

Organizational Design and Structure,

What is an Organization?

An **organization** is a:

system of consciously coordinated activities or forces of two or more persons,

an open system, meaning that its survival and operation depends on constant interaction with its environment,

Open System Theory:

Open: Organizations are open to, and influenced by, their environments,

System: Movement in one part leads to predictable movement in another,

Organizations:

1. import resources,
2. transform it into a product characteristic of organizational processes,
3. export the product, and,
4. re-energize from sources in the environment,

Organizational Design:

Organizational structure is the vertical and horizontal configuration of departments, authority, and jobs within an organization,

Organizational design is the process of constructing and adjusting an organization's structure to achieve its business strategy and goals relative to its environment,

By differentiating and integrating both tasks and roles, organizational structure determines organizational process (activities that transform input into output) by clarifying :

1. Formal lines of authority and responsibility,
2. Formal systems of communication, coordination, and integration,

Differentiation is the process of breaking down organizational goals into tasks; there are three types of differentiation

1. Horizontal: Between organizational subunits,
2. Based on employee knowledge, education, and training (i.e., task specialization),

Vertical: Between hierarchical/authority levels

1. Decrease as span of control (number of subordinates a manager supervises) increases
2. More control, bureaucratic communication, high opportunity for promotion

Spatial: Between geographic locations

1. Political and legal issues also play a role in decisions to spatially differentiate,

As differentiation increases, so does **complexity**; as complexity increases, firms need more links to coordinate different parts

Integration is the process of linking tasks and roles together to form a structure that supports strategy and goal accomplishment

Vertical linkages coordinate hierarchical tasks:

1. Hierarchical referrals (problem solving; delegation)
2. Rules/procedures (standing information)
3. Plans and schedules
4. Management information systems

Horizontal integration connects jobs

1. Liaison roles/integrators
2. Task forces or teams (new interdependent entities)

15 ORGANIZATIONAL DESIGN, EFFECTIVENESS, AND INNOVATION

How Can Understanding These Key Processes and Outcomes Help Me Succeed?

Major Topics I'll Learn And Questions I Should Be Able To Answer

15.1 THE FOUNDATION OF AN ORGANIZATION

MAJOR QUESTION: How can knowledge about an organization's foundation help me in my career?

15.2 ORGANIZATIONAL DESIGN

MAJOR QUESTION: What are the seven basic ways in which organizations are structured, and how do these structures relate to the organization's purpose?

15.3 CONTINGENCY DESIGN AND INTERNAL ALIGNMENT

MAJOR QUESTION: How can I use knowledge about contingent organization design and internal alignment to improve my satisfaction and performance?

15.4 ASSESSING ORGANIZATIONAL EFFECTIVENESS

MAJOR QUESTION: What does its choice of ways to measure its effectiveness tell me about an organization?

15.5 ORGANIZATIONAL INNOVATION

MAJOR QUESTION: How can I support my employer's attempts to innovate?

The Organizing Framework shown in Figure 15.1 summarizes what you will learn in this chapter. The influences on key processes at the individual, group, and organizational levels are three person factors (attitudes about freelancing, goal orientation and P-O fit) and six situation factors (organizational structure, organizational culture, organizational climate, organizational vision and values, contingency factors, and office design). The greater number of situation rather than person factors impacting processes reveals that situation factors play a more important role in explaining the OB outcomes discussed in this chapter. However, OB processes affect outcomes at all three levels.

FIGURE 15.1 Organizing Framework for Understanding and Applying OB

A summary graphic outlining what will be learned in this chapter.

Access the text alternative for Figure 15.1.

These two photos are great representations of how organizational design and innovation have changed over the years. The photo of workers on the left depicts a typical department in the early 1900s. Note the linear set of desks and the seriousness with which people are working. If you look toward the left edge of this photo you will see managers in the aisle watching over the workers. Organizations tended to be structured more hierarchically and relied on more managerial oversight. In contrast, modern day offices tend to be more open, which encourages more spontaneous interactions among coworkers. Research shows that creativity and innovation are enhanced by spontaneous interactions.

Winning at Work

Working Virtually Takes Special Preparations

Advances in social networking, videoconferencing, cloud storage, and mobile technology have enabled more employees to work virtually. Whether you work for a company such as FlexJobs, which has 43 employees who all work from home offices, or a company that prefers employees show up at the office, it is likely you will perform some of your work away from the office. An estimated 3.7 million employees, about 2.8 percent of the workforce, currently work from home about 50 percent of the time. Further, a national survey revealed that 85 percent of millennials, people born between 1980 and 2001, would prefer to telecommute full-time.

Why Is It Hard to Work Virtually?

Although you can work virtually from almost anywhere, most virtual work is done at home. Three primary issues make this challenging. The first is the need for personal contact and social interaction. Many of us enjoy the social contact and camaraderie that comes with working in an office. Second, many people have difficulty creating boundaries between their work and home life. Finally, it takes discipline to work from home. There are no managers or colleagues around to prompt you to get things done.

Tips for Working Virtually

Separate work life from home life. You need dedicated space to work, free of clutter and distractions (like the TV). It should feel like an office, be well lit, and allow for privacy. One expert suggested that you ,establish ‘do not disturb’ guidelines, work hours, break times, and a policy on handling personal matters ... no doing dishes or laundry or taking out the trash during work hours ... treat your home office as if it were a ‘real’ office located somewhere else.,

Set your work hours. Too much flexibility can lead to distractions and wasted time. Commit to specific hours just as if you were going to an office. Otherwise you may find yourself putting off your work or working around the clock to make up for it.

Establish and maintain a morning routine. You want your morning routine to put you into a productive mind-set. Business writer Shannon Cyr recommends that virtual workers should ,take a shower, get dressed, brush your teeth, make the bed, exercise, make coffee, eat breakfast, or meditate. Regardless of what you do to start your day, the trick is to remain consistent in your routine so you give your brain a signal it’s time to start the workday.,³

Set expectations with family and friends. Talk to family and friends about your need to minimize distractions while working from home. You need to be left alone. It must be clear that working from home doesn't mean you are available to answer personal questions any more than if you worked at an office. Interruptions should be allowed for important issues.

Establish goals and to-do lists. A list of things you need to get done will help you focus on the work and avoid distractions or the tendency to procrastinate. One of your authors, Angelo Kinicki, works virtually and starts every day with a prioritized list of things to accomplish.

Communicate with people in your professional network. Out of sight, out of mind. Proactive communication with your network is essential if you are working virtually. This obviously includes your boss and coworkers, but also customers, vendors, and personal contacts. We recommend that you make an effort to lunch with work colleagues and others in your network.

Get the desired level of human interaction. Schedule time to meet face-to-face with coworkers and friends. You will have to make a special effort because you are the one away from the office.

Know yourself before saying yes. Working virtually is not for everyone. It takes self-motivation, flexibility, emotional intelligence, and sensitivity to what others need. If you don't have these skills, it may be better to say no to telecommuting.

What's Ahead in This Chapter

This second chapter on macro OB highlights the way organizational structure and design affect organizational-level outcomes. We begin by exploring the basic foundation of an organization and then review seven basic ways organizations are structured. Next, we review the contingency approach to organizational design and four basic effectiveness criteria used by organizations. We conclude by exploring innovation and ways in which you can foster it.

15.1 THE FOUNDATION OF AN ORGANIZATION

MAJOR QUESTION

How can knowledge about an organization's foundation help me in my career?

THE BIGGER PICTURE

Whether they are for-profit, nonprofit, or mutual benefit, organizations possess some common characteristics. The better you understand these foundations, the better prepared you will be to perform at any level of the organization. You'll explore these commonalities and more, such as the difference between closed and open systems and the way organizations can become learning organizations. As a necessary springboard for this chapter, we formally define the term organization, clarify the meaning of organization charts, and explore two open-system perspectives of organizations.

What Is an Organization?

From a design perspective, an organization is ,a system of consciously coordinated activities or forces of two or more persons., Earlier in this book, the everyday understanding of organization was adequate for our discussions. But this formal definition is especially helpful now because the phrase ,consciously coordinated, underscores the importance of organizational design.

Embodied in the conscious coordination aspect of this definition are four common denominators of all organizations: coordination of effort, aligned goals, division of labor, and a hierarchy of authority.

Coordination of effort is achieved through formulation and enforcement of policies, rules, and regulations.

Aligned goals start with the development of a companywide strategic plan. These strategic goals are then cascaded down through the organization so employees are aligned in their pursuit of common goals.

Division of labor occurs when the common goals are pursued by individuals performing separate but related tasks.

Hierarchy of authority, also called the chain of command, is a control mechanism dedicated to making sure the right people do the right things at the right time. Historically, managers have maintained the integrity of the hierarchy of authority by adhering to the unity of command principle. The unity of command principle specifies that each employee should report to only one manager. Otherwise, the argument goes, inefficiency would prevail because of conflicting orders and lack of personal accountability. As you will learn in this chapter, this philosophy of managing and structuring organizations has been replaced by more dynamic approaches.

When operating in concert, the four foundational factors coordination of effort, aligned goals, division of labor, and a hierarchy of authority enable an organization to come to life and function.

Organization Charts

An organization chart is a graphic representation of formal authority and division of labor relationships. Within each box is the name and title of a current position holder. Informally, we can think of an organization chart as a family tree. To organization theorists, however, organization charts reveal much more. The partial organization chart in Figure 15.2 shows four basic dimensions of organizational structure: (1) hierarchy of authority (who reports to whom), (2) division of labor, (3) spans of control, and (4) line and staff positions.

FIGURE 15.2 Sample organization chart for a hospital (executive and director levels only)

A graphic of a sample hospital organization chart listing the chain of command. Access the text alternative for Figure 15.2.

Hierarchy of Authority

As Figure 15.2 illustrates, an organization has an unmistakable structure or chain of command. Working from bottom to top, the 10 directors report to the two executive directors who report to the president who reports to the chief executive officer. Ultimately, the chief executive officer answers to the hospital's board of directors. The chart in Figure 15.2 shows strict unity of command up and down the line. A formal hierarchy of authority also delineates the official communication network and speaks volumes about compensation. Research shows that the difference in pay between successive layers tends to increase over time.

Division of Labor

Our sample organization chart indicates extensive division of labor. Immediately below the hospital's president, one executive director is responsible for general administration, while another is responsible for medical affairs. Each of these two specialties is further subdivided, as indicated by the next layer of positions. At each successively lower level in the organization, jobs become more specialized.

Spans of Control

Span of control describes the number of people reporting directly to a given manager. Spans of control can range from narrow to wide. For example, the president in Figure 15.2 has a narrow span of control of two. (Staff assistants usually are not included in a manager's span of control.) Narrow spans of control tend to create ,taller, or more hierarchical organizations. In contrast, a wide span of control leads to a ,flat, organization. The executive administrative director in Figure 15.2 has a wider span of control of five. Historically, spans of 7 to 10 people were considered best. More recently, however, corporate restructuring and improved communication technologies have increased the typical span of control.

Although there is no consensus regarding the optimal span of control, managers should consider four factors when establishing spans of control: organizational size, managers' skill level, organizational culture, and managerial responsibilities. Let's consider each of these factors.

Organizational size. Larger organizations tend to have narrower spans of control and more organizational layers, whereas smaller ones have a wider span of control. Costs tend to be higher in organizations with narrow spans due to the increased expense of having more managers. Communication also tends to be slower in narrow spans because information must travel throughout multiple organizational layers.

Skill level. Complex tasks require more managerial input, thereby suggesting a narrow span of control. Conversely, routine tasks do not require much supervision, leading to the use of a wider span of control.

Organizational culture. Narrow spans of control are more likely in companies with a hierarchical culture because they focus on internal integration and stability and control recall Figure 14.4. In contrast, wider spans of control are more likely to be found in companies that desire flexibility and discretion, cultures characterized as clan or adhocracy. Wider spans also complement cultures that desire greater worker autonomy and participation.

Managerial responsibilities. The most senior-level executives tend to have narrower spans of control than middle managers because their responsibilities are broader in scope and more complex. It's important to consider the breadth of a person's responsibilities when deciding his or her span of control.

Line and Staff Positions

The organization chart in Figure 15.2 also distinguishes between line and staff positions. Line managers such as the president, the two executive directors, and the various directors occupy formal decision-making positions within the chain of command. Line positions generally are connected by solid lines on organization charts. Dotted lines indicate staff relationships. Staff employees do background research and provide technical advice and recommendations to their line managers. Line managers generally have the authority to make decisions for their units. For example, the cost-containment specialists in the sample organization chart merely advise the president on relevant matters. Apart from supervising the work of their own staff assistants, they have no line authority over other organizational members. Modern trends such as cross-functional teams and matrix structures, discussed later in this chapter, are blurring the distinction between line and staff.

An Open-System Perspective of Organizations

To better understand how organizational models have evolved over the years, we need to know the difference between closed and open systems. A closed system is a self-sufficient entity. It is closed, to the surrounding environment. In contrast, an open system depends on constant interaction with the environment for survival. The distinction between closed and open systems is a matter of degree. Because every worldly system is partly closed and partly open, the key question is: How great a role does the environment play in the functioning of the system? For instance, a battery-powered clock is a relatively closed system. Once the battery has been inserted, the clock performs its time-keeping function hour after hour until the battery goes dead. The human body, on the other hand, is a highly open system because it requires a constant supply of life-sustaining oxygen from the environment. Nutrients and water also are imported from the environment. Open systems are capable of self-correction, adaptation, and growth, thanks to feedback from the environment.

Whole Foods Market's approach to the growing and selling of organic food is good example of an open system. John Mackey, cofounder and co-CEO of Whole Foods Market, believes this industry can benefit from systems thinking. ,Organic has grown stale. Its guidelines prohibit the use of synthetic fertilizers and pesticides, which is a good thing,, he says. But they don't address all the burgeoning issues from excessive water usage to the treatment of migrant laborers facing agriculture today. And once farmers are certified as organic, Mackey believes they have little incentive to improve their practices. Mackey concludes, ,Organic is a great system, but it's not a complete solution., Whole Foods thus decided to take a more open-systems approach by implementing a new system called Responsibly Grown. The program measures factors such as energy conservation, waste reduction, and farmworker welfare. As you might imagine, many local organic growers are angry about these changes, claiming they will increase their costs. Whole Foods has made some small adjustments to the program based on this feedback, but Mackey is staying with it. He firmly believes an open-systems approach is better for consumers and the planet.

A photo of a field of lettuce.

Whole Foods Market is putting increased pressure on farms like this to produce products that are Responsibly Grown. This organic farm of green and red lettuce would need to meet Whole Foods standards if it wants to sell produce to the company. Do you think it is fair for chains like Whole Foods to create additional standards that increase a farmer's costs?

Historically, management theorists downplayed the environment because they used closed-system thinking to characterize organizations as either well-oiled machines or highly disciplined military units. They believed rigorous planning and control would eliminate environmental uncertainty. But that approach proved unrealistic. Drawing on the field of general systems theory that emerged during the 1950s, organization theorists suggested a more dynamic model for organizations. The resulting open-system model likened organizations to the human body. Accordingly, the model in Figure 15.3 reveals the organization to be a living organism that transforms inputs into various outputs. (Notice the similarity to the Input, Process, and Outcome features of the Organizing Framework for Understanding and Applying OB.) The outer boundary of the organization is permeable. People, information, capital, and goods and services move back and forth across this boundary.

FIGURE 15.3 The organization as an open system

A summary graphic of the open-system model.

SOURCE: This model is synthesized from Figures 5-2 and 5-3 in F. E. Kast and J. E. Rosenzweig, *Organization and Management: A System and Contingency Approach*, 4th ed. (New York: McGraw-Hill, 1986), 112, 114.

Moreover, each of the five organizational subsystems goals and values, technical, psychosocial, structural, and managerial is dependent on the others. Feedback about such things as sales and customer satisfaction enables the organization to self-adjust and survive despite uncertainty and change. In effect, the organization is alive.

Learning Organizations

In recent years, organizational theorists have extended the open-system model by adding a ,brain, to the ,living body., Organizations are said to have humanlike cognitive functions, such as the abilities to perceive and interpret, solve problems, store information, and learn from experience. This realization has led to a stream of research that examines the process by which organizations learn. Peter Senge, a professor at the Massachusetts Institute of Technology, popularized the term learning organization in his best-selling book *The Fifth Discipline*. He described a learning organization as ,a group of people working together to collectively enhance their capacities to create results that they truly care about. A practical interpretation of these ideas results in the following definition. A learning organization proactively creates, acquires, and transfers knowledge and changes its behavior on the basis of new knowledge and insights.

We want to understand how organizations learn because organizational learning is positively associated with organizational performance and innovation, a topic we discuss later in this chapter. Researchers have shown that organizations learn by using five independent subprocesses (see Figure 15.4): information acquisition, information distribution, information interpretation, knowledge integration, and organizational memory. Let us consider how these processes work.

FIGURE 15.4 The process of organizational learning

A summary graphic of the five independent subprocesses involved in organizational learning.

Step 1: Information Acquisition

Information acquisition, also known as scanning, is ,the process through which an organization obtains information from internal and external sources., Because this is the first step of learning, organizations should cast a wide net in their acquisition of information. For example, discussions about past success and failure, called postmortems, are critical sources of information.

Step 2: Information Distribution

Information distribution consists of the processes or systems that people, groups, or organizational units use to share information among themselves. For example, Jill Nelson, the founder of Ruby Receptionists, a virtual reception service in Oregon, asks employees to discuss their mistakes at weekly staff meetings. Nelson commented, ,We discuss the mistakes and what the employees learned from them. The sharing of this information sends the message that it's OK to make a low-stakes mistake as long as you learn from it and share your lesson with others.,

A photo of firefighters at an on-site investigation.

This unit of firefighters has to rely on organizational learning to effectively fight fires. It has to work as a team while adjusting to factors such as weather, temperature, and breadth of the fire. Fire units also are known for having postmortems after a fire to discuss the lessons learned.

Step 3: Information Interpretation

This step is all about making sense of the information organizations have acquired and distributed. In this process people are affected by the perceptual biases discussed in Chapter 4 and the decision-making biases reviewed in Chapter 11.

Step 4: Knowledge Integration

Knowledge integration occurs when information is shared and accumulated across different parts of an organization. This provides more and better information for making decisions. This step can be accomplished by having postmortems in which different people or groups present their ideas about an opportunity or problem. The point is to seek consensus about what the learned information means.

Step 5: Organizational Memory

Learning will not last unless the organization finds a method to save it. Knowledge needs to be put into some type of repository or organizational memory if it is to be used in the future. Organizational memory is not an object. According to a team of OB experts, it is the combined processes of ,encoding, storing, and retrieving the lessons learned from an organization's history, despite the turnover of personnel.,

What Can Be Done to Improve Organizational Learning?

We have three recommendations for improving organizational learning.

Improve on the five steps just discussed. You might begin by using a survey to assess the extent to which your organization is already following these steps. Self-Assessment 15.1 was created so that you could make this assessment on a current or former employer. You can use the results to target organizational changes aimed at improving learning.

Realize that leader behavior, organizational climate, and organizational culture drive organizational learning. If leaders do not support a vision and culture that promote the value of learning, it won't happen.

EXAMPLE Michael Molinaro, vice president of talent management at New York Life Insurance, understands this conclusion. He notes that the company fosters a learning climate and culture by ,trying to make each moment about learning, about establishing the intention to learn in every interaction, every relationship and every chance to lead., The company uses a biannual employee survey to assess its success at creating a learning-oriented climate and culture.

We can all be role models of learning from failure. Failure occurs when an activity fails to deliver its expected results or outcomes. Unfortunately, failure or mistakes are generally feared and penalized, which creates an environment of risk aversion. Bill Gates, founder and former CEO at Microsoft, concludes, ,It's fine to celebrate success, but it's more important to heed the lessons of failure. How a company deals with mistakes suggests how well it will bring out the best ideas and talents of its people, and how effectively it will respond to change.,

SELF-ASSESSMENT 15.1 Are You Working for a Learning Organization?

Please be prepared to answer these questions if your instructor has assigned Self-Assessment 15.1 in Connect.

To what extent is the company a learning organization? Are you surprised by the results?

Identify the three items receiving the lowest ratings. Propose solutions for improving on these three areas.

Suggestions in the Applying OB box guide the way to learning from failure.

APPLYING OB

Learning from Failure

Conduct postmortems. Take the time to reflect on why a project failed or a goal was not met. Start from the beginning and consider everything that occurred during the course of working on the project. You can use the Organizing Framework to brainstorm the potential causes of the failure. You may need to collect data during this process. Be sure to reflect on what you learned regarding each of these factors:

- a. Customers.
- b. The organization's vision, strategy, culture, climate, and internal processes.
- c. Yourself and those who worked on the project.
- d. Group dynamics.
- e. Organizational leadership and politics.

Share the learning with others. The real value of failure comes from sharing our experiences with others. This is a form of ,sharing best practices, in which knowledge about what led to failure identifies the best practice. Following this suggestion also destigmatizes failure and can reduce our fear of it. This lesson is valuable because self-preservation and fear of failure are big obstacles to innovation.

Consider your goal orientation. In Chapter 6 we defined two goal orientations that influence the way we work and our willingness to learn from failure. A performance goal orientation is aimed at demonstrating competence or avoiding perceptions of incompetence. People with this orientation are less likely to take the risks needed for innovation. In contrast, a learning or mastery orientation focuses on learning and growing. For those with this orientation, failure is just another way to learn and develop. Employees should adopt more of a learning goal orientation if they want to increase their learning from failure.

15.2 ORGANIZATIONAL DESIGN

MAJOR QUESTION

What are the seven basic ways in which organizations are structured, and how do these structures relate to the organization's purpose?

THE BIGGER PICTURE

An organization's design or structure is like a fingerprint. It uniquely identifies an organization and provides information about how things get done. You will learn about seven fundamental types of organizational structures, and the implications for you at any level of the organization.

Organizational design sets ,the structures of accountability and responsibility used to develop and implement strategies, and the human resource practices and information and business processes that activate those structures., The general idea behind the study of organizational design is that organizations are more effective or successful when their structure supports the

execution of corporate strategies. Keep in mind that there is no one best structure for a company. Companies tend to change structure in response to changes in the marketplace or in their strategic goals. Consider the case of DuPont and Dow Chemical.

EXAMPLE DuPont Co. and Dow Chemical Co. decided to merge into a new company DowDuPont. The merged company will be restructured around three different businesses. DowDuPont expects to reduce costs by \$3 billion each year by using the following three-part structure:²⁹

A global agriculture company, with combined revenue of \$19 billion.

A global material science company, with combined revenue of \$51 billion.

A technology- and innovation-driven company focused on specialty products, with combined revenue of \$13 billion.

Our consulting experience tells us that too many companies attempt structural changes to solve performance problems. For example, Sony restructured nine times between 1994 and 2009. A McKinsey & Co. survey of 1,890 executives supports a similar conclusion; only 8 percent experienced positive results after making structural changes. This finding is also consistent with a study of 57 reorganizations by consulting firm Bain & Co., which demonstrated that most reorgs had no effect, and some led to lower organizational performance.

This section and the next provide information about how managers can increase their chances of choosing an effective organizational design. The same information will allow you to better understand which structure your employer adopts and how you can better function and perform within that structure.

We begin by reviewing three broad categories of organizational structure and then turn to the seven fundamental types of designs found in the workplace today. The following section then identifies when these structures may be most effective.

Three Categories

Our changing world means businesses develop new forms of organization to respond to emerging business opportunities. Management professor Richard L. Daft defined three eras that each contributed its own broad category of organization and focus (see Table 15.1).

TABLE 15.1 CATEGORIES AND ERAS OF ORGANIZATIONAL DESIGN

CATEGORY	ERA	FOCUS	TYPE
1. Traditional	Mid-1800s through 1970s	Self-contained within organization's boundaries	Functional Divisional Matrix
2. Horizontal	1980s	Team- and process-oriented	Horizontal

3. Open Since mid-1990s Opened beyond

organization's boundaries

Hollow

Modular

Virtual

SOURCE: N. Anand and R. L. Daft, "What Is the Right Organizational Design?", *Organizational Dynamics*, June 2007, 329–344.

Traditional Design

Organizations defined by a traditional approach tend to have functional, divisional, and/or matrix structures. Each of these structures relies on a vertical hierarchy and attempts to define clear departmental boundaries and reporting relationships.

Historical Forces: Industrialization, mass production, and related capitalization. Mid-1800s through 1970s.

Rationale: With industrialization and mass production, organizations were able to achieve great economies of scale by specializing the application of labor to specific and standardized functions.

Horizontal Design

Organizations defined by a horizontal approach work hard to flatten hierarchy and organize people around specific segments of the work flow. A horizontal structure, sometimes called a team or process structure, relies on a horizontal work flow and attempts to dissolve departmental boundaries and reporting relationships as much as possible.

Historical Forces: Increased complexity and increasingly rapid development cycles for new products. 1980s.

Rationale: The traditional approach of dividing up work according to functions, products, and customers frustrates managers who want to focus on bringing people together, without internal boundaries keeping them apart. If you want people to share knowledge, collaborate, and continually improve the way things are done, a horizontal design is a good option.

Open Design

Organizations defined by an open approach tend to have hollow, modular, or virtual structures. Each of these structures relies on leveraging technology and structural flexibility to maximize potential value through outsourcing and external collaboration.

Historical Forces: Rapid technological improvements (including the Internet and mobile phones) and the rise of emerging economies (China and India) with pools of skilled workers willing to work for less than those in developed economies. Since mid-1990s.

Rationale: Open designs help organizations respond more rapidly to customer and market changes. They also potentially reduce costs and increase innovation.

The rationale of open systems led Jack Welch, former CEO of GE, to coin the term boundaryless organization. A boundaryless organization is one in which management has largely succeeded in

breaking down barriers between internal levels, job functions, and departments, as well as reducing external barriers between the association [organization] and those with whom it does business. This type of structure is fluid and flexible and relies on telecommuting between geographically dispersed people. It is most appropriate for businesses in fast-changing industries or environments.

All the structural forms outlined in Table 15.1 are in use today. Let's consider each design and an illustrative example.

Seven Types of Organizational Structures

FUNCTIONAL STRUCTURE

Work is organized into separate vertical functions, such as finance, sales, production, and human resources.

A graphic representing the functional structure. It shows four vertical bars.

The following seven types of organizational structure cover almost all organizations. We provide historical background, with examples and schematic diagrams for each.

Functional Structure

A functional structure groups people according to the business functions they perform, for example, manufacturing, marketing, and finance. A manager is responsible for the performance of each of these functions, and employees tend to identify strongly with their particular function, such as sales or engineering.

EXAMPLE The organization chart previously shown in Figure 15.2 illustrates a functional structure. Responsibility at this hospital is first divided into administrative and medical functions, and within each category, directors are responsible for each of the functions. This arrangement puts together people who are experts in the same or similar activities. As a small company grows and hires more production workers, salespeople, and accounting staff, it typically groups them with a supervisor who understands their function.

DIVISIONAL STRUCTURE

Work is organized into separate vertical divisions, which may focus on products or services, customers or clients, or even geography.

A graphic representing the functional structure. It shows four vertical bars.

Some organizations have concluded that using a functional structure divides people too much, ultimately creating silos within the organization. This detracts from the extent to which employees collaborate and share best practices across functions.

Divisional Structure

In a divisional structure, employees are segregated into organization groups based on industries, products or services, customers or clients, or geographic regions. The divisional structure is sometimes called a product structure or profit center approach.

EXAMPLE General Electric is structured around nine primary business divisions: GE Power, GE Oil & Gas, GE Renewable Energy, GE Energy Connections, GE Aviation, GE Healthcare, GE Transportation, GE Capital, and GE Digital. These major business areas are subdivided

further into either product or geographic divisions. Typically, within each division it maintains its own internal functional structure.

MATRIX STRUCTURE

The matrix can be used with a variety of vertical and horizontal elements. Shown here are four different functions (F1, F2, and so on) interlinked to four product lines (P1, P2).

A graphic representing the matrix structure. The functions are represented by vertical lines and the product lines cross them horizontally.

As with functional structures, some organizations have concluded that using a divisional structure can also create silos within the organization.

Matrix Structure

Organizations use matrix structures when they need stronger horizontal alignment or cooperation in order to meet their goals. A matrix structure combines a vertical structure with an equally strong horizontal overlay. Functional and divisional chains of command form a grid with two command structures, one shown vertically by function and the other shown horizontally by product line, brand, customer group, or geographic region.

EXAMPLE Pharmaceutical maker Bristol-Myers Squibb is highly committed to this structure. Jane Luciano, vice president of global learning and organization development, said, „We have the matrix every way it can be organized, including geographically, functionally, and on a product basis.„ The company is very pleased with its matrix structure. Luciano noted, „The matrix has enabled us to upgrade and promote excellence around core capabilities, so we can be very purposeful in developing functional expertise in specific disciplines, such as marketing, medical, HR, or finance excellence.„

A matrix structure can also provide a reasonable counterbalance among important stakeholders, but applying it to an organization is not easy. Matrix organizations can be complex and confusing without an extra layer of collaboration and integration to effectively implement the structure. Jay Galbraith, an expert on the subject, noted that matrix structures frequently fail because management fails to create complementary and reinforcing changes to the organization’s IT systems, human resource procedures (performance appraisals, rewards, selection criteria), planning and budgeting processes, organizational culture, internal processes, and so on. He concluded, „Organization structures do not fail; managements fail at implementation.„ This type of structure is increasingly being used by companies expanding into international markets.

Horizontal Structure

HORIZONTAL STRUCTURE

Several flexible teams T1–T4 organize around the horizontal work flow or processes. Some vertical functions remain, but they are minimized.

A graphic representing the horizontal structure. The teams are shown in horizontal row. Each team is connected by lines to all four functions.

In a horizontal structure, teams or work groups, either temporary or permanent, are created to improve collaboration and work on common projects.

The horizontal approach to organizational design tends to focus on work processes. A process consists of every task and responsibility needed to meet a customer need, such as developing a new product or filling a customer order. Completing a process requires input from people in different functions, typically organized into a cross-functional team (described in Chapter 8). W.L. Gore & Associates is a good example of a company that has successfully implemented this structure (see the OB in Action box).

OB IN ACTION

W.L. Gore & Associates Operates with a Horizontal Design

A screenshot of the W.L. Gore homepage.

W.L. Gore links strategy, culture, and structure.

W.L. Gore is a technologically driven company that focuses on product innovation. It develops and manufactures products that provide highly reliable performance in varied environments ranging from the surface of Mars to the inside of the human heart. Today, Gore has more than \$3 billion in revenue and 10,000 employees working in offices in 25 countries.

The company has been profitable every year since its founding in 1958, and it has been ranked among Fortune's 100 Best Places to Work every year since 1998. It was No. 12 in 2016.

Culture and Values Founder Bill Gore wanted a company free of bureaucracy and a command and control style of leadership. To support this culture, the company promotes the following values:

Belief in the individual employees are encouraged to trust and believe in each other.

Power of small teams a team-based structure with minimum hierarchy is used.

All in the same boat employees are part owners through a stock plan.

Long-term view investments are based on long-term payoffs.

Organizational Structure Gore's structure is consistent with its strategy and culture. It has a team-based, lattice, organization. The company website describes the structure as one with no traditional organizational charts, no chains of command, nor predetermined channels of communication. Employees, who are called associates, are accountable to the members of their multidisciplinary teams. Teams organize around opportunities and leaders emerge, according to the corporate website.

Associates are not hired for specific jobs. The corporate website indicates employees are hired for general work areas. With the guidance of their sponsors (not bosses) and a growing understanding of opportunities and team objectives, associates commit to projects that match their skills. All of this takes place in an environment that combines freedom with cooperation and autonomy with synergy.

Sponsors help associates adjust to this flexible work environment by providing feedback on performance and by assisting in internal networking.

YOUR THOUGHTS?

What type of people would like to work at Gore given its structure and culture?

Would this type of structure enhance or reduce organizational learning? Discuss your rationale.

Do you think this type of structure would work in most organizations? Explain.

The final three types of structures are all examples of open organizations. Before learning about them in more detail, find out how well suited you are for telecommuting by completing Self-Assessment 15.2. Telecommuting is a common practice in companies that use open designs.

SELF-ASSESSMENT 15.2 What Is Your Preference for Telecommuting?

Please be prepared to answer these questions if your instructor has assigned Self-Assessment 15.2 in Connect.

Do you prefer telecommuting or a traditional work environment?

What bothers you most about telecommuting?

How might managers assess an employee's preference for telecommuting during a job interview?

Hollow Structure

HOLLOW STRUCTURE

Within the organization, a number of functions are outsourced.

A graphic representing the hollow structure. The functions are represented by vertical bars. A U-shaped bar wraps around the functions.

A hollow structure, also known as a network structure, is designed around a central core of key functions and outsources other functions to outside companies or individuals who can do them cheaper or faster. An athletic shoe company, for example, might decide it can excel at developing new designs, owing to its design talent and knowledge of the market. Then it might find outsourcing partners to handle other activities such as manufacturing, order taking, shipping, and managing employee benefits. The more processes that are outsourced, the more the resulting organization is hollow, and focused on what it does best.

EXAMPLE Herman Miller, the furniture company, goes outside the organization for design expertise. CEO Brian Walker explained the advantages: „This external network ensures that we are always taking a fresh look at problems faced by our customers without subjecting [them] to our own filters. If you have only an internal design staff, even an enormously talented one, you are inherently limited by their existing world view and experiences. Our ability to tap into a broader outside network lets us ... get a fresh perspective on existing or emerging problems., The company also uses other organizations for manufacturing; Walker says the company is „more ... an integrator than a manufacturer., which makes it less resistant to new product ideas because it doesn't have to change manufacturing processes itself.

A hollow structure is useful when an organization is faced with strong price competition and there are enough companies to perform the required outsourced processes.

The growing number of hollow structures has increased demand for freelance workers. This has created an online industry that helps companies hire people for micro-tasks or short-term assignments (see the Problem-Solving Application).

PROBLEM-SOLVING APPLICATION

Freelancers Use the Internet to Obtain Work

TaskRabbit, located in San Francisco, operates like an eBay for odd jobs. The online service helps link people looking for short-term work with organizations or people in need of someone to complete specific tasks.

How Does It Work? Assume an individual has an errand he or she wants done but doesn't have time to do, or a company wants a unique task completed and doesn't have a skilled person to do it. The person or organization looking for help goes to TaskRabbit.com and posts the task and the amount to be paid for the work. Members of TaskRabbit, called TaskRabbits, then place bids to get the work. Generally, the lowest bidder wins. TaskRabbit gets a cut of the transaction.,

The website ,makes people undergo a rigorous process to become a TaskRabbit, including a video interview, federal background check, Social Security number trace, and, lastly, a test to see if applicants have what it takes.,

Is the Concept Spreading? Yes, according to a study commissioned by Freelancers Union and Upwork. The findings revealed that about 54 million people, almost 34 percent of the US workforce, did freelance work in 2015. The majority are freelancers by choice because they prefer the freedom, autonomy, and increased flexibility associated with this work role. Freelancers also report earning more income now than in the past, and the majority are optimistic about future job prospects.

Is There a Downside? Sara Horowitz, founder and executive director of the Freelancers Union, thinks a possible downside of freelancing is that sites like TaskRabbit will lead people to accept jobs with no benefits and poor work conditions.

Apply the 3-Step Problem-Solving Approach

Step 1: Define the problem that led to the creation of companies such as TaskRabbit.

Step 2: Identify the causes of the problem. What OB theories or concepts explain why people would want to work as freelancers?

Step 3: Recommend what organizations can do to effectively motivate and monitor the work of freelancers.

Modular Structure

A modular organization, like a hollow organization, uses outsourcing. But instead of outsourcing processes, it outsources production of parts of a product, such as components of a jet or subroutines of a software program. In a modular structure, the company assembles product parts, components, or modules provided by external contractors. The modular organization also is responsible for ensuring that the parts meet quality requirements, that they arrive in a timely fashion, and that the organization is capable of efficiently combining the parts into the final whole. This design is useful when a company can identify product modules and create design interfaces that allow it to assemble parts into a working order.

A graphic representing the modular structure.

MODULAR STRUCTURE

The main part of the organization (M) is structured and managed to make it easy to plug in vendors for well-defined functions (F1 through F3) as parts of the business process.

Access the text alternative for A graphic Representing the Modular Structure Graphic.

EXAMPLE A good example is Boeing, in its production of the 787 Dreamliner. Boeing's Wikipedia page describes the production process as one where, instead of building the complete aircraft from the ground up in the traditional manner, final assembly would employ 800 to 1,200 people to join completed subassemblies and to integrate systems. Boeing assigned its global subcontractors to do more assembly themselves and deliver completed subassemblies to Boeing for final assembly. This approach was intended to result in a leaner and simpler assembly line and lower inventory.

A photo of the inside of a Boeing factory.

These employees are conducting final assembly of a Boeing 777 airplane in the Everett, Washington, plant. Final assembly can involve between 800 and 1,200 people working to complete subassemblies and to integrate systems. This is a classic example of a modular structure.

Virtual Structure

The concept of virtual organizations originated in the 1990s as an outgrowth of the benefits of information technology. A virtual structure is one whose members are geographically apart, usually working with e-mail and other forms of information technology, but that generally appears to customers as a single, unified organization with a real physical location.

A graphic representing the virtual structure.

VIRTUAL STRUCTURE

One or more companies (here we show companies A and B) create or manage a wide network of virtually connected employees, represented by the dots, for a specific business process that otherwise appears as a traditional company.

Access the text alternative for A Graphic Representing the Virtual Structure Graphic.

EXAMPLE Automattic Inc., a web designer, has 458 employees working in 45 countries. The company, which hosts servers for the blogging platform WordPress.com, allows workers to work from anywhere. Executives bring all the employees together once a year for a seven-day conference. Project teams also meet five to seven days a year to plan strategy and to bond. Otherwise, virtual meetings are commonplace. The company has a San Francisco office for occasional use, but project management, brainstorming and water-cooler chatter take place on internal blogs. If necessary, team members fly around the world to meet each other face-to-face. And if people have sensitive questions, they pick up the phone.

The primary benefits of virtual structures such as Automattic has are the ability to tap into a wider talent pool, to get things done more quickly, and to reduce costs because there is less need for physical facilities and travel budgets.

Today, virtual structures are classified into two types: internal and networked.

Internal virtual structures. Internal virtual structures coordinate the work of geographically dispersed employees working for one organization, such as those at Automattic Inc. This structure primarily relies on the use of information technology, but it also requires managers to consider three key issues:

Do I have the right people? Not everyone is suited to work virtually, as you may have learned from taking Self-Assessment 15.2. Managers must consider the personal characteristics, needs,

and values of their people who might work virtually. For example, a study of upper-division business students revealed that the Big Five personality trait of agreeableness was positively associated with attitudes toward telecommuting.

How often should people get together? There is no clear answer to this question. Our recommendation is to use a contingency approach. More frequent contact is needed at the start of a project, and we suggest holding regular milestone meetings online.

What type of technology should be used to coordinate activities? Remote workers can stay connected with a host of technologies. The choice depends on their skills and the resources at hand.

Networked virtual structures. Networked virtual structures establish a collaborative network of independent firms or individuals to create a virtual entity. The networked individuals or companies join forces because each possesses core competencies needed for a project or product. This structure is used in the movie/entertainment industry. For example, writers, producers, actors, and studios join forces to make a movie, not as one legal entity, but rather as a collaborative network. Once again, a variety of information technologies coordinates the efforts of different members within the network.

Now that we have reviewed all seven designs, consider Table 15.2. It lists the pros and cons for each design and suggests situations when each may be most effective.

TABLE 15.2 SEVEN STRUCTURES OF ORGANIZATIONAL DESIGN

Structure	Best For	Pros	Cons
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Functional

Small companies, some large government organizations and divisions of large companies. Clear roles and responsibilities. Coordination and communication lapses across functional silos; most companies use dotted line or other informal means to combat this potential limitation.

Divisional

Large companies with separate divisions built on different technologies, geographies, or different bases of customers. Clear roles and responsibilities. Greater product focus, accountability, and flexibility for workers in each division than in a functional structure.

Coordination and communication lapses across divisional silos; most companies use dotted line or other informal means to combat this potential limitation.

Matrix

Organizations, increasingly including international ones, looking to avoid problems associated with silos by using a formal level of horizontal integration. Lines of formal authority along two dimensions, such as functional/product or product/region, that allow organizations to work more cohesively. Inadequate processes to ensure success. Potential for conflict when employees report to two bosses if those managers fail to coordinate.

Horizontal

Companies needing greater efficiency or flexibility to rapidly respond to customer needs. Rapid communication and reduction in cycle time for work done; greater flexibility;

faster organizational learning; improved responsiveness to customers. Potential conflicts between processes and nonprocess functions; neglect of nonprocess parts of the organization; reduced opportunities for functional specialization.

Hollow

Companies facing heavy price competition with pressure to cut costs; companies with options outside the organization that can perform required processes. Lower cost of entry and overhead; access to best sources of specialization and technology; market discipline that leads to supplier competition and innovation; potential for further cost reduction and quality improvement. Loss or decrease of in-house skills, of internal capacity to innovate, and of control over supply; costs of transitioning to hollow state; need for higher monitoring to align incentives; danger of being supplanted by suppliers.

Modular

Organizations that can specify the nature of product modules and design interfaces to multiple vendors and join them. Potential for cost savings, greater responsiveness, and competence beyond the organization's boundaries; ability to switch vendors for best fit and product improvement. A high proportion of products unsuitable to chunking into modules; poorly specified interfaces; slow or poor-quality collaborators.

Virtual

Companies that need to explore a new market opportunity by partnering with other organizations or rapidly deploy a new potential business model. Ability to respond nimbly to market opportunity; ability to provide product extension or one-stop-shop service; low exit costs if initial opportunity vanishes. High level of communication necessary to avoid redundancy; low trust and coordination among widely distributed employees; failure to promote strong employee loyalty or organizational identification.

SOURCE: Adapted from N. Anand and R. L. Daft, "What Is the Right Organizational Design?", *Organizational Dynamics*, June 2007, 329–344.

TAKE-AWAY APPLICATION

What Is My Preferred Type of Organizational Structure?

Use the seven fundamental types of organizational structure to answer these questions:

Which of the seven types is most consistent with the way you like to work and your preferred working environment? Explain.

Have you ever worked in a company whose structure did not fit your needs and style? How did you feel about working there?

How would you assess whether a future employer had your preferred organizational structure?

15.3 CONTINGENCY DESIGN AND INTERNAL ALIGNMENT

MAJOR QUESTION

How can I use knowledge about contingent organization design and internal alignment to improve my satisfaction and performance?

THE BIGGER PICTURE

The previous section showed that no one structure is appropriate for all organizations. This section reviews five contingency factors to consider when choosing an organizational design. We also discuss the need to align several organizational characteristics in this process and show how you can use this knowledge to enhance your personal and career outcomes.

There is no one best form of structure for an organization. The choice of structure is instead based on considering a host of contingency factors and internal organizational characteristics. This section helps show how this is done by discussing the concept of contingency organization design. According to the contingency approach to organization design, organizations tend to be more effective when they are structured to fit the demands of the situation, and when the structure is aligned with internal activities and actions of the organization. The demands of the situation consist of five contingency factors.

Contingency Factors

Experts suggest that managers should consider five key contingency factors when making decisions about organization design: strategy and goals, market uncertainty, decision-making processes, technology, and size.

A photo of puzzle pieces fitting together.

Selecting the best organizational design is akin to putting together a puzzle. The organization's strategy, market uncertainty, decision-making processes, technology, and size must fit together like this puzzle.

Strategy and Goals

An organization's strategy is the cornerstone of its decision about the most appropriate design. Because setting a corporate strategy requires an organization to decide how it will compete given both internal and external considerations, organizational design must be developed in tandem with establishing strategy. For example, if a company has a strategy to grow by developing and selling new products or services, a flatter or more horizontal structure may be more effective. In general, more complex organizational designs are needed as companies pursue strategies to add products, services, markets, or geographic expansion.

Market Uncertainty

The level of market uncertainty the organization faces helps determine the level of formalization it needs. Organizations such as Intel and Facebook that operate in dynamic markets need less formalized structures. Horizontal or open structures are more appropriate in this case because they allow quicker responses to marketplace threats and opportunities. Organizations may need to change their structure due to marketplace changes such as new competitors, alternate products, or customer preferences.

Decision-Making Processes

Decision-making processes span a continuum from centralized to decentralized. Centralized decision making occurs when key decisions are made by top management. Decentralized decision making occurs when important decisions are made by middle- and lower-level managers. A landmark study by a pair of British behavioral scientists, Tom Burns and G. M. Stalker, found a relationship between decision-making processes and organizational structure. In the course of their research, Burns and Stalker drew a very instructive distinction between what they called mechanistic and organic organizations.

Mechanistic organizations are rigid bureaucracies with strict rules, narrowly defined tasks, top-down communication, and centralized decision making. A mechanistic organization generally would have one of the traditional organizational designs described in the preceding section and a hierarchical culture. The orderliness of this structure is expected to produce reliability and consistency in internal processes, resulting in higher efficiency, quality, and timeliness.

Organic organizations are flexible networks of multitasking individuals who perform a variety of tasks. Organic organizations are more likely to use decentralized decision making and horizontal or open designs.

Burns and Stalker discovered that one type was not superior to the other. Each type had its appropriate place, depending on the environment. When the environment was relatively stable and certain, the successful organizations tended to be mechanistic. When the environment was unstable and uncertain, the successful ones tended to be organic.

Whole Foods Market, which traditionally had an organic structure, is currently changing its structure due to high market uncertainty. Do you think it will work? See the Problem Solving Application box.

PROBLEM-SOLVING APPLICATION

Whole Foods Is Moving from an Organic to a Mechanistic Structure

Whole Foods Market has grown by merger, acquisition, and expansion to more than 435 stores, 85,000 employees, and revenue of \$15.4 billion in 2015. It operates in the United Kingdom, Canada, and 42 states in the United States. The company has been rated by Fortune as one of the best places to work for 18 consecutive years.

Historically, the company was more organic and relied on decentralized decision making. Co-founder and co-CEO John Mackey stated, "Whole Foods is a social system. It's not a hierarchy." The company did not pass down lots of rules from corporate headquarters in Austin, Texas. Rather, it allowed the stores to make local decisions such as about purchasing their own staples. It also relied on a clannish culture that promoted commitment to productivity, innovation, and customer service.

Competition Creates the Need to Change the Structure Kroger Co. and Costco Wholesale Corp. are going after the market for natural and organic products. They also have offered lower prices in many cases. To combat this competition, Whole Foods is trying to offer more competitive pricing while increasing efficiency. Doing this requires the company to cut costs.

Whole Foods is moving toward more centralized decision making and streamlining some functions in order to cut costs and improve its negotiating power with suppliers. These changes force the company to manage the delicate balance of "wringing more efficiency out of its stores without sacrificing the local flavor and specialty offerings that have helped fuel the chain's success," according to The Wall Street Journal.

What Are the Structural Changes? The company is moving to corporate headquarters more of the responsibility for buying various products such as meat, produce, and some nonperishable items. It also is "deploying software to simplify labor-intensive tasks like scheduling store workers and replenishing shelves." Another cost-saving and customer-focused initiative is "replacing four separate checkout systems ... with a single system that will enable Whole Foods to offer more discounts more quickly to shoppers based on their personal preferences." The company estimates that these actions will save almost \$300 million a year by 2017.

Apply the 3-Step Problem-Solving Approach

Step 1: Define the problem facing Whole Foods.

Step 2: Identify the causes of this problem.

Step 3: Make your recommendations. Do you think the company's decision to change its structure is the best solution? Explain your rationale.

Technology

Technology consists of the information technology, equipment, tools, and processes needed to transform inputs to outputs. It allows products and services to be created and distributed and lets companies use big data in making decisions. Experts suggest that the use of big data will change organizational structures as organizations pursue the opportunities presented. This implies that the technology a company uses is a key consideration in deciding the best way to organize in pursuit of strategic goals.

Size

Size is measured by the number of employees, volume of sales, amount of assets, and geographical locations. Larger size generally requires more complex organizational designs.

Internal Alignment

The choice of best organizational form requires more than just considering the five contingency factors. Organizations perform more effectively when various internal organizational-level characteristics are aligned and mutually reinforcing. For example, if a company wants to grow through innovative product offerings (strategy), then it probably needs a less hierarchical structure coupled with an adhocracy and market culture. It also would help to have rewards tied to innovation and to employ people with high amounts of human and social capital. Can you see the alignment that exists among strategy, culture, structure, human resources practices, and employees' capabilities?

In contrast, if a company wants to reduce costs by improving internal processes (strategy), it would benefit from a more horizontal structure coupled with a hierarchical and clan culture. This combination would be enhanced if rewards were linked to cost reduction or efficiency, and if employees were knowledgeable about internal process control. Again, you can see that alignment is needed across internal characteristics for organizations to achieve higher performance. Although academics and consultants don't completely agree on the list of internal characteristics that need to be aligned, it is safe to recommend the following for inclusion:60

Strategy.

Structure.

Organizational culture.

Internal processes.

Human resource practices, policies, and procedures.

Employees' human and social capital.

What Does This Mean to Me?

There are both short and long-term implications to consider.

Short-Term Implications

Two photos. The top shows students sitting in a large lecture hall. The bottom shows students sitting around a table, talking to a teacher.

How many times have you sat in a lecture hall or classroom structured like the top photo? The experience is quite different from a small group meeting in which participants interact in a less formal fashion. Both contexts have their place, and our behavior is affected by the structure of a the learning environment.

Structure affects your behavior and performance. Imagine taking a class in which the seats are arranged in a stair-step, theater-style set of rows in which chairs are bolted to the ground. You can swivel in your chair, but your position is set. Now consider how this structure affects your interactions with other students. You will tend to speak with others on either side and will struggle to do group work with four to five people. It's inconvenient to turn and observe someone speaking from the back of the room. This structure also stops instructors from walking into the audience and interacting with students as in a talk show. Contrast this with a classroom with a flat floor and round tables with five or six students at each. Interactions and group work are both easier and more efficient. You can move to another table if you want. The instructor can easily walk around and interact with everyone. The point is that structure affects behavior. The value of understanding the various types of organization design is that you can work around their strengths and limitations.

You may want to start your own company. Yesterday, the owner of an appliance repair company came to the home of one of your authors to fix an ice maker and dishwasher. He has 15 employees. When asked how he structured his small company, he said everyone reports to him, but this structure is getting overwhelming and he needs someone to focus on getting new customers. He is the only person doing this, but he also has to do repairs on certain types of equipment like those in our home, leaving him less time to cultivate new business. We discussed how he might use a divisional structure based on having offices in cities within the Phoenix metropolitan area and creating incentives for those who bring in new customers. He was thankful for the free advice. You need to know about various organizational designs if you ever start your own company.

Person–organization (P-O) fit matters. In Chapter 14 we defined P-O fit as the extent to which your personality and values match the climate and culture in an organization. You also learned that P-O fit is related to a host of important outcomes such as job satisfaction, engagement, commitment, performance, and turnover. You will be happier, healthier, and more productive when you fit. For example, if you prefer autonomy, flexibility, and empowerment, then you probably won't fit into a company with a mechanistic structure. You would be much happier with an organic type of structure. Knowledge about organization design can help you find a work environment that fits.

Long-Term Implications

Decisions about organizational design generally are made by senior leaders and consultants in medium and large firms. We have participated in this process and it can get quite complicated. Assuming you want to move up the managerial hierarchy, the day will come when you have to provide input on organizational designs that can help your employer meet its strategic goals. Our discussion here will help.

15.4 ASSESSING ORGANIZATIONAL EFFECTIVENESS

MAJOR QUESTION

What does its choice of ways to measure its effectiveness tell me about an organization?

THE BIGGER PICTURE

Organizations that measure and monitor their progress in achieving goals outperform those that do not. The type of goals companies seek to achieve essentially define their mission and vision. The purpose of this section is to discuss the effectiveness criteria organizations use.

Do you think top managers would like to have easy-to-read graphics that contain the latest information about sales, quality problems, employee turnover, and the like, aggregated from data pulled in real time from corporate software? The technology to track all these metrics exists and is called a dashboard, like the instrument panel in a car.

Bob Parsons, founder of GoDaddy, believed in dashboards. „Measure everything of significance. Anything that is measured and watched improves,„ he said. Larry Bossidy, former CEO of both Honeywell International and AlliedSignal, similarly noted, „When I see companies that don't execute, the chances are that they don't measure, don't reward, and don't promote people who know how to get things done.,

In several chapters we emphasized the value of evidence-based management the use of real-world data rather than assumptions or hunches in making managerial decisions. The dashboard is a tool that can help you manage this way. Two professors from Harvard, Robert Kaplan and David Norton, have applied the dashboard idea in their balanced scorecard and strategy maps. These tools help companies establish their strategies and goals and provide a vehicle for assessing organizational effectiveness. Hundreds of companies around the globe have used them.

The Balanced Scorecard: A Dashboard-Based Approach to Measuring Organizational Effectiveness

Kaplan and Norton note, „The balanced scorecard (BSC) translates an organization's vision and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system., It „retains an emphasis on achieving financial objectives, but also includes the performance drivers of these financial objectives., The BSC provides managers with a comprehensive view of the organization in terms of four perspectives: (1) financial, (2) customer, (3) internal business processes, and (4) learning and growth, which looks at employee welfare and development.

A photo of pilots in a cockpit.

These pilots monitor the dials and gauges in the cockpit to safely navigate a plane. A balanced scorecard is akin to the dials and gauges in a cockpit. They inform managers as to the status of achieving their goals.

Think of the balanced scorecard as the dials and indicators in an airplane cockpit,, say Kaplan and Norton. For a pilot, „reliance on one instrument can be fatal. Similarly, the complexity of managing an organization today requires that managers be able to view performance in several areas simultaneously.

Four Perspectives Underlying the Balanced Scorecard

The process of creating a balanced scorecard requires managers to establish goals and measures for all four perspectives. Let's look at each one.

Financial Perspective: How Do We Look to Shareholders? Corporate financial strategies and goals generally fall into two buckets: revenue growth and productivity growth. Revenue growth goals might focus on increasing revenue from both new and existing customers. Equipment manufacturer John Deere, for instance, is pursuing new revenue by developing software services that provide information and guidance to farmers in the field. It is doing this to offset a recent 5 percent decrease in revenue. Productivity metrics such as revenue per employee or total output produced divided by number of employees are common organization-level goals. We can also measure productivity in terms of costs. For example, Bob Evans Farms, Inc., is closing 27 underperforming restaurants in an attempt to decrease costs and improve profitability.

Customer Perspective: How Do Customers See Us? Many companies view customers as one of their most important constituents. The balanced scorecard translates this belief into measures such as market share, customer acquisition, customer retention, customer satisfaction/loyalty, product/service quality, response time the time between order and delivery and percentage of bids won. Part of Amazon's success, for example, is its response time and pricing. The general idea behind the customer perspective is that companies will acquire and retain more customers, thereby growing market share, when they provide high-quality products and services people want, and in a timely manner.

Management at the Four Seasons resort chain places high emphasis on customer satisfaction and loyalty. To achieve the goal of providing the quietest rooms in the industry, a Fortune reporter noted the company built facilities such that ,no plumbing touches concrete. To encourage personalized service [the CEO], gave everyone from parking attendants on up the authority to act instantly when a guest makes a request.,

Internal Business Process Perspective: What Must We Excel At? The internal business perspective focuses on ,what the organization must excel at, to effectively meet its financial objectives and customers' expectations. A team of researchers has identified four critical high-level internal processes that managers are encouraged to measure and manage:

Innovation.

Customer service and satisfaction.

Operational excellence, which includes safety and quality.

Good corporate citizenship.

These processes influence productivity, efficiency, quality, safety, and a host of other internal metrics. Companies tend to adopt continuous improvement programs in pursuit of upgrades to their internal processes. Consider how Con-way Freight attempts to meet its goals for safety and quality.

EXAMPLE Con-way Freight dispatches over 9,600 trucks from 365 service centers on a daily basis. The company picks up deliveries, consolidates them, and then delivers them to customers. According to a writer for HR Magazine, 36 percent ,are delivered the next day and another 43 percent within two days. ... Drivers are held to high standards and charged with safely operating trucks that back into dozens of customers' docks. They are required to maintain excellent safety and security records in order to keep their commercial driver's licenses with hazardous materials and combination-vehicle endorsements., The company also uses more than 1,000 drivers as

mentors and trainers of programs related to new technology rollouts and safety initiatives. The company also rewards safety by linking pay to safety measurements taken on a daily, weekly, and monthly basis.

Cotopaxi, an outdoor apparel company, makes corporate citizenship its top criterion for evaluating organizational effectiveness. As part of its mission the company funds ,sustainable poverty alleviation, moves people to do good, and inspires adventure through innovative outdoor products and experiences., According to Bloomberg Businessweek, ,Cotopaxi is one of about 1,700 businesses worldwide that have registered as a benefit corporation, or B Corp, a legal category for corporations that hew to the concept of a double bottom line, in which financial goals don't take precedence over social ones., The company gives 2 percent of its revenue to nonprofits focused on poverty alleviation around the world.

A photo of James Myron Roh outside a building with children gathered around.

Cotopaxi followed its focus on social issues by sending ambassador James Myron Roh (shown in foreground) to Kumari, a rural village in Nepal. The village had experienced an earthquake, and this computer lab was the only part left standing. The building is now a central meeting place for students. Roh was teaching the students about photography and storytelling. What is your thought about Cotopaxi giving 2 percent of its revenue to nonprofits focused on poverty alleviation around the world?

Learning and Growth Perspective: Can We Continue to and Create Value? The learning and growth perspective focuses on providing employees with the capabilities, resources, and work environment they need to achieve customer, internal business processes, and financial goals. It's the foundation of all other goals in a scorecard. Typical metrics in this perspective are employee satisfaction/engagement, employee retention, employee productivity, training budget per employee, technology utilization, and organizational climate and culture. Many are tracked with employee surveys to gauge attitudes and opinions.

Based on theories and research discussed throughout this book, you might expect your job satisfaction, engagement, and performance to be higher if you work for a company that truly cares about the innovation and learning perspective. Are you curious about whether a current or former employer is committed to this perspective? You can find out by completing Self-Assessment 15.3.

SELF-ASSESSMENT 15.3 Assessing the Learning and Growth Perspective of the Balanced Scorecard

Please be prepared to answer these questions if your instructor has assigned Self-Assessment 15.3 in Connect.

Where does the company stand in terms of commitment to innovation and learning? Are you surprised by the results?

Use the three highest and three lowest scores to identify the strengths and weaknesses of this company's commitment to innovation and learning.

Based on your answer to question 2, suggest three ways management can improve its commitment to innovation and learning.

Strategy Mapping: Visual Representation of the Path to Organizational Effectiveness

Have you ever worked for a company that failed to effectively communicate its vision and strategic plan? If yes, then you know how it feels to be disengaged because you don't know how your work contributes to organizational effectiveness. Kaplan and Norton recognized this common problem and developed a tool called the strategy map.

A strategy map is a visual representation of a company's critical objectives and the crucial relationships among them that drive organizational performance. Maps show relationships among a company's strategic goals. This helps employees understand how their work contributes to their employer's overall success.

We created an illustrative strategy map for Dr Pepper Snapple Group in Figure 15.5. Starting with learning and growth, the arrows in the diagram show the logic that connects goals to internal processes, to customers, to financial goals, and finally to the long-term goal of providing shareholder value. For example, you can see that organizational culture affects the internal process goals related to innovation, operational improvements, and good corporate citizenship. This causal structure provides a strategic road map of how the company plans to achieve organizational effectiveness.

FIGURE 15.5 Sample strategy map for Dr Pepper Snapple Group

A strategy map.

SOURCE: This map was based on information in ,Dr Pepper Snapple Group to Boost Container Recycling, and More. ..., TheShelbyReport.com, February 12, 2016; C. Choi, ,Dr Pepper to Test Naturally Sweetened Sodas,, FoodManufacturing.com, February 13, 2014; A. Gasparro and M. Esterl, ,Keurig Reels In Dr Pepper for Its Coming Soda Machine,, The Wall Street Journal, January 7, 2015; S. Frizell, ,Coke and Pepsi Pledge to Cut Calories,, Time, September 23, 2014; M. Esterl, ,How Dr Pepper Cuts Costs. And Then Cuts Costs Some More,, The Wall Street Journal, February 16, 2016, R2; ,Vision Call to Breakthrough ACTION,, DrPepperSnappleGroup.com, accessed May 12, 2016.

Access the text alternative for Figure 15.5.

You can also detect which of the four perspectives is most important to Dr Pepper Snapple by counting the number of goals in each perspective. For this strategy map, there are four, five, eight, and four goals for the financial, customer, internal processes, and learning and growth perspectives, respectively. You can also see that internal process goals affect eight other goals count the number of arrows coming from internal process goals. All told, the beauty of a strategy map is that it enables leaders to present a strategic road map to employees on one page. It also provides a clear statement about the criteria used to assess organizational effectiveness.

15.5 ORGANIZATIONAL INNOVATION

MAJOR QUESTION

How can I support my employer's attempts to innovate?

THE BIGGER PICTURE

Managers agree that the ability to innovate affects long-term success, and you will undoubtedly be asked to help your employer achieve this. This section provides insights into the ways organizations approach the goal of innovation. After discussing approaches toward innovation pursued by companies, we review the need to create an innovation system and summarize the influence of office design on innovation and performance.

We live in a time of technological advancement that is creating transformative changes in the way we live, work, and play. Organizations are feeling both the opportunity and the pinch of this reality. Consider the situation faced by executives at Gap. Sales at the global retailer have slumped, and the company has too many stores. An industry expert further concluded, „Every retailer is competing for a shrinking pool of customers who lately spend more of their money on meals or services, such as manicures and travel. Still, they demand greater value and discounts from their clothing purchases., Although the company’s chief executive promised to innovate, Bloomberg Businessweek reported, 10 months later, the transformation has yet to materialize. Sales have continued to disappoint.

Is Gap an anomaly or is the need to innovate widespread? It’s widespread !. Results from a recent survey of 500 leaders showed that about 94 percent viewed innovation as key to their company’s success. Sadly, only 14 percent of these executives had confidence in their organization’s ability to drive innovation.

Innovation ,is the creation of something new that makes money; it finds a pathway to the consumer. This definition underscores that innovations must be both novel and useful. We now take a closer look at innovation and the way organizations foster it. You will learn that innovation is more likely to occur when organizations create and support a system of innovation, which includes tailoring the characteristics of the physical environment.

Approaches toward Innovation

We can classify innovations by crossing their type with their focus, producing four distinct types (see Figure 15.6).

FIGURE 15.6 Approaches toward innovation

A summary graphic of innovation classifications. Includes type of innovation (product or process) and focus of innovation (improvement or new directions).

The Type of Innovation

Managers often need to improve a product or service they offer in response to competition or customer feedback. This response often amounts to a technological innovation. Or managers may need to improve the process by which a product is made or a service is offered. This need typically leads to a process improvement.

More specifically, a product innovation is a change in the appearance or functionality/performance of a product or a service or the creation of a new one. Apple has made nine generations of iPhones that each added new features or functionality, such as camera features, screen size, and Siri voice control system. Apple CEO Tim Cook revealed that Apple has sold about 700 million iPhones as of March 2015. PepsiCo’s creation of Mountain Dew Kickstart is another example: higher juice content, fewer calories, new flavors. This new drink has generated over \$200 million in two years.

A process innovation is a change in the way a product or a service is conceived, manufactured, or distributed. Alcoa’s use of 3-D printing in its manufacturing process of jet engine components is a great example. Fortune contrasted Alcoa’s old and new manufacturing processes: „In the past, Alcoa built a die using a process called subtractive machining. It’s similar to sculpture: Start with a material in this case, steel then whittle it down into the shape you need. Ten to 30 weeks later, the company ended up with a custom die that it would then use to cast the needed engine part. Today Alcoa pairs computer-aided design, or CAD, with 3-D printing to construct

the die from a computer file, layer by layer. A process that once took half a year could be completed in two to eight weeks, allowing the company to dramatically increase its output., The new process reduced manufacturing costs by 25 percent.

A photo.

Three-D printing, also known as additive manufacturing, is used to create a three-dimensional object by having a computer control the successive layers of material that comprise an object. Some people believe that 3-D printing will create a third industrial revolution. Here we see the creation of the Eiffel Tower from a 3-D plastic printer.

The Focus of the Innovation

The focus continuum measures the scope of the innovation. Improvement innovations enhance or upgrade an existing product, service, or process. These types of innovations are often incremental and are less likely to generate significant amounts of new revenue at one point in time. As is true for products like Apple's iPhone and PepsiCo's Mountain Dew, however, improvement innovations can produce significant revenue if the results are highly different from past products or services.

In contrast, new-direction innovations take a totally new or different approach to a product, service, process, or industry. These innovations focus on creating new markets and customers and rely on developing breakthroughs and inventing things that didn't already exist. Experimental driverless cars are a new-direction innovation, and most major automobile manufacturers are exploring their market potential. Some industry experts, including Christoph Grote, head of BMW's advanced technologies group, believe this innovation might change the entire industry. ,The next 10 years will bring more change than the last 30., he said.

A photo of a crane lifting a section of a home.

An example of building a panelized home. Note the section of a home being raised so that it can be assembled with additional prefabricated walls. As you can imagine, homes can be built more quickly using this innovative method of construction.

The housing industry has experienced a new-direction innovation that changes the process of constructing homes. The traditional way of building a home is called ,stick-built., Architectural plans are given to a general contractor, who then hires subcontractors to build the home in phases, starting with pouring the foundation and framing the structure. The process is time consuming, filled with quality issues, and expensive. The new alternative is ,panelized homes., in which all components of a house are prefabricated at a climate-controlled factory and then shipped to the building site for construction. The weather-tight shell usually can be assembled in a matter days. An industry study compared results of these two constructions processes for a 2,600-square-foot home and found that panelized homes ,required 26 percent less lumber, wasted 76 percent less materials, and needed just over a third of the man-hours that would be used in a comparable stick-built house.,

An Innovation System: The Supporting Forces for Innovation

Innovation won't happen as a matter of course. It takes dedicated effort and resources, and the process must be nurtured and supported. Organizations do this best by developing an innovation system. An innovation system is ,a coherent set of interdependent processes and structures that dictates how the company searches for novel problems and solutions, synthesizes ideas into a business concept and product designs, and selects which projects get funded., Research and

practice have identified seven components of an innovation system: innovation strategy; committed leadership; innovative culture and climate; required structure and processes; necessary human capital; human resource policies, practices, and procedures; and appropriate resources (see Figure 15.7). These must be aligned and integrated for innovation to blossom, hence the dual-headed arrows in Figure 15.7.

FIGURE 15.7 Components of an innovation system

A summary graphic of the innovation system. All components are shown with arrows to lead to other components as well as the innovation system as a whole.

Create an Innovation Strategy

Many companies fail in their improvement efforts because they lack an innovation strategy. An innovation strategy, which amounts to a plan for being more innovative, requires a company to integrate its innovation activities into its business strategies. This integration encourages management to invest resources in innovation and generates employee commitment to innovation across the organization.

Corning is a diverse company that used its expertise in glassmaking to become a global manufacturer of specialty components needed for electronic displays, life sciences instruments, and telecommunications systems among others. According to a writer for the Harvard Business Review, 'The company's business strategy focuses on selling 'keystone components' that significantly improve the performance of customers' complex system products. Executing this strategy requires Corning to be at the leading edge of glass and materials science so that it can solve exceptionally challenging problems for customers and discover new applications for its technologies. That requires heavy investments in long-term research., The company spearheads these innovation efforts via a centralized R&D laboratory in upstate New York.

Commitment from Senior Leaders

One of the biggest lessons we have learned from our consulting experience is that the achievement of strategic goals is unlikely without real commitment from senior leaders. PepsiCo CEO Indra Nooyi knows this lesson well. She is currently driving innovation by prioritizing design.

Nooyi hired Mauro Porcini from 3M to be PepsiCo's first chief design officer. Nooyi told an interviewer that Porcini, wanted resources, a design studio, and a seat at the table., She gave him all that. ,Now our teams are pushing design through the entire system, from product creation, to packaging and labeling, to how a product looks on the shelf, to how consumers interact with it,, she said.

Foster an Innovative Culture and Climate

A recent survey by the Boston Consulting Group identified risk-averse culture as the key obstacle to innovation. Academic research also supports the conclusion that an innovative culture and climate are associated with the creation of new ideas and products. These findings reflect the fact that innovation requires experimentation, failure, and risk taking, and these are all aspects of an organization's culture. Many senior leaders understand this link.

The legendary 3M Chairman William McKnight once said, 'The best and hardest work is done in the spirit of adventure and challenge. ... Mistakes will be made., Pixar President Ed Catmull has

a similar viewpoint: „Mistakes aren’t a necessary evil. They aren’t evil at all. They are an inevitable consequence of doing something new ... and should be seen as valuable.,

Managers can create an innovative culture and climate by using the 12 mechanisms for creating culture change discussed in Chapter 14. These concerted efforts should facilitate the creation of values, norms, and rewards that support risk taking, adaptability, agility, and psychological safety to speak up and provide criticism.

PROBLEM-SOLVING APPLICATION

Extended Stay America Tries to Increase Innovation

Jim Donald took the helm at national hotel chain Extended Stay America after the company had gone through bankruptcy. Employees were suffering job insecurity and avoiding decisions that might cost the company money. „They were waiting to be told what to do., says Donald.

What Did the Company Do to Increase Innovation? Employees were told the company needed them to generate daring ideas and take calculated risks to improve customer service and profitability. To make this happen, Donald decided to provide a safety net to encourage people to let go of the fear of failure. He created „Get Out of Jail Free, cards (as in the game of Monopoly) and distributed them to the company’s 9,000 employees.

Employees could turn the card in „when they took a big risk on behalf of the company no questions asked., The card became a way of giving employees permission to make mistakes in the interests of trying something innovative.

What Was the Result of the Program? The cards have been trickling in since the program started. For example, „one California hotel manager recently called to redeem her card ... confessing that she nabbed 20 business cards from a fishbowl in the lobby of nearby rival La Quinta in an attempt to find prospective customers. Another manager in New Jersey cold-called a movie-production company when she heard it would be filming in the area. The film crew ended up booking \$250,000 in accommodations at the hotel.,

Apply the 3-Step Problem-Solving Approach

Step 1: Define the problem Donald was trying to resolve.

Step 2: Identify the causes. What OB theories or concepts help explain the causes of the problem?

Step 3: Make your recommendation. What do you think about Donald’s solution? Explain.

Have you worked for a company that has an innovative climate? Are you wondering what it takes to create such a climate? If yes, take the innovation climate Self-Assessment 15.4.

SELF-ASSESSMENT 15.4 How Innovative Is the Organizational Climate?

Please be prepared to answer these questions if your instructor has assigned Self-Assessment 15.4 in Connect.

What is the level of innovation? Are you surprised by the results? Explain.

Select the three lowest survey item scores. Use the content of these items to recommend what the company could do to become more innovative.

Required Structure and Processes

Organizational structure and internal processes can promote innovation if they foster collaboration, cross-functional communication, and agility. Our earlier discussion of organizational design suggests that organic structures are better suited for innovation than mechanistic ones. For example, Juniper Networks, a leader in computer network integration, concluded that its formal organizational structure was not conducive to the types of rich interactions and conversations required for innovation to thrive. Vince Molinaro, executive vice president of worldwide sales, commented, "We were not integrating diverse expertise and experience across engineering, infrastructure, and sales teams the way we could when we were a small company. Juniper changed its structure."

In Chapter 1, we defined organizational processes as an organization's capabilities in management, internal processes, and technology that turn inputs into outcomes. Processes play a critical role in innovation. The design and consulting firm IDEO, for example, employs a unique process when it helps companies to innovate (see the OB in Action box). Crowdsourcing, defined as the practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, typically via the Internet, is being used by more companies to help innovate. For example, Anheuser-Busch used 25,000 online collaborators to help develop a golden-amber lager called Black Crown. General Mills also relied on crowdsourcing to seek ideas about ingredients in products, packaging, and new products. To date there has been limited research on the effectiveness of crowdsourcing. One recent study, however, showed that its use was positively associated with firm performance.

OB IN ACTION

Design Thinking Your Way to Innovative Solutions

IDEO (pronounced "EYE-dee-oh") is a unique, award-winning, and highly respected and influential global design firm. It is responsible for such innovative products as the first mouse for Apple, heart defibrillators that walk a user through the steps, and TiVo's "thumbs up—thumbs down" button. An intense focus on end-user behavior is the foundation of all the company does and is embedded in the three steps of its design thinking. The steps are inspiration, ideation, and implementation.

Inspiration. As defined by David Kelley, IDEO's legendary founder, inspiration is the problem or opportunity that motivates the search for solutions.

Ideation. Ideation is the process of generating, developing, and testing ideas.

Implementation. The final step, implementation, links the problem's solution to people's lives.

Observing user behavior and working with prototypes are important aspects of each step. They help IDEO's diverse problem-solving teams both define client problems and gauge the effectiveness of their solutions.

Thinking Like a Designer The company's consulting approach to products, services, processes, and strategy brings together what is desirable from a human point of view with what is technologically feasible and economically viable. It also allows people who are trained as designers to use creative tools to address a vast range of challenges. The goal: to tap into abilities we all have that are overlooked by more conventional problem-solving practices. Thinking like a designer relies on one's ability to be intuitive, to recognize patterns, to construct ideas that are emotionally meaningful as well as functional, and to express ourselves through means beyond words or symbols.

Beyond Product Design IDEO's design thinking has been so successful that many nonbusiness and nonproduct organizations are now engaging the company. For instance, it is working with the City of Los Angeles to design a revolutionary voting system for its 5 million registered voters. The system must be ,useful and accessible to all types of voters: those who are vision and hearing impaired, in wheelchairs, have learning disabilities, are unfamiliar with technology, speak languages other than English voters of all ages and backgrounds., It also is working with Lufthansa to redesign the long-haul travel experience. The company's head of customer experience said, ,Our goal was to improve service in these private moments so that the guest receives a totally new flying experience with much more quality time.,

As an Organization IDEO has more than 600 employees in 10 offices, both in major US cities and overseas in London, Munich, Shanghai, Singapore, and Tokyo. The firm has an organic design, the result of merging four design companies. Its current structure builds on project teams and a flat hierarchy, in support of individual autonomy and creativity.

YOUR THOUGHTS?

What is appealing to you about IDEO?

To what extent does IDEO's approach to design force companies to use the seven components of an innovation system (see Figure 15.7)? Explain.

Finally, a team of experts suggested that organizations can foster innovation by focusing on four agility techniques.

Place more emphasis on people than on processes and tools. Innovation initiatives or projects should be built around motivated individuals who are empowered to get the job done and have the resources to do it.

Be responsive to change rather than following a detailed plan. It helps to create project plans, but don't spend large amounts of time trying to identify each and every task to be completed. Tasks frequently change as situations evolve. Teams thus need the freedom to diverge from project plans if the situation or customer requires it. GE is following this recommendation. CEO Jeff Immelt is encouraging employees to pivot to a new idea if an approach to innovating or solving problems isn't working. He told a reporter from Bloomberg Businessweek, ,We encourage people to try things, pivot, try them again. It's a better way to run the place than centralized command and control, process-laden.,

Develop and test prototypes rather than focusing on documentation. People learn more and are happier when they observe their ideas being applied in real market conditions. Teams should experiment with products and services on a small scale to see whether customers like them. If they do, keep the new ideas; otherwise, it's back to the drawing board. For example, PepsiCo originally designed SunChips to be one-inch square and to break into pieces when eaten. When the company pilot-tested the product in focus groups, people said they preferred products that were smaller than one inch. PepsiCo concluded the chips were too big and changed its molds and production processes.

Collaborate with customers rather than adhering to rigid contracts. Customers often don't know what they want. Adhering to fixed contracts and deliverables rather than adjusting to customer preferences can reduce innovation when employees get too focused on budgets and specifications. Constant collaboration with customers will keep work focused on what they ultimately value.

Develop the Necessary Human Capital

We defined human capital in Chapter 14 as the productive potential of an individual's knowledge and actions: a person factor in the Organizing Framework. Research has identified several employee characteristics that can help organizations innovate. For example, innovation has been positively associated with the individual characteristics associated with creativity, creative-thinking skills, intrinsic motivation, the quality of the relationship between managers and employees, and international work experience.

EXAMPLE GE is aware of the need to develop human capital for innovation. The company has hired hundreds of software engineers to develop its analytic and big data capabilities. It is doing this in pursuit of the strategic goal of being a top-10 software company by 2020.

EXAMPLE General Motors CEO Mary Barra is trying to increase innovation by hiring more executives with experience outside the firm. This action is the opposite of the company's tradition of promoting senior executives from within. According to The Wall Street Journal, "The shake-up reflects a desire to reshape a notoriously insular corporate culture with a tradition of grooming internal talent, including Ms. Barra, who joined GM as a college intern some three decades ago."

Human Resource Policies, Practices, and Procedures

Human resource policies, practices, and procedures need to be consistent with and reinforce the other six components of an innovation system. Companies that know this are more likely to be innovative and to have higher financial performance. For example, the practice of bringing people from different disciplines together to both brainstorm and train is a good way to foster the collaboration needed for innovation. The University of Michigan's Biointerfaces Institute "locates materials scientists, chemical engineers, biomechanical engineers, and medical researchers near each other. The resulting collaborations led to the creation of a blood test that both captures and cultures cancer cells for speedier cancer diagnoses," according to a writer for Training.

A company's performance management and incentive system are often at odds with an innovation culture and climate. For example, GE changed its well-known annual performance review process to make it more consistent with driving innovation and attracting younger software engineers. In the past, the company ranked all employees and then eliminated the bottom 10 percent. This process has been replaced with a more nurturing approach in which employees are coached by more experienced colleagues. Companies also need to align their reward and recognition systems with innovation-related goals. Research shows that receipt of extrinsic rewards is associated with both creativity and innovation.

Appropriate Resources

Organizations need to put their money where their mouths are. If managers want innovation, they must dedicate resources to its development. Resources can include people, dollars, time, energy, knowledge, and focus. Heineken, for example, spent \$2 million on training employees in beer basics to help them innovate.

Office Design

A photo of an open office. The large room contains many workstations with no dividers between them.

This photo is quite typical for an open office environment. What are the pros and cons to working in this area? Would you prefer this office design or a traditional office with a door?

Office designs have gone through radical changes in the past 15 years. In an effort to reduce costs, to promote cooperative behavior and camaraderie, to increase productivity, and to create more transparency in what we do, many companies have adopted open-office design. Unlike traditional designs in which people have their own offices, open-plan designs offer shared work space that accommodates anywhere from two to several hundred people. The Washington Post reported that 70 percent of today's organizations use some amount of open office space. All told, our personal space at work is predicted to decrease from 2010 levels of 225 square feet to under 100 square feet by 2017.

For us, the question is whether the move to open-office designs is leading to positive individual, group, and organizational outcomes. What is your opinion? Here are some findings from OB research:

Privacy, defined as the ability to control incoming stimulation and interpersonal contact and to limit outgoing information, is reduced in an open-plan office.

Few office cubicle dividers are tall enough to block the noise and distractions that limit people's ability to focus at work. The resulting overstimulation is stressful for many people.

Spatially dense work environments (in which employees are crowded) have been found to promote cooperative behavior and productivity, but they can also be detrimental to individual, group, and organizational performance.

Attitudes about personal space are culturally bound around the world. Germans allocate an average of 320 square feet per employee; Americans an average of 190. For workers in India and China, the figures are 70 and 50 square feet respectively, according to a writer in the Harvard Business Review. Both Indian and Chinese workers rated their work environments highly in terms of their ability to concentrate and work without disruption, but this is not true in the United States.

The above results demonstrate both positive and negative effects of open-office designs. So what is management to do? For one, recognize that people have preferences. For example, your two coauthors have opposite views on this issue. Mel Fugate likes to work at his university office and Angelo Kinicki does not. Mel goes to school every day to write and enjoys the social interaction, while Angelo finds the environment too distracting to focus on writing and creative work. Second, remember that open offices are not inherently good or bad when it comes to innovation, collaboration, or performance. All told, we agree with these conclusions by a team of office design professionals.

The key to successful work spaces is to empower individuals by giving them choices that allow control over their work environment. When they can choose where and how they work, they have more capacity to draw energy and ideas from others and be re-energized by moments of solitude. Providing the ability to move easily between group time and individual private time, create a rhythm coming together to think about a problem and then going away to let ideas gestate that is essential to the modern organization.

What Did I Learn?

You learned that your knowledge of organizational design, effectiveness, and innovation gives you the ability to help both you and an organization to achieve desired goals. Reinforce your

learning with the Key Points below. Then consolidate your learning with the Organizing Framework. Finally, challenge your mastery of the material by answering the Major Questions in your own words.

Key Points for Understanding Chapter 15

You learned the following key points.

15.1 THE FOUNDATION OF AN ORGANIZATION

Coordination of effort, aligned goals, division of labor, and hierarchy of authority are four common denominators of all organizations.

There is no consensus about the optimal span of control. In setting the span of control, managers should consider the organization's size, the skill level needed to complete tasks, the organization's culture, and managerial responsibilities.

Closed systems, such as a battery-powered clock, are relatively self-sufficient. Open systems, such as the growing and selling of organic food, are highly dependent on the environment for survival. Organizations are open systems.

A learning organization proactively creates, acquires, and transfers knowledge and changes its behavior on the basis of new knowledge and insights.

Figure 15.4 illustrates the five-step process underlying organizational learning.

15.2

ORGANIZATIONAL DESIGN

There are three broad types of organizational design: traditional, horizontal, and open. Each has a different focus and is associated with specific types of structure.

Organizations are structured in seven basic ways. Traditional designs include (1) functional structures, in which work is divided according to function; (2) divisional structures, in which work is divided according to product or customer type or location; and (3) matrix structures, with dual-reporting lines based on product and function. Organizations also may be designed (4) horizontally, with cross-functional teams responsible for entire processes. Organization design can reduce barriers between organizations, by means of (5) hollow organizations, which outsource functions; (6) modular organizations, which outsource the production of a product's components; and (7) virtual organizations, which temporarily combine the efforts of members of different companies to complete a project.

Table 15.2 summarizes the pros and cons of each of the seven types of organizational design.

15.3

CONTINGENCY DESIGN AND INTERNAL ALIGNMENT

There is no one best form of structure for an organization. Organizations are more effective when they are structured to fit the demands of the situation.

Managers should consider five key contingency factors when making decisions about organizational design: strategy and goals, market uncertainty, decision-making processes, technology, and size.

Six organizational characteristics strategy; structure; organizational culture; internal processes; human resource practices, policies, and procedures; and employees' human and social capital need to be aligned and mutually reinforcing when selecting an effective organizational design.

There are both short- and long-term benefits to knowing about organizational design.

15.4

ASSESSING ORGANIZATIONAL EFFECTIVENESS

The balanced scorecard is a dashboard approach to measuring organizational effectiveness. It is based on the use of four key perspectives to measure organizational effectiveness.

The four perspectives underlying the balanced scorecard are financial, customer, internal business process, and learning and growth.

A strategy map is a visual representation of a company's strategic goals and the relationships among them.

15.5

ORGANIZATIONAL INNOVATION

Innovation is the creation of something new and useful that gets commercialized.

Crossing the types of innovation with the focus of the innovation results in four approaches toward innovation.

Innovations can produce new products or new processes and can vary in focus from improvement to new directions.

An innovation system's seven components are an innovation strategy, commitment from senior leaders, an innovative culture and climate, required structure and processes, necessary human capital, appropriate resources, and human resource policies, practices, and procedures.

Office design affects innovation and employee performance.

The Organizing Framework for Chapter 15

As shown in Figure 15.8, more situation than person factors serve as inputs to a host of processes across all three organizational levels. These processes in turn affect outcomes across the individual, group, and organizational levels.

FIGURE 15.8 Organizing Framework for Understanding and Applying OB

A summary graphic outlining what was learned in this chapter.

Access the text alternative for Figure 15.8.

Challenge: Major Questions for Chapter 15

You now should be able to answer the following questions. Unless you can, have you really processed and internalized the lessons in the chapter? Refer to the Key Points, Figure 15.8, the chapter itself, and your notes to revisit and answer the following major questions:

How can knowledge about an organization's foundation help me in my career?

What are the seven basic ways in which organizations are structured, and how do these structures relate to the organization's purpose?

How can I use knowledge about contingent organization design and internal alignment to improve my satisfaction and performance?

What does its choice of ways to measure its effectiveness tell me about an organization?

How can I support my employer's attempts to innovate?

IMPLICATIONS FOR ME

This chapter highlights six implications for you. First, take the time to learn from failure in both your personal and work life. It helps to adopt a learning or mastery goal orientation. Second, structure affects your behavior and performance. If you feel your employer's organizational structure is constraining your effectiveness, try to find a solution for overcoming the barrier. Third, P-O fit matters when it comes to organizational design. This means you need to understand the pros and cons of the seven organizational designs so you can assess whether a particular work environment is going to fit. Fourth, try to establish goals at work that take the four perspectives in the balanced scorecard. This will be more effective if your goals flow from those of your boss. Fifth, build your human and social capital so you can help your organization innovate. Finally, if your office environment does not suit your work style, talk to your boss about changes that would make things better.

IMPLICATIONS FOR MANAGERS

There are seven implications for managers. First, do what you can to help your organization learn. Be seen as someone who promotes learning rather than someone who hides from failure and constructive feedback. Second, formalize the process of learning from failure within your work unit. Third, familiarize yourself with the pros and cons of the seven core organizational designs so you can participate in related discussions at work. Fourth, assess the extent to which your organization's current structure is based on the alignment of the six key internal organizational-level characteristics. If they are not aligned, present a proposal to someone higher in the managerial chain about improving this alignment. Fifth, use the balanced scorecard as a framework for setting goals for your work unit. Then apply strategy mapping as a mechanism to show how your goals flow upward from the learning and growth perspective to the financial perspective. Sixth, foster innovation by focusing on how you can enhance an innovation system. Improve those factors under your control. Finally, talk to your team about the office design. Find out how everyone feels about it and ask for recommendations about how it might be improved.

PROBLEM-SOLVING APPLICATION CASE

Zappos CEO Asks Employees to Commit to Teal, or Leave

A Bit of History

Zappos had modest beginnings. In 1999, shoesite.com was started by Nick Swinmurn to capture online shoe sales. Swinmurn reached out to Tony Hsieh (pronounced ,shay,) and Alfred Lin, who were running Venture Frogs, a kind of venture capital group, for advice and funding. Shoesite soon changed its name to Zappos, a riff on zapatos, the Spanish word for shoes, but abstract enough to let the company offer products other than footwear.

In 2000 Hsieh joined Swinmurn as co-CEO and then became sole CEO. Quietly charismatic, Hsieh gives quote-worthy interviews and for over a decade has served as the company's public face and voice. (Swinmurn left in 2006.)

Zappos has achieved great financial success. Revenue jumped from \$1.6 million in 2000 to over \$1 billion by 2008. This success led Amazon.com to purchase the company for \$1.2 billion in 2009. And today? While Amazon does not separate Zappos revenues in its annual report, the division's sales are assumed to continue at well over \$1 billion annually. Hsieh told Jennifer Reingold, a Fortune reporter, that the company had achieved its highest operating profit ever in 2015.

Tony Hsieh's Vision for the Company

Hsieh has long cared about employee welfare, as evidenced by his book titled *Delivering Happiness*. He asserts that employee satisfaction is essential for business success. Today, his goal is to turn Zappos into a ,teal, company: teal represents a company ,characterized by self-management, bringing one's 'whole' self to work, and having a purpose beyond making money,, according to Fortune. To get there, Hsieh implemented an organizational structure he calls a holacracy.

Moving to Holacracy

Zappos historically favored an informal and flatter organization structure that probably best fits the horizontal form of organizational design discussed in this chapter. The company preferred this design because it felt bureaucracy and hierarchy might dampen the creativity and employee engagement needed to provide great customer service, a primary corporate goal. Although this design aided Zappos throughout its growing years, in 2013 Hsieh came to believe that Zappos's organizational structure was limiting what employees had to offer. It was time for a change.

Hsieh told *The Wall Street Journal*, ,Employees have so much more to offer. They're a full human being that has all these skills that, if they're given the right context to collaborate with each other and be creative and help move the company forward, they will do that.,

In a holacracy, the traditional hierarchical structure and reporting relationships are replaced by self-management. There are no job titles and no managers. ,It removes power from a management hierarchy and distributes it across teams that have a clear set of roles, responsibilities, and expectations. Instead of being assigned to a particular job position or description, roles of employees are defined around the work. These roles are constantly being updated and employees fill several roles. Additionally, employees work within a team in which authority is equally distributed among its members,, according to management blogger.

These teams represent a hierarchy of work circles. A writer for Fortune noted that each team has a different purpose, and the circles ,operate next to, and on top of, each other. ... Lead links are the nominal managers but they have little formal authority and can't force employees to do anything they don't want to do.,

A writer from Forbes described the structure as a hierarchy of circles that operate according to detailed procedures outlined in the *Holacracy Constitution*. ,Each higher circle tells its lower circle (or circles) what its purpose is and what is expected of it. It can do anything to the lower circle change it, re-staff it, abolish it if it doesn't perform according to the higher circle's expectations. The word customer or a reference to any feedback mechanism from the customer doesn't appear even once in the *Holacracy Constitution*. The arrangements are purely inward-

looking and vertical,, according to Forbes. As of 2015, more than 300 circles covered the areas of customer service, social media, Holacracy implementation, and others.

The Holacracy Constitution was developed by Brian Robertson, the software executive who proposed this form of organizational design. This document contains a language unique to this form of structure and detailed procedures for running governance and tactical meetings and expressing ,tensions., A tension is an employee concern or problem about something happening at the company. Circles are expected to resolve tensions. Employees are expected to use the language and procedural guidelines in the constitution.

Hsieh notes this process makes everything explicit. In other words, holacracy creates bureaucracy and hierarchy. ,The ironic thing is there's actually a lot more structure and we have governance meetings. Each circle has its own governance meetings that list accountabilities and change purpose statements and so on,, he said.

Employees are allowed to move from circle to circle if they believe their talents can be used more effectively elsewhere or they are unhappy in their current circle.

The Outcomes of Holacracy at Zappos

In attempt to optimize P-O fit, in 2015 Hsieh offered employees three months of severance pay if they did not like working in the new structure. About 14 percent of Zappos's 1,500 employees took the deal. This is huge when you consider that the company's traditional turnover rate has been about 1 percent. Hsieh isn't overly concerned and even provided this positive spin:

,Another way to look at it is that 86 percent of employees chose to walk away from the 'easy money' and stay with the company., Zappos simply went out and hired more people.

Fortune reporter Reingold concluded that holacracy creates winners and losers. On the positive side, it sparked new ideas and provided more opportunities for less senior employees because experience and expertise were de-emphasized in the new structure. It also benefited introverts in that they now are expected to speak up in meetings. It also helped dissatisfied employees such as Derek Noel. Noel was a customer service representative who wanted to transfer to the company's culture team. His boss had blocked the transfer, but under holacracy, he was no longer allowed to do this. So Noel moved to the Fungineering circle, an events-planning/pep team.

On the downside, the new structure is vague about how people receive performance evaluations and pay raises. Some are concerned about promotional opportunities because there are no managerial job tracks. Employees told The Wall Street Journal, ,The new system has been confusing and time-consuming, especially at first, sometimes requiring five extra hours of meetings a week as workers unshackled from their former bosses organize themselves into 'circles' and learn the vocabulary of holacracy.,

Now What?

Hsieh wrote a 4,300-word memo to employees in 2015 called, ,Reinventing Zappos: The Road to Teal., (Remember that he earlier asked people to commit to a holacracy culture and 14 percent of the employees quit.) He then asked everyone to commit to teal or leave (with a nice severance package). He felt that nonbelievers needed to go. According to Fortune, ,In the end, 18 percent of the 1,500 employees took buyouts, and another 11 percent left without a package., All told, about 29 percent of Zappos employees quit the company as a result of instituting a holacracy culture in pursuit of becoming teal.

Many remaining employees feel it's time to refocus on organizational culture. It was suggested that circles include a ,culture check, at every governance meeting. The company has also revised its recruiting process to assess whether applicants fit the new structure and philosophy of teal.

In 2016, Zappos did not make Fortune's list of Best Places to Work for the first time in eight years. Its scores on 48 of 58 questions had dropped.

Apply the 3-Step Problem-Solving Approach to OB

Step 1: Define the problem.

Look first at the Outcomes box of the Organizing Framework in Figure 15.8 to help identify the important problem(s) in this case. Remember that a problem is a gap between a desired and a current state. State your problem as a gap, and be sure to consider problems at all three levels. If more than one desired outcome is not being accomplished, decide which one is most important and focus on it for steps 2 and 3.

Cases have protagonists (key players), and problems are generally viewed from a particular protagonist's perspective. Take the perspective of Zappos employees.

Step 2: Identify causes of the problem by using material from this chapter, summarized in the Organizing Framework shown in Figure 15.8. Causes will appear in either the Inputs box or the Processes box.

Start by looking at Figure 15.8 to identify which person factors, if any, are most likely causes to the defined problem. For each cause, ask yourself, Why is this a cause of the problem? Asking why multiple times is more likely to lead you to root causes of the problem.

Follow the same process for the situation factors.

Now consider the Processes box shown in Figure 15.8. Consider concepts listed at all three levels. For any concept that might be a cause, ask yourself, Why is this a cause? Again, do this for several iterations to arrive at root causes.

To check the accuracy or appropriateness of the causes, map them onto the defined problem.

Step 3: Make your recommendations for solving the problem. Consider whether you want to resolve it, solve it, or dissolve it (see Section 1.5). Which recommendation is desirable and feasible?

Given the causes identified in Step 2, what are your best recommendations? Use the content in Chapter 15 or one of the earlier chapters to propose a solution.

You may find potential solutions in the OB in Action boxes and Applying OB boxes within this chapter. These features provide insights into what other individuals or companies are doing in relationship to the topic at hand.

Create an action plan for implementing your recommendations.

LEGAL/ETHICAL CHALLENGE

Does Tax-Exempt Status for Universities Make Them Good Organizational Citizens?

We discussed in this chapter how the balanced scorecard identifies four categories of organizational effectiveness criteria. Community-related measures of effectiveness, such as satisfaction with services or benefits provided by a company, are one component of the internal

business process category. This challenge considers the issue of community-related effectiveness. Specifically, you will be asked to consider the ,good organizational citizen, category within the balanced scorecard.

Surely universities and colleges are good for society, but could they do better? Consider the issue of federal income taxation.

According to the Association of American Universities (AAU), ,the vast majority of private and public universities and colleges are tax-exempt entities as defined by the Internal Revenue Code ... because of their educational purposes purposes that the federal government has long recognized as fundamental to fostering the productive and civic capacities of citizens.,

The AAU further notes that ,income for activities that are substantially related to the purpose of an institution's tax exemption, charitable contributions received, and investment income are not subject to federal income tax.,

Princeton University is New Jersey's only Ivy League school. Its \$22.7 billion endowment is the fourth largest in the United States. Not only does Princeton not pay income taxes on investment income from this endowment, but it also is exempt from property taxes.

Two dozen Princeton homeowners have filed a suit challenging the tax-exempt status of the school. If the suit is successful, tax revenue from the university would climb to about \$40 million a year, 264 percent higher than what it currently is paying, according to Bruce Afran, the plaintiffs' lawyer. That would reduce homeowners' tax payments by about 33 percent.

,The so-called benefits the university gives are not real economic benefits that help the average person., said Afran. New Jersey resident Leighton Newlin noted that the university ,almost operates like a hedge fund that conducts classes.,

The idea of challenging universities' tax-exempt status is starting to spread. Not only is Congress looking into it, but also lawmakers in New Haven, Connecticut, have proposed legislation to tax Yale University's \$25.6 billion endowment.

The question for you to address is not the legality of the tax-exempt status of colleges and universities. The issue is whether these institutions would provide enhanced value to the communities in which they are located if they paid taxes on both investment income and property.

If You Were a Jurist Evaluating the Tax-Exempt Status of Princeton and Yale, How Would You Vote?

I would continue to give universities tax-exempt status on both endowments and property taxes. Universities most likely spend the tax-exempt money on scholarships, buildings, and funding research. All these expenditures provide value to society, suggesting that universities are good citizens.

I would vote for tax-exempt status on investment income for the same reasons noted above, but not property taxes. Everyone else has to pay property taxes, and if colleges and universities paid them too, the funds would directly help the members of the surrounding community by reducing their tax burden. This is good citizenship.

I would both revoke the tax-exempt status of investment income and collect property taxes. Being a good corporate citizen necessitates that these institutions pay taxes like businesses and individuals do.

Invent other options.