

15 Current Trends in Strategic Management

In any field of human endeavor you reach a point where you can't solve new problems using the old principles. We've reached that point in the evolution of management. When you go back to the principles upon which our modern companies are built—standardization, specialization, hierarchy, and so on—you realize that they are not bad principles, but they are inadequate for the challenges that lie ahead.¹

—GARY HAMEL, MANAGEMENT THINKER

The truth is you don't know what is going to happen tomorrow. Life is a crazy ride, and nothing is guaranteed.

—EMINEM, MUSICIAN AND SONGWRITER

The future ain't what it used to be.

—YOGI BERRA, BASEBALL PLAYER AND COACH

OUTLINE

◆ Introduction

◆ The New Environment of Business

- Technology
- Competition
- Systemic Risk
- Social Forces and the Crisis of Capitalism

◆ New Directions in Strategic Thinking

- Reorienting Corporate Objectives
- Seeking More Complex Sources of Competitive Advantage

- Strategy in a Digital World

- Managing Options

- Understanding Strategic Fit

◆ Redesigning Organizations

- MultiDimensional Structures
- Coping with Complexity: Making Organizations Informal, Self-Organizing, and Permeable

◆ The Changing Role of Managers

◆ Summary

◆ Notes

Introduction

In 2018, the business world was being reshaped by unpredictable forces: the widespread adoption of artificial intelligence, the rise of nationalism and decline of international institutions, and challenges to social and political norms. Our challenge in this chapter is to identify the forces that are reshaping the business environment, to assess their implications for strategic management, and to consider what new ideas and tools managers can draw upon to meet the challenges ahead.

We are in poorly charted waters and, unlike the other chapters of this book, this chapter will not equip you with proven tools and frameworks that you can deploy directly in case analysis or in your own companies. Our approach is exploratory. We begin by reviewing the forces that are reshaping the environment of business. We will then draw upon concepts and ideas that are influencing current thinking about strategy and the lessons offered from leading-edge companies about strategies, organizational forms, and management styles that can help us to meet the challenges of this demanding era.

The New Environment of Business

In terms of the forces reshaping business, the first two decades of the 21st century are similar to the first two decades of the 20th century. During both periods, the developed world was transformed by technological innovation. In the 20th century, it was electricity, the automobile and the telephone; in the 21st century, digital technologies are transforming production, commerce, and social interaction. Both periods also saw massive political changes: in the early 20th century it was the rise of the nation state, the collapse of colonial empires, and the birth of Marxist-Leninism; in the early 21st century, the rise of religious extremism, the decline of liberalism, and disillusion with political leaders and political systems. During both periods popular disaffection with big business was a common theme. Let us focus upon four key drivers of change in the 21st century.

Technology

The invention of the integrated circuit in 1958 marked the beginning of the digital era. However, it was not until the advent of the microprocessor (1971), RFID and the subsequent “Internet of Things” (1989), and wireless broadband (2001) that the digital revolution became a truly disruptive force.

In the US, “FAANG” companies (Facebook, Amazon, Apple, Netscape, and Google) accounted for 14% of the market capitalization of the S&P 500 at the end of July 2018. The most valuable Chinese companies were Tencent Holdings and Alibaba Group. Yet, according to Brian Arthur, a pioneer of complexity economics, the full impact of the digital revolution has yet to be felt. The combination of sensors, big data, and artificial intelligence (AI) produces an “external intelligence in business—one not housed internally in human workers but externally in the virtual economy’s algorithms and machines. Business and engineering and financial processes can now draw on huge libraries of intelligent functions and bit by bit render human activities obsolete.”² For instance, the advent of autonomous vehicles will likely eliminate not only millions of jobs in commercial and personal transportation but also the need for individuals to own

cars. In retailing, check-out-free Amazon Go stores, together with the development of shelf-filling robots, point the potential for fully-automated retail stores.³

Technology is also shifting the boundaries between firms and markets in fundamental ways. Wireless technologies have slashed transaction costs, facilitating the growth of the “sharing economy” involving both peer-to-peer sharing (Airbnb, Blablacar, Lending Club) and “gig economy” freelance services (Uber, freelancer.com, TaskRabbit).⁴ By the end of 2017, Airbnb’s listings exceeded the hotel rooms offered by the world’s five biggest hotel chains, while Uber, with 16,000 employees, had 1.6m drivers worldwide.

Competition

As we observed in Chapter 11 (“Implications of International Competition for Industry Analysis”), the entry into world markets by companies from emerging-market countries has added considerably to competitive pressures in many manufacturing industries. In wireless hand-sets, 67 new companies entered the industry between 2000 and 2009, 34 of them from China and Taiwan. Many of these new suppliers began as OEM suppliers and then went on to develop their own brands, thereby competing with their former customers.⁵

The wave of digital innovation described in the previous section is also a source of new competition. Across a broad range of industries, established market leaders are threatened by digital upstarts deploying disruptive technologies: TV broadcasting and cable companies by video streaming companies such as Netflix, banks by fintech companies offering new payment systems such as Ant Financial and Adyen, home security companies such as ADT by Nest Labs (owned by Alphabet).

Increased competition from low-cost, emerging-market competitors, or from new entrants with innovative business models, means that competitive advantage has become increasingly fleeting. As we shall see later, one consequence of this is that firms must develop multiple sources of competitive advantage.

However, these sources of new competition have been counteracted by the efforts of established companies to consolidate their positions of market leadership. The merger wave of 2014–18 was dominated horizontal mergers among market leaders, which turned more and more of the world’s industries into concentrated oligopolies. For example: Anheuser-Busch’s acquisition of SAB Miller created a global giant with 25% of the world’s beer market; in metals mining mergers have resulted in five leading global players—Glencore, Rio Tinto, BHP-Billiton, and Vale; four companies dominate the world tobacco industry—Philip Morris, Japan Tobacco, BAT, and Imperial Tobacco.

These monopolistic tendencies are not just a feature of mature industries. The most startling feature of the digital revolution has been the growing dominance of a few diversified digital giants, of which Apple, Alphabet, Amazon, Facebook, Alibaba and Tencent are the most prominent. Each of these companies has quasi-monopoly positions in one or more markets (e.g., Alphabet has a 70% share of web search and 84% share of smartphone operating systems; Amazon has a 48% share of all book sales). Of greater concern is these companies’ ability to extend dominance from one market to another and accumulate vast stores of data on individuals.⁶

Systemic Risk

The financial crisis of 2008–09 demonstrated the vulnerability of the global financial system to turbulence arising from a single source (in this instance, US real estate

financing). However, the decade since has been one of low volatility in most of the world's financial markets.

This apparent tranquility may be a delusion. As Nicholas Taleb observes, most of the key turning points in world history are “black swan events”: rare occurrences with extreme impact that are unpredictable.⁷ Yet, we can also point to the types of systems that give rise to such events.

A feature of the global economy, and human society in general, is increasing interconnectedness through trade, financial flows, markets, and communication. Systems theory predicts that increasing levels of interconnectedness within a complex, non-linear system increase the tendency for small initial movements to be amplified in unpredictable ways. Regional and global political and social phenomena—such as the “Arab Spring” the rise of radical populism in the US and Europe, and the “me too” movement—point to the role of systematic forces.

In 2018, the World Economic Forum pointed to three “complex risks in the interconnected systems that underpin our world”: environmental risks (caused by climate change), cybersecurity risks (caused by the vulnerability of computer systems and electronic data), and geopolitical risks (caused by the erosion of multilateral rules-based approaches to international relations).⁸ In all three areas, the transition from a unipolar world led by the US and international organizations (such as the United Nations, World Bank, IMF, and OECD) to a multipolar world where China, Russia, and Iran challenge prevailing orthodoxies has increased the vulnerability of the global system.⁹

Social Forces and the Crisis of Capitalism

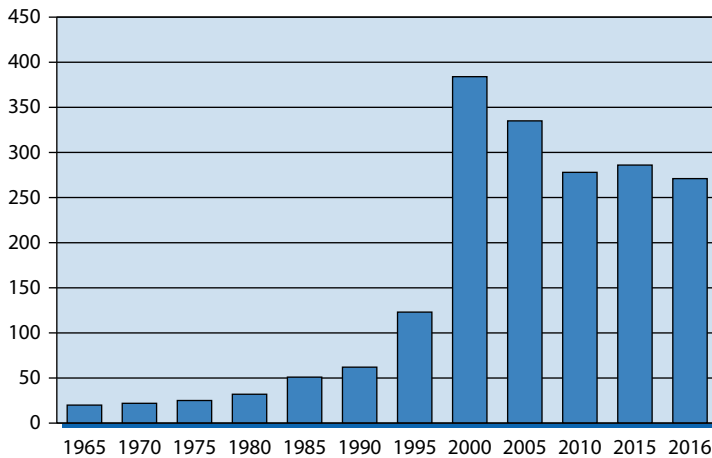
For organizations to survive and prosper requires that they adapt to the values and expectations of society—what organizational sociologists refer to as *legitimacy*.¹⁰ One fall-out from the 2008–09 financial crisis was the loss of legitimacy that many businesses suffered—banks in particular. This negatively affected their reputations among consumers, the morale of their employees, the willingness of investors and financiers to provide funding, and the government policies toward them. The 2017 allegations of sexual abuse against Hollywood mogul, Harvey Weinstein, led to the bankruptcy of his movie production company in March 2018.

The notion that the business enterprise is a social institution that must identify with the goals and aspirations of society has been endorsed by many management thinkers, including Peter Drucker, Charles Handy, and Sumantra Ghoshal.¹¹ The implication is that, when the values and attitudes of society are changing, so must the strategies and behaviors of companies. During the past two decades antibusiness sentiment has moved from the fringes of the political spectrum—neo-Marxists, environmentalists, and antiglobalization activists—into mainstream public opinion.

The fraying legitimacy of market capitalism can be traced to the 2008–09 financial crisis; the corporate scandals that have engulfed Volkswagen (diesel emissions fraud), Kobe Steel (bogus quality data), and BP (safety violations); and the rising tide of inequality.¹² Figure 15.1 offers one indication of the growing income disparities generated by the modern economy.

The rise of China has reinforced doubts about the efficacy of market capitalism. Between 2000 and 2017, the number of Chinese companies among the Global Fortune 500 grew from 10 to 109—most of them state-owned enterprises. By 2017, the Chinese economy was about 25% bigger than the US economy (on the basis of GDP measured at purchasing power parity exchange rates).

FIGURE 15.1 Ratio of average CEO compensation to that of average worker, USA, 1965–2016



Source: Institute for Economic Policy.

State-owned enterprises are one alternative to traditional shareholder-owned companies; other alternative forms of business enterprise have also attracted interest in recent years.

- *Cooperatives*—businesses that are mutually owned by consumers (e.g., credit unions), employees (e.g., the British retailing giant John Lewis Partnership), or by independent producers (e.g., agricultural marketing cooperatives)—have captured particular attention. Cooperatives account for 21% of total production in Finland, 17.5% in New Zealand, and 16.4% in Switzerland. In most East African countries, cooperatives are the dominant organizational form in agriculture.¹³
- *Social enterprises* are business enterprises that pursue social goals. Social enterprises may be for-profit or not-for-profit companies (and may include both charities and cooperatives). Muhammad Yunus' Grameen Bank is a for-profit company that encourages business development among poor people through microcredit. Most US states have amended their corporate laws to permit *benefit corporations*: companies with explicit goals to pursue social and environmental goals as well as profit.¹⁴

Adapting to society's growing demands for fairness, ethics, and sustainability presents challenges for business leaders that extend beyond the problems of reconciling societal demands with shareholder interests. Should a company determine unilaterally the values that will govern its behavior or does it seek to reflect those of the society in which it operates? Companies that embrace the values espoused by their founders are secure in their own sense of mission and can ensure a long-term consistency in their strategy and corporate identity (e.g., Walt Disney Company and Walmart with respect to founders Walt Disney and Sam Walton). However, being continually responsive to stakeholder interests and views and staying alert to social issues, can also be diversion of time and effort for senior managers. In 1989, Michael Jensen of Harvard Business School predicted that the advantages of private companies over public companies would cause the "Eclipse of the Public Corporation."¹⁵ Thirty years later, his prediction

is being realized: between 1997 and 2017 the number of companies listed on US stock markets has halved.¹⁶ More and more companies are avoiding the scrutiny to which public corporations are subject, either by going private, or—as in the case of e-commerce startups such as Airbnb, Uber, and Didi Chuxing—by avoiding IPOs.

New Directions in Strategic Thinking

These features of the 21st century business environment have created challenging conditions under which to formulate and implement business strategy. The result has been a reconsideration of corporate objectives, new approaches to competitive advantage and the management of uncertainty, and new thinking about strategic fit.

Reorienting Corporate Objectives

The issue of whether companies should be operated in the interests of their owners, in the interests of their stake-holders, or in the interests of society as a whole remains unresolved. Recent efforts to reconcile a broader societal role for firms with shareholder value maximization have emphasized either the need for companies to maintain social legitimacy or the potential for such a broadening of goals to open up new avenues for value creation—the central theme of Porter and Kramer's *shared value* concept.¹⁷

The doctrine of shareholder value creation has also evolved away from its 1990s preoccupation with stock market valuation toward a refocusing of top management priorities upon the fundamental drivers of enterprise value. This reflects a recognition that management cannot create stock market value: its focus should be the strategic factors that drive profits: operational efficiency, customer satisfaction, innovation, and new product development.

There is a danger that we get sidetracked by the debate over the appropriate goals for a company. Richard Rumelt views strategy as a response to a problem—whether it is President Cyril Ramaphosa's challenge of reviving the South African economy or Coca-Cola's challenge of maintaining its revenues and profits as worldwide sales of soda drinks decline. Hence, for Rumelt the kernel of a good strategy begins with “an explanation of the nature of the challenge.”¹⁸

Seeking More Complex Sources of Competitive Advantage

Addressing such strategy fundamentals does not necessarily lead to simple strategies. As we have already observed, both in this chapter and in Chapter 7, in today's dynamic business environment competitive advantages are difficult to sustain. According to Rita McGrath, firms need to “constantly start new strategic initiatives, building and exploiting many transient competitive advantages at once.”¹⁹ Complex competitive advantages are more sustainable than simple advantages. A key feature of companies that have maintained both profitability and market share over many years—for example, Toyota, Walmart, 3M, Robert Bosch, and Samsung Electronics—is their development of multiple layers of competitive advantage, including cost efficiency, differentiation, innovation, responsiveness, and adaptability. As we shall see, reconciling the different requirements of different performance dimensions imposes complex organizational challenges that are pushing companies to fundamentally rethink their structures and management systems.

This pursuit of multiple capabilities in contrast to building a single core capability recalls Isaiah Berlin's classification of intellectuals into foxes and hedgehogs: "The fox knows many things; the hedgehog knows one big thing."²⁰ Despite Jim Collins' praise for companies that exploit a single penetrating insight into the sources of value in their chosen sectors, the fate of companies such as Toys "R" Us with big-box retailing, Dell with its direct sales model, and Nokia's consumer-oriented market segmentation, points to the weakness of a single dominant logic in a complex, changing world.²¹

The quest for more complex sources of competitive advantage also involves strategies that look beyond industry boundaries to exploit linkages across sectors. As we shall explore below, the competitive advantages built by Apple, Google, and Amazon are the result of business models that exploit sources of value across entire ecosystems of linked businesses.²²

Strategy in a Digital World

Of all the forces that have transformed the business sector over the past three decades, digital technologies have been the most potent and the most ubiquitous. What does this mean for strategy—both for the types of strategies appropriate to digital sectors and the types of analytical tools we apply in order to formulate digital strategies?

In the course of this book, we have seen identified some of the major features of firms and industries that are based upon digital technologies. Beginning with industry structures, we noted in Chapter 4 that industries supplying goods and services tend to be complex ecosystems comprising different suppliers of complementary products. For example, the smartphone industry comprises the suppliers of handsets, operating systems, applications, components, and contact manufacturing services. Such industries offer potential for complex business models—especially for platform owners. Although, as we observed in Chapter 7 (pp. 158 and 170), despite the emphasis given to business model innovation, most digital business models are variants of more traditional models.

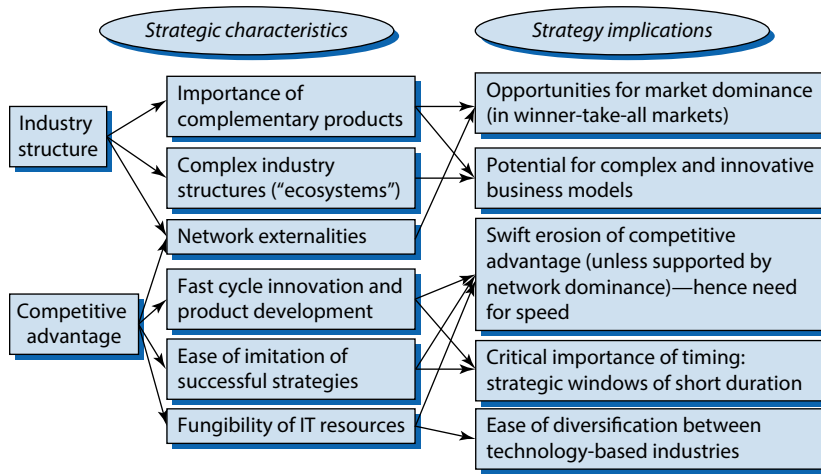
Among industries based upon digital technologies, a key differentiator is whether the industry is subject to network externalities—a critical factor that explains the massive value appropriation of companies that dominate one or more digital market such as Apple, Alphabet, Amazon, Facebook, Microsoft, eBay, and Baidu. In the absence of network externalities, digital industries are subject to fragmentation and intense price competition—for example, the markets for Android smartphones, digital cameras, and cloud storage.

Because digital technologies are ultimately based upon binary codes, digital resources tend to be fungible: a software development team can develop software for a wide variety of applications. For Alphabet, the different businesses providing web search (Google), autonomous vehicles (Waymo), home automation (Nest), and human longevity (Calico) are all engaged in developing algorithms. Fungibility also characterizes digital process technology: 3D printing is a generic technology with the potential to transform much of manufacturing industry.

These strategic characteristics of digital industries are summarized in Figure 15.2. As digital technologies continue to transform more and more established industries, so these features will become increasingly general.

Managing Options

As we observed in the last section of Chapter 2 ("Strategy as Options Management"), the value of the firm derives not only from the present value of its profit stream (cash

FIGURE 15.2 The strategic characteristics of digital industries

flows) but also from the value of its options. During turbulent times, real options—growth options, abandonment options, and flexibility options—become increasingly important as sources of value.

Viewing strategy as the management of a portfolio of options shifts the emphasis of strategy formulation from making resource commitments to the creation of opportunities. Strategic alliances are especially useful in creating growth options while allowing firms to focus on a narrow set of capabilities.

The adoption of options thinking also has far-reaching implications for our tools and frameworks of strategy analysis. For example:

- Industry analysis has taken the view that decisions about industry attractiveness depend on profit potential. However, as industry structure become less stable, industry attractiveness will depend more on option value. From this perspective, an industry that is rich in options is one that produces different products, comprises multiple segments, has many strategic groups, and utilizes different technologies—such as computer software, packaging, and investment banking. These offer more strategic options than airlines or steel or car rental.
- Similarly with the analysis of resources and capabilities. In terms of option value, an attractive resource is one that has multiple applications. A technological breakthrough in nanotechnology is likely to offer greater option value than a new process that increases the energy efficiency of blast furnaces. A relationship with a rising politician is a resource that has more option value than a coalmine. Similarly with capabilities: a highly specialized capability, such as expertise in the design of petrochemical plants, offers fewer options than expertise in the marketing of fast-moving consumer goods. Dynamic capabilities are especially important because they “are the organizational and strategic routines by which firms achieve new resource combinations as markets emerge, collide, split, evolve, and die.”²³

However, applying real options thinking goes beyond making modest adaptations to our strategic analysis. Lenos Trigeorgis and Jeff Reuer view real options theory as

a comprehensive approach to analyzing the firm's strategic decision-making under uncertainty whose potential has yet to be realized.²⁴

Understanding Strategic Fit

A central theme throughout this book is the notion of *strategic fit*. The basic framework for strategy analysis presented in Chapter 1 (Figure 1.2) emphasized how strategy must *fit* with the business environment and with the firm's resources and capabilities. We subsequently viewed the firm as an *activity system* where all the activities of the firm fit together (Figure 1.3). In Chapter 6, we introduced *contingency approaches* to organizational design: the idea that the structure and management systems of the firm must fit with its strategy and its business environment. In Chapter 8, we saw how this fit between strategy, structure, and management systems can act as a barrier to change. In recent years our understanding of fit (or contingency) has progressed substantially as a result of two major concepts: complementarity and complexity. These concepts offer new insights into linkages within organizations.

Complementarity Complementarity among management practices implies that management must be viewed as a system: the successful adoption of lean manufacturing requires that human resource practices are adapted to meet the needs of new production processes.²⁵ Similarly, the effectiveness of six-sigma quality programs are dependent upon changes in incentives, recruitment policies, product strategy, and capital budgeting practices.

This complementarity makes it difficult to generalize about the effectiveness of particular strategies every firm is unique and must create a unique configuration of strategic variables and management practices. However, strategic choices tend to converge around a limited number of *configurations*. Thus, successful adaptation among large European companies was associated with a few configurations of organizational structure, processes, and boundaries.²⁶

Complexity Theory Organizations—like the weather, flocks of birds, and human crowds—are *complex systems* whose behavioral characteristics have important implications for their management:

- *Unpredictability*: agents interact to produce unpredictable outcomes; small disturbances typically have minor consequences but may also trigger major movements.²⁷
- *Self-organization*: is a feature of most biological and social systems. If bee colonies and shoals of fish display sophisticated coordination without anyone giving orders, presumably human organizations have the same capacity.²⁸
- *Inertia, chaos, and evolutionary adaptation*: Complex systems can stagnate into inertia (stasis) or become disorderly (chaos). In between is an intermediate region where the most rapid evolutionary adaptation occurs. Positioning at this *edge of chaos* results in both small, localized adaptations and occasional evolutionary leaps that allow the system to attain a higher *fitness peak*.²⁹ Kaufman's *NK model*, which allows the behavior of complex systems to be simulated, has been widely applied to the study of organizations.³⁰

The Contextuality of Linkages within the Firm The implications of complementarity and complexity for management depend upon *contextuality* of the linkages among activities.³¹ There are two dimensions to this contextuality. First, the

contextuality of activities: whether the performance effects of an activity are dependent or independent of the other activities that a firm undertakes. Second, *contextuality of interactions*: whether the interactions between activities are the same for all firms, or whether they are specific to individual contexts.³² Understanding contextuality can help us to understand whether or not it is desirable to transfer a “best practice” from another firm or even from another part of the same firm and the extent to which change in any activity will have wider repercussions.

Redesigning Organizations

A more complex, more competitive business environment requires that companies perform at higher levels with broader repertoires of capabilities. Building multiple capabilities and pursuing multiple performance dimensions presents dilemmas: producing at low cost while also innovating, deploying the massed resources of a large corporation while showing the entrepreneurial flair of a small start-up, achieving reliability and consistency while also adapting to individual circumstances. In Chapter 8, we addressed one of these dilemmas: the challenge of *ambidexterity*—optimizing efficiency and effectiveness for today while adapting to the needs of tomorrow. In reality, the problem of reconciling incompatible strategic goals is much broader: reconciling *multiple* dilemmas requires *multidexterity*.

Implementing complex strategies with conflicting performance objectives takes us to the frontiers of organizational design. We know how to devise structures and systems that drive cost efficiency; we know the organizational conditions conducive to innovation; we can recognize the characteristics of *high-reliability organizations*; we are familiar with the sources of entrepreneurship. But how on earth do we achieve all of these simultaneously?

Multidimensional Structures

Organizational capabilities, we have learned (Chapter 5), need to be embodied in processes and housed within organizational units that provide the basis for coordination between the individuals involved. The traditional matrix organization allows capabilities to be developed in relation to products, geographical markets, and functions. And the more capabilities an organization develops, the more complex its organizational structure becomes.

Coping with Complexity: Making Organizations Informal, Self-Organizing, and Permeable

How can firms avoid the costs, rigidities, and loss of dynamism that result from increasing organizational complexity? In Chapter 6, we observed that traditional matrix structures which combined product, geographical, and functional organizations proved unwieldy for many corporations. Yet, developing additional capabilities has involved adding further organizational dimensions!

Informal Organization The key to increasing organizational complexity while maintaining agility and efficiency is to shift from formal to informal structures and systems. The organizational requirements for coordination are different from those required for compliance and control. Traditional hierarchies with bureaucratic systems are based upon the need for control. Coordination requires modular structures. But

each module can be organized as an informal, team-based structure, while coordination between modules does not necessarily need to be managed in a directive sense—it can be achieved by means of standardized interfaces, mutual adjustment, and horizontal collaboration (see discussion of “The Coordination Problem” in Chapter 6).

The scope for team-based structures to reconcile complex patterns of coordination with flexibility and responsiveness is enhanced by the move toward project-based organizations. While construction companies and consulting firms have always been structured around projects, a wide range of companies are finding that project-based structures featuring cross-functional teams charged with clear objectives and a specified time horizon are more able to achieve innovation, adaptability, and rapid learning than more traditional structures. W. L. Gore, the supplier of Gore-tex and other hi-tech fabric products, is an example of a team-based, project-focused structure that integrates a broad range of highly sophisticated capabilities despite an organizational structure that is almost wholly informal: there are no formal job titles and leaders are selected by peers. Employees (“associates”) may apply to join particular teams, and it is up to the team members to choose new members. The teams are self-managed and team goals are self-determined.³³

Reducing complexity at the formal level can foster greater variety and sophisticated coordination at the informal level. In general, the greater the potential for reordering existing resources and capabilities in complex new combinations, the greater the advantages of *consensus-based hierarchies*, which emphasize horizontal communication, over *authority-based hierarchies*, which emphasize vertical communication.³⁴

Self-Organization The above-mentioned attributes of complex systems that are conducive to self-organization—identity, information, and relationships—can substitute for formal management processes.

- **Organizational identity:** A collective view of what is distinctive and enduring about the character of an organization can offer organizational members a stable bearing in navigating the cross-currents of the 21st century business environment.³⁵ Coherence at the core allows an organization to face the world with greater confidence.³⁶ Of course, organizational identity, because of its permanence, can impede rather than facilitate change. The challenge for organizational leaders is to reinterpret organizational identity in a way that can support and legitimate change. Michael Eisner at Disney, Lou Gerstner at IBM, and Franck Riboud at Danone all initiated major strategic changes, but within the constancy of their companies’ identities.
- **Information:** The information and communication revolution of the past two decades has transformed society’s capacity for self-organization, as evident from the role of social media in political movements ranging from the “Arab Spring” to “MeToo” of 2017–18. Within companies, information and communication networks support spontaneous patterns of complex coordination with little or no hierarchical direction.
- **Relationships:** According to Wheatley and Kellner-Rogers: “Relationships are the pathways to the intelligence of the system. Through relationships, information is created and transformed, the organization’s identity expands to include more stakeholders, and the enterprise becomes wiser. The more access people have to one another, the more possibilities there are. Without connections, nothing happens... In self-organizing systems, people need access to everyone; they need to be free to reach anywhere in the organization to accomplish work.”³⁷ There is increasing evidence that a major part of the work of organizations is achieved through informal social networks.³⁸

For organizations to respond spontaneously to the changes occurring around them, they require mechanisms that facilitate automated, real-time organizational responses to new data—without requiring human decisions. BCG consultants, Martin Reeves and colleagues, envisage a “self-tuning enterprise” where adaptation is guided by organizational algorithms. They view the Chinese ecommerce giant, Alibaba, as exemplifying many of these self-tuning characteristics.³⁹

Permeable Corporate Boundaries Even with informal coordination mechanisms, modular structures, and sophisticated knowledge management systems, there are limits to the range of capabilities that any company can develop internally. Hence, in order to expand the range of capabilities that they can deploy, firms collaborate in order to access the capabilities of other firms. This implies less distinction between what happens within the firm and what happens outside it. Strategic alliances, as we have already seen, permit stable yet flexible patterns for integrating the capabilities of different firms while also sharing risks. While localized networks of firms—such as those that characterize Italy’s clothing, furniture, and industrial machinery industries—offer potential for building trust and interfirm routines, web-based technologies permit much wider networks of collaboration. The open innovation efforts, such as IBM’s “Innovation Jam,” and open-source product development communities, such as Linux and Wikipedia, illustrate the power of technologies to support the accessing and integration of knowledge from across the globe.⁴⁰

The Changing Role of Managers

Changing external conditions, new strategic priorities, and different types of organization call for new approaches to management and leadership. In the emerging 21st century organization, the traditional role of the CEO as peak decision-maker may no longer be feasible, let alone desirable. As organizations and their environments become increasingly complex, the CEO is no longer able to access or synthesize the information necessary to be effective as a peak decision-maker. Recent contributions to the literature on leadership have placed less emphasis on the role of executives as decision-makers and more on their role in guiding organizational evolution. Gary Hamel is emphatic about the need to redefine the work of leadership:

The notion of the leader as a heroic decision maker is untenable. Leaders must be recast as social-systems architects who enable innovation... In Management 2.0, leaders will no longer be seen as grand visionaries, all-wise decision-makers, and iron-fisted disciplinarians. Instead, they will need to become social architects, constitution writers, and entrepreneurs of meaning. In this new model, the leader’s job is to create an environment where every employee has the chance to collaborate, innovate, and excel.⁴¹

Jim Collins and Jerry Porras also emphasize that leadership is less about decision-making and more about cultivating identity and purpose:

If strategy is founded in organizational identity and common purpose, and if organizational culture is the bedrock of capability, then a key role of top management is to clarify, nurture and communicate the company’s purpose, heritage, personality,

values, and norms. To unify and inspire the efforts of organizational members, leadership requires providing meaning to people's own aspirations. Ultimately this requires attention to the emotional climate of the organization.⁴²

These views are supported by empirical research by McKinsey & Company into the characteristics of effective leaders. They identify four attributes that “explained 89 percent of the variance between strong and weak organizations in terms of leadership effectiveness”: solving problems effectively, operating with a strong results orientation, seeking different perspectives, and supporting others.⁴³

This changing role also implies that senior managers require different knowledge and skills. Research into the psychological and demographic characteristics of successful leaders has identified few consistent or robust relationships—successful leaders come in all shapes, sizes, and personality types. However, research using *competency modeling* methodology points to the key role of personality attributes that have been referred to by Daniel Goleman as *emotional intelligence*.⁴⁴ These attributes comprise: *self-awareness*, the ability to understand oneself and one's emotions; *self-management*, control, integrity, conscientiousness, and initiative; *social awareness*, particularly the capacity to sense others' emotions (empathy); and *social skills*, communication, collaboration, and relationship building. Personal qualities are also the focus of Jim Collins' concept of “Level 5 Leadership,” which combines personal humility with an intense resolve.⁴⁵

A similar transformation is likely to be required throughout the hierarchy. Informal structures and self-organization have also transformed the role of middle managers from being administrators and controllers into entrepreneurs, coaches, and team leaders.

Summary

The dynamism and unpredictability of today's business environment presents difficult challenges for business leaders responsible for formulating and implementing their companies' strategies. Not least, because businesses need to compete at a higher level along a broader front.

In responding to these challenges, business leaders are supported by two developments. The first comprises emerging concepts and theories that offer both insight and the basis for new management tools. Key developments include complexity theory, the principles of self-organization, real option analysis, organizational identity, network analysis, and new thinking concerning innovation, knowledge management, and leadership.

A second area is the innovation and learning that results from adaptation and experimentation by companies. Long-established companies such as IBM and P&G have embraced open innovation; technology-based companies such as Google, W. L. Gore, Microsoft, and Facebook have introduced radically new approaches to project management, human resource management, and strategy formulation. In emerging-market countries we observe novel approaches to government involvement in business (China), new initiatives in managing integration in multibusiness corporations (Samsung), new approaches to managing ambidexterity (Infosys), and new forms of employee engagement (Haier).

At the same time, it is important not to overemphasize either the obsolescence of existing principles or the need for radically new approaches to strategic management. Many of the features of today's

business environment are extensions of well-established trends rather than fundamental discontinuities. Certainly, our strategy analysis will need to be adapted and augmented in order to take account of new circumstances; however, the basic tools of analysis—industry analysis, resource and capability analysis, the applications of economies of scope to corporate strategy decisions—remain relevant and robust. One of the most important lessons to draw from the major corporate failures that have scarred the 21st century—from Enron and WorldCom to Royal Bank of Scotland and Eastman Kodak—has been the realization that the rigorous application of the tools of strategy analysis outlined in this book might have helped these firms to avoid their misdirected odysseys.

Notes

1. "A Conversation with Gary Hamel and Lowell Bryan," *McKinsey Quarterly* (Winter 2008).
2. W. B. Arthur, "Where is Technology Taking the Economy?" *McKinsey Quarterly* (October 2017).
3. "Amazon's New Supermarket Could Be Grim News for Human Workers," *The New Yorker* (January 26, 2018).
4. "The Future of Work," *Economist* (January 3, 2015): 17–20.
5. J. Alcelar and J. Oxley, "Learning by Supplying," *Strategic Management Journal* 35 (2014): 204–223.
6. See "The Antitrust Case Against Facebook, Google and Amazon," *Wall Street Journal* (January 16, 2018); and F. Foer, *World Without Mind: The Existential Threat of Big Tech* (New York: Penguin, 2017).
7. N. N. Taleb, *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2007).
8. <http://reports.weforum.org/global-risks-2018/executive-summary/>. Accessed February 5, 2018.
9. E. A. Cohen, "How Trump Is Ending the American Era," *The Atlantic* (October 2017).
10. A. Y. Lewin, C. B. Weigelt, and J. D. Emery, "Adaptation and Selection in Strategy and Change," in M. S. Poole and A. H. van de Ven (eds.), *Handbook of Organizational Change and Innovation* (New York: Oxford University Press, 2004): 108–160.
11. P. F. Drucker, *Managing in the Next Society* (London: St. Martin's Press, 2003); S. Ghoshal, C. A. Bartlett, and P. Moran, "A New Manifesto for Management," *Sloan Management Review* (Spring 1999): 9–20; C. Handy, *The Age of Paradox* (Boston: Harvard University Press, 1995).
12. Rising inequality is analyzed in T. Piketty, *Capital in the 21st Century* (Cambridge, MA: Harvard University Press, 2014).
13. "Background Paper on Cooperatives." <http://www.un.org/esa/socdev/social/cooperatives/documents/survey/background.pdf>, accessed July 20, 2015.
14. J. Moizer and P. Tracey, "Strategy Making in Social Enterprise: The Role of Resource Allocation and its effects on Organizational Sustainability," *Systems Research and Behavioral Science* 27 (2010): 252–266.
15. M. C. Jensen, "Eclipse of the Public Corporation," *Harvard Business Review* (Sept.–Oct. 1989).
16. M. Jensen, "The Eclipse of the Public Corporation," *Harvard Business Review* (September–October, 1989).
17. R. L. Martin, "The Public Corporation is Finally in Eclipse," *Harvard Business Review* (October 2014); "Why the Decline in the Number of Listed American Firms Matters," *Economist* (April 22, 2017).
18. R. P. Rumelt, "The Perils of Bad Strategy," *McKinsey Quarterly* (June 2011).
19. R. G. McGrath, "Transient Advantage," *Harvard Business Review* (June/July 2013): 62–70.
20. I. Berlin, *The Hedgehog and the Fox* (New York: Simon & Schuster, 1953).
21. J. Collins, *Good to Great* (New York: HarperCollins, 2001).
22. See: N. J. Foss and T. Saebi (eds.) *Business Model Innovation: The Organizational Dimension* (Oxford: Oxford University Press, 2015).
23. K. M. Eisenhardt and J. A. Martin, "Dynamic Capabilities: What Are They?" *Strategic Management Journal* 21 (2000): 1105–1121.
24. L. Trigeorgis and J. J. Reuer, "Real Options Theory in Strategic Management," *Strategic Management Journal* 38 (2017): 42–63.
25. K. Laursen and N. J. Foss, "New Human Resource Management Practices, Complementarities and the Impact on Innovation Performance," *Cambridge Journal of Economics* 27 (2003): 243–263.
26. R. Whittington, A. Pettigrew, S. Peck, E. Fenton, and M. Conyon, "Change and Complementarities in the New Competitive Landscape," *Organization Science* 10 (1999): 583–600.
27. P. Bak, *How Nature Works: The Science of Self-organized Criticality* (New York: Copernicus, 1996).
28. M. J. Wheatley and M. Kellner Rogers, *A Simpler Way* (San Francisco: Berrett-Koehler, 1996).
29. P. Anderson, "Complexity Theory and Organizational Science," *Organization Science* 10 (1999): 216–232.

30. S. McGuire, B. McKelvey, L. Mirabeau, and N. Oztas, "Complexity Science and Organization Studies," in S. Clegg (ed.), *The SAGE Handbook of Organizational Studies* (Thousand Oaks, CA: SAGE Publications, 2006): 165–214.
31. M. E. Porter and N. Siggelkow, "Contextuality within Activity Systems and Sustainable Competitive Advantage," *Academy of Management Perspectives* 22 (May 2008): 34–56.
32. These issues are discussed in greater depth in Porter and Siggelkow op. cit.
33. G. Hamel, *The Future of Management* (Boston: HBS Press, 2007): 84–99.
34. J. A. Nickerson and T. R. Zenger, "The Knowledge-based Theory of the Firm: A Problem-solving Perspective," *Organization Science* 15 (2004): 617–632.
35. D. A. Gioia, M. Schultz, and K. G. Corley, "Organizational Identity, Image and Adaptive Instability," *Academy of Management Review* 25 (2000): 63–81; D. Ravasi, "Organizational Identity, Culture, and Image." In M. Schultz et al (eds.), *The Oxford Handbook of Organizational Identity* (Oxford University Press, 2016): 65–78.
36. M. J. Wheatley and M. Kellner-Rogers, "*The Irresistible Future of Organizing*," (July/August 1996), <http://margaretwheatley.com/articles/irresistiblefuture.html>, accessed July 2015.
37. Wheatley and Kellner-Rogers, op. cit.
38. L. L. Bryan, E. Matson, and L. M. Weiss, "Harnessing the Power of Informal Employee Networks," *McKinsey Quarterly* (November 2007).
39. M. Reeves, M. Zeng and A. Venjara, "The Self Tuning Enterprise," *Harvard Business Review* (June 2015).
40. R. D. Steele, *The Open-Source Everything Manifesto* (Berkeley CA: North Atlantic Books, 2012).
41. G. Hamel, "Moon Shots for Management?" *Harvard Business Review* (February 2009): 91–98.
42. J. C. Collins and J. I. Porras, *Built to Last* (New York: Harper Business, 1996).
43. C. Feser, F. Mayol, and R. Srinivasan, "Decoding Leadership: What Really Matters," *McKinsey Quarterly* (January 2015).
44. D. Goleman, "What Makes a Leader?" *Harvard Business Review* (November/December 1998): 93–102.
45. J. Collins, "Level 5 Leadership: The Triumph of Humility and Fierce Resolve," *Harvard Business Review* (January 2001): 67–76.