

Organizational Effectiveness

by

David J. Cherrington

Sheri J. Bischoff

W. Gibb Dyer

Eric G. Stephan

Greg L. Stewart

Department of Organizational Leadership and Strategy

Brigham Young University

Provo, Utah, 84602

September 2001

Preface

This book focuses on what you need to know to create effective organizations and it explains principles that come from organizational behavior, human resource management, strategy, group dynamics, and leadership. This book represents a work in progress as we continue to select the most significant core principles that will help you manage or work with organizations.

We live in an organizational world and we are surrounded by countless organizations, including business organizations, government agencies, family businesses, and churches. We participate in many groups at work, at church, and in our neighborhoods. Some organizations and groups are more effective than others. Effective organizations make a great contribution to society because they produce valuable products and services and provide meaningful opportunities for self expression and fulfillment. Organizations that have direction and purpose, whose strategies are aligned with their structures and processes, and whose leaders make careful and sensitive decisions are a blessing to the lives of organizational members. Ineffective organizations tend to reduce the quality of life and waste environmental resources.

As a society we need people who know how to create effective organizations. We need transformational leaders and entrepreneurs who know how to manage organizations. A major difference between a healthy thriving society and a struggling society is the existence of a coordinated network of effective organizations that provide goods and services for consumers and work opportunities for citizens.

This text presents the basic principles of organizational effectiveness and explains how to apply them. It focuses more on practical application than on statistical surveys and empirical research. Some of the major research studies in organizational behavior are included when they illustrate or explain an important principle. As a general rule, we have only included what we think someone needs to know while ideas that are interesting but not essential have been deleted.

We welcome feedback on the material presented here. We want to know which ideas are not adequately explained or sufficiently illustrated and which ideas seem unnecessary or immaterial. We want to know which paragraphs are awkward and need to be rewritten. It would also be nice to learn which ideas were most helpful or insightful.

David J. Cherrington, Sheri J. Bischoff, W. Gibb Dyer, Eric G. Stephan, and Greg L. Stewart
Organizational Behavior and Human Resource Management Group in the Department of
Organizational Leadership and Strategy, Brigham Young University, Provo, Utah, 84602
September, 20002

Table of Contents

Section I	What are effective organizations and how do you create them?	1
Chapter 1:	Effective Organizations,	2
Chapter 2:	Strategy,	27
Section II	How do you attract and train an effective workforce?	46
Chapter 3:	Human Resource Planning, Recruitment, and Selection,	47
Chapter 4:	Socialization and Training,	72
Chapter 5:	Employee Relations,	89
Section III	How do you motivate employees to accomplish the organization's goals?	107
Chapter 6:	Analyzing Individual Behavior,	108
Chapter 7:	Motivation,	132
Chapter 8:	Work Design,	162
Chapter 9:	Performance Management,	184
Chapter 10:	Employee Discipline,	206
Section IV	How do you create a productive work environment?	222
Chapter 11:	Effective Groups,	223
Chapter 12:	Intergroup Relations,	245
Chapter 13:	Organizational Design,	270
Chapter 14:	Organizational Culture,	292
Section V	What are the key processes leading to organizational effectiveness?	309
Chapter 15:	Communication,	310
Chapter 16:	Decision Making,	331
Chapter 17:	Leadership,	348
Chapter 18:	Power and Influence,	367
Section VI	How do you improve organizational effectiveness?	388
Chapter 19:	Organizational Change,	389
Chapter 20:	Organizational Development,	407
Chapter 21:	Improving Your Own Effectiveness,	426
Appendix A:	Towards an Integration of Sacred and Secular Processes of OB,	448
Index:		461

Section I

What are effective organizations and how do you create them?

If all the world is a stage, it is a stage filled with organizations. Regardless of the part we play – student, manager, customer, employee, or entrepreneur – we act our parts on an organizational stage. The quality of our lives is influenced by our interactions with organizations and by whether these interactions are satisfying and fulfilling. Many of our emotional gratifications and physical comforts depend on the products and services of organizations. Whether we participate as members, managers, or customers, we need to understand organizational behavior and what makes an organization effective. We need to know how organizations influence us and how we influence organizations.

Section I explains how organizations are created from the vision, mission, and strategy of a founder. People who want to start an organization to help them fulfill their economic dreams need to understand the characteristics of an effective organization. Chapter 1 describes the central characteristics of organizations and explains the concepts of efficiency and effectiveness. Chapter 2 explains the concept of strategy and discusses the advantages of the different competitive strategies that an organization could use to succeed.

Chapter 1: Effective Organizations

Chapter 2: Strategy

Chapter 1

Effective Organizations

Chapter Outline

Understanding Organizations

- Managers, Leaders, and Entrepreneurs
- Five Concepts for Creating an Effective Organization
- Levels of Analysis

Open System Theory

- Defining an Organization
- Organizational Subsystems

Organizational Effectiveness

- Organizational Goals
- Evaluating Organizational Effectiveness
- Creating Ethical Organizations

Developing and Testing Theories

- Analyzing Organizational Events
- Developing Theories
- Testing Theories

Understanding Organizations

Managers, Leaders, and Entrepreneurs

Do you know what an organization is and how to create one? If you needed to start your own company would you know how to do it? This book explains how to create an organization and how to make it more effective by knowing how to diagnose problems, formulate new policies, and implement change. At one time or another we will all serve as leaders in some kind of organization, whether it is a business, a family, a church, a neighborhood, or a political organization. Consequently, we need to know what organizations are and how to make them function effectively.

How important are healthy organizations? Organizations have an enormous impact on the lives of individuals and societies; almost everything we do is done in the context of an organization. Organizations provide the essential goods and services that benefit society and they have the potential to greatly improve the quality of our lives. Healthy organizations produce healthy members by providing valuable opportunities for self-expression and fulfillment plus jobs that provide an income. Conversely, ineffective organizations can damage the self-esteem of their members and cause frustration and unhappiness. Although every organization has the potential to injure people, ineffective organizations can be especially abusive by destroying feelings of self-worth, cheating customers, or wasting resources.

This book adopts a managerial perspective and is designed to teach you what you need to know to create an effective organization and manage it. Managers and leaders have a large influence on the success of organizations. Studies on the reasons why organizations succeed or fail typically point to the significant role of managers. Key managerial decisions in formulating strategic plans and organizational policies primarily account for the survival or the demise of organizations.

Effective managers make things happen. They are largely responsible for establishing organizations that create new jobs and produce useful products and services. Dynamic leaders who have the vision and foresight to create an enterprise and who can excite the minds of followers to coalesce around their vision are a valuable national treasure.

An *entrepreneur* is someone who creates a new organization to produce a product or service. The word entrepreneur means *risk bearer*, and an entrepreneur is willing to bear the financial risk of creating a company for the opportunity of making a profit. Successful entrepreneurs need to have a vision about producing something new that is better or cheaper than what is currently available and this vision becomes the driving passion that helps them succeed. The value of this entrepreneurial spirit is not just for the wealth of the person; it is also a vital resource for any society that is fortunate enough to possess it. It is a great economic blessing to nations where it is found. Underdeveloped countries are often rich in natural resources, but they lack the entrepreneurial spirit and the managerial talent needed to create effective organizations that produce vital products and services.

Six Concepts for Creating an Effective Organization

This book is organized in six sections that explain the six major concepts involved in building and maintaining an effective organization.

1 What is an effective organization and how do you create one? The first step in knowing how to create an effective organization is to understand what it is. Most people define an organization as a group of people working together to achieve a common goal. But, this is not a good definition for three reasons: (a) the people are not clearly defined since some participate more than others, (b) they are not all working together if by that we mean doing the same thing, and (c) they usually have their own personal goals. A much better definition is to view an organization as a system of patterned activities in an open social system that is constantly adapting to its environment. Organizations are goal-directed entities that originate from the vision and mission of a founder and their survival depends on following a successful strategy. The characteristics of an organization are explained in this chapter and strategy is explained in chapter 2.

2 How do you attract and train an effective workforce? The most important resources in almost every company are its human resources. Every organization must succeed in attracting talented people who are willing to join the company and contribute to its goals while satisfying their personal goals. Effective human resource management involves recruiting and selecting the right people for the right jobs and providing them with the kinds of training they need to perform well. People must also be treated fairly and several laws have been passed to prohibit discrimination. These human resource functions are explained in chapters 3 - 5.

3 How do you motivate employees to accomplish the organization's mission and goals? Once people join an organization they must be willing to stay for at least some minimum time and make a dependable contribution to its mission and goals. People decide to join organizations for many different reasons and there are even more reasons to explain why they are willing to work. Chapters 6 - 10 explain the major theories of motivation and how effective managers can use both intrinsic and extrinsic rewards, as well as punishment, to motivate employees.

4 How do you create a productive work environment? Leaders are responsible for creating a productive work environment. Poorly designed work environments can prevent employees from being productive regardless of their motivation. Working conditions need to be carefully designed at the individual, group, and organizational levels. Chapters 11 - 14 explain how to design effective work teams, organizational structures, and organizational cultures.

5 What are the key processes leading to organizational effectiveness? Effective organizations are held together by four key processes: communication, decision making, leadership, and power. These processes determine the way information is created and shared, how decisions are made and who makes them, and how influence is exerted to keep the organization functioning smoothly. Good leadership makes people want to contribute and helps them be productive.

6 How do you improve organizations and keep them from becoming obsolete? In many ways, our modern organizations are very different than organizations fifty or even five years ago. Today's organizations are characterized by much greater diversity and technological advancements than in earlier years, and the amount of change in organizations seems to increase each year. Many factors contribute to the growing diversity of the labor force, including an increase in the percentage of female and minority employees and a larger number of ethnic groups represented in the labor force. Scientific discoveries have made dramatic changes in technology, especially in the transmission of information. New products emerge almost instantaneously making old products obsolete. The world has increasingly become one global economy requiring organizations to interact across national and cultural boundaries as competitors and partners. To survive, many organizations have had to change their orientation from being a product-producing organization to a service-producing organization. Chapters 19 - 21 explain how change occurs and how we can improve the effectiveness of both people and organizations.

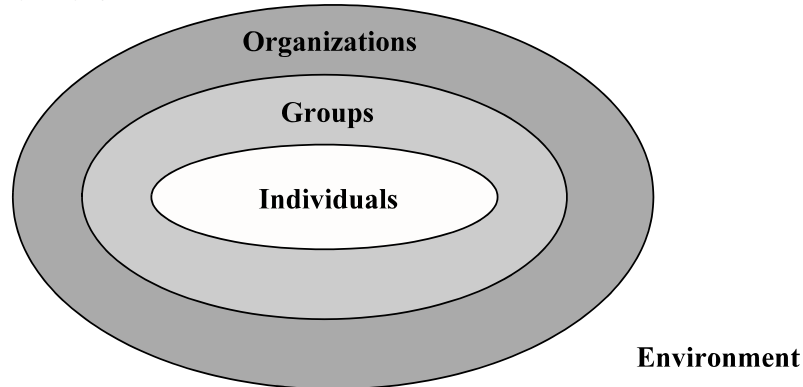
Levels of Analysis

To understand organizational effectiveness, you must be able to analyze organizational events and have a framework for organizing your observations. These events can be examined from three distinct levels of analysis – the individual, the group, and the organization – and they are also embedded in a distinct environment. What we observe depends on which level we use for examining it. For example, a dispute between a purchasing supervisor and a warehouse superintendent would be analyzed quite differently depending on whether it was viewed as a conflict between personalities at the individual level, a problem between members of a task force at a group level, or a conflict between two division heads at the organizational level. All three levels should be considered to perform a proper diagnosis of the problem, as illustrated in Exhibit 1.1.

Individual level. At the individual level, events are diagnosed in terms of the behaviors and personalities of the people interacting in the situation. Each individual brings to the organization a unique history of attitudes, values, and past experiences. If an organization announced that it was sponsoring a competitive incentive program, this program would be greeted enthusiastically by people with a high need for achievement, while employees with a low need for achievement may be threatened. When the warehouse superintendent and the purchasing supervisor debate the merits of a proposed change, their comments reflect their own personal attitudes and values. How forcefully they express their attitudes is influenced by their own self-esteem and assertiveness. Whether the proposed change is accepted may depend on which individual has better negotiation skills or aggressiveness.

Exhibit 1.1 Three Levels for Analyzing Organizational Events

Environment



Group level. Although groups are made of individuals, the events that occur within a group are not simply the sum of individual behaviors. Groups develop their own norms of acceptable behavior and these general expectations may be shared by members of the group even though none of them would be willing to accept the same norms outside the group. The behavior of group members is influenced by group dynamics, group roles, and status. For example, in a task force meeting, the warehouse superintendent could suggest a superior solution to a critical problem. But, because of group dynamics, the task force may select an inferior suggestion that protects the interests of the purchasing supervisor, who is chairing the task force.

Organizational level. Organizations are more than just the sum of individuals. Events occur within the context of an organizational structure. This structure and the location of people within it has an impact on virtually every social interaction, including casual conversations. For example, secretaries and production workers do not speak to the president of the company with the same degree of candor and ease as they speak with each other.

An organizational structure with hierarchical reporting relationships gives certain individuals the power and the authority to influence others. This structure affects the way information is communicated and the way decisions are made. A decentralized organizational structure, for example, allows lower-level managers to participate in making decisions, thereby raising their status and providing greater variety in their jobs. Returning to the previous example: the purchasing supervisor is opposed to the warehouse superintendent's recommendation to adopt a computerized inventory system because the people in the warehouse would then have immediate access to all inventory information. In the past this information was controlled by purchasing supervisors, who used it as a source of power to influence other areas of the organization, particularly accounting.

Environment. Organizational events do not occur in isolation; external forces may exert a powerful influence on what is observed at each of these three levels. For example, low productivity, careless work, excessive absenteeism, and high tardiness are serious problems that need to be analyzed at more than just the individual, group, and organizational levels. The seriousness of these problems becomes evident when we realize that the environment includes consumers who demand high-quality products, and competing firms in Korea, Japan, or Singapore have workers who are willing to dependably produce high-quality items for considerably lower wages.

Returning to our earlier example: the purchasing supervisor's desire to maintain control of the inventory data may be inconsistent with the organization's need to install a computerized inventory system. The survival of the organization may be threatened by other organizations who use "just-in-time" manufacturing and have a competitive advantage because they require less working capital for raw materials and finished goods. Organizations face a variety of significant environmental forces that influence their effectiveness, including changes in the labor force, evolving social customs, fluctuating economic conditions, and the enactment of laws by federal or state legislatures.

Open-Systems Theory

This book uses open-systems theory to describe organizations and explain what makes them effective. Open-systems theory explains the characteristics that all social organizations have in common, including manufacturing companies, service organizations, government agencies, religions, and voluntary associations.

The concept of an organization is usually rather difficult to understand because we are not accustomed to thinking at an organizational level of abstraction. We can see individual differences and we have observed group dynamics, but organizational processes and structure are more abstract and more unfamiliar. Furthermore, organizations are not physical objects that we can touch or feel. They are systems of activities with subsystems that perform essential functions enabling them to survive and grow. If they consisted of physical objects, like buildings, organization charts, machines, or people, they would be easy to observe. But because they are nonphysical they are more difficult to understand.

We are surrounded by organizations and we interact with them in almost everything we do. We are largely unaware of the complex organizations that provide the basic goods and services we have come to expect in our society. The food we buy at the supermarket is not provided by just one chain of food stores but by a complex combination of corporate farms, food-processing companies, transportation companies, and government agencies. Likewise, the gas we buy at the corner station depends on a complex web of national and international organizations that manufacture oil-drilling equipment, drill for oil, transport it, refine it, and market the products. Even simple activities like registering a car or renewing a driver's license require the coordinated efforts of large public organizations.

How well these organizations function has a significant influence on the quality of our lives. Effective organizations make life happier; but poorly structured organizations can create enormous inconvenience and unhappiness. For example, consider the problem of a secretary who wants to purchase a metal bookshelf for her office similar to the one she bought for herself on sale for \$39. Since the cost exceeds \$25, she cannot simply take the money out of petty cash and buy it herself. But, following the correct procedure is almost impossible. Because the bookshelf is capital equipment and it has not been budgeted, the purchasing department cannot accept her purchase order until another form with three signatures is obtained authorizing the exception through the accounting department. Finally, in frustration the secretary takes \$25 from petty cash and pays the remainder herself to get the bookshelf before the sale ends. The hassle of buying a new bookshelf is so unpleasant that the secretary believes the accounting and purchasing staffs are consciously refusing to cooperate. In reality, however, both staffs are only trying to follow the proper procedures. The problem isn't a lack of cooperation or motivation; the problem is a rigid organizational structure.

Defining an Organization

An organization is an open social system that consists of the patterned activities of a group of people that tend to be goal directed.¹ Viewing an organization as a system of structured activities is especially useful when diagnosing organizational problems or analyzing the competitive advantages of a firm. Effective organizations consist of smoothly functioning patterned activities that occur at predictable times and require minimal guidance or direction. Thinking of an organization as a system of patterned activities prepares us to improve organizational effectiveness and to identify organizational problems and opportunities.

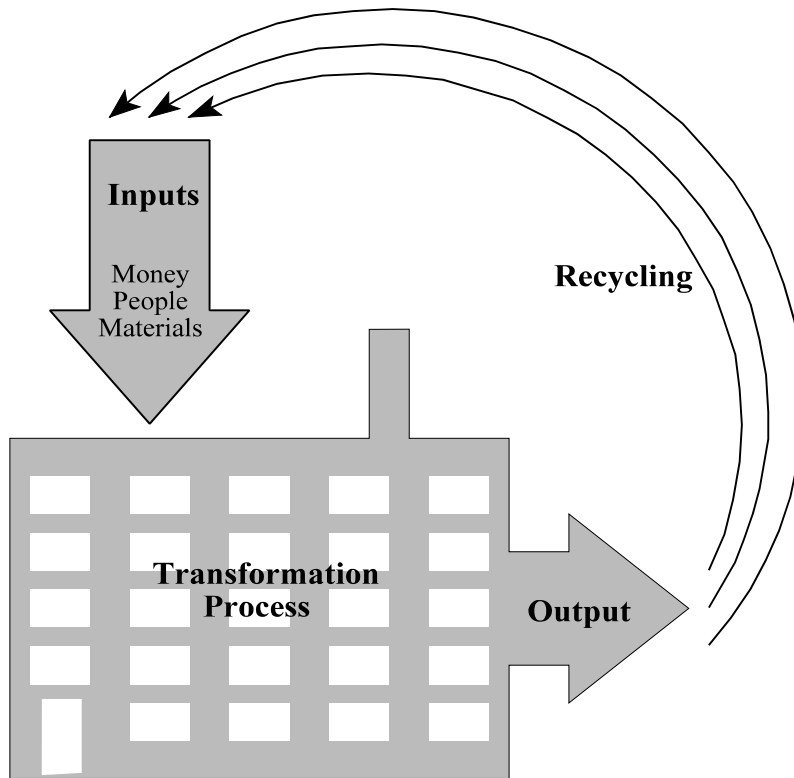
Open Social Systems. The best way to understand an organization is to view it as an open social system. A *system* is a set of interrelated elements that acquires inputs from the environment, transforms them into some form of useful output, and discharges the outputs to the external environment. Social systems can be compared with biological systems to the extent that they both have subsystems and they interact with the environment. A useful analogy is the human body, which consists of a series of subsystems that support the body and help it function, such as the respiratory, digestive, excretory, muscular, and skeletal systems. These subsystems interact in predictable ways that allow the organism to survive. The circulatory system, for example, obtains oxygen from the respiratory system and delivers it throughout the body for the muscular system to use. A breakdown in any system could result in serious illness or even death. But, social systems are more complex than biological systems and this complexity explains why organizations cannot be designed like machines that are simply turned on and allowed to run without further direction. Social systems exist in a changing social environment that requires them to adapt to new demands.

All social systems are open systems, as illustrated in Exhibit 1.2. A closed system would not depend on its environment; it would be autonomous and isolated from the outside world. Plus, it would have all the energy it needed and it would function without consuming external resources. Many studies of organizational behavior have examined the internal functioning of organizations as if they were closed systems isolated from their environments. Many industrial engineering studies, for example, have used a closed-system logic by assuming the environment was constant and that organizational effectiveness depended only on improving internal efficiency. This logic assumed that the organization had a constant supply of incoming resources and that the products were automatically consumed by a receptive public.

Unfortunately, this closed-system logic is seriously flawed, since there are no closed social systems. Even organizations that try to minimize contact with society, such as prisons and some religious communities, still exist within an external environment that influences the availability of resources and the acceptability of outputs.

An *open system* must interact with the environment to survive. It must obtain resources from the environment and export products back to the environment. It cannot isolate itself nor seal itself off from the environment; nor can it ignore environmental change. It must continuously adapt to the demands of a changing environment. Organizations must continue to obtain the necessary inputs and produce acceptable products in spite of an uncertain environment and fluctuations in the availability of resources or demand for the product. The human body is an open system, and so are churches, the military, businesses, cities, and the federal government.

EXHIBIT 1.2 Open-Systems Model of Organizations



Patterned Activities. The best way to think about an organization is to view it as a series of patterned activities — relatively stable and predictable events that continue to occur with regularity. These patterned activities are complementary and interdependent with respect to a common goal; that is, they are organized and coordinated to achieve a conscious purpose or objective. To analyze an organization we want to first analyze these repeated, relatively enduring patterned activities.

If an activity pattern occurs only once or at unpredictable intervals, we could not speak of an organization. A mob or a protest group, for example, would not be considered an organization until some type of structure emerged to provide stability and a recurrence of the activities. The patterned activities in a hospital include such activities as admitting patients, conducting diagnostic tests, performing operations, and providing health care. A significant patterned activity for a university consists of the hundreds of classes where students and teachers meet to share ideas. The patterned activities of a religion consist of worship services and other social events.

Describing an organization as a sequence of patterned activities explains why organizations are difficult to understand. Patterned activities are not objects that we can touch or feel; they are events that can only be viewed one at a time as they occur.

Negative entropy. According to open-systems theory, organizations are best analyzed in terms of the resources and energy inputs they acquire from the environment, the transformation of energies within the system, the resulting product or output, and the translation of these products into new energy to reactivate the system. In an open social system, the products are recycled within the environment and transformed

into more resources and energy to perpetuate the cycle of activities. Consumer goods are sold, and the money is used to purchase additional raw materials and to compensate employees. In a voluntary organization, the satisfaction from participating is the output, and it must be great enough to create the expectation that future participation will continue to be satisfying.

In a successful organization this recycling allows the organization to grow and prosper, a condition called *negative entropy*. The process of entropy is a universal law of nature in which all forms of organization move toward disorganization or death. The organization, however, by acquiring more energy from its environment than it uses to produce its products, can store energy and achieve negative entropy. Business organizations hope to sell their products for more than the cost of producing them. These retained earnings and profit represent a form of negative entropy because they allow the organization to grow.

An illustration of entropy is when a research institute uses a research grant (energy) to study a problem and fails to produce any results. When all the money has been spent on salaries, supplies, and other research costs and the energy is exhausted, entropy has occurred and the institute dies. But the institute can achieve negative entropy if it produces reports or discoveries that it can sell for more than the initial grant. Negative entropy allows it to survive and even grow.

Differentiation and Integration. Open systems move in the direction of greater differentiation and elaboration. Not every individual performs every function. Instead, specialized activities are identified and assigned to individuals and departments. In a hospital's emergency center, for example, different people are responsible for admitting patients, cleaning wounds, taking blood samples, inserting IVs, setting bones, taking X rays, and transporting patients. *Differentiation* is the development of specialized functions and a division of labor.

As organizations become more differentiated, they require some sort of coordinating process, called *integration*, to integrate the various activities and bring the system together for unified functioning. As organizations become more highly differentiated, the need for integrating activities increases. In living organisms, integration is achieved by the hormonal and nervous subsystems. In organizations, coordination is achieved by setting priorities, establishing routines, synchronizing functions, and scheduling events. In a university, for example, the two major coordinating instruments are the class schedule announcing when and where each course will be taught and the university catalogue describing the degree requirements, the courses, and the faculty.

Organizations must receive feedback to know when changes are needed and what they must do to adapt to a changing environment. If there were no feedback mechanisms to help the organization stay on course, it would lose its ability to survive and continue as a system. Customer satisfaction, new product information, and employee opinions are essential forms of feedback. As we will see later, the communication and decision making mechanisms that organizations use to collect, analyze, and disseminate knowledge largely determine how work teams and organizations should be structured.

Social organizations are essentially contrived systems. Since they are made by people, they are imperfect systems. They can come apart at the seams overnight, but they can also outlast by centuries the people who originally created them. Some organizations, such as Freemasonry and the Catholic Church, have survived for centuries in spite of dramatic social and cultural changes. Other organizations essentially disappear overnight, such as the political organization of an unsuccessful candidate. Until election night, the campaign organization is a rapidly growing and thriving organization. By the next morning, however, the organization is essentially dead, since all the speeches, campaigning, and rallies that represented its patterned activities have come to an end.

The cement holding organizations together is psychological rather than biological. Social organizations are anchored in the attitudes, beliefs, motivations, and expectations of human beings. Some organizations can continue to survive and even flourish in spite of very limited individual involvement. Such is the case with many political and volunteer associations, such as the parent-teacher associations (PTAs), where most members contribute only a few minutes per year. An organization can have a very high rate of turnover and still persist. The relationships of people, rather than the people themselves, provide the constancy of an organization.

Organizational Subsystems

As an open system, an organization is composed of several subsystems. Each of these subsystems can also be viewed as a system in its own right because it receives inputs from other subsystems and transforms them into outputs for use within the organization. Six subsystems necessary for any organization to survive and grow are the procurement, production, disposal, maintenance, adaptive, and managerial subsystems.² Although these subsystems are largely associated with particular departments, it is important to view them not as a specific department but as kinds of patterned activities performed in multiple departments.

1. The **procurement subsystem**. All open systems import some form of energy from the external environment, such as human resources, raw materials, financial resources, status, recognition, satisfaction, or future expectations. New employees and venture capital may be the most important resources for a new enterprise. Satisfaction and future expectations, however, may be the most important resources for a religion or a sorority. The procurement subsystem includes all of the inbound logistics associated with receiving and storing materials, handling and controlling inventory, and securing other resources and energy from the environment. The procurement subsystem tries to guarantee a stable source of future inputs. These activities are typically performed by the purchasing department in most organizations.
2. The **production or operations subsystem** produces the products and services of the organization and represents the primary transformation activities. In a manufacturing firm, this subsystem consists largely of the activities of the production department; in a university, it consists of seminars and classes; and in a driver's license bureau, it consists of administering tests and issuing licenses. In most organizations, the production subsystem serves as the foundation around which other subsystems are organized. Open systems transform the energy into a product. Auto assembly plants have a manufacturing process that transforms inputs into cars, and universities conduct classes and seminars to educate students.
3. The **disposal subsystem** includes all marketing and sales efforts to dispose of the product in the environment. These activities include all outbound logistics, such as processing orders and distributing the product to the buyer; marketing and sales activities, such as advertising and pricing; and service activities, including installing and repairing the product and training customers. Most manufacturing organizations have sales departments that specialize in performing the disposal function. In universities this function is performed by placement offices and alumni associations.
4. The **maintenance subsystem**, sometimes called the human resource subsystem, involves bringing people into the organization and motivating them to perform. Therefore, maintenance activities include recruiting and selecting new employees, compensating them fairly, providing attractive

benefits, creating favorable work conditions, rewarding outstanding performance, and providing other forms of recognition to satisfy human needs.

5. The ***adaptive subsystem*** is responsible for helping the organization respond to a changing environment. Adaptive subsystem activities include developing new products, adopting new technology, gathering information about problems and opportunities, developing creative innovations to help the organization adapt and change. Most of the activities of a research and development department would be considered part of the adaptive subsystem.
6. The ***managerial subsystem*** is responsible for directing the other subsystems of the organization. Management determines the strategy, goals, and policies that direct the entire organization. It also allocates resources and resolves disputes between people and departments. The managerial subsystem is also responsible for designing the organization structure and directing the tasks within each subsystem.

These subsystems represent the patterned activities that design, produce, market, and deliver a firm's products. Understanding how these subsystems are linked together and with the external environment is essential when we analyze a firm's competitive advantages in the following chapter. The competitive position of each firm depends on its ability to create value for buyers through what is called a ***value chain***.³ Each firm represents a link in a chain of value: it receives inputs from suppliers, adds value to them, and passes them on to buyers. Within each firm, this value chain consists of strategically relevant activities that accomplish the firm's essential subsystem activities. This value chain concept can be used to determine whether a firm has the potential to provide a differentiated product and whether it can add value at each stage of the chain.

Procurement and disposal subsystem activities are sometimes called ***boundary-spanning activities***, since they involve transactions at the organization's boundaries. Boundary-spanning activities regulate interactions between organizations and coordinate organizational demands with the environment. Procurement and disposal subsystem activities may also include lobbying efforts that create a favorable climate for the organization. This activity, called the ***institutional function***, protects the institution and creates a friendly environment that supports the organization.⁴ Most public relations activities, such as lobbying efforts and political action committee activities, are part of the institutional function, because these activities try to obtain favorable legislation to guarantee the survival and protect the special interests of the organization.

Organizational Effectiveness

Organizational effectiveness refers to how well the organization is performing and whether it is achieving its goals. When we study organizations, we need a method to measure organizational performance. Performance measures allow us to assess how well the organization is functioning or whether decisions are good or bad. Unfortunately, most organizations do not have clear and concise goals.

Organizational Goals

Effective organizations have clearly defined goals that are widely shared among all members. Clearly defined goals help to focus the efforts of members and give meaning and purpose to the organization.

Organizations that have unclear goals usually struggle with high levels of employee frustration and low levels of productivity.

Organizations have **official goals** that define the general mission of the organization and **operative goals** or **objectives** that are more specific and describe what the organization is actually trying to accomplish. Having clearly defined goals provides several benefits for the organization.

1. *Legitimacy.* The official goals of an organization provide a symbol of legitimacy both to employees and external constituencies. Goals describe the purpose of the organization, so people know what it stands for and they accept its existence.
2. *Employee direction and motivation.* Operative goals provide a sense of direction and motivation for employees. Research on goal setting has shown that the performance of employees can be significantly increased by realistic goals.
3. *Decision guidelines.* Goals provide a standard for evaluating performance. Organizational goals can serve as guidelines for individual behavior and decisions. The goals can serve as the criteria against which management decisions are made.
4. *Reduce uncertainty.* The process of goal setting tends to reduce uncertainty for members of the organization, especially top management. The process of arriving at a set of mutually acceptable goals helps to focus the energies and efforts of the entire organization.

Organizations exist for a purpose; therefore, they are considered goal-directed social entities. Some have argued, however, that organizations *per se* do not have goals—only people have goals. Technically this criticism is correct. Organizations and other social entities do not have goals or other human properties, such as a soul, a memory, or feelings. However, most organizations have a goal that is commonly shared by many individuals, and there is sufficient agreement among people about the organization's goals to unite them in a common purpose. Therefore, it is appropriate to conclude that an organization and its members are trying to achieve a particular goal. Participants may have goals different from the organization's goals, and the organization may have several goals, but organizations exist for one or more purposes without which they would cease to exist. Therefore, it is meaningful to talk about organizational goals because of the consensual validation supporting them. The term *consensual validation* refers to a common belief or consensus that is so widely shared among a group of people that most of the people accept it as true, even though it may not match their own personal feelings.

Developing a list of goals and objectives is a valuable process that contributes to an organization's effectiveness, especially when many members participate in the process and the goals are widely shared. Goals tend to be broad and general statements of what the organization hopes to achieve, while objectives tend to be more specific and short-range. The best objectives relate directly to the central mission and goals of the organization and they are measurable. Goal setting activities contribute enormously to organizational success and the principles associated with goal setting are discussed in later chapters.

Measuring Organizational Effectiveness

How we measure organizational effectiveness depends on the time frame we use to measure it. The most popular short-run criteria are job satisfaction and productivity: productive companies that provide pleasant jobs are considered highly effective. In the long run, however, the survival of the organization is the ultimate measure of organizational effectiveness. If an organization survives for several centuries, we say it is effective because it has acquired resources from the environment, transformed them into usable products, and adapted to changing environmental demands. Although survival is the ultimate measure of

organizational effectiveness, we need more immediate measures on a monthly or yearly basis to evaluate managerial decisions.

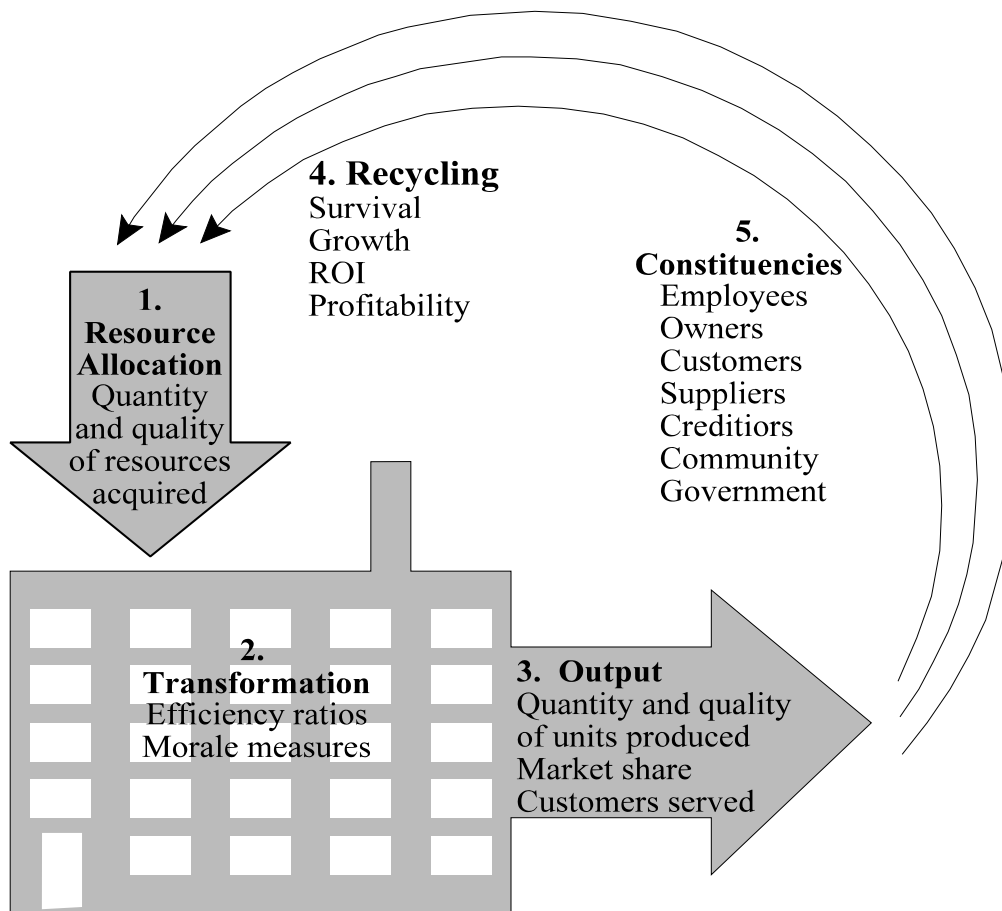
Efficiency Versus Effectiveness. *Efficiency* refers to how well the organization converts inputs into outputs, whereas *effectiveness* measures how well products are produced plus how well they are recycled in the environment back into usable inputs for the organization.

Efficiency usually contributes to effectiveness but not always. An organization could be extremely efficient in transforming inputs into outputs, and yet be ineffective because its products are obsolete. Conversely, an organization could be extremely effective because of new innovations or a unique market strategy, even though it is not particularly efficient.

Organizations use a variety of efficiency measures, such as labor costs, productivity per employee hour, costs per unit, and tons per employee hour. These numbers are interpreted by examining historical trends or by making industry comparisons, and managers use this information to improve their organizational efficiency. In some industries the performance of different companies demonstrates wide variations in efficiency ratios, such as the auto industry where there is considerable variation in the ratios of cars produced per year per employee.

Open-systems theory provides a useful model for evaluating organizational effectiveness. Effectiveness can be measured in terms of the inputs, transformation, outputs, stakeholders, and recycling. These processes identify the most frequently used criteria of effectiveness, as illustrated in Exhibit 1.3.

EXHIBIT 1.3 Approaches to Measuring Organizational Effectiveness



Resource Acquisition Approach. How well does the organization acquire resources? The most effective organizations are the ones that are the most successful in acquiring valued resources. This approach is often used by organizations in the early stage of development: new businesses measure their success by their ability to acquire venture capital. Other organizations use resource acquisition to measure their effectiveness because other measures are difficult to obtain. For example, voluntary organizations such as the March of Dimes or the Muscular Dystrophy Association frequently report their success in terms of the contributions they receive from society. The number of new converts and new members is an important measure of effectiveness for religious and social organizations. Some government agencies measure their effectiveness by the size of their budget or the amount of office space allocated to them. Along with their ability to attract new faculty or students, universities frequently use allocations from the state legislature as a measure of effectiveness. In their advertising commercials, car dealerships often emphasize how many cars the manufacturers sent to them and consider this number an indication of their effectiveness.

The value of the resource acquisition approach is that it considers the relationship of the organization to its environment, and it can be used to compare organizations that have different goals. However, it has a very limited perspective. An athletic team that acquires many star players would not be considered

effective if the team loses its games. A research institute that fails to find new discoveries with the money it receives would not be considered effective.

Transformation Approach. How efficiently does the organization convert inputs into outputs? The transformation approach includes both quantitative measures of economic efficiency and perceptual measures of internal health. Some examples of quantitative measures include rate of return on capital or assets, unit cost, scrap and waste, down time, cost per patient or per student or per client, and occupancy rates.

Many questionnaires have been developed to measure the attitudes of employees concerning internal organizational health. These questionnaires measure the amount of confidence, trust, and communication between workers and management; how well decisions are made; whether there is a feeling of teamwork, loyalty, and commitment; whether the reward system is fair and adequate; and whether the organization is properly structured. These evaluations overlook the interaction between the organization and its environment; however, they can be used to compare organizations whose outputs are not the same.

Output Approach. How many outputs does the organization produce? Some of the most popular measures of output include profit, sales, market share, patients released, documents processed, clients served, students graduated, and the number of arrests or citations issued. The output approach is generally viewed as the most relevant criterion of organizational effectiveness, since it appears to measure goal accomplishment. This approach seems logical because organizations try to maximize their outputs. But unless the output is consumed by the public, the organization will not survive. In using the output approach, it is also important to remember that organizations have multiple goals and multiple outcomes. High achievement on one goal may mean low achievement on another. Therefore, measuring effectiveness on only one dimension could oversimplify the objectives of the organization and produce misleading conclusions.

Recycling Approach. How well are the outputs adopted by the environment? The recycling approach concerns how well the products produced by the organization are consumed by society and translated into essential inputs. Unlike the earlier approaches, the recycling approach involves a long-term perspective and is more abstract. Three dimensions of the recycling approach include adaptability, development, and survival.

Adaptability refers to how well the organization responds to internal and external changes. To the extent that the organization cannot or does not adapt to its environment, its survival is in jeopardy. Changes in consumer taste and foreign competition are two environmental forces that have had a profound influence on many organizations. Some organizations measure their adaptability by examining their growth over time or the number of new products they have produced.

Development includes organizational restructuring to improve the organization and training to help the employees. Organizations need to invest in themselves through organizational development and training programs. By helping their employees develop new skills, organizations hope to adapt to a changing environment with less resistance and difficulty.

Survival is the ultimate measure of organizational effectiveness. Organizations that fail to respond to a changing environment or that lose their ability to produce viable products and transform them into new inputs do not survive and, by definition, they are not effective. Accordingly, the final test of organizational effectiveness is whether it is able to sustain itself in the environment. However, this

criterion is not very useful for managers who want more immediate feedback on the effectiveness of their decisions.

Constituency Approach. How well do stakeholders value the organization? The constituency approach involves obtaining feedback from the organization's various constituencies. A constituency is a group either inside or outside the organization that has a stake in the organization's performance. These groups are also called *stakeholders*. Employees, owners, customers, suppliers, and stockholders are all constituencies whose assessment of the organization can serve as a measure of the organization's performance. Each constituency has a different criterion of success because it has a different interest in the organization. The effectiveness of the organization can be evaluated by surveying the attitudes of each constituency. Seven of the most important constituencies and the effectiveness criteria used by each are listed here.

Constituency	Effectiveness Criterion
1. Employees	Satisfaction with pay, supervision, and the work itself
2. Owners	Financial return on investment
3. Customers	Quality of goods and services produced by the company
4. Suppliers	Satisfactory transactions
5. Creditors	Creditworthiness
6. Community	Social responsibility
7. Government	Compliance with laws and regulations

The strength of the constituency approach is that it uses a broad view of effectiveness and examines both internal and external factors. The concepts of social responsibility and community involvement, absent in the other approaches, are also included here. The constituency approach recognizes that there is no single measure of effectiveness and that the achievement of one criterion may be just as important as another. The well-being of employees, for example, is just as important as achieving the goals of the owners.⁵

The recognition of multiple constituencies and their multiple goals should significantly influence major organizational decisions, such as whether to close a factory or where a new community hospital should be built. The constituency approach also calls attention to the fact that effectiveness criteria reflect the values of different people. The organization must decide which values it wishes to pursue and which values will be excluded. Organizations cannot simultaneously satisfy all criteria. The leaders of organizations are required to balance difficult ethical dilemmas.

Creating Ethical Organizations

Organizations are expected to contribute to the quality of life and the betterment of society. Effective organizations provide avenues for people to develop their talents and skills and pursue self-actualization. Some people discover great meaning and fulfillment in life because of the work they perform in organizations and their relationships with co-workers are highly satisfying. Unfortunately, this is not

always the case. Some organizations are a great detriment to society because they pollute the environment, destroy natural resources, create hazardous work conditions, and mistreat workers.

Unfair Policies. Organizations have the power to abuse individuals. The balance of power is clearly in the hands of the organization in power struggles over wages, benefits, and working conditions. Although disgruntled employees are free to quit, the consequences of quitting are clearly more costly to the individuals than to the organization. The loss of a job to an employee is more catastrophic than the loss of an employee to an organization.

Although the Bill of Rights guarantees certain freedoms to citizens in society, employees in organizations do not enjoy many of the same rights. For example, freedom of speech is sometimes constrained by company regulations that limit what they may say. The rights of privacy and security guaranteed to citizens are also not extended to most employees at work. Although employees' homes are protected from arbitrary search and seizure, their lockers, desks, and files at work can be inspected without warning or permission.

In some situations employees are faced with moral dilemmas because they are asked to perform unethical or illegal acts. For example, employees are sometimes told to falsify reports, to dump toxic wastes in streams, to use substandard materials in construction, or to fire employees because of their age or race. These orders are immoral and illegal and employees should never be expected to obey them. Even minor violations, such as telling a secretary to say that a manager is out when the manager is really in can create an uncomfortable situation in which the secretary is forced to compromise personal standards of integrity.

Unintended abuse. When organizations condone illegal or immoral activities, the potential for abuse is obvious. However, organizations also abuse employees in subtle ways that may be entirely unintended. Every organization has the potential to abuse individuals – even benign organizations that sincerely try to help and support their employees.

Organizations do not have a heart and a mind or a soul; and employees who have contributed years of faithful service may be forced to find a new job or a new career because of forces beyond the control of the organization, such as a technological advance or an economic collapse. A new management team often has little knowledge about the devoted service of long-term employees who deserve to be protected.

Organizations cannot control the expectations of employees, and there are natural tendencies for employees to develop false expectations. Employees are often seduced into thinking that someone in top management is looking after them and that they should just quietly serve the organization. When their jobs are eliminated because of a merger or new technology, these people feel abused and mistreated. The real irony here is that the most employee-friendly organizations with active career development programs have the greatest potential for abuse because they create the greatest expectations.

Job opportunities, even those that are typically valued by employees such as promotions, transfers, and sales contests, can result in unintended abuse. Marriages can be damaged by long separations or pressure to relocate. Families may suffer because parents miss important events, like graduations and little league games, or they are not available to provide guidance and support at critical times. Excessive job stress may impair health and leave employees too emotionally exhausted to cope with other demands. It is natural for employees in large and powerful organizations to succumb to the belief that the organization's goals are inherently right and that the interests of the organization are more important than their personal welfare.

The hierarchical authority structure in organizations creates a natural opportunity for adversely influencing employees because they tend to develop a distorted concept of authority. When a person is promoted to a higher-level position, the promotion somehow seems to imply moral superiority, innate goodness, or some other virtuous quality. As a result, employees do not question the decisions of upper-level managers and they give too much relevance to managers' opinions. The blind obedience that results is often a disservice to the employee, the manager, and the organization.

A partial solution to organizational abuse is to change the policies and programs that cause improper and unfair treatment. But more practically, individuals should be taught how to protect themselves from organizational influences. Protecting employees and helping them achieve their goals are basic ethical concerns of leaders.

Developing and Testing Theories

Good managers rely on good theories to help them know what to do. It has been said that nothing is as practical as a good theory.⁶ To some extent, we are all behavior scientists as we observe the events around us and try to make sense out of them. We develop our own working theories to help us interpret what is happening, and what will be the consequences of our behavior. We rely on informal theories to guide our actions. If our theories are wrong, we can make serious mistakes without realizing that the problem stemmed from a bad theory. The skills of a good behavioral scientist – observing, interpreting, generalizing, and explaining – are essential for managers since they are required to collect data, analyze it logically, and act on it. Therefore, we all need to learn how to develop good theories and use them.

Analyzing Organizational Events

When we analyze organizational events, we typically use this information for one of three reasons: to describe what happened, to explain why it happened, or to control it in the future. Our knowledge of organizational behavior and our ability to use this information to create effective organizations has been acquired over the years through this sequential process of description, explanation, and control.

Description. When we see something occur with regularity we first try to identify it and develop a way to discuss it. This requires us to label and define organizational events. For example, if the comments of women in a mixed committee are consistently ignored, the first goal is to describe what is happening and identify the problem of sexism.

Explanation and prediction. After we describe recurring events, we need to identify the forces contributing to them. This allows us to predict what will happen in the future when the same conditions are present, thereby making our world more stable and secure. We develop our own informal theories to explain the relationships between events and the motives that cause people to behave the way they do. Even though we may not think of ourselves as behavioral scientists, we generate our own theories to explain the world around us. For example, we have our own working theories to explain why some people refuse to accept welfare, why supervisors get angry, why people play lotteries, why students are so concerned about grades, and why people quit their jobs.

Control. The third goal of organizational analysis is to control the behavior that occurs in organizations. If behavior has been carefully explained, and we know what causes it, we can create situations that elicit desirable behaviors and eliminate undesirable behaviors.

Organizational leaders can use a variety of techniques and interventions to change the behaviors of individuals, groups, and organizations. Controlling behavior, however, creates a difficult ethical problem: some people are firmly opposed to the idea of using organizational behavior knowledge to control the behavior of people at work. Organizational control is criticized as a form of bribery, coercion, or manipulation. Those who object to the idea of controlling behavior have a valid concern because organizations can harm people and society. However, they can also provide excellent opportunities for personal growth and self-fulfillment. This issue points to the continuing need to study the ethics of organizational behavior.

Some organizations do much more than others to control behavior. The military is well known for its structured environment that controls to a great extent both thoughts and behaviors. The control process in the military is apparent from the very first minute new recruits begin basic training. Other organizations, especially fraternities and sororities, also use social pressures and rigorous initiation rituals to influence the attitudes and behaviors of new members, and some of these practices have led to public censure when they have become extreme. Smoking is a behavior that is becoming increasingly controlled by organizations. Some companies, such as U.S. Gypsum, use a variety of rewards, punishments, and counseling to induce their employees to completely stop smoking both on and off the job.

Attempts to control behavior are not necessarily unethical. Essentially all managerial actions are designed to influence individual behavior and control what occurs in organizations. Organizations control behavior whether we like it or not, and it only seems reasonable that we should try to design them to enhance the quality of life. As an ethical concern, managers should attempt to control behavior in a way that contributes to both individual growth and organizational goal achievement.

Developing Theories

Being an effective manager requires a combination of knowledge and experience; neither one alone is sufficient. **Experiential learning** refers to learning from our own experiences. As we observe the consequences of our behavior and discover how others respond to what we do we gain new insights into human behavior and we learn how to be more effective when working in groups and organizations. Being able to learn from our own experience is a valuable skill. However, experience alone is also not enough. We do not adequately learn from our own experiences because life is so complex and our experiences are so limited. We are not exposed to enough information to make broad generalizations about any more than a few topics. Consequently, we must use the insights of others to broaden our knowledge.

Behavioral science research involves developing and testing theories. A **theory** consists of a statement of functional relationships among variables; we are stating a theory when we attempt to explain a recurring event. Some theories are very simple, involving only two variables, while other theories are extremely complex. Theories are useful because they direct our observations and tell us what to look for; they help us interpret and explain our observations; and they help us predict future behavior.

Many valuable insights have come from formal theories in the behavioral science literature. However, we also develop our own informal theories to help us organize and interpret our observations. These are some examples of theories:

1. Dissatisfied employees are more likely to steal from their employers.
2. How people dress influences their career success.

3. Students do not learn very well when they study with the television on.
4. People who have the most power can manipulate situations so they get more power.

In our day-to-day activities we develop a large repertoire of theories similar to these, and use them to guide our thinking. By making careful observations to test our theories, we can refine them and improve the accuracy of our predictions and the likelihood of behaving effectively. There are no perfect theories in organizational behavior; each theory has advantages and limitations. Good theories generally contain the following characteristics.

1. A good theory is *parsimonious*, that is, stated in simple terms. A theory that explains things simply is superior to one that requires complex relationships to explain the event.
2. Good theories are testable. Although we cannot prove a theory is true, a testable theory allows us to estimate the probability of its truth. If a theory cannot be confirmed or disproved we cannot assess its accuracy.
3. A good theory should be logically consistent with itself and other known facts and build on what has already been learned.
4. The conditions when a theory is relevant need to be clearly defined so that the theory is not erroneously applied in situations where it was never intended.

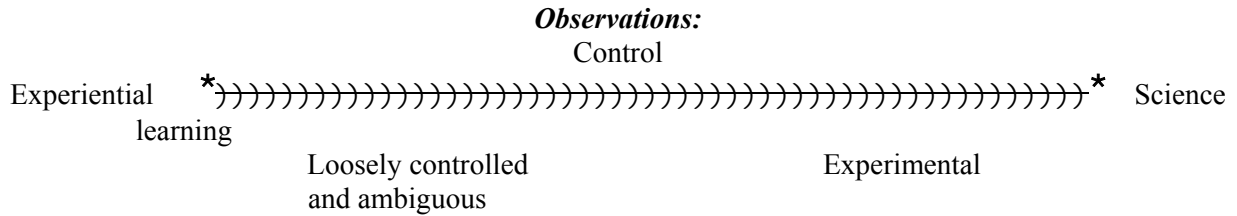
Most of the theories presented in this book do not satisfy all of these criteria. None of the theories have been so extensively researched that they can be pronounced conclusively true. Rather, the theories that have been the most extensively studied are usually the most qualified. Extensive research helps to identify the conditions when the theory applies and the conditions when it does not. Although students usually want to know only if a theory is true or false, this is not the best question to ask. Rather than asking if a theory is true or false, it is better to ask when it is useful.

Occasionally the development of new knowledge produces a dramatic shift in the way a problem is analyzed and in the way the situation is perceived. This change, which is called a *paradigm shift*, results in a total restructuring in the way we think about a situation and the kinds of assumptions we make about former observations. A paradigm refers to a method of approaching a problem or situation and the kinds of assumptions, values, and attitudes associated with thinking about the situation.⁷

The most dramatic illustration of a paradigm shift was the shift from the Ptolemaic theory of seeing the earth as the center of the universe to the Copernican theory which saw the sun as the center of the universe. Another illustration of a paradigm shift in management theory was the shift from scientific management to the human relations movement during the 1930s. The focus of scientific management from about 1880 to 1930 was on task efficiency; consequently, the development of time and motion studies, piece-rate incentives, and division of labor were analyzed and evaluated according to the criteria of how they influenced task efficiency. On the other hand, the human relations movement from about 1930 to 1950 focused on personal feelings of satisfaction and worth. Therefore, all corporate policies and management practices were evaluated with respect to how well employees were treated.

Testing Theories

made. In science, however, observations are carefully controlled through a variety of experimental methods.



The theory that corporate mergers destroy company loyalty can be used to illustrate the difference between the scientific method and intuition. A newspaper article describing the angry feelings of a worker whose job was terminated after a corporate merger supports the theory that mergers destroy corporate loyalty. However, this newspaper article would be classified as experiential learning since the hypothesis is not operationally defined and the observation comes from one randomly selected person rather than a representative sample of the affected population. The scientific method requires that a testable hypothesis using operationally defined constructs be stated and examined in a controlled setting. An example of a testable hypothesis would be “If one company acquires another company through a leveraged buyout, the average organizational commitment scores of the employees in the acquired company will decline after the acquisition.” Here loyalty is operationally defined by responses to the organizational commitment questionnaire. The observations could come from administering the questionnaire to randomly selected groups of employees at designated times before and after the merger.

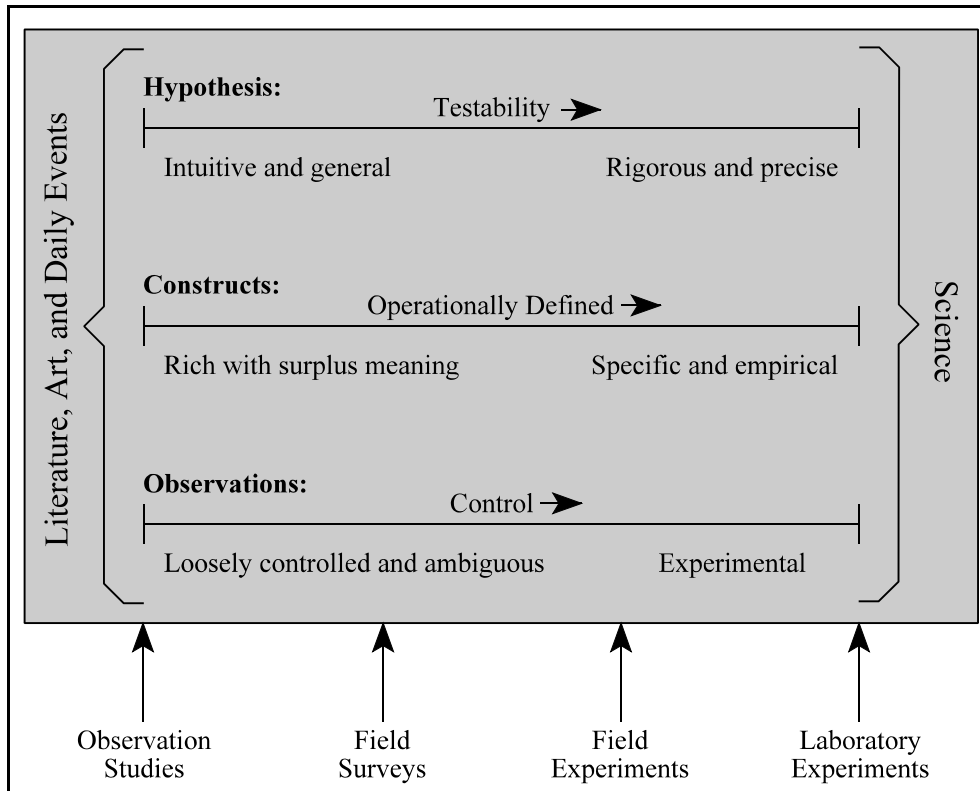
Research Methods. Behavioral scientists use a variety of research methods to obtain knowledge about organizations, including observational studies, field surveys, field experiments, and laboratory experiments.

1 Observational studies. Most of our common-sense views about organizations and people come from observational studies where we examine the natural activities of real people in an organizational setting. Behavioral scientists are trained to describe the behavior they see using specific terms that can be confirmed by others. They try to avoid drawing unwarranted conclusions about things they cannot observe such as motives and attitudes.

Case studies are a form of observational study that examine numerous characteristics of one or more people, usually over an extended period of time. Occasionally an experimenter will join a group and actively participate in group activities in what is called *participant observation*. This method has often been used by anthropologists who study the customs and norms of various cultures by actually living among them.

Case studies are often used to help students learn how to diagnose organizational problems and formulate possible solutions. Although they are useful for educational purposes, a case study is not a good research method. The insights and conclusions from a case study depend entirely upon the skill of the observer. Although a trained researcher may be able to make valuable observations, the results are based upon a sample of one (N=1) meaning that they cannot be generalized to other situations, and rarely can case studies be repeated or their findings verified.

Exhibit 1.4 The Continuum of Scientific Research Methods



- 2 **Field studies.** Field studies allow us to examine a few characteristics of a large number of people in actual organizational settings, but they do not allow us to make causal inferences. Most field surveys are *correlational studies* that measure two or more variables and then test whether they are related, such as a test of the relationship between office size and job satisfaction. A correlation coefficient could be computed between job satisfaction as measured by a questionnaire and office space measured in square feet. A positive correlation would indicate that office space and satisfaction seem to be related, but we could not conclude that increased office space caused greater satisfaction.
- 3 **Field experiment.** In a field experiment, we attempt to manipulate and control variables in the natural setting of the organization. Here the subjects being observed continue to work as employees in an ongoing organization and certain important organizational variables are manipulated or changed to examine their effects on behavior. An illustration of a field experiment is offering a select group of employees a financial incentive for every day they work without a recordable accident and then measuring the reduction in their accidents.

The advantage of a field experiment is that the individuals continue to interact in a real situation under relatively normal circumstances. The effects of different variables can be assessed by varying them one at a time. The results of a field experiment allow researchers to draw causal inferences, such as a change in variable A caused a change in variable B. The disadvantages of a field experiment are that the results cannot always be generalized to other organizations and some experiments disrupt the organization.

- 4 Laboratory experiments.** In a laboratory experiment, the environment is controlled to eliminate extraneous influences, which is both an advantage and disadvantage. It is an advantage since it eliminates competing explanations for the observed changes, and it is a disadvantage since it creates an artificial environment that does not necessarily represent reality.

In laboratory and field experiments, the variable we control is called the *independent variable* since we decide when it will be presented, in what form, or how much. The *dependent variables* refer to the variables that are measured to see if the independent variable had an influence. For example, in a study that tests whether financial incentives influence productivity, the independent variable is the change in financial incentives, while the dependent variable is the level of productivity.

Data Collection Methods. Four of the most frequently used methods in collecting research data include observations, interviews, questionnaires, and archival data. Each of these methods has advantages and disadvantages and is appropriate for a particular type of research.

- 1 Observations.** Direct observations allow us to accurately record specific behaviors, but these observations sometimes influence behavior. This problem was recognized in the Hawthorne experiments (1927-1935) and has come to be known as the *Hawthorne effect*: when people know they are being observed, they tend to behave differently.⁹
- 2 Interviews.** Interviews can be used to assess personal feelings and attitudes. A *nondirective interview*, where employees talk about issues important to them, provides a rich and meaningful description for a researcher. This type of interview is particularly helpful when a researcher does not know what to look for and is searching for an explanation. The major disadvantage of nondirective interviews is that they are not reliable. What individuals say in an interview tends to vary from time to time and may be highly influenced by the unique circumstances of the interview. To increase the reliability of interviews, researchers can develop a *patterned interview* schedule in which they ask specific written questions and the interviewee may even be given a list of alternatives for making a multiple-choice answer. A highly patterned interview, however, fails to generate the richness, diversity, and creative insight that makes interviewing so valuable, and it becomes more like a verbal questionnaire.
- 3 Questionnaires.** One of the major advantages of a questionnaire is that it can be used to collect extensive information from a large sample of people at the same time. Furthermore, questionnaire data can be conveniently analyzed using a variety of statistical procedures. Most well-developed questionnaires are usually reliable and valid measures of specific variables.
- 4 Archival Data.** Archival data refer to the information contained in the personnel files and historical records of a company, such as financial reports, attendance records, accident reports, application forms, grievance statements, exit interviews, and performance evaluations. Sometimes this information is referred to as *unobtrusive measures* since the nature of the data and the way they are obtained do not influence how employees behave.¹⁰ The advantages of using archival data are that they already exist and they provide a long-term perspective. Unobtrusive measures may also be more accurate than direct measures in some situations. For example, adults may not be willing to admit their interest in the hatching-chick display at the National Museum of Science and Industry in Chicago. Therefore, a better measure showing the public's great interest in this display is a record of how frequently the linoleum must be replaced in front of this display. Likewise, to assess the interest of students in different library books, an

alternative to asking them about their interest is measuring the dust on the top of each book or counting how many times each book has been checked out.

Discussion Questions

- 1 What do we mean when we say that an organization is an *open social system* that consists of *goal-directed behaviors* and *patterned activities*? Identify an organization in which you are a member and describe specific activities that illustrate these three characteristics.
- 2 A group of friends who play string instruments get together every Thursday night just to practice and play together and occasionally they perform at wedding receptions and funerals. Would this group be considered an organization? What are its patterned activities, inputs, transformation process, and outputs? How are its outputs recycled to provide additional inputs?
- 3 What are some illustrations of the differences between organizational efficiency and effectiveness? What are the potential consequences of confusing these two terms?
- 4 What is a theory? Describe two informal theories you have created to explain things you have observed and explain your thinking.

Notes

1. Daniel Katz and Robert L. Kahn, *The Social Psychology of Organizations*, 2nd ed. (New York: Wiley, 1978).
2. Ibid., chap. 3.
3. Michael E. Porter, *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (New York: Free Press, 1980); Michael E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: Free Press, 1985).
4. Ibid., p. 52.
5. Alfred A. Marcus and Robert S. Goodman, "Victims and Shareholders: The Dilemmas of Presenting Corporate Policy During a Crisis," *Academy of Management Journal*, vol. 34 (1991), pp. 281-305; Anne S. Tsui, "A Multiple-Constituency Model of Effectiveness: An Empirical Examination of the Human Resource Sub-Unit Level," *Administrative Science Quarterly*, vol. 35 (September 1990), pp. 458-483.
6. Kurt Lewin, "The Research Center for Group Dynamics at the Massachusetts Institute of Technology," *Sociometry*, vol. 8 (1945), pp. 126-135.
7. Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1952).
8. Melvin H. Marx, "The General Nature of Theory Construction," *Theories of Contemporary Psychology*, ED. Melvin H. Marx (New York: McMillan, 1963), pp. 4-46.
9. Fritz J. Roethlisberger and William J. Dickson, *Management and the Worker*, (Cambridge: Harvard University Press, 1939, 1967).
10. Eugene J. Webb, Donald T. Campbell, Richard D. Schwartz, and Lee Sechrist, *Unobtrusive Measures: Non-reactive Research in the Social Sciences*. (Chicago: Rand-McNally, 1966).

