence across stages of the decision journey.

[10] Shahar Markovitch and Paul Willmott, "Accelerating the digitization of business processes," *McKinsey on Business Technology*, May 2014, mckinsey.com.

[11] For an in-depth examination what Digital Quotient entails and how it can help drive performance, see Catlin, Scanlan, and Willmott, "Raising your Digital Quotient."

[12] Ben Paynter, "How 'Toggle' worked its way through AT&T's innovation pipeline and into cell phones," *Fast Company*, July 2, 2012, fastcompany.com.

Technology

Most incumbents have been through waves of IT transformation in the past and understand that overhauling legacy architecture is a multiyear process. Yet today's fluid marketplace requires technology that can drive innovation, automation, and personalization much more quickly. So, the best are moving to a two-speed IT model that enables rapid development of customer-facing programs while evolving core systems designed for stability and high-quality data management more slowly.

This typically means that high-speed IT teams are charged with rapidly iterating software, releasing updates in beta, fixing kinks and bugs in near-real time, then rereleasing. Their goal is to continually fuel an accelerated development infrastructure that can support near-instant cross-channel deployment and real-time decision making.

One European bank, for instance, created a new team that used concurrent-design techniques (in which multiple development tasks are completed in parallel) to create a prototype of an account-registration process, while using existing technology where it could. By testing this process with real customers in a live environment, the team was able to make constant refinements until it succeeded in cutting the process down to 5 steps from the original 15. In under five minutes, customers can now use a mobile device to open an account, as opposed to waiting in a bank branch and filling out paperwork.[13]

New developments in DevOps (the integration of technical development and operations) and continuous delivery (the automation of testing, deployment, and infrastructure processes) have introduced capabilities that radically increase speed to market and lower costs. An international travel company used these approaches to reduce time to market by moving to the cloud, fully automating its testing, and rolling out a one-click deployment process.

Data and analytics

Companies that make extensive use of customer analytics see a 126 percent profit improvement over competitors.[14] Companies that see that kind of return are adept at deciding which data to use (both inside and outside the organization), focusing the analytics on delivering on goals with clear and useful insights, and having the right capabilities and processes in place act on them. That requires people with the right kinds of skills—particularly "translators" who can articulate business goals and use cases with respect to analytics requirements and turn data output into business insights.

With the Internet of Things and new technology developments, analytics are opening new doors for growth. Analysts have predicted that the installed base for Internet of Things devices will grow from around 10 billion connected devices today to as many as 30 billion devices by 2020.[15] Real-time monitoring and visualization, for example, are fundamentally changing the relationship of insurers and the insured. Telematics are being used in auto insurance to monitor driving habits in real time; this resulted in a 30 percent

[13] Juan Garcia Avedillo, Duarte Begonha, and Andrea Peyracchia, "Two ways to modernize IT systems for the digital era," August 2015, mckinsey.com.

[14] Alec Bokman, Lars Fiedler, Jesko Perrey, and Andrew Pickersgill, "Five facts: How customer analytics boosts corporate performance," July 2014, *McKinsey on Marketing & Sales*, mckinseyonmarketingandsales.com.

[15] Harald Bauer, Mark Patel, and Jan Veira, "The Internet of Things: Sizing up the opportunity," December, 2014, mckinsey.com.

reduction in claims at one UK insurance company, which reported that customers had developed better driving habits.[16] Similarly, data monitors on UPS trucks are used to help configure the most efficient ways to load a truck and send alerts when a part needs a repair, before it breaks.[17]

While each of these building blocks is important, the real value is in being able to integrate them and manage the cross-business contingencies and dependencies of a large-scale digital initiative (for best practices for all six, see our "From good to great" infographic). The digital revolution has given birth to an interconnected world that binds customers, employees, managers, and systems together in a network of unprecedented complexity and opportunity. Making sense of those connections and building value requires a new interdisciplinary model of work that is redefining how companies succeed today.

[16] Richard Clarke and Ari Libarikian, "Unleashing the value of advanced analytics in insurance," August 2015, mckinsey.com.

[17] Jacob Goldstein, "To increase productivity, UPS monitors drivers' every move," NPR, April 17, 2014, npr.org.

STRATEGY AND INNOVATION

GOOD

- Identify broad trends and potential value shifts using a linear strategy process
- Understand positioning and capabilities of potential partners, "frenemies," and competitors
- Make small bets on promising opportunities

GREAT

- Perform granular diagnostic of value creation/destruction across value chain and business model
- Run scenario testing to test (and flip) different business-model assumptions and industry trends
- Maintain an active investment partnership to shape/sustain market position and prospects

CUSTOMER DECISION JOURNEY

GOOD

- Develop initiatives to improve satisfaction at individual interaction points or within channels
- Focus on improvement initiatives for each customer segment
- Have a clear understanding of consumer decision funnel

GREAT

- Develop omnichannel view of circular customer journey
- Respond dynamically in near-real time to customer usage and feedback
- Align metrics against top journeys and launch cross-functional improvement teams to support
- Understand how segment value and satisfaction varies and focus on elements that will move the needle

PROCESS AUTOMATION

GOOD

- Automate processes to reduce cost
- Understand which processes support which customer interactions; appoint clear process owners
- Oversee traditional operational methods with clear requirements/project plans
- Focus on upgrading large processes

GREAT

- Use process automation to reduce costs and improve customer experience
- Remove silos to allow automation teams to cut across functions
- Use agile development methods to operate at speed and increase capacity
- Rapidly digitize series of small or midsize processes

ORGANIZATION

GOOD

- Make digital-talent acquisition a priority
- Maintain dedicated budget for specific digital initiatives
- Foster knowledge-sharing culture among peers and teams
- Use clear project management, aggressive timelines, and dedicated personnel
- Conduct pilots, but on a pass/fail basis

GREAT

- Build a brand that the digital community associates with creativity, entrepreneurship, and leadership to aggressively attract digital talent
- Manage the digital budget across functions with a multiyear horizon
- Deploy small teams for specific projects with the right talent and ensure they are empowered to break through problems
- Make extensive use of digital metrics; monitor actively and align incentives with them
- Embrace continuous, rapid testing and learning cycles

TECHNOLOGY

GOOD

- Evolve legacy IT
- Release large blocks of code weekly or monthly
- Dedicate IT teams to each stage of software-development process

GREAT

- Establish 2-speed IT architecture to evolve large systems and develop rapid test-and-deploy environment
- Create DevOps teams that oversee entire code-development process
- Institute continuous delivery and agile capabilities
- Release code often; deploy within minutes and seconds

DATA AND ANALYTICS

GOOD

- Incorporate new sources of data and build a central data repository
- Launch 1 or 2 pilots to understand what matters to customers
- Generate detailed insights into customers and markets
- Hire and incorporate data scientists and analysts

GREAT

- Move ahead, even with imperfect data
- Launch actions that prove impact
- Run hundreds of tests per month and use co-located cross-functional teams
- Use customer impact to prioritize where to invest
- Develop insights in near-real time and deliver them to decision makers in user-friendly format
- Hire “translators” to bridge talent gaps and deliver insights that meet business goals

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