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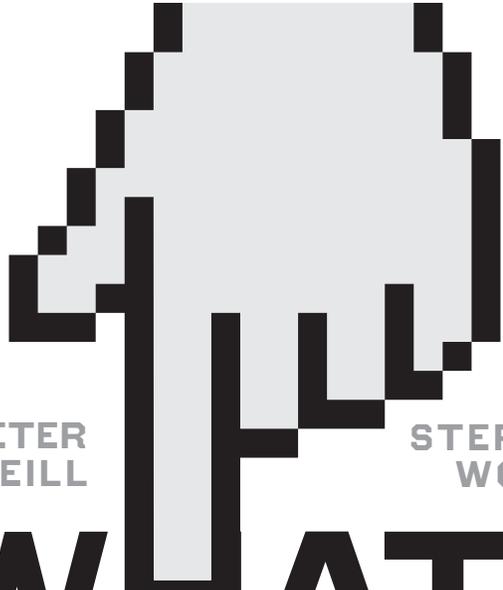
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WHAT'S YOUR DIGITAL BUSINESS MODEL?

**SIX QUESTIONS TO HELP YOU BUILD THE
NEXT-GENERATION ENTERPRISE**

HARVARD BUSINESS REVIEW PRESS

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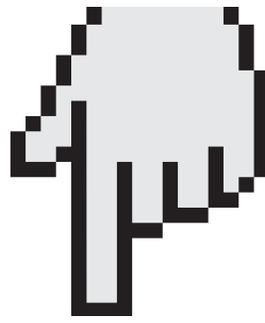
SIX QUESTIONS TO HELP YOU BUILD THE
NEXT-GENERATION ENTERPRISE

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INTRODUCTION

Building the Next- Generation Enterprise

Digital transformation is not about technology—it's about change. And it is not a matter of *if*, but a question of when and how.

Recently, we conducted a workshop about digital disruption with the board and senior management team of a successful bank. Deep into the conversation, we were encouraging the bank to think about a new business model: to become a destination for customers navigating life events, rather than simply being a place they go to for making a transaction. People don't go to a bank looking for a mortgage, we said—they are looking to buy a home. That small shift in thinking would mean a profound shift in almost every aspect of the business, and this change was the bank's best bet for addressing the squeeze the company already felt from new digital financial services that were making a meal of its revenues.

At that point, one of the senior managers asked a serious question: "What happens if this new business model doesn't work?"

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The chair of the board and the CEO, almost in unison, replied, “Then we will try something else.” The CEO continued: “But we know for sure that if we don’t do anything, someone else will get between us and the customer, using digital.”

In the digital economy that’s now upon us, many enterprises won’t succeed by merely tweaking the management practices that led to past success. Larger enterprises are particular targets of digital disruption because of their large customer base, juicy profits, and sometimes-patchy customer experience. To thrive in a digitized universe, businesses of all sizes will need to reinvent themselves and substantially change their organizations, including their business models, people, structures, critical competencies, and cultures. In short, your relationship with your customers depends on creating new digital ways for them to interact with your company.

To be sure, the digital revolution is disrupting virtually every industry. In financial services, for example, customers are pulling away from long-established relationships with banks in favor of third-party apps and experiences offered by the likes of PayPal, Apple Pay, Kabbage, and Venmo. Even retailers such as Coles—the Australian supermarket chain—and the home-goods chain Ikea are claiming their share of new customer transactions, breaking into the insurance business to sell policies alongside furniture and perishables.

The numbers associated with the disruption are large indeed, and so are the ramifications. Citi estimates that global private investment in financial technology (so-called fintech) increased from US\$2 billion in 2010 to US\$21 billion in 2016.¹ One consequence: an estimated 30 percent of current bank-industry employees will probably lose their jobs over the next decade—and governments will have to find ways to help those people make the

transition.² Here's another consequence: as the competition heats up, profit margins decrease and regulation increases; incumbent banks currently in the driver's seat have everything to lose. Tech firms, including fintech firms, are not as burdened by regulations as big banks are, and with mobile technologies, they have a direct link to customers.³ If big banks don't reinvent their business models with far more compelling customer engagement, they will be caught in a cost-driven race to the bottom.

Digitization is staking claims in other industries as well. The business news is full of examples, from Uber (disrupting taxis) and Airbnb (disrupting hotels) to Amazon's disruption of retailers of all kinds—and the resulting backlash. Amazon's share of apparel sales grow daily: recently, buying behavior officially tipped away from box stores like Macy's (which in 2016 announced the closing of one hundred stores) toward Amazon, which analysts estimate will become the biggest seller of apparel in the United States by the end of 2017.⁴

In our research, we've found that digital disruption comes in three varieties:

1. **New entrants:** Startups like Uber and Airbnb—and former born-digital startups like Amazon and WeChat, which have a different business model and superior digital capabilities—enter an existing industry (often those that are complex and difficult for customers to navigate) and offer an exciting new value proposition.
2. **New business models for traditional competitors:** Existing businesses adopt a business model that is more appealing to their customers—like the challenging move Nordstrom made from a traditional department store to an attractive omnichannel business, combining the best of *place*

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(tangible, product-based, customer-oriented transactions) and *space* (intangible, service based, and oriented toward the customer experience).⁵ Banking, insurance, retail, and energy companies are all struggling to find that perfect mix of place and space.

3. **Crossing industry boundaries:** Enterprises that are successful in one industry (or customer domain) use digital tactics to move into a new industry or domain. We are seeing this trend in many areas like home ownership—with banks, insurance companies, realtors, and others all vying for this space.

Given the level of turmoil caused by digital disruption of all varieties, addressing it is no longer a choice; today it is a business imperative. It's time for companies to evaluate the threats, understand the opportunities, and start creating new business options for the future.

Board members at large companies agree. In our recent research at MIT's Center for Information Systems Research (<http://cisr.mit.edu>), board members of various companies estimated that 32 percent of their company's revenue would be under threat from digital disruption in the next five years. A full 60 percent believed that their boards should spend significantly more time on this issue next year.⁶

But how, exactly, do companies prepare for digital disruption? How do they join the ranks of digitization to take advantage of customer relationships and increase cross-selling opportunities, among other benefits? How do leaders create a compelling vision for their enterprises' success five, even ten, years from now?

Thus far, the path forward hasn't been obvious. Even though digitization is one of the biggest challenges larger enterprises have

faced in a generation, and even as businesses are experimenting with new ideas every day, they often have no idea if they'll be successful. With such uncertainty, it's very hard to build a business case for digital strategy right now. Nevertheless, without a compelling vision for success in a digital economy, your enterprise will suffer a “death of a thousand cuts”—a slow and agonizing descent into a world of automation and cost competition while someone else captures the relationship with your customers.

Recent business literature describes aspects of digital disruption and offers possible solutions. But these books haven't done enough to help leaders create a winning *digital business model* (DBM). We think we know why. In our work with senior executive teams and the boards of larger companies worldwide, we discovered a surprising phenomenon: leaders lack a common language or a compelling framework to help them assess the degree of threat to their business, and—more importantly—to offer direction about what they should do.

In this book, we introduce a simple but powerful digital business model framework and language to help executives think about their competitive environments in the digital era. The framework will enable leaders to understand where they are in their digital journey, where they have to go, and which best practices will get them there. We derived the framework and material for this book by studying top financial performers and drawing on five years of field-based research, executive education, meeting and workshop facilitation, and advising. Moreover, we have studied fifty companies with in-person interviews and more than a thousand companies through survey data collected over six surveys.⁷

The result is a framework tested globally with dozens of senior management teams. The book will prove valuable to executives of larger enterprises facing both disruption and opportunity

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from digital. The ideas will also be valuable to startups nibbling at the best parts of big business, board members looking at the many strategic questions digital raises, and consulting firms seeking viable ideas to present to their large clients. And managers at smaller companies will also find our framework useful, as will any leader concerned with how his or her company will thrive five years from now and beyond in an increasingly digital economy.

Let's turn now to a brief introduction of the framework itself and the reasoning behind it and to an outline of the overall organization of the book.

A Framework for Becoming a Model for Success in the Digital Economy

First, some background. For some time now, we have observed a sea change in customer needs and behavior because of changes in technology. As the bank executives in our opening example came to understand, customers today are more interested in solving life events than in buying a single item, such as a banking product. When borrowing money to buy a car, for example, a customer often wants the deal negotiated, the car delivered, and insurance and financing arranged all through a single relationship—and on a mobile device at ten o'clock at night. Customers no longer want to have to go back and forth from bank to insurance agent to car dealer to put a deal together.

Accordingly, in our research and workshops with many hundreds of enterprises, we've seen that those that successfully transform for the digital economy find ways to create a persuasive *new value proposition*—often a breakthrough in customer experience. Our framework, therefore, helps companies use digital techniques

that will help them know more about their customers—be they other businesses (B2B) or the end customers themselves (B2C)—and how to solve these customers’ life-event needs.

Digital transformation is not really about digital. Digital technologies—social, mobile, analytics, cloud, and the internet of things, and so forth—can create a massive change, particularly as they seem to have been developed and introduced all at once and are easily accessible to most enterprises. But the technologies are still just the vehicle. Because almost every enterprise can use these digital technologies, they don’t necessarily offer a competitive advantage. The key is *differentiating your business* by offering customers something new and compelling, enabled by the vehicle that digital offers, and creating a destination customers want to visit.

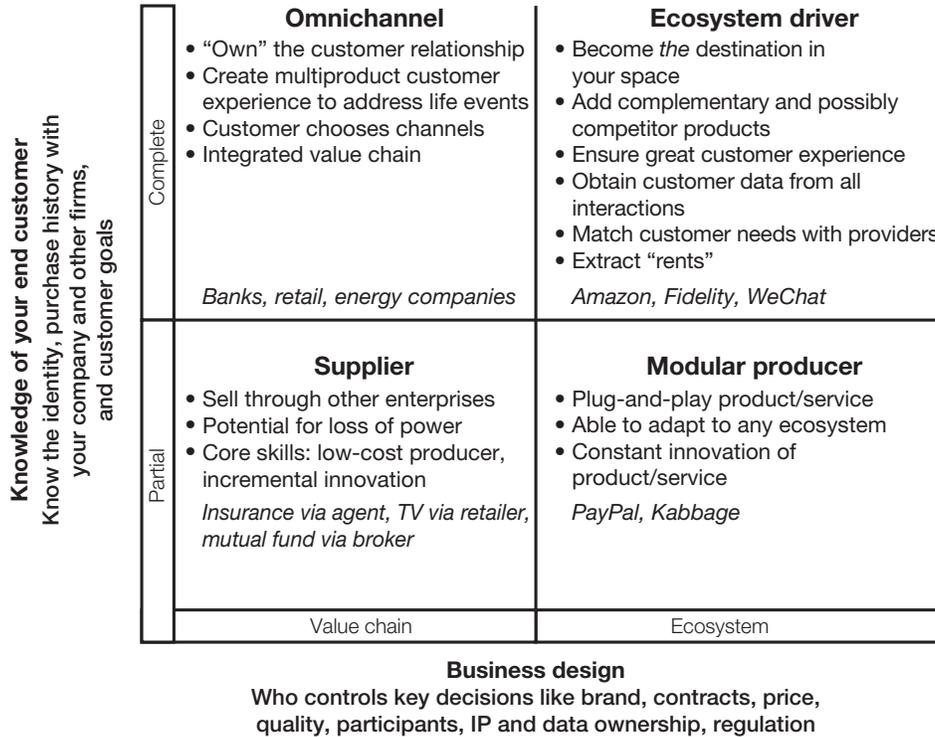
We call this process *creating the next-generation enterprise*. The DBM framework we’ve developed is a tool for building that enterprise. Here’s how it works. Our research shows that digitization is compelling companies to move their business models on two dimensions. First, they are moving from controlled value chains (à la Michael Porter circa 1980) to more-complex, networked systems.⁸ Second, they are moving from less familiarity with customer needs and life events to a better, closer understanding of them, resulting in better customer engagement. Looking at these dimensions in combination results in a two-by-two framework (the DBM framework) consisting of *four distinct business models*, each within a quadrant representing different capabilities and varying average financial performance (figure I-1).

1. **Supplier:** producer that sells through other enterprises
2. **Omnichannel:** integrated value chain that creates multi-product, multichannel customer experiences to address life events

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FIGURE I-1

Digital business model framework



Source: P. Weill and S. L. Woerner, “Thriving in an Increasingly Digital Ecosystem,” *MIT Sloan Management Review* 56, no. 4 (June 16, 2015): 27–34. © 2017 MIT Sloan Center for Information Systems Research. Used with permission.

3. **Modular producer:** provider of plug-and-play products or services
4. **Ecosystem driver:** organizer of an ecosystem, a coordinated network of enterprises, devices, and customers to create value for all participants, which is *the* destination in a particular domain (such as shopping), ensuring great customer service; includes complementary and sometimes competitor products

To determine where a company falls in the four quadrants and where it wants to move, leaders must ask certain questions and

make choices. First, they must determine to what extent they are part of a value chain that can be controlled (and that they believe they or someone must control), or to what extent they are part of a more complex digital ecosystem, in which the dynamics are less about command and control and more about building, maintaining, and using networks.

Second, executives need to assess how much they know about the needs of their end customers and how much they *can* know. Once a company has determined which quadrant or quadrants it is operating in, it can use the framework to discover whether it should stay where it is or, if not, what it should do to move toward another DBM.

There is a lot at stake in these choices. Although being part of a value chain is a perfectly manageable business model with known capabilities (such as keeping costs down and enjoying efficient supply chains)—especially in enterprises that operate B2B—for the most part, businesses operating strictly as suppliers focused narrowly on value chains could find themselves at a disadvantage. Pressure is growing, especially in companies where end customers are used to interacting digitally and expect a great experience.

On the other hand, we found that enterprises with an ecosystem-driver model had higher revenue growth and net profit margins than the other DBMs (table I-1). We believe most existing companies can build on their strong customer relationships or take advantage of their networks, assets, capital, and business partners to grow in a digital world. For example, they can increase digital cross-selling opportunities, such as what Commonwealth Bank of Australia has done with its new mobile property-valuation app to drive the sale of mortgages (more on that later in the book).⁹

In many ways, Walmart's primary business model exemplifies the value chain approach. Walmart controls everything about

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TABLE I-1

Ecosystem drivers outperform all other business models on four measures for performance

Digital business model	Customer experience	Time to market	Revenue growth	Net profit margin
Supplier	65%	50%	33%	34%
Omnichannel	80%	75%	40%	40%
Modular producer	70%	63%	43%	46%
Ecosystem driver	80%	78%	51%	50%

Source: MIT CISR 2013 Ecosystem Survey (101 participants) and MIT CISR-Gartner 2013 Ecosystem Survey (93 participants). Results are from companies with more than \$1 billion in revenues. Self-reported net profit margin correlates to actual net profit margin at $p < 0.05$ and self-reported revenue growth correlates to actual revenue growth at $p < 0.09$. Financial measures are relative to industry. Customer experience and time to market were assessed relative to competitors. All measures were transformed to a 0–100 percent scale. Differences between models for each measure are significant at $p < 0.05$. © 2017 MIT Sloan Center for Information Systems Research. Used with permission.

its products: the price, from the supplier, where they are located in the store, and when they are sold. However, it doesn't always know who its customers are and why they are buying particular products. Digitization enables consumers and companies to know more and to seek out a wider array of benefits.

Meanwhile, the ecosystem-driver model that Amazon typifies allows greater customer choice, offers the best price available, and enables faster innovation. The enhanced consumer value comes from having different vendors selling similar (or even identical) products—often at different prices or service levels—and fast feedback, allowing vendors to improve their products and services. Consumers get a one-stop Amazon-curated experience with greater choice and with more information about prices and quality. Amazon gets to see the data on all the activity in its ecosystem while fine-tuning and identifying new opportunities and extracting rents from the merchants within the ecosystem.

Ecosystems are particularly powerful in retail. Moreover, health care (e.g., Aetna), online entertainment (e.g., Netflix), energy management (e.g., Schneider Electric), and wealth management (e.g., Fidelity) all have powerful ecosystem-driver businesses. Looking ahead, we see the trend moving toward individual and business customers preferring only one, or maybe two, powerful ecosystem drivers in each domain; the result is significant industry consolidation. This potential consolidation raises the stakes for leaders to clarify their positions and understand their options for moving toward a better DBM today.

Accordingly, some long-standing enterprises are reinventing themselves—and they view their reinvention as a journey that will continue for many years, evolving along the way. Using digital, they have some exciting visions of how they will interact with their customers. Consider these examples of such companies, both established and new:

- **Aetna—building a healthier world.** Aetna has moved from a primarily B2B health insurance enterprise to an increasingly full-service destination for customers to meet their health-care needs. From 2009 to 2014, it increased its revenue to more than three times the industry average.¹⁰
- **7-Eleven Japan—solving your daily needs.** 7-Eleven has moved from a chain of around 20,000 convenience stores averaging around three thousand products each, but with different selections in each store, to a single point of contact (either at the store or online) for more than three million products. 7-Eleven Japan has a 42 percent share of convenience store sales in Japan, and its profitability leads the industry average (3.4 percent vs. 1.8 percent).¹¹

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- **Uber—coordinating logistics through a citywide digital mesh.** Uber, the world's best-known ride-sharing enterprise, is moving into personal logistics and beyond and is growing fast.¹²
- **Schneider Electric—leading the digital transformation of energy management and automation.** Schneider Electric is moving from manufacturing and distributing thousands of electrical products to providing complete energy management and automation solutions. The company has increased its cross-selling by 20 percent.¹³
- **Amazon—creating the destination for all customer needs and more.** Amazon has moved from being an electronic book-seller to an online marketplace with more than 480 million products in the United States. The company continues to add products and services for customers and businesses.¹⁴
- **WeBank—reinventing banking.** WeBank is a pioneer of financially enabling social activities for the approximately eight hundred million active users on WeChat. WeBank provides banking services to enable the social activities of WeChat users—like going out to dinner, traveling, or looking for an apartment. Yet it provides these services in the background, without the user ever going to a bank or enlisting a banking app. Employing mostly data analysts, not bankers, WeBank represents a major threat to traditional banks.¹⁵
- **United Services Automobile Association (USAA)—solving your life events.** USAA rethought banking by moving from selling products to solving life events such as buying a car,

having a child, or moving your residence. The firm regularly achieves the highest customer satisfaction scores in banking in the United States.¹⁶

Like these enterprises, your company can reinvent itself to compete in the digital era. In working with large enterprises around the world and across industries, we have found that the DBM framework helps executive teams address digital threats and capture opportunities to create winning strategies. But first they must ask themselves some critical questions.

The Six Questions—and a Guide to This Book

Using the DBM framework to foster successful transformation requires that leaders first grapple with six key questions:

1. **Threat:** How strong is the digital threat to your business model?
2. **Model:** Which business model is best for your enterprise's future?
3. **Advantage:** What is your competitive advantage?
4. **Connection:** How will you use mobile technologies and the internet of things (IoT) to connect and learn?
5. **Capabilities:** Are you buying options for the future and preparing for the necessary organizational surgery?
6. **Leadership:** Do you have the leadership at all levels to make transformation happen?

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Most enterprises don't get their transformations right the first time, and iteration is as critical as vision and inspiration. And perhaps that's the most important lesson of all. It's very rare—in fact, we can't remember any examples—to see an enterprise create a great vision and plan for transformation and implement it without significant course corrections. Enterprises need to answer, with actionable decisions, the six questions we've just listed and then iterate, course-correct, and learn from their actions to go to the next step in the continuous journey of reinvention. It's this willingness and flexibility that we think differentiates success from failure.

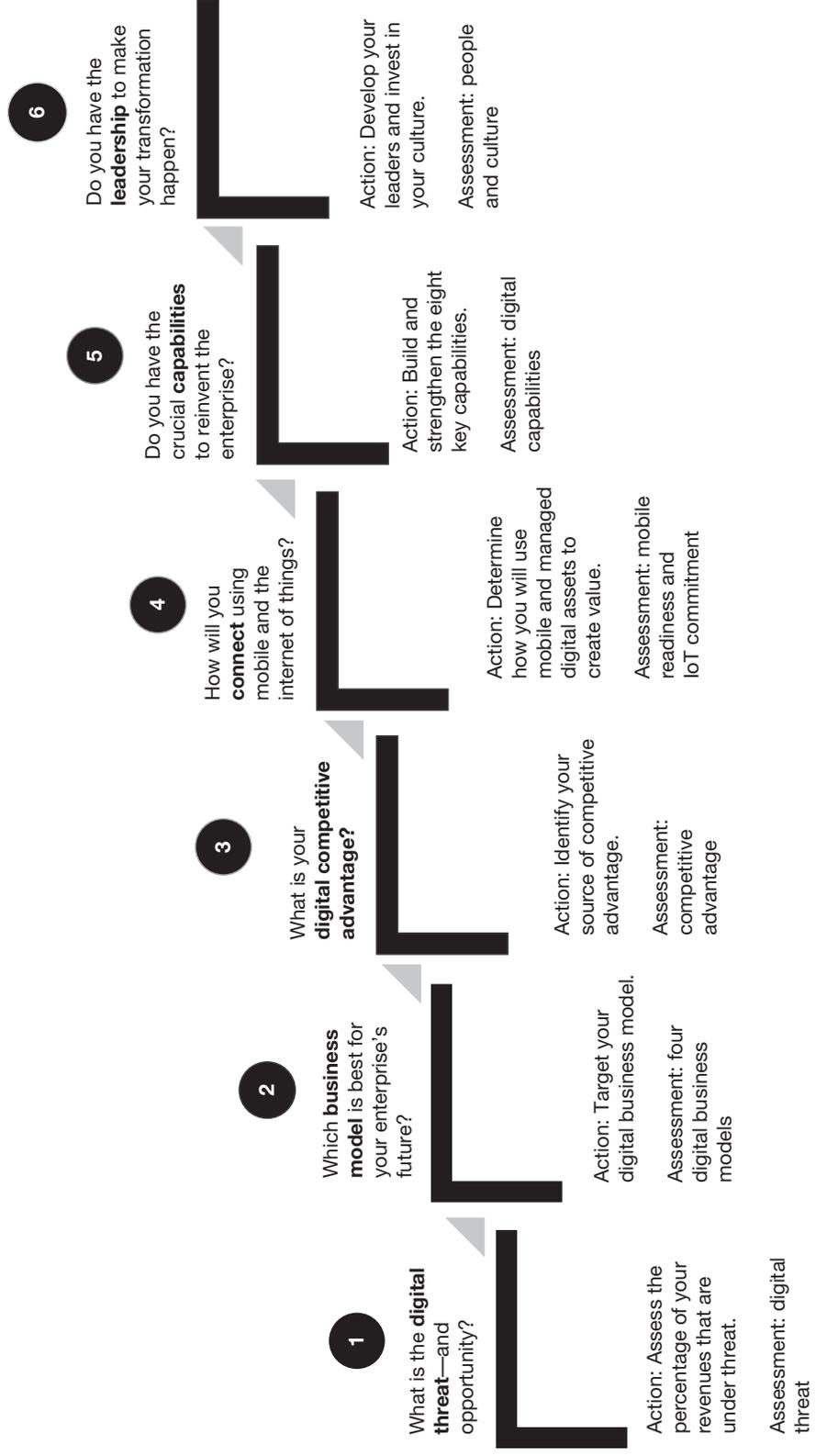
This book will lead you through each of the six questions—one question per chapter. Each chapter provides a structure to help you answer the question, an assessment to help you figure out where you are, data on what top-performing enterprises do, and motivating case studies of enterprises that have excelled. By the end of each chapter, you should be able to decide what action to take (figure I-2). Examples and cases cited throughout the book include Aetna, Amazon, BBVA, Commonwealth Bank of Australia, DBS Bank, Dunkin' Donuts, Fidelity, Garanti Bank, Johnson & Johnson, PayPal, Procter & Gamble, Schindler, Schneider Electric, 7-Eleven Japan, USAA, and Woolworths.

In chapter 1 we examine the various threats and opportunities enterprises are facing from digitization. We use case studies to inspire and share what has worked in other businesses grappling with similar issues. The key action here is to *identify the level of threat* your enterprise now faces. We'll finish the chapter with a self-assessment to help you do that.

Chapter 2 focuses on the DBM framework that we described earlier in this introduction, that is, the four possible business models in a digital economy: ecosystem driver, omnichannel, modular producer, and supplier. We describe a leading enterprise in each

FIGURE I-2

Six key questions and actions for transformation in the digital economy



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model—Aetna, PayPal, Procter & Gamble, and USAA—and show how enterprises are changing models over time. And we show which models have the best growth, net profit margins, customer experience, and levels of innovation. Specifically, we explore the two dimensions of major change enabled by digitization: getting closer to end customers and moving from supplier models (value chains like the traditional Walmart) to digital ecosystems (such as Amazon). Enterprises that are both closer to their end customers and earn most of their revenues from ecosystems have, up to now, outperformed their industry-average profitability by more than 25 percent. But the ecosystem-driver model is hard to get right. Other models may not offer the financial performance that the ecosystem driver currently does, but other business outcomes can be as important as profitability, in the short term. And not every enterprise will be able to make the move to ecosystem driver right away. There are good intermediary goals to shoot for—such as opening up the company to more partnerships and learning more about the end customers. This chapter primarily aims to help you determine *which business model in the DBM framework is best for your enterprise* to create a new, compelling customer offer. We finish the chapter with a self-assessment. The first part helps you find your current position in the DBM framework, and the second part asks where you want to be in the next five years.

Chapter 3 describes how to *identify and capitalize on your main sources of competitive advantage*. In a digital economy with many new competitors, senior executives have to understand what makes their enterprises great. Enterprises can compete digitally with one or more of three capabilities: their content (products and information), their customer experience (multichannel and multi-product), and their digitized platforms (internal and external). We explore the issues with case studies of digital leaders like Amazon,

BBVA, Commonwealth Bank of Australia, LexisNexis, TripAdvisor, USAA, and Wall Street Journal. Using results from our effective-practices survey, we describe how the top-performing enterprises identify and exploit their competitive advantage. We finish the chapter with a self-assessment exercise to help you identify the most important sources of competitive advantage for your enterprise's future success—and discuss next steps.

Chapter 4 explores the importance of connectivity to success in the next-generation enterprise. Connectivity is the essence of digitization and is enabling new business models every day. We illustrate connectivity with the promise of the IoT and mobile—a connected world leading to new ways to delight customers and make money. Together mobile and the IoT will change almost everything. Estimates of the IoT business market are as high as US\$19 trillion; such projections have led to lots of lofty talk and strategic positioning.¹⁷ However, our research indicates that while there is great opportunity, top- and bottom-line value is typically created only by enterprises willing to make the hard choices necessary to change their business models. We illustrate how to achieve connectivity with case studies of Dunkin' Donuts, Flex, GE, iGaranti, Johnson & Johnson, and Schindler. In this chapter, we ask the following question: *How will you use mobile and digitally managed assets to connect and create value?*

In chapter 5, we argue that enterprises will not succeed in the digital economy merely by tweaking the management practices that led to past success. To thrive, many enterprises will need to make investments in structures, skills, and practices to substantially change their organization. We discuss two key actions companies can take. They can build a digital culture and structure—the shared values, beliefs, traditions, and assumptions about digital—that guide behaviors. And they can become

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ambidextrous by simultaneously innovating and cutting costs. We return to the DBM framework and identify the eight organizational capabilities necessary for the next-generation enterprise:

- Gathering great information about customers (e.g., their goals)
- Amplifying the customer voice inside the enterprise (making the customer central to everything the enterprise does)
- Creating a culture of evidence-based decision making (using customer, operational, market, and social data)
- Providing an integrated, multiproduct, multichannel customer experience
- Being distinctive, and becoming the first place your best customers think of when a need arises
- Identifying and developing great partnerships and acquisitions
- Service-enabling your core business capabilities (implementing business capabilities in reusable modular software components) and making them available using application programming interface (APIs)
- Developing efficiency, compliance, and security as enterprise competencies

We describe how several enterprises, including Aetna and BBVA, are creating digital cultures and reinventing their next-generation enterprises to win in the digital economy. The self-assessment in this chapter helps you determine how good you are at the eight organizational capabilities and where you need to focus.

Introduction

Chapter 6, our final chapter, discusses a key role of leaders in creating the next-generation enterprise: *identifying and leveraging leaders throughout the organization to enact the needed changes*. Transformation requires leadership from all parts of the organization—top down and bottom up. We talk about the roles of the important players: the board, the CEO, the executive committee, the chief information officer (CIO), and the workforce, including middle management and younger employees. We illustrate the leadership challenges with insights from DBS Bank, Deloitte, ING, and Microsoft; provide an assessment to help you identify gaps in your leadership; and recommend how to begin leading the transformation to the next-generation enterprise.

Right now is both an exciting and a daunting time to be a leader of a large enterprise. The stakes are very high. Digital disruption is already here, and doing nothing will lead to the aforementioned slow death of a thousand cuts. The goal of this book is to provide a common language, helpful frameworks, motivating case studies, and data on early financial performance to help you reach the difficult decisions you must make to set up their enterprises for success in the next decades.

Let's get started.

ABOUT THE AUTHORS

PETER D. WEILL, BE, MBA, MPhil, PhD, is the Chairman of MIT CISR at the Sloan School of Management, which studies and works with companies on how to transform for success in the digital era. MIT CISR has approximately one hundred company members globally who use, debate, support, and participate in the research. Peter's work centers on the role, value, and governance of digitization in enterprises and their ecosystems. Ziff Davis recognized Peter as number twenty-four of "The Top 100 Most Influential People in IT" and the highest-ranked academic. This is Peter's sixth book for Harvard Business Review Press.

STEPHANIE L. WOERNER, MBA, MA, PhD, is a research scientist at MIT CISR. Her research centers on how companies manage organizational change caused by the digitization of the economy. She has a passion for measuring hard-to-assess digital factors such as connectivity and customer experience and linking them to firm performance. Stephanie earned her PhD in organizational behavior at the Stanford University Graduate School of Business.