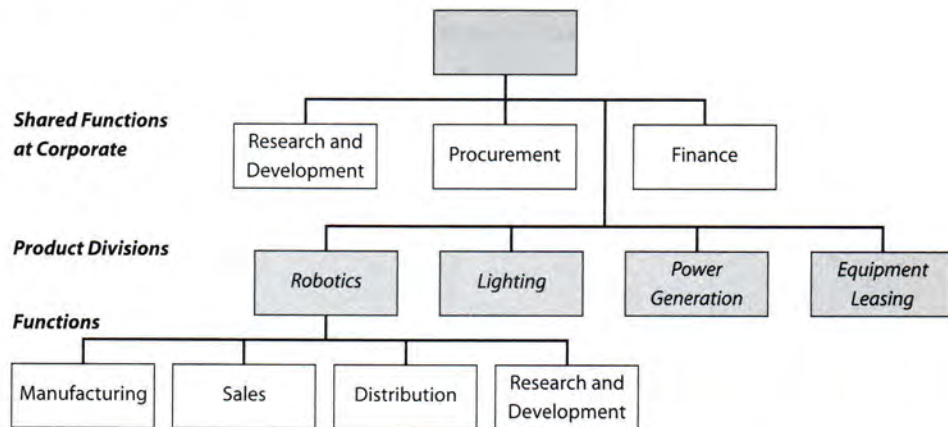


FIGURE 1.4 **Product Structure.**

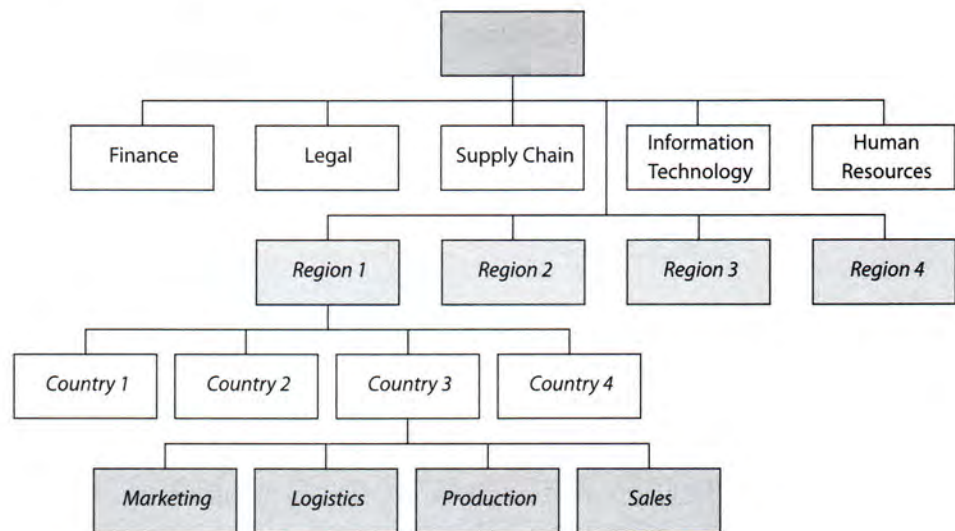
division that could be applied by another division may go unnoticed. Second, as opposed to leveraging scale, which a functional structure does, there may be duplication of effort by the functions housed in each division. This separation also creates policy and system divergence, as opposed to standardization, which may be problematic if there is a desire to build a common culture and operating practices across the divisions. The final disadvantage is that customers who wish to buy more than one product may be frustrated by having to deal with each division independently.

The product division structure is useful under the following conditions:

- Short product life cycles
- An emphasis on quick product development, new product features, and being first to market
- Multiple products that are produced for separate market segments
- Product lines with different underlying business models
- Product divisions large enough to achieve the minimum efficient scale required so that duplication of functions is not costly

Geographic Structure

The geographic dimension is employed as a company saturates its home market and grows by expanding into new territories. It is true that advances in communications and the rise of Internet shopping mean that fewer businesses need to have operations in the same physical locations where they have customers; nevertheless, when culture, language, or political factors influence buying patterns or when consumer behavior differs significantly by region, a geographic structure provides the local focus that can create competitive advantage. The benefit of having local managers focused on these differences is that they can tailor the company's standard products

FIGURE 1.5 **Geographic Structure.**

for local tastes and compete successfully against competitors that are more familiar with the local market. A geographic structure is also useful when the cost of transporting products is high or a service must be delivered locally.

Figure 1.5 illustrates the structure of a beverage bottling company that uses geography as its primary organizing dimension. Although the core products are standardized, differences among countries in product packaging, marketing, logistics, and the need to build good relationships with local government officials and retailers all require an organization that allows managers to focus on local conditions.

The disadvantages of the geographic structure are similar to those of the product division. Power and resources are controlled by regional or country managers, who may favor their own unit's needs over shared global or regional needs. As with the product division, the design challenge is to find the elements that can be shared across geographies while providing autonomy for managers to make local adaptations.

The geographic structure is useful under the following conditions:

- Transportation of materials to customers is costly, or the service is delivered on site.
- Buying patterns have strong local differences based on culture and language.
- The host government is active in the economic sector, and strong government and community relationships need to be developed.

Customer Structure

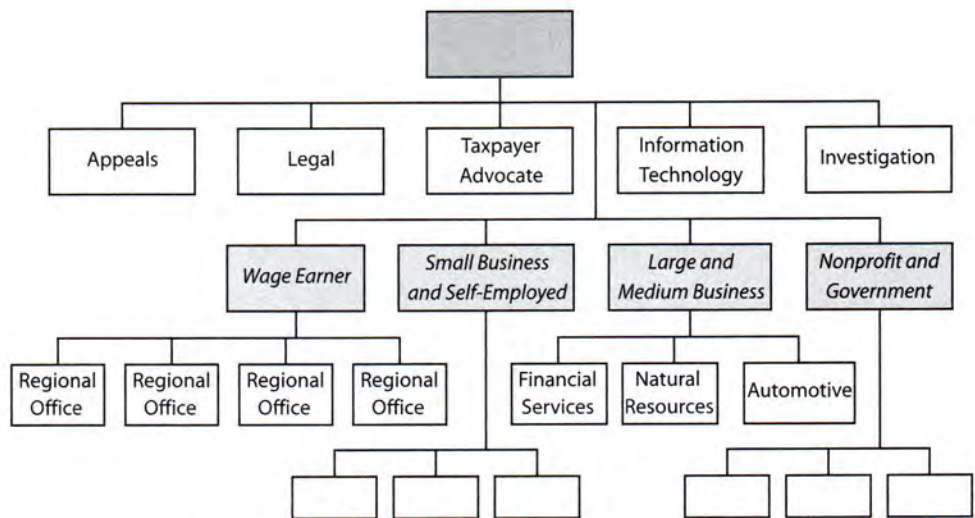
Functional, product, and geographic structures provide benefits for managers, but they do not necessarily provide an easy interface for the customer. Customers, particularly businesses buying from other business, often want a single point of contact, products customized to meet their needs, or an integrated bundle of services and products. The customer structure looks much like the product structure, except that divisions are based on *customer segments*, which are groups of customers who share similar needs, characteristics, or buying patterns.

Such a structure allows a dedicated service relationship and is often found in professional services firms and investment banks. An interesting example of an organization that uses a customer organization is the Internal Revenue Service (Rossotti, 2001). In the late 1990s, this U.S. government agency, which was originally structured by geography, was reorganized into four customer segments that reflect groups of taxpayers with similar characteristics: wage earners, sole proprietors and small businesses, medium and large businesses, and government and nonprofit entities. Each segment has full responsibility for serving its set of taxpayers. Managers therefore can focus on creating programs, services, and communications targeted for each group. Shared information technology services are housed at the corporate level, as are some small units that need to be independent, such as appeals, criminal investigation, and taxpayer advocacy services.

We can also illustrate here how other dimensions can be used at lower levels of the organization to match additional organizational needs. The medium and large-size business category is further segmented by customer into industry groups. Each of these industries has headquarters located in the city where the activity is concentrated, such as financial services in New York City and natural resources in Houston. The wage earner segment, however, is broken into geographic territories one level down in order to create regional offices close to the taxpayers. The high-level structure is shown in Figure 1.6.

The potential disadvantages of the customer structure are similar to those of the product division. Activities may be duplicated, incompatible systems might be developed to serve different sets of customers, and the advantages of scale can be lost. Such a structure also creates barriers when products or services are sold to multiple customer segments. However, when segments are highly differentiated or each segment is large enough to create scale on its own, then this is not an issue. For example, at the IRS, the wage earners segment serves 116 million taxpayers, allowing enough scale to deliver most functional activities cost-effectively.

FIGURE 1.6 Customer Structure in the IRS.



Source: Adapted from Rossotti (2001).

The customer structure is useful under the following conditions:

- Customers are powerful (whether through buying power or depth of relationship with the company) and demand customization and solutions.
- Deep customer knowledge provides an advantage.
- Customer segments can be differentiated in such a way that the products or services offered are unique to each customer group.
- The organization is large enough to achieve minimum efficient scale within each segment.



The *front-back structure* combines the advantages of the customer and product dimensions and is described in Chapter Two. The Structural Options tool located in the Appendix provides a summary of the advantages and disadvantages for each dimension.

Processes

Leaders frequently lament the organizational silos that prevent people from working together. *Silo* evokes an image of an invisible but windowless tower surrounding vertically stacked groups of people. These walls prevent the groups not just from interacting with one another but from even being able to see another group's perspective. "Breaking down the silos" is a common theme in discussions of organizational change.

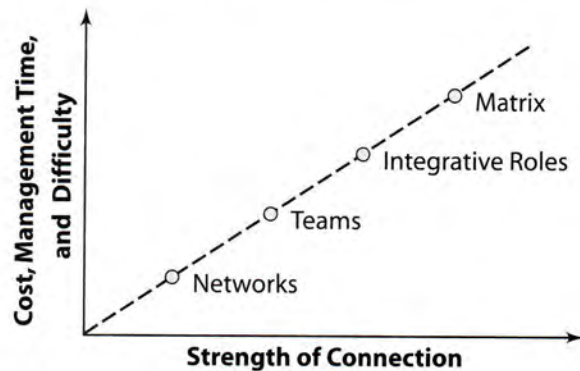
All structures create silos. Whenever people are grouped according to one logic, boundaries are created that make it difficult for them to interact with groups formed according to a different logic. This is not a problem if the strategy does not require a high level of interaction or collaboration across these boundaries. But if the strategy does require collaboration, then the organization's structure—no matter how well thought out—will create some barriers to collaboration. The organizational challenge becomes how to bridge these internal boundaries and integrate activities. Processes and lateral connections provide the required mechanisms of integration.

We use the term *process* to mean a series of connected activities that move information up and down and across the organization. This includes work processes, such as developing a new product, closing a deal, or filling an order. It also includes management processes, such as planning and forecasting sales, business portfolio management, price setting, standards development, capacity management, and conflict resolution. Processes that cross organizational boundaries force organizational units to work together. Their design has a significant impact on how well units work together vertically or laterally. Clear articulation of roles and responsibilities at the boundary interfaces is essential for the design of good processes. The Responsibility Charting tool located in the Appendix can be used to help provide this clarity.

In addition to processes, *lateral connections* can be used to bridge barriers erected by an organization's structure. Lateral connections are generally less well understood than processes, and so are given more attention here. Lateral connections can be thought of as existing along a continuum, as shown in Figure 1.7. The horizontal axis represents the strength of connection between people or units, with personal networks forming a relatively weak connection and a matrix forcing a strong relationship. The vertical axis represents the cost, management time, and difficulty in using the lateral connection successfully. Costs include such things as reconfiguring information systems to aggregate data in new ways or meetings, which are notoriously time-consuming but are the vehicle for much lateral coordination work. Networks are relatively inexpensive and easy to foster, whereas a matrix is one of the most difficult organizational forms to master. Each type of lateral connection is briefly reviewed below.

Networks are the webs of interpersonal relationships that people form across organizations and serve to coordinate work informally. Healthy networks are the foundation for all other lateral connections. While networks

FIGURE 1.7 Continuum of Lateral Connections.



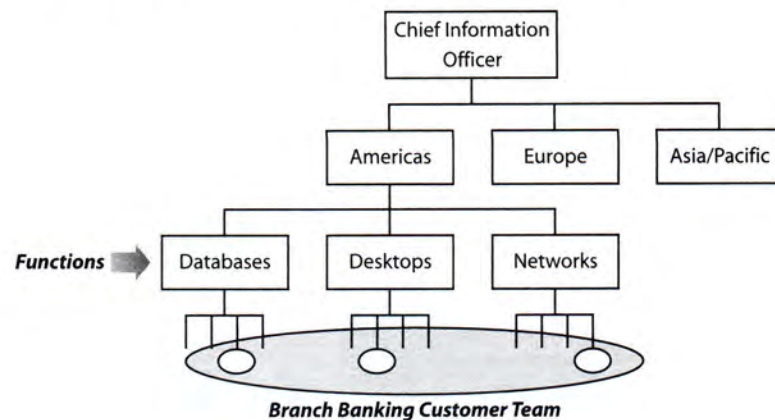
are voluntary and do occur spontaneously, there are a number of ways that management can influence and encourage them:

- Co-locate people who need to work together, and design the physical space to encourage informal interaction.
- Create communities of practice that bring together employees who are in different organizational units but have a shared interest (for example, an emerging technology, a common customer, or research interest), either for face-to-face meetings or virtually, through an intranet.
- Use meetings, retreats, and training programs to build relationships among individuals from different units.
- Rotate work assignments to bring knowledge, relationships, and culture from one unit to another and create understanding and appreciation for different organizational perspectives.
- Use technology and e-coordination to make knowledge sharing easy and help staff find others with complementary skills or interests.



The Relationship Map tool in the Appendix provides more guidance for analyzing and building interpersonal networks.

Teams are cross-business structures that bring people together to work interdependently and share collective responsibility for outcomes. A team can be configured around any dimension. If the primary structure is functional, a team can focus its work on another dimension: product, customer, or geography. Teams are more formal than networks. Participation is required rather than voluntary, and a team's charter will specify accountability and expected outcomes. Teams typically require a leader or project manager, dedicated resources, and senior-level sponsorship and attention and are thus more costly than networks. An example is shown in Figure 1.8. In this illustration of an information technology organization, a customer

FIGURE 1.8 **Cross-Business Team.**

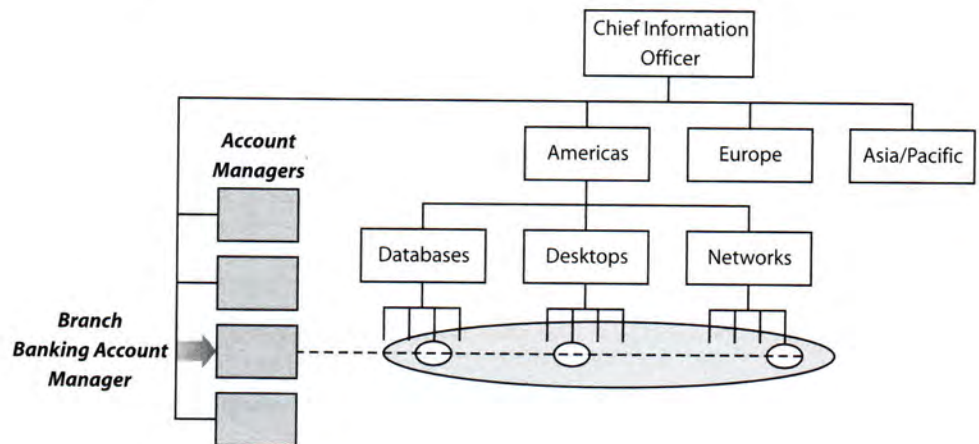
team is used to coordinate across the database, desktop, and network functional units on behalf of the branch banking business customer.

Integrative roles provide a higher level of coordination than teams. Teams are typically staffed by people who remain in their business unit and devote part of their time to the team's mission, or are pulled out of their unit to participate on the team for a limited period of time. An integrative role is a full-time manager charged with orchestrating work across units. A customer relationship manager and a brand manager are examples of integrative roles. They have accountability for results but do not directly manage the resources they need to achieve these results. Successful integrators are people who have high credibility and strong influence skills. An example of an integrative role is shown in Figure 1.9, which builds on the example in Figure 1.8. In addition to the customer team, there is now an account manager for the customer dimension in this illustration to create additional focus and coordination.

A *matrix* is a set of dual reporting relationships used to balance two or more dimensions in an organization. Networks, teams, and integrative roles all serve to integrate a secondary dimension. The matrix allows both dimensions to be equal. Selected roles in the organization report to two managers from different units, representing distinct structural dimensions. Because these managers are required to jointly set objectives, resolve conflicting priorities, and manage performance of the shared resources, they are forced to take a broader view than if they focused solely on one dimension of the business.

In the example shown in Figure 1.10, the organizational dimensions of function and customer are equally important. The matrixed manager has to balance the perspectives and objectives of each organizational

FIGURE 1.9 Integrative Role.

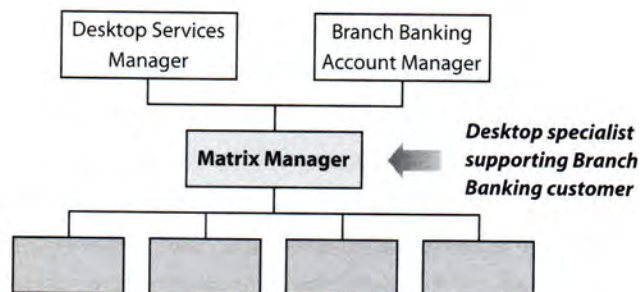



dimension when making decisions. For example, if asked to upgrade the desktop operating system for the branch banking business, he will have to ensure that it meets the global standards set by the desktop functional area and satisfies the needs of the branch banking customer. The matrix forces managers at a lower level in the organization to make decisions from a general management perspective.

The matrix can also promote a much more flexible and efficient use of resources, since teams do not have to be duplicated along every dimension. However, the successful use of a matrix requires a well-functioning management team, above the level of the matrixed manager, that can jointly manage the conflicts that inevitably arise.

Processes and lateral connections are the principal means of coordinating activities. Well-designed processes and lateral connections ensure that the right people are brought together to speed decision making. They allow more decisions to be made closer to customers and the activities affected, and also allow the company to be responsive to multiple constituencies.

FIGURE 1.10 Matrix.





By designing and managing lateral connections, the leader gains increased ability to respond to opportunities and challenges. The carefully considered use of processes and lateral connections can be used to avoid the need to restructure when strategy shifts. The underlying structure can remain a stable home for employees, while processes and lateral connections are quickly reconfigured. A new strategic direction can be implemented with the majority of the organization still focusing on current work. For example, customer teams can be used as an interim step in reorienting a product structure toward customer segments. We refer to an organization's *lateral capability* as its ability to build, manage, and reconfigure its processes and lateral connections in the service of its strategic goals. Strong lateral capability is fundamental to all of the complex organizational forms discussed in this book. The Selecting Lateral Connections tool in the Appendix summarizes the options.

Rewards

Metrics and rewards align individual behaviors and performance with the organization's goals. For employees, a company's scorecard and reward system communicate what the company values more clearly than any written statement can. *Metrics* are the measures used to evaluate individual and collective performance. The *reward system* motivates employees and reinforces the behaviors that add value to the organization through salary, bonuses, stock, recognition, and benefits.

In complex organizations, the overriding challenge in designing metrics and rewards is how to create incentives for collaborative behavior. Rewards based on simple bottom-line measures that work for self-contained units cannot drive business results in organizations that depend heavily on cross-unit coordination. In complex organizations, variable compensation (that is, pay above base salary) typically tends to focus on team, unit, and business performance more than on individual accomplishment. Some questions to consider in designing rewards are these:

- *Level*. At what level should results and behaviors be measured and rewarded: team, department or unit, division, or company? How high up in the organization should results be aggregated before being rewarded? What level will still allow employees to feel they are being measured on the outcomes of their decisions and actions?
- *Locus of measure*. What is the appropriate configuration of profit centers? Should the product, customer, or geographic unit be accountable for business results? How does the organization create accountability

and transparency and minimize overhead cost allocations? How does it apportion credit among the multiple dimensions?

- *Behaviors.* What are the behaviors and actions that are essential to supporting desired strategic outcomes (for example, responsiveness, follow-up and communication, knowledge sharing, leading and participating in teams, cultural acuity, relationship building, influence, developing talent, and other organizational infrastructure contributions)? How do these get acknowledged in the performance management process?
- *Evaluation process.* Who should assess the performance that rewards are based on? What is the role of customers, peers, direct reports, lower-level staff, and colleagues from other departments? How does the organization create rigor around what can become a subjective evaluation of required behaviors?

Throughout this book and in the context of the strategy and organizational form being discussed in a particular chapter, we point out planning, measurement, and reward practices that help to answer these questions.

People

By *people practices*, we mean the human resource policies for selection, staffing, training, and development that are established to help form the capabilities and mind-sets necessary to carry out the organization's strategy. The complex organizations discussed in this book require a sophisticated management team that understands how to use the organization as a lever for competitive advantage. But it is not just managers who need to have strong organizational and interpersonal skills. Complex organizations require employees at all levels to have a fundamental set of competencies to interact across organizational boundaries, participate on teams, and make decisions that take multiple perspectives into account. The competencies that the organization needs to select for and develop include the ability to:

- View issues holistically and from cross-functional and cross-cultural perspectives
- Negotiate and influence without formal authority or positional power
- Build relationships and networks and skillfully work through informal channels
- Advocate and collaborate without bullying or compromising
- Share decision rights and resources and make joint decisions with peers
- Exhibit flexibility and resolve conflicts

- Manage projects with discipline
- Make decisions in situations of ambiguity and change

Management must also model these abilities and behaviors. Transparency and open communication channels between employees and managers create an important foundation for all of these competencies. In our discussions of various organizational forms, we highlight the talent and human resource considerations relevant to each model.

Design Principles

A number of themes run through this book. They are summarized here in the form of design principles. We have chosen these few to emphasize based on our experience consulting with organizations, combined with our understanding of the rich body of research that has been conducted on organizational design.

Requisite Complexity

Ashby's dictum from 1952—that an organization should be as complex as its business requires—still holds true. Today's leaders, while trying to respond to the increased demands of the market and speed of competition yet keep their organizations manageable, have to challenge themselves. Have we simplified too much in a desire to make our leadership task easier? Have we failed to build an organization that can achieve all aspects of our strategy? Conversely, some questions arise about whether an organization is too complex. Have we exceeded human limitations? Have we created too many interactions and interfaces for our people to manage? Can we achieve the same outcomes more simply and introduce complexity only where absolutely needed? Organizations can be designed so that managers have simple roles in a complex structure or, alternatively, work in a simple structure but end up with highly complex jobs. Complexity cannot be avoided, but it can be intelligently designed and managed.

Complementary Sets of Choices

The choices one has among structures, processes, rewards, and people practices are many. However, once a strategic path is set, the number of suitable choices for each point on the Star Model is reduced. The organization designer learns what sets of complementary choices work best together and assists the organization's leaders to build, align, and optimize these alternatives.

Coherence, Not Uniformity

A large, complex organization—particularly one that spans geographic boundaries—rarely has a simple structure. Rather, it can be thought of as a set of differentiated networks, in which each suborganization is designed in accordance with the environment in which it must operate (Nohria and Ghoshal, 1997). Leaders can make their organizations responsive to local conditions and at the same time remain coherent by differentiating where appropriate, and then using integrative mechanisms to link the organization into one system.

Active Leadership

With the interaction of many dimensions in an organization, priorities must be clear, or decision making falters and strategy execution slows. Leaders must clearly and continually communicate strategy and priorities throughout the organization so that employees know where to focus and how to make intelligent trade-offs. Successful complex organizations are guided and led by visible and active leaders who not only communicate strategy but also create the decision frameworks in which employees operate. They do not shy away from conflicts, complexity, or difficult choices.

Reconfigurability

An organization's internal rate of change has to be as fast as the rate of change in its external environment. But the larger the organization is, the harder it is to change. An organization's lateral capability—that is, its ability to bring the right people together quickly around risks or opportunities—is its most powerful means for changing direction. With robust lateral capability, processes and lateral connections can be rerouted and new ones created to shift priorities. They can even be designed in advance in anticipation of changes in strategic direction.

Evolve, Do Not Install

Lateral connections are cumulative. The capabilities developed at a lower level are necessary for the next level to work well. For example, for an organization to be able to use teams effectively, strong, informal networks must have already been developed. Build lateral capabilities by beginning at the low end of the continuum and working upward. As people in the organization gain the necessary skills and behaviors, begin instituting the next type of lateral connection if the strategy calls for it. Installing a matrix,

rather than evolving toward it through the use of networks, teams, and integrative roles, is usually a recipe for failure.

Start with the Lightest Coordinating Mechanism

Coordination is expensive in terms of management time and attention. Always use the lightest touch when selecting what lateral form to use, choosing the least costly and least difficult coordination process to meet the required objectives. That is, start with networks and teams, and move to integrative roles and a matrix only if required.

Make Interfaces Clear

To manage complexity, spend time designing and clarifying interfaces. When interfaces between units are numerous and unclear, the amount of communication necessary can become overwhelming, and coordination suffers. Help the people who will be working at the interfaces understand the intentions and implications of the design.

Organize Rather Than Reorganize

Successful companies are continually evaluating and adjusting their organizations. Leaders of these firms form and communicate a picture of the future ideal and move toward it every day. Rather than periodic reorganization events that cause the organization to lurch forward, leaving employees with whiplash, aim for 80 percent initial alignment, with a plan for how to continue organizing toward the ideal.

• • •

In this chapter, we have introduced the fundamental concepts of organization design. The Star Model provides both a decision-making framework and a starting point to help leaders think about the interaction of strategy, structure, processes, rewards, and people. To begin the organization design process requires articulating the organizational capabilities to execute the strategy. These become the criteria for all further design decisions regarding the complementary sets of structures, processes, rewards, and people practices.

We also discussed how the organization needs to be as complex as the surrounding environment demands. The structural dimensions of function, product, geography, and customer should be configured based on the strategy. Different parts of the organization can be configured differently based on the external conditions they face and the challenges that need

to be addressed. Decision making and activities are coordinated through processes and lateral connections. Lateral connections—networks, teams, integrative roles, matrices—are key elements of reconfigurability, which provides competitive advantage in a world of constant change.

The following chapters use the concepts introduced here and prepare you to confront five of the critical organizational design decisions that managers face today: designing around the customer, organizing globally, making a matrix work, making decisions about what to centralize and what to decentralize, and how to organize for innovation.