

6 Organization Structure and Management Systems: The Fundamentals of Strategy Implementation

Ultimately, there may be no long-term sustainable advantage other than the ability to organize and manage.

—JAY GALBRAITH AND ED LAWLER

I'd rather have first-rate execution and second-rate strategy anytime than brilliant ideas and mediocre management.

—JAMIE DIMON, CEO, JPMORGAN CHASE & CO.

Many people regard execution as detail work that's beneath the dignity of a business leader. That's wrong. To the contrary, it's a leader's most important job.

—LARRY BOSSIDY, FORMER CEO, HONEYWELL

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Introduction and Objectives

We spend a lot of our time strategizing: pondering our next career move, making plans for a vacation; thinking about how to improve our marketability. Most of these strategies remain just wishful thinking: if strategy is to yield results, it must be backed by commitment and translated into action.

The challenges of strategy implementation are even greater for organizations than for individuals. Executing strategy requires the combined efforts of all the members of the organization, many of whom will have played no role in its formulation; others will find that the strategy conflicts with their own personal interests. Even without these impediments, implementation tends to be neglected because it requires commitment, persistence, and hard work. “How many meetings have you attended where people left without firm conclusions about who would do what and when?” asks super-consultant, Ram Charan.¹

In this chapter, we consider some of the fundamentals of strategy implementation. We begin by clarifying the relationship between strategy formulation and strategy implementation. If strategy involves translating intention into action, the basic organizational requirements are for coordination and cooperation. We view organizational capability as the mechanism through which coordination and cooperation effectuate action. We disaggregate organizational capability into four components: resources, motivation, processes, and structure and go on to explore the role of each of these in strategy implementation.

This chapter introduces only the fundamentals of strategy implementation. In subsequent chapters, we shall consider strategy implementation in particular contexts, such as strategic change (Chapter 8), innovation (Chapter 9), mature industries (Chapter 10), international business (Chapter 12), multibusiness firms (Chapter 14), and mergers and acquisitions (Chapter 15). At the same time, our consideration of strategy implementation is limited: ultimately strategy implementation embraces the whole of management.

By the time you have completed this chapter, you will be able to:

- ◆ Understand the relationship between strategy formulation and strategy implementation and the role of strategic planning systems in linking strategy to action.
- ◆ Recognize the role of cooperation and coordination as the basic requirements for organizational effectiveness.
- ◆ Appreciate the role that resources, processes, motivation, and structure play in developing organizational capabilities.
- ◆ Select the organizational structure best suited to a particular business context.

Strategy Formulation and Strategy Implementation

The relationship between strategy formulation and strategy implementation has long been a contentious issue. During the early years of corporate planning, strategy was viewed as a two-stage process: first, formulation (mainly by top management), then implementation (mainly by middle management). This conception was challenged by Henry Mintzberg who envisaged strategy as emerging from the interaction between the formulation and implementation (see the discussion of “How is Strategy Made? The Strategy Process” in Chapter 1).²

From what we have learned about the nature of strategy, it is clear that we cannot separate strategic management into self-contained formulation and implementation stages. The intended strategy of any organization is inevitably incomplete: it comprises goals, directions, and priorities, but it can never be comprehensive. It is during implementation that the gaps are filled in and, because circumstances change, the strategy adapts. Equally, strategy formulation must take account of the conditions of implementation. The observation “Great strategy; lousy implementation” is typically a misdiagnosis of strategic failure: a strategy which has been formulated without taking account of its ability to be implemented is a poorly formulated strategy. Clearly, strategy formulation and implementation are interdependent. Nevertheless, the fact remains that purposeful behavior requires that action must be preceded by intention, and intention needs to be preceded by thought.

The Strategic Planning System: Linking Strategy to Action

Our outline of the development of strategic management in Chapter 1 (see “A Brief History of Business Strategy”) indicated that companies adopted corporate planning, not to formulate strategy but to facilitate coordination and control in increasingly large and complex organizations.

Similarly with entrepreneurial start-ups, when Steve Jobs and Steve Wozniak founded Apple Computer at the beginning of 1977, strategy was developed in their heads and through their conversation. A written articulation of Apple’s strategy did not appear until they needed to write a business plan in order to attract venture capital funding.³ However, Apple did not adopt a systematic strategic planning process until several years later when it needed to establish capital expenditure budgets for its different functions and product teams and link strategy to day-to-day decision-making.

Thus, Mintzberg’s claim that formalized strategic planning is a poor way to make strategy, even if it is right, fails to recognize the real value purpose of strategic planning systems. As we shall see, strategic planning systems provide a framework for the strategy process which can assist in building consensus, communicating the strategy and its rationale throughout the organization, allocating resources to support the strategy, and establishing performance goals to guide and motivate the individuals and groups responsible for carrying out the strategy.

The Strategic Planning Cycle Most large companies have a regular (normally annual) strategic planning process that results in a document that is endorsed by the board of directors and provides a development plan for the company for the next three to five years. The strategic planning process is a systematized approach that assembles information, shares perceptions, conducts analysis, reaches decisions, ensures

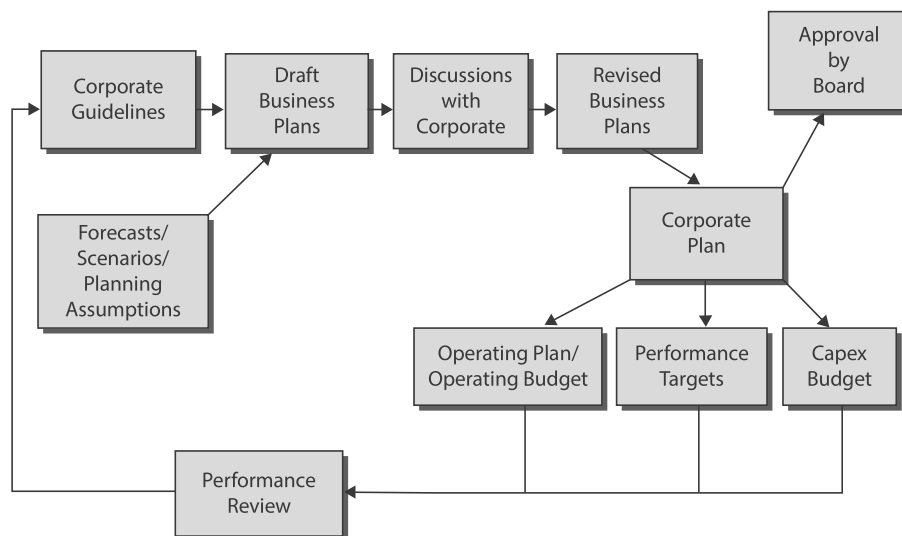
consistency among those decisions, and commits managers to courses of action and performance targets.

Strategic planning processes vary between organizations. At some they are highly centralized. Even after an entrepreneurial start-up has grown into a large company, strategy making may remain the preserve of the chief executive. At MCI Communications, former CEO Orville Wright observed: “We do it strictly top-down at MCI.”⁴ However, at most large companies, the strategic planning process involves a combination of top-down direction and bottom-up initiatives.⁵

Figure 6.1 shows a typical strategic planning cycle. The principal stages are:

- 1 *Setting the context: guidelines, forecasts, assumptions.* The CEO typically initiates the process by indicating strategic priorities—these will be influenced by the outcome of the previous performance reviews. In addition, the strategic planning unit may provide assumptions or forecasts that offer a common basis for strategic planning by different units within the organization. For example, the 2017–20 strategic plan of the Italian oil and gas company Eni was based upon (a) the goal of increasing free cash flow by expanding petroleum production and selling assets and (b) assumptions that the price of crude would rise to \$60 per barrel and the dollar/euro exchange rate would appreciate to 1.20 by 2020.⁶
- 2 *Business plans.* On the basis of these priorities and planning assumptions, the different organizational units—product divisions, functional departments, and geographical units—create strategic plans that are then presented for comment and discussion to top management. This dialogue represents a critically important feature of the strategy system: it provides a process for sharing knowledge, communicating ideas, and reaching consensus. This process may be more important than the strategic plans that are created. As General (later President) Dwight Eisenhower observed: “Plans are worthless, but planning is everything.”⁷

FIGURE 6.1 The generic annual strategic planning cycle



- 3 *The corporate plan.* Once agreed, the business plans are then integrated to create the corporate strategic plan that is then presented to the board for approval.
- 4 *Capital expenditure budgets.* Capital expenditure budgets link strategy to resource allocation. They are established through both top-down and bottom-up initiatives. When organizational units prepare their business plans, they will indicate the major projects they plan to undertake during the strategic planning period and the capital expenditures involved. When top management aggregates business plans to create the corporate plan, it establishes capital expenditure budgets both for the company as a whole and for the individual businesses. The businesses then submit capital expenditure requests for specific projects that are evaluated through standard appraisal methodologies, typically using discounted cash flow analysis. Capital expenditure approvals take place at different levels of a company according to their size. Projects of up to \$5 million might be approved by a business unit head; projects of up to \$25 million might be approved by divisional top management; larger projects might need to be approved by the top management committee; the biggest projects may require approval by the board of directors.
- 5 *Operational plans and performance targets.* Implementing strategy requires breaking down strategic plans into a series of shorter-term plans that provide a focus for action and a basis for performance monitoring. At the basis of the annual operating plan are a set of performance targets derived from the strategic plan. These performance targets are both financial (sales growth, margins, return on capital) and operational (inventory turns, defect rates, number of new outlets opened). In the section on “Setting Performance Targets” in Chapter 2, I outlined the basic cascading logic for goal setting: overall goals of the organization are disaggregated into more specific performance goals as we move down the organization. As Chapter 2 shows, this can use either a simple financial disaggregation or the balanced scorecard methodology. There is nothing new about this approach: management by objectives (the process of participative goal setting) was proposed by Peter Drucker in 1954.⁸ Performance targets can be built into the annual operating budget. The operating budget is a pro forma profit-and-loss statement for the company as a whole and for individual divisions and business units for the upcoming year. It is usually divided into quarters and months to permit continual monitoring and the early identification of variances. The operating budget is part forecast and part target. Each business typically prepares an operating budget for the following year that is then discussed with the top management committee and, if acceptable, approved. In some organizations, the budgeting process is part of the strategic planning system: the operating budget is the first year of the strategic plans; in others, budgeting follows strategic planning. Operational planning is more than setting performance targets and agreeing budgets; it also involves planning specific activities. As Bossidy and Charan explain: “An operating plan includes the programs your business is going to complete within one year ... Among these programs are product launches; the marketing plan; a sales plan that takes advantage of market opportunities; a manufacturing plan that stipulates production outputs; and a productivity plan that improves efficiency.”⁹

The Fundamentals of Organizing: Specialization, Cooperation, and Coordination

Translating intention into action requires organizing. To understand what organizing involves, we must understand why firms exist.

Specialization and Division of Labor

Firms exist because of their efficiency advantages in producing goods and services that results from the *division of labor*: each worker specializing in a specific task. Consider Adam Smith's description of pin manufacture:

One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the papers.¹⁰

Smith's pin makers produced about 4800 pins per person each day. "But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each have made 20, perhaps not one pin, in a day."

However, specialization comes at a cost: dividing the production process requires integrating the separate efforts. This involves two problems: first, the *cooperation problem*, aligning the interests of individuals who have divergent goals; second, the *coordination problem*, even in the absence of goal conflict, how do individuals harmonize their separate efforts?

The Cooperation Problem

The economics literature analyzes cooperation problems arising from goal misalignment as the **agency problem**.¹¹ An agency relationship exists when one party (the principal) contracts with another party (the agent) to act on behalf of the principal. The problem is ensuring that the agent acts in the principal's interest. Particular attention has been given to agency problems arising between owners (shareholders) and managers. The central issue of corporate governance is ensuring that managers act in the interests of shareholders. However, agency problems exist throughout the entire hierarchy: employees tend to pursue their own interests rather than those of their organization. Even organizational goals fragment as a result of specialization as each department creates its own subgoals. The classic conflicts are between different functions: sales wishes to please customers, production wishes to maximize output, R & D wants to introduce mind-blowing new products, while finance worries about profit and loss.

Several mechanisms are available to management for achieving goal alignment within organizations:

- *Control mechanisms* typically operate through hierarchical supervision: managers supervise the behavior and performance of subordinates using positive and negative incentives. The principal positive incentive is the opportunity for promotion up the hierarchy; negative incentives are dismissal and demotion.

- *Performance incentives* link rewards to output: they include piece rates for production workers and profit bonuses for executives. Performance-related incentives have the advantages of being “high powered”—rewards are directly related to performance—and they avoid the need for costly monitoring and supervision of employees. Pay-for-performance is less effective when employees work in teams or where output is difficult to measure.
- *Shared values*. Some organizations achieve high levels of cooperation and low levels of goal conflict without resorting to either punitive controls or performance incentives. The members of churches, charities, and voluntary organizations often share values that support common purpose. Similarly, for business enterprises, as we saw in Chapter 2 (see pp. 52–53), shared values among members encourage the convergence of interests and perceptions that facilitate consensus and enhances performance.¹² In doing so, shared values can act as a control mechanism that is an alternative to bureaucratic control or financial incentives. An organization’s values are one component of its culture. Strategy Capsule 6.1 discusses the role of organizational culture in aligning individual actions with company strategy.
- *Persuasion*. Implementing strategy requires leadership and at the heart of leadership is persuasion. J.-C. Spender argues that, language is central, both to the conceptualization of strategy and to its implementation.¹³ Leadership requires influencing others, where *rhetoric*—the use of language for persuasion—is a core skill. Management rhetoric is not simply about communicating strategy; it involves changing the perceptions of organizational members, their relationships with the organization, and, ultimately, guiding their actions to actualize the strategy in the face of uncertainty and ambiguity.

The Coordination Problem

Willingness to cooperate is not enough to ensure that organizational members integrate their efforts—it is not a lack of a common goal that causes Olympic relay teams to drop the baton. Unless individuals can find ways of coordinating their efforts, production does not happen. As we shall see in our discussion of organizational capabilities, the exceptional performance of Disney theme parks, the Ferrari Formula 1 pit crew, and the US Marine Corps band derives less from the skills of the individual members and more from superb coordination among them.

Mechanisms for coordination include the following:

- *Rules and directives*: A basic feature of all firms is a general employment contract under which individuals agree to perform a range of duties as required by their employer. This allows managers to exercise authority by means of general rules (“Secret agents on overseas missions will have essential expenses reimbursed only on production of original receipts”) and specific directives (“Miss Money Penny, show Mr Bond his new toothbrush with 4G communication and a concealed death ray”).
- *Mutual adjustment*: The simplest form of coordination involves the mutual adjustment of individuals engaged in related tasks. In soccer or doubles tennis, players coordinate their actions spontaneously without direction or established routines. Such mutual adjustment occurs in leaderless teams and is especially suited to novel tasks where routinization is not feasible.

STRATEGY CAPSULE 6.1

Organizational Culture as an Integrating Device

Corporate culture comprises the beliefs, values, and behavioral norms of the company, which influence how employees think and behave.^a It is manifest in symbols, ceremonies, social practices, rites, vocabulary, and dress. While shared values are effective in aligning the goals of organizational members, culture exercises a wider influence on an organization's capacity for purposeful action. Organizational culture is a complex phenomenon. It is shaped by the national and ethnic cultures within which the firm is embedded and the social and professional cultures of organizational members. Most of all, it is a product of the organization's history, especially the founder's personality and beliefs: the corporate culture of Walt Disney Company continues to reflect the values, aspirations, and personal style of Walt Disney. A corporate culture is seldom homogeneous: different cultures coexist within different functions and departments.

Culture can facilitate both cooperation and coordination through fostering social norms and a sense of identity. Cultures can also be divisive and dysfunctional. At the British bank NatWest during the 1990s, John Weeks identified a "culture of complaining" which was a barrier to top-down strategy initiatives.^b A culture may support some types of corporate action but handicap others. Lehman Brothers (whose collapse in September 2008 triggered the global financial crisis) was renowned for its individualistic, entrepreneurial culture whose downside was ineffective risk management. The culture of the British Broadcasting Corporation reflects internal

politicization, professional values, and dedication to the public good, but a lack of customer focus.^c

Cultures take a long time to develop and cannot easily be changed. As the external environment changes, a highly effective culture may become dysfunctional. The police forces of some US cities have developed cultures of professionalism and militarism, which increased their effectiveness in fighting crime, but led to isolation and unresponsiveness to community needs.^d

Despite its power in determining how an organization behaves, culture is far from being a flexible management tool at the disposal of chief executives. It is a property of the organization as a whole, which is not amenable to manipulation. CEOs inherit rather than create the culture of their organizations. The key issue is to recognize the culture of the organization and to ensure that structure and systems work with the culture and not against it. Where strategy is aligned with organizational culture, it can act as a control device and a source of flexibility: when individuals internalize the goals and principles of the organization, they can be allowed to use their initiative and creativity in their work.

Notes:

^aE. H. Schein, "Organizational Culture," *American Psychologist* 45 (1990): 109–119.

^bJ. Weeks, *Unpopular Culture: The Ritual of Complaint in a British Bank* (Chicago: University of Chicago Press, 2004).

^cT. Burns, *The BBC: Public Institution and Private World* (London: Macmillan, 1977).

^d"Policing: Don't Shoot," *Economist* (December 13, 2014): 37.

- **Routines:** Where activities are performed repeatedly, coordination becomes routinized. As we shall see in more detail when we discuss processes, organizational routines are "regular and predictable sequences of coordinated actions by individuals" that provide the foundation of organizational capability. If organizations are to perform complex activities efficiently and reliably, rules, directives, and mutual adjustments are not enough—coordination must become embedded in routines.

The relative roles of these different coordination devices depend on the types of activity being performed and the intensity of collaboration required. Rules are highly efficient for activities where standardized outcomes are required—most quality-control procedures involve the application of simple rules. Routines are essential for activities where close interdependence exists between individuals, be the activity a basic production task (supplying customers at Starbucks) or more complex (performing a heart bypass operation). Mutual adjustment works best for nonstandardized tasks (such as problem-solving), where those involved are well informed of the actions of their coworkers, either because they are in close visual contact (a chef de cuisine and her sous chefs) or because of information exchange (a design team using interactive CAD software).

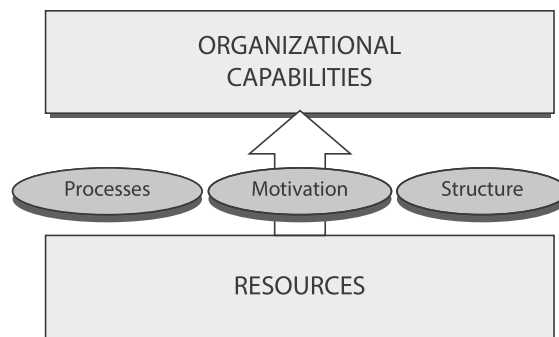
Developing Organizational Capability

Translating strategy into action requires organizational capability. Hence, the development and deployment of organizational capabilities lies at the core of strategy implementation. So far, we have said little about the determinants of organizational capability beyond recognizing that capabilities involve combining resources to perform a task. Let us look more closely at the structure of organizational capability in the light of our preceding discussion of the fundamentals of organizing.

Capabilities require resources, and the level of capability depends, to some degree, upon the amount and quality of these resources. However, there is more to capability than resources alone. In sport, all-star teams can be beaten by teams that create strong capabilities from modest resources. In 1992, the US men's Olympic basketball team—the “Dream Team” that included Charles Barkley, Larry Bird, Patrick Ewing, Magic Johnson, Michael Jordan, Karl Malone, and Scottie Pippen—lost to a team of college players in one of their practice games. In Euro 2016, the English soccer team, with a market value of \$810 million, was eliminated by Iceland, a team valued at \$30 million. Similarly, in business: upstarts with modest resources can outcompete established giants—Dyson against Electrolux in domestic appliances, ARM against Intel in microprocessors, Spotify against Apple in streamed music. Clearly, there is more to organizational capability than just resources.

The effectiveness with which resources—people especially—are integrated to create capabilities depends upon three major factors: processes, motivation, and structure. These are depicted in Figure 6.2.

FIGURE 6.2 Integrating resources to build capability



Processes

The academic literature views organizational capability as based upon **organizational routines**—“regular and predictable behavioral patterns [comprising] repetitive patterns of activity” that determine what firms do, who they are, and how they develop.¹⁴ Like individual skills, organizational routines develop through learning-by-doing—and, if not used, they wither.

However, the academic literature’s emphasis on routines as an emergent phenomenon ignores the role of management. In practice, patterns of coordination among organizational members to undertake a productive task are planned by managers who use learning-before-doing as a vital preliminary to learning-by-doing. For this reason, I emphasize *organizational processes* over *organizational routines*, where a process is a coordinated sequence of actions through which specific productive tasks are performed. Not only is the term *process* well understood by managers, but there are established tools for their design, mapping, and development.¹⁵

Motivation

Processes provide the basis for team members to coordinate their individual actions; however, the effectiveness of the coordination depends upon the extent of their motivation. We discussed motivation in relation to the challenge of aligning the goals of individuals with those of the organization. Team motivation is more complex: it depends not only on each individual’s willingness to strive in performing his/her specific task but also on a willingness to subordinate individuals to team goals. Despite decades of research, the determinant of exceptional team performance remains a mystery—which is why outstandingly successful sports coaches—Alex Ferguson, Joe Gibbs, John Wooden, Scotty Bowman—command huge fees on the corporate lecture circuits.

Structure

The people and processes that contribute to an organizational capability need to be located within the same organizational unit if they are to coordinate effectively. Processes that span internal organizational boundaries rarely achieve high levels of capability. Until the mid-1980s, European and US automakers used a sequential system of new product development which began in marketing then went, in turn, to styling, engineering, manufacturing, and finance. When they adopted the cross-functional product development teams pioneered by Toyota and Honda, the time to develop a new model of car was halved.¹⁶ As companies develop new capabilities, so their organizational structures become more complex. Strategy Capsule 6.2 shows the evolution of organizational structure at a management consulting company as it developed specialist capabilities.

The design of organizational structure is a broad topic that cannot be reduced to the simple principle of locating each organizational process within an organizational unit. So let us consider more generally the basic issues that are involved in the design of organizational structures.

STRATEGY CAPSULE 6.2

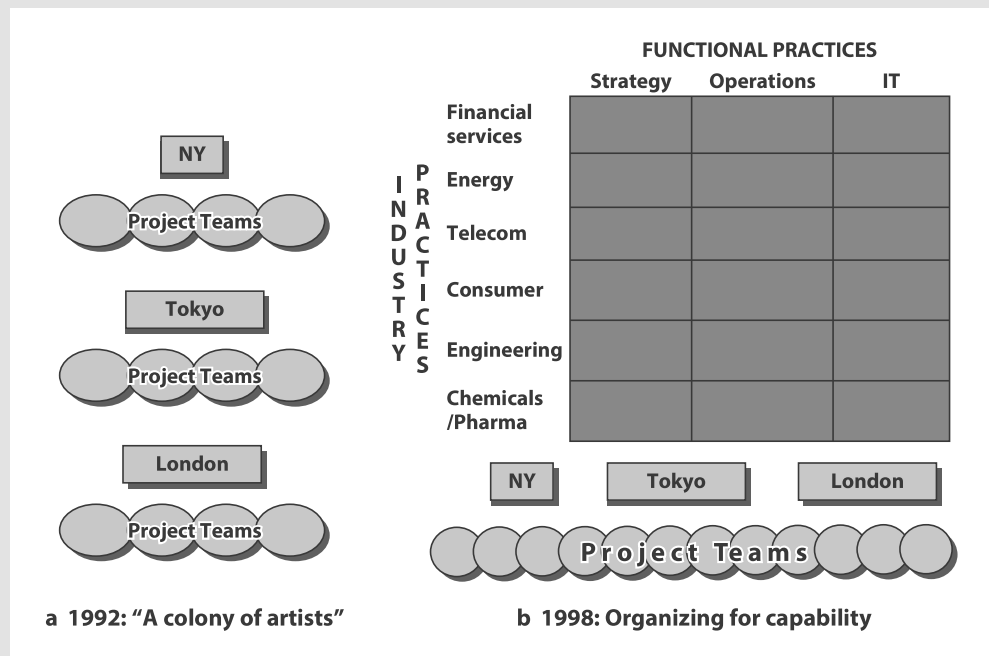
Capability Development and Organizational Structure at Booz & Company

During the 1990s, Booz Allen Hamilton (now Strategy&, a subsidiary of PwC) transitioned from a “generalist” to a “specialist” model of management consulting. Under the generalist model, consultants were located in one of its 28 offices throughout the world and were then assigned to one or more consulting projects. The expectation was that they would develop, through experience, broad-based consulting expertise that was not specific either to a particular management function or particular sector. Booz’s managing partner referred to the firm as “a colony of artists” (see Figure 6.3a).

During the 1990s, Booz recognized the need to develop specialist capabilities in relation to individual

management functions (such as strategy, operations, information technology, and change management) and specific sectors (e.g., energy, telecom, financial services, and automobiles). To develop these specialist capabilities, Booz adopted a matrix structure comprising functional practices and sector practices (see Figure 6.3b). Hence, a new consultant or associate joining Booz would be located within a particular office and assigned to one or more client teams, but training and career development purposes would also be part of a functional practice and a sector practice.

FIGURE 6.3 Booz Allen Hamilton (Worldwide commercial business)



Organization Design

Designing structures that can reconcile efficiency through specialization with effective integration is a major management challenge that is informed by a substantial body of organizational theory. Let us restrict ourselves to four issues that are especially relevant to implementing strategy. We begin by acknowledging the need for hierarchy—all organizations are hierarchical to a greater or lesser degree. We go on to consider how to define organizational units within these hierarchies. We then examine how these organizational units are configured within the overall structure of the company. Finally, we look at formality within organizations and the relative merits of mechanistic and organic structures.

The Role of Hierarchy

Hierarchy is the fundamental feature of all but the simplest organizations and the primary mechanism for achieving coordination and cooperation. Despite the negative images that hierarchy often conveys, there are no viable alternatives for complex organizations—the critical issue is how hierarchy should be structured and how its various parts should be linked. Hierarchy is a solution both to the problem of cooperation and the problem of coordination.

Hierarchy as Mechanism for Cooperation: Hierarchy is system of control through authority: each member of the organization reports to a superior and has subordinates to supervise and monitor. Hierarchy is a core feature of *bureaucracy*—a formalized administrative system devised by the Qin emperor of China in about 220BC, and deployed ever since in public administration, the military, and commerce. For the German sociologist, Max Weber, bureaucracy was the most efficient and rational way to organize human activity. It involves “each lower office under the control and supervision of a higher one”; a “systematic division of labor”; formalization in writing of “administrative acts, decisions, and rules”; and work governed by standardized rules and operating procedures. Authority is based on “belief in the legality of enacted rules and the right of those elevated to authority under such rules to issue commands.”¹⁷

Hierarchy as Coordination: Hierarchy is a feature not only of human organizations, but of all complex systems:

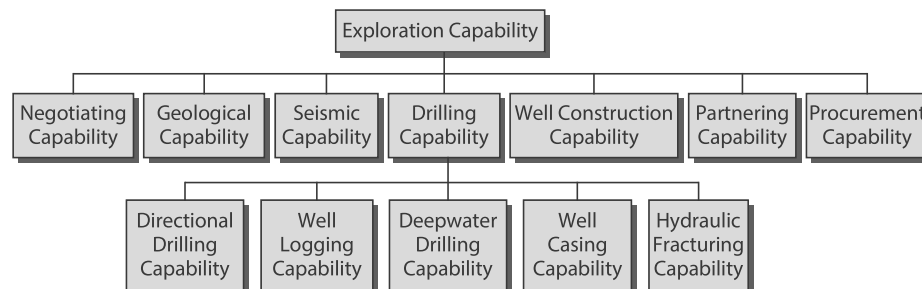
- The human body comprises subsystems such as the respiratory system, nervous system, and digestive system, each of which consists of organs, each of which is made up of individual cells.
- The physical universe is a hierarchy with galaxies at the top, solar systems below, planets below that, and so on, all the way down to atoms and subatomic particles.
- A novel is organized by chapters, paragraphs, sentences, words, and letters.

The basic principle here is that of *modularity*: dividing complex systems into hierarchically organized components.¹⁸ Modular, hierarchical structures have two major advantages in coordinating productive activities:

- *Economizing on coordination:* Hierarchy reduces the amount of communication needed to coordinate the activities of organizational members. Suppose that the optimal span of control is five. In a group of six individuals, there are 15 bilateral interactions, if one member is appointed coordinator, there are five vertical interactions. Similarly, a group of 25 involves 250 bilateral interactions; a hierarchical system with a span of control of five requires a three-tier hierarchy and 24 interactions. The larger the number of organizational members, the greater the efficiency benefits from organizing hierarchically. Complex computer software can require large development teams: Microsoft's Windows 8 development team comprised about 3200 software development engineers, test engineers, and program managers. These were organized into 35 "feature teams," each of which was divided into a number of component teams. As a result, each engineer needed to coordinate only with the members of his or her immediate team. The modular structure of the Windows 8 development team mirrored the modular structure of the product.
- *Adaptability:* Hierarchical, modular systems can evolve more rapidly than unitary systems. This adaptability requires *decomposability*: the ability of each component subsystem to operate with some measure of independence from the other subsystems. Modular systems that allow significant independence for each module are referred to as *loosely coupled*.¹⁹ The modular structure of Windows enabled a single feature team to introduce innovative software features without the need to coordinate with all 34 other teams. The key requirement is that the different modules must fit together—this requires a standardized interface. Entire companies may be viewed as loosely coupled modular structures. At Procter & Gamble, decisions about developing new shampoos can be made by the Beauty, Hair, and Personal Care sector without involving P&G's other three sectors (Baby, Feminine, and Family Care; Fabric and Home Care; and Health and Grooming). A modular structure also makes it easier to add new businesses and divest others—in 2015, P&G sold its cosmetics and fragrances business to Coty.²⁰

Organizational capabilities can also be viewed as being organized hierarchically. In the petroleum sector, drilling capability is composed of several specialist capabilities; then drilling capability links with other capabilities to form overall exploration capability (see Figure 6.4). Similarly with Apple's new product development capability, this

FIGURE 6.4 The hierarchical structure of organization capabilities: The case of oil and gas exploration



too is a higher-level capability that combines an array of lower-level capabilities such as market insight, microelectronic capability, software engineering, design aesthetics, and partner relations management. Because these upper-level capabilities integrate such a broad span of specialist know-how, they are difficult for others to imitate.

Defining Organizational Units

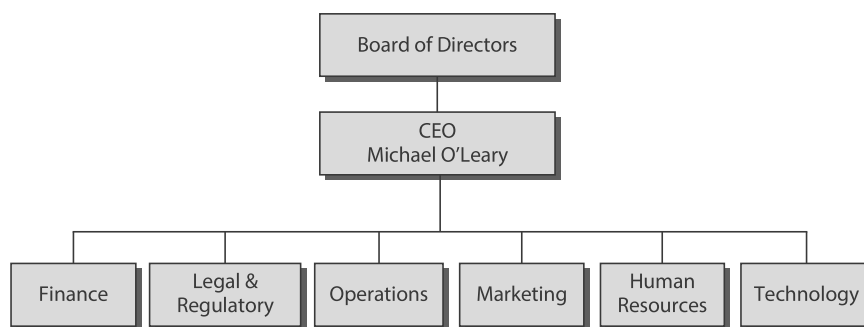
An organizational hierarchy is composed of organizational units—but how should we define these units? The principle we have established so far is that organizational structure should be aligned with processes: those who perform a process should be located within the same organizational unit. The fundamental issue is *intensity of coordination needs*: those individuals who need to interact most closely should be located within the same organizational unit. In the case of McDonald's, the store managers and crew members undertake food preparation, cooking, and cleaning; the individual store is the basic organizational unit. At Infosys Consulting, a client engagement may involve consultants and software engineers at different Infosys offices throughout the world as well as those at the client site: the project team is the appropriate organizational unit—even if it is temporary and spans multiple locations. However, individuals' organizational roles typically involve them in multiple processes—which should take precedence when defining organizational units? James Thompson's answer was “Where interdependence among organizational members is most intense.”²¹

Alternative Structural Forms: Functional, Multidivisional, Matrix

The same principle of defining organizational units in the basis of the intensity of interdependence also applies to the integration of lower-level organizational units into higher-level units. On the basis of these alternative approaches to grouping tasks and activities, we can identify three basic organizational forms for companies: the **functional structure**, the **multidivisional structure**, and the **matrix structure**.

The Functional Structure Single-business firms tend to be organized by function. Most airlines have functional structures (see Figure 6.5). Grouping together functionally similar tasks is conducive to exploiting scale economies, promoting learning and capability building, and deploying standardized control systems. Since cross-functional integration occurs at the top of the organization, functional

FIGURE 6.5 Ryanair Holdings plc: Organizational structure



structures are conducive to a high degree of centralized control by the CEO and top management team.

As functionally organized companies grow and diversify, so there are pressures to decentralize through adopting a divisional structure (see below). However, as companies and their industries mature, the advantages of efficiency, centralized control, and well-developed functional capabilities can cause companies to revert to functional structures. General Motors, a pioneer of the multidivisional structure, integrated its product divisions and overseas subsidiaries into a more integrated functional structure as scale economies became its dominant strategic priority.

The Multidivisional Structure In a multidivisional corporation, the divisions are separate businesses, defined by product or geography. The key advantage of the multidivisional structure is the potential for decentralized decision-making. It is a loosely coupled, modular organization where business-level strategies and operating decisions can be made at the divisional level, while the corporate headquarters concentrate on corporate planning, budgeting, and providing common services.

The effectiveness of the multidivisional form depends on the ability of the corporate center to apply a common management system to the different businesses. At ITT, Harold Geneen's "managing by the numbers" allowed him to cope with over 50 divisional heads reporting directly to him. At BP, a system of "performance contracts" allowed CEO John Browne to oversee BP's 24 businesses, each of which reported directly to him. Divisional autonomy also fosters the development of leadership capability among divisional heads—an important factor in grooming candidates for CEO succession.

The large, divisionalized corporation is typically organized into three levels: the corporate center, the divisions, and the individual business units, each representing a distinct business for which financial accounts can be drawn up and strategies formulated. Figure 6.6 shows General Electric's organizational structure at the corporate and divisional levels. Chapter 14 will look in greater detail at the management of the multidivisional corporation.

Matrix Structure Whatever the primary basis for grouping, all companies that embrace multiple products, multiple functions, and multiple locations must coordinate across all three dimensions. Organizational structures that formalize coordination and control across multiple dimensions are called *matrix structures*.

FIGURE 6.6 General Electric: Organizational structure, January 2018

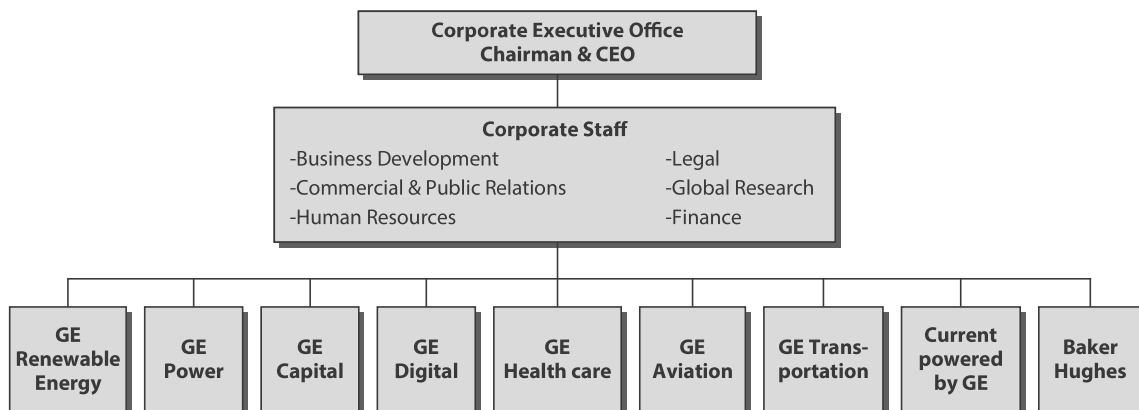
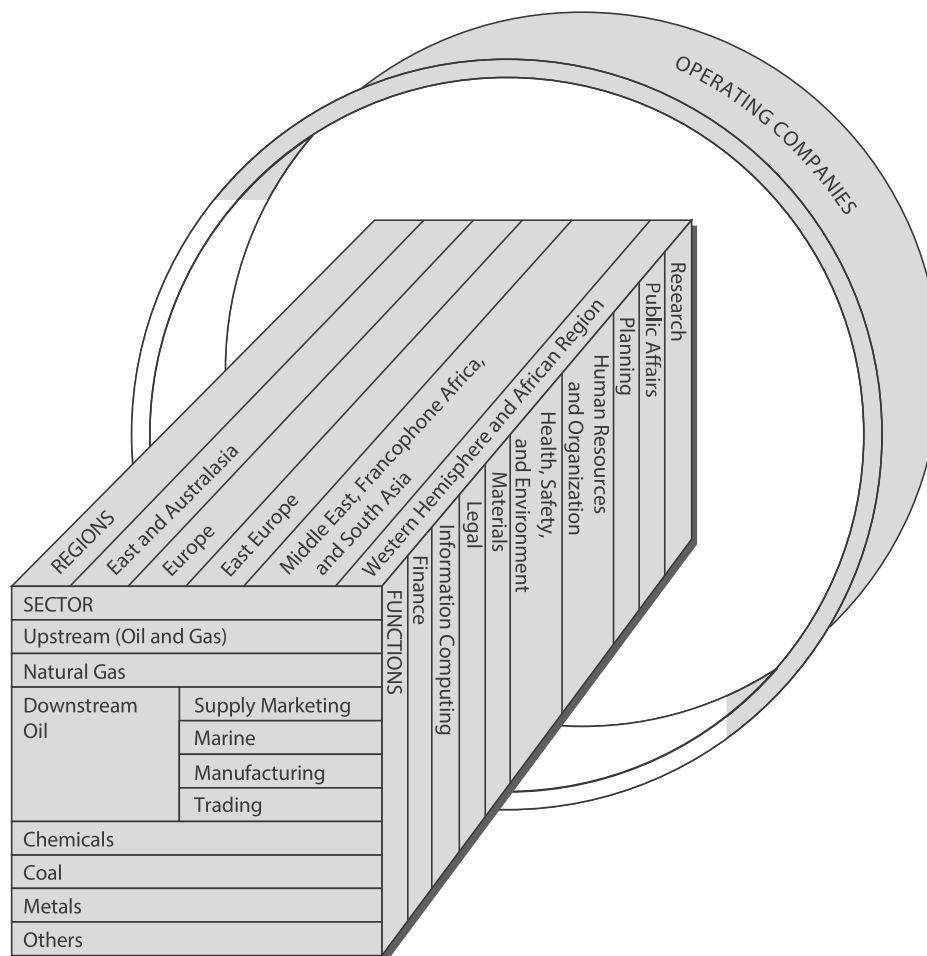


Figure 6.7 shows the Shell management matrix (prior to reorganization in 1996). Within this structure, the general manager of Shell's Berre refinery in France reported to his country manager, the managing director of Shell France, but also to his business sector head, the coordinator of Shell's refining sector, as well as having a functional relationship with Shell's head of manufacturing.

Many diversified, multinational companies, including Philips, Nestlé, and Unilever, adopted matrix structures during the 1960s and 1970s, although in all cases one dimension of the matrix tended to be dominant in terms of authority. Thus, in the old Shell matrix, the geographical dimension, as represented by country heads and regional coordinators, had primary responsibility for budgetary control, personnel appraisal, and strategy formulation.

Since the 1980s, the matrix structure has fallen out of favor and several large corporations have claimed to have dismantled their matrix organizations: "They led to conflict and confusion; the proliferation of channels created informational logjams as a proliferation of committees and reports bogged down the organization; and overlapping responsibilities produced turf battles and a loss of accountability."²² Yet, any company that operates over multiple products, multiple functions, and multiple geographical

FIGURE 6.7 Royal Dutch Shell Group: Pre-1996 matrix structure



markets has to coordinate with each of these dimensions. So, all multifunctional, multi-product, multinational companies are *de facto* matrix organizations. The problem is over-formalization, resulting in a top-heavy corporate HQ and over-complex systems that slow decision-making and dull entrepreneurial initiative. The trend has been for companies to focus on formal systems of coordination and control on one dimension, then allowing the other dimensions of coordination to be mainly informal. Thus, while Shell claims to have dismantled its matrix and organized itself around four business sectors, the reality is that it still has country heads, responsible for coordinating all Shell's activities in relation to legal, taxation, and government relations within each country, and functional heads, responsible for technical matters and best-practice transfer within their particular function.

Systems and Style: Mechanistic versus Organic Organizational Forms

So far, we have looked just at structure—the architecture of organizations. Equally important are the systems through which the structure operates and the management styles through which these systems are manifest. During the first half of the 20th century, management thought was dominated by Weber's theory of bureaucracy and Frederick Taylor's rational approach to job design and employee incentives. During the 1950s, the human relations school of management recognized the importance of social relationships within organizations and adverse impact of inertia and alienation on employee effort. "Theory X" had been challenged by "Theory Y."²³ The important issue here is that different types of management suit different circumstances. Among Scottish engineering companies, Burns and Stalker found that firms in stable environments had *mechanistic forms*, characterized by formality and high degrees of job specialization; those in less stable markets had *organic forms* that were less formal and more flexible.²⁴ Table 6.1 contrasts key characteristics of the two forms.

This principle that an organization's structure, systems, and management style should reflect the environment, in which it operates forms the basis of *contingency theory*—there is no one best way to organize; it depends upon circumstances.²⁵ Although Alphabet (Google) and McDonald's are both large international companies, their structures and systems are very different. McDonald's is highly bureaucratized: high levels

TABLE 6.1 Mechanistic versus organic organizational forms

Feature	Mechanistic forms	Organic forms
Task definition	Rigid and highly specialized	Flexible and broadly defined
Coordination and control	Rules and directives vertically imposed	Mutual adjustment, common culture
Communication	Vertical	Vertical and horizontal
Knowledge	Centralized	Dispersed
Commitment and loyalty	To immediate superior	To the organization and its goals
Environmental context	Stable with low technological uncertainty	Dynamic with significant technological uncertainty and ambiguity

Source: Adapted from Richard Butler, *Designing Organizations: A Decision-Making Perspective* (London: Routledge, 1991): 76, by permission of Cengage Learning.

of job specialization, formal systems, and a strong emphasis on rules and procedures. Google emphasizes informality, low job specialization, horizontal communication, and the importance of principles over rules. These differences reflect differences in strategy, technology, human resources, and the dynamism of the business environments that each firm occupies. In general, the more standardized are a firm's products (beverage cans, blood tests, or haircuts for army inductees) and the more stable its environment, the greater are the efficiency advantages of mechanistic approach with standard operating procedures and high levels of specialization. Once markets become turbulent, or innovation becomes desirable, or buyers require customized products—then the bureaucratic model breaks down.

Contingency also requires the functions within a company to be organized differently. At my university, admissions, student records, and accounting operate on bureaucratic principles; research, fund raising, and external relations are organized organically.

As the business environment has become increasingly turbulent, the trend has been toward organic approaches to organizing, which have tended to displace more bureaucratic approaches. Since the mid-1980s, almost all large companies have made strenuous efforts to restructure and reorganize to achieve greater flexibility and responsiveness. Within their multidivisional structures, companies have decentralized decision-making, reduced their number of hierarchical layers, shrunk headquarters staffs, emphasized horizontal rather than vertical communication, and shifted the emphasis of control from supervision to accountability.

However, the trend has not been one way. The financial crisis of 2008 and its aftermath have caused many companies to reimpose top-down control. Greater awareness of the need to manage financial, environmental, and political risks in sectors such as banking, petroleum, and mining have also reinforced centralized control and reliance on rules. Many companies follow the cycles of centralization and decentralization that may be a means by which they balance the trade-off between integration and flexibility.²⁶

Developments in information and communication technology (ICT) have worked in different directions. In some cases, the automation of processes has permitted their centralization and bureaucratization (think of the customer services at your bank or telecom supplier). In other areas, ICT has encouraged informal approaches to coordination. The huge leaps in the availability of information available to organizational members and the ease with which they can communicate with one another have increased vastly the capacity for mutual adjustment without the need for intensive hierarchical guidance and leadership.

Recent Trends in Organizational Design

Consultants and management scholars have proclaimed the death of hierarchical structures and the emergence of new organizational forms. Two decades ago, two of America's most prominent scholars of organization identified a "new organizational revolution" featuring "flatter hierarchies, decentralized decision-making, greater tolerance for ambiguity, permeable internal and external boundaries, empowerment of employees, capacity for renewal, self-organizing units, and self-integrating coordination mechanisms."²⁷

In practice, there has been more organizational evolution than organizational revolution. Certainly, major changes have occurred in the structural features and management systems of industrial enterprises, yet there is little that could be described as radical organizational innovation or discontinuities with the past. Hierarchy remains the basic structural form of almost all companies, and the familiar structural configurations—functional, divisional, and matrix—are still evident. Nevertheless, within these familiar structural features, change has occurred:

- *Delaying*: Companies have made their organizational hierarchies flatter. The motive has been to reduce costs and to increase organizational responsiveness. Wider spans of control have also changed the relationships between managers and their subordinates, resulting in less supervision and greater decentralization of initiative. At General Electric, Jack Welch reduced the number of hierarchical levels from nine to five throughout most of the company. As a result, senior executives had up to 25 subordinates directly reporting to them, forcing them to decentralize decision-making.
- *Adhocracy and team-based organization*: Adhocracies, according to Henry Mintzberg, are organizations that feature shared values, high levels of participation, flexible communication, and spontaneous coordination. Hierarchy, authority, and control mechanisms are largely absent.²⁸ Adhocracies tend to exist where problem-solving and other nonroutine activities predominate and where expertise is prized. Team-based organizations engaged in research, consulting, engineering, and entertainment tend to be adhocracies, as are some technology-based startup companies.
- *Project-based organizations*: Consulting and construction companies are organized around projects, the defining characteristic of which is that work assignments have finite lives, hence the organization structure needs to be dynamically flexible. Because every project is different and involves a sequence of phases, each project needs to be undertaken by a closely interacting team that is able to draw upon the know-how of previous and parallel project teams. As cycle times become compressed across more and more activities, project-based organization is becoming increasingly common across the business sector.
- *Network structures*: A major feature of the shift from formal to informal organizational structures is that coordination is determined less by hierarchical structures and more by social networks—the patterns of interactions among organizational members. The importance of social networks to the behavior and performance of organizations has led several management thinkers to recommend that these informal social structures be the primary basis for organizational structure and supplant traditional, formal structures. Thus, Gunnar Hedlund and Bartlett and Ghoshal have proposed network-based models of the multinational corporation.²⁹ Advances in information and communications technology have greatly enhanced the potential for coordination to occur spontaneously without the need for formal organizational structure.
- *Permeable organizational boundaries*: Network relationships are not limited by company boundaries. As firms specialize around their core competencies and products become increasingly complex, so these interfirm networks become increasingly important. As we shall see when we look more closely at strategic alliances (Chapter 15), localized networks of closely interdependent firms are features not only of traditional industrial districts such as those of northern Italy,³⁰ but also the high-tech clusters such as the concentration of Formula 1 constructors in Britain's "Motorsport Valley" and Israel's medical electronics cluster.³¹

Common to these emerging organizational phenomena are:

- A focus on coordination rather than on control: In contrast to the command-and-control hierarchy, these structures focus almost wholly on achieving coordination. Financial incentives, culture, and social controls take the place of hierarchical control.

- Reliance on informal coordination where mutual adjustment replaces rules and directives: Central to all nonhierarchical structures is their dependence on voluntary coordination through bilateral and multilateral adjustment. The capacity for coordination through mutual adjustment has been greatly enhanced by information technology.
- Individuals occupying multiple organizational roles thereby requiring informal structures that facilitate flexibility and responsiveness.

Summary

Strategy formulation and strategy implementation are closely interdependent. The formulation of strategy needs to take account of an organization's capacity for implementation; at the same time, the implementation process inevitably involves creating strategy. If an organization's strategic management process is to be effective then its strategic planning system must be linked to actions, commitments and their monitoring, and the allocation of resources. Hence, operational plans and capital expenditure budgets are critical components of a firm's strategic management system.

Strategy implementation involves the entire design of the organization. By understanding the need to reconcile specialization with cooperation and coordination, we are able to appreciate the fundamental principles of organizational design.

Applying these principles, we can determine how best to allocate individuals to organizational units and how to combine these organizational units into broader groupings—in particular, the choice between basic organizational forms such as functional, divisional, or matrix organizations.

We have also seen how companies' organizational structures have been changing in recent years, influenced both by the demands of their external environments and the opportunities made available by advances in information and communication technologies.

The chapters that follow will have more to say on the organizational structures and management systems appropriate to different strategies and different business contexts. In the final chapter (Chapter 16), we shall explore some of the new trends and new ideas that are reshaping our thinking about organizational design.

Self-Study Questions

1. Jack Dorsey, the CEO of Twitter, Inc., has asked for your help in designing a strategic planning system for the company. Would you recommend a formal strategic planning system with an annual cycle such as that outlined in "The Strategic Planning System: Linking Strategy to Action" and Figure 6.1? (Note: Twitter's strategy is summarized in Strategy Capsule 1.5 in Chapter 1.)
2. Select a persistently successful team in a professional sport with which you are familiar. To what extent can the superior capabilities of this team be attributed to the role of processes, motivation, and structure (as discussed in the section "Developing Organizational Capability")?