

16.2: Organizational Structures and Design

1. What are mechanistic versus organic organizational structures?

First, an **organizational structure** is a system for accomplishing and connecting the activities that occur within a work organization. People rely on structures to know what work they should do, how their work supports or relies on other employees, and how these work activities fulfill the purpose of the organization itself.

Second, **organizational design** is the process of setting up organizational structures to address the needs of an organization and account for the complexity involved in accomplishing business objectives.

Next, **organizational change** refers to the constant shifts that occur within an organizational system—for example, as people enter or leave the organization, market conditions shift, supply sources change, or adaptations are introduced in the processes for accomplishing work. Through **managed change**, leaders in an organization can intentionally shape how these shifts occur over time.

Finally, **organizational development (OD)** is the label for a field that specializes in change management. OD specialists draw on social science to guide change processes that simultaneously help a business achieve its objectives while generating well-being for employees and sustainable benefits for society. An understanding of OD practices is essential for leaders who want to maximize the potential of their organizations over a long period of time.

Together, an understanding of these concepts can help managers know how to create and direct organizations that are positioned to successfully accomplish strategic goals and objectives.

To understand the role of organizational structure, consider the experience of Justin, a young manager who worked for a logistics and transportation company. His success at leading change in the United States gave his leaders the confidence that he could handle a challenging assignment: organize a new supply chain and distribution system for a company in Northern Europe. Almost overnight, Justin was responsible for hiring competent people, forming them into a coherent organization, training them, and establishing the needed infrastructure for sustained success in this new market.

If you were given this assignment, what would you do? How would you organize your employees? How would you help them understand the challenge of setting up a new organization and system? These are the kinds of questions that require an understanding of organizational structure, organizational design, organizational change, and organizational development.

One of the first issues Justin will need to address deals with how he will organize the system he will manage. “The decisions about the structure of an organization are all related to the concept of organizational design. There are two fundamental forms of structure to remember when designing an organization.

To address these questions, we need to be familiar with two fundamental ways of building an organization.

The **formal organization** is an officially defined set of relationships, responsibilities, and connections that exist across an organization. The traditional organizational chart, as illustrated in Figure 16.2.1, is perhaps the most common way of depicting the formal organization. The typical organization has a hierarchical form with clearly defined roles and responsibilities.

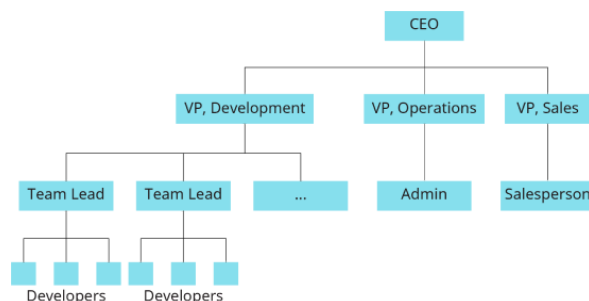


Figure 16.2.1 **Formal Organizational Chart** (Attribution: Copyright Rice University, OpenStax, under CC-BY 4.0 license)

When Justin sets up his formal organization, he will need to design the administrative responsibilities and communication structures that should function within an organizational system. The formal systems describe how flow of information and resources should occur within an organization. To establish the formal organization, he will identify the essential functions that

need to be part of the system, and he will hire people to fill these functions. He will then need to help employees learn their functions and how these functions should relate to one another.

The **informal organization** is sometimes referred to as the invisible network of interpersonal relationships that shape how people actually connect with one another to carry out their activities. The informal organization is emergent, meaning that it is formed through the common conversations and relationships that often naturally occur as people interact with one another in their day-to-day relationships. It is usually complex, impossible to control, and has the potential to significantly influence an organization's success.

As depicted in Figure 16.2.2 the informal organization can also be mapped, but it is usually very different than the formal organization. The chart you see in this example is called a network map, because it depicts the relationships that exist between different members of a system. Some members are more central than others, and the strength of relationships may vary between any two pairs or groups of individuals. These relationships are constantly in flux, as people interact with new individuals, current relationships evolve, and the organization itself changes over time.

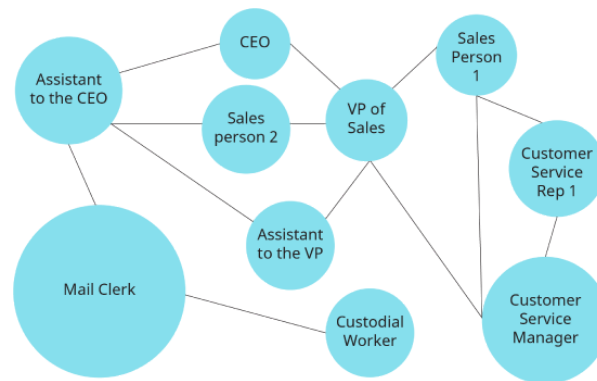


Figure 16.2.2 **Informal Organizational Chart** (Attribution: Copyright Rice University, OpenStax, under CC-BY 4.0 license)

The informal organization in Justin's design will form as people begin interacting with one another to accomplish their work. As this occurs, people will begin connecting with one another as they make sense of their new roles and relationships. Usually, the informal organization closely mirrors the formal organization, but often it is different. People quickly learn who the key influencers are within the system, and they will begin to rely on these individuals to accomplish the work of the organization. The informal organization can either help or hinder an organization's overall success.

In sum, the formal organization explains how an organization *should* function, while the informal organization is how the organizational *actually* functions. Formal organization will come as Justin hires and assigns people to different roles. He can influence the shape of the informal organization by giving people opportunities to build relationships as they work together. Both types of structures shape the patterns of influence, administration, and leadership that may occur through an organizational system.

As we continue our discussion of structure and design, we will next examine different ways of understanding formal structure.

Types of Formal Organizational Structures

Now, Justin will need to choose and implement an administrative system for delegating duties, establishing oversight, and reporting on performance. He will do this by designing a formal structure that defines the responsibilities and accountability that correspond to specific duties throughout an organizational system. In this section, we'll discuss the factors that any manager should consider when designing an organizational structure.



Figure 16.2.3 **Smoke coming out of chapel chimney** Almost all organizations have established organizational hierarchies and customs. As an older, large organization, the Catholic Church has a tall global structure with the pope in the Vatican at the apex. A process of succession has the cardinals voting on a new pope, and white smoke billowing out of the Sistine Chapel signals that they have chosen the new pope. (Credit: Jeffrey Bruno/ flickr/ Attribution 2.0 Generic (CC BY 2.0))

Bureaucracy

One of the most common frameworks for thinking about these issues is called the **bureaucratic model**. It was developed by Max Weber, a 19th-century sociologist. Weber's central assumption was that organizations will find efficiencies when they divide the duties of labor, allow people to specialize, and create structure for coordinating their differentiated efforts, usually within a hierarchy of responsibility. He proposed five elements of bureaucracy that serve as a foundation for determining an appropriate structure: specialization, command-and-control, span of control, centralization, and formalization.

Specialization

The degree to which people are organized into subunits according to their expertise is referred to as **specialization**—for example, human resources, finance, marketing, or manufacturing. It may also include specialization within those functions. For instance, people who work in a manufacturing facility may be well-versed in every part of a manufacturing process, or they may be organized into specialty units that focus on different parts of the manufacturing process, such as procurement, material preparation, assembly, quality control, and the like.

Command-and-Control

The next element to consider is the reporting and oversight structure of the organization. **Command-and-control** refers to the way in which people report to one another or connect to coordinate their efforts in accomplishing the work of the organization.

Span of Control

Another question addresses the scope of the work that any one person in the organization will be accountable for, referred to as **span of control**. For instance, top-level leaders are usually responsible for all of the work of their subordinates, mid-level leaders

are responsible for a narrower set of responsibilities, and ground-level employees usually perform very specific tasks. Each manager in a hierarchy works within the span of control of another manager at a level of the organization.

Centralization

The next element to consider is how to manage the flows of resources and information in an organization, or its **centralization**. A highly centralized organization concentrates resources in only one or very few locations, or only a few individuals are authorized to make decisions about the use of resources. In contrast, a diffuse organization distributes resources more broadly throughout an organizational system along with the authority to make decisions about how to use those resources.

Formalization

The last element of bureaucracy, **formalization**, refers to the degree of definition in the roles that exist throughout an organization. A highly formalized system (e.g., the military) has a very defined organization, a tightly structured system, in which all of the jobs, responsibilities, and accountability structures are very clearly understood. In contrast, a loosely structured system (e.g., a small, volunteer nonprofit) relies heavily on the emergent relationships of informal organization.

Mechanistic and Organic Structures

Using the principles of bureaucracy outlined above, managers like Justin have experimented with many different structures as way to shape the formal organization and potentially to capture some of the advantages of the informal organization. Generally, the application of these principles leads to some combination of the two kinds of structures that can be seen as anchors on a continuum (see Table 16.2.1).

Elements of Organizational Structure and Their Relationship to Mechanistic and Organic Forms		
Mechanistic	↔	Organic
Highly formalized	Standardization	Low
High/Narrow	Specialization	Low/Broad
Centralized	Centralization	Decentralized
Functional	Departmentalization	Divisional

Table 16.2.1 (Attribution: Copyright Rice University, OpenStax, under CC-BY 4.0 license)

On one end of the continuum is **mechanistic bureaucratic structure**. This is a strongly hierarchical form of organizing that is designed to generate a high degree of standardization and control. Mechanistic organizations are often characterized by a highly **vertical organizational structure**, or a “tall” structure, due to the presence of many levels of management. A mechanistic structure tends to dictate roles and procedure through strong routines and standard operating practices.

In contrast, an **organic bureaucratic structure** relies on the ability of people to self-organize and make decisions without much direction such that they can adapt quickly to changing circumstances. In an organic organization, it is common to see a **horizontal organizational structure**, in which many individuals across the whole system are empowered to make organizational decision. An organization with a horizontal structure is also known as a **flat organization** because it often features only a few levels of organizational hierarchy.

The principles of bureaucracy outlined earlier can be applied in different ways, depending on the context of the organization and the managers’ objectives, to create structures that have features of either mechanistic or organic structures.

For example, the degree of specialization required in an organization depends both on the complexity of the activities the organization needs to account for and on the scale of the organization. A more organic organization may encourage employees to be both specialists and generalists so that they are more aware of opportunities for innovation within a system. A mechanistic organization may emphasize a strong degree of specialization so that essential procedures or practices are carried out with consistency and predictable precision. Thus, an organization’s overall objectives drive how specialization should be viewed. For example, an organization that produces innovation needs to be more organic, while an organization that seeks reliability needs to be more mechanistic.

Similarly, the need for a strong environment of command-and-control varies by the circumstances of each organization. An organization that has a strong command-and-control system usually requires a vertical, tall organizational administrative structure. Organizations that exist in loosely defined or ambiguous environments need to distribute decision-making authority to employees, and thus will often feature a flat organizational structure.

The span of control assigned to any specific manager is commonly used to encourage either mechanistic or organic bureaucracy. Any manager's ability to attend to responsibilities has limits; indeed, the amount of work anyone can accomplish is finite. A manager in an organic structure usually has a broad span of control, forcing her to rely more on subordinates to make decisions. A manager in a mechanistic structure usually has a narrow span of control so that she can provide more oversight. Thus, increasing span of control for a manager tends to flatten the hierarchy while narrowing span of control tends to reinforce the hierarchy.

Centralization addresses assumptions about how an organization can best achieve efficiencies in its operations. In a mechanistic structure, it is assumed that efficiencies will occur in the system if the resources and decisions flow through in a centralized way. In an organic system, it is assumed that greater efficiencies will be seen by distributing those resources and having the resources sorted by the users of the resources. Either perspective may work, depending on the circumstances.

Finally, managers also have discretion in how tightly they choose to define the formal roles and responsibilities of individuals within an organization. Managers who want to encourage organic bureaucracy will resist the idea of writing out and tightly defining roles and responsibilities. They will encourage and empower employees to self-organize and define for themselves the roles they wish to fill. In contrast, managers who wish to encourage more mechanistic bureaucracy will use tools such as standard operating procedures (SOPs) or written policies to set expectations and exercise clear controls around those expectations for employees.

When a bureaucratic structure works well, an organization achieves an appropriate balance across all of these considerations. Employees specialize in and become highly advanced in their ability to perform specific functions while also attending to broader organizational needs. They receive sufficient guidance from managers to stay aligned with overall organizational goals. The span of control given to any one manager encourages them to provide appropriate oversight while also relying on employees to do their part. The resources and decision-making necessary to accomplish the goals of the organization are efficiently managed. There is an appropriate balance between compliance with formal policy and innovative action.

Functional Structures

Aside from the considerations outlined above, organizations will often set structures according to the functional needs of the organization. A functional need refers to a feature of the organization or its environment that is necessary for organizational success. A functional structure is designed to address these organizational needs. There are two common examples of functional structures illustrated here.

Product structures exist where the business organizes its employees according to product lines or lines of business. For example, employees in a car company might be organized according to the model of the vehicle that they help to support or produce. Employees in a consulting firm might be organized around a particular kind of practice that they work in or support. Where a functional structure exists, employees become highly attuned to their own line of business or their own product.

Geographic structures exist where organizations are set up to deliver a range of products within a geographic area or region. Here, the business is set up based on a territory or region. Managers of a particular unit oversee all of the operations of the business for that geographical area.

In either functional structure, the manager will oversee all the activities that correspond to that function: marketing, manufacturing, delivery, client support systems, and so forth. In some ways, a functional structure is like a smaller version of the larger organization—a smaller version of the bureaucracy that exists within the larger organization.

One common weakness of a bureaucratic structure is that people can become so focused on their own part of the organization that they fail to understand or connect with broader organizational activities. In the extreme, bureaucracy separates and alienates workers from one another. These problems can occur when different parts of an organization fail to communicate effectively with one another.

Some organizations set up a **matrix structure** to minimize the potential for these problems. A matrix structure describes an organization that has multiple reporting lines of authority. For example, an employee who specializes in a particular product might have both the functional reporting line and a geographic reporting line. This employee has accountability in both directions. The functional responsibility has to do with her specialty as it correlates with the strategy of the company as a whole. However, her

geographic accountability is to the manager who is responsible for the region or part of the organization in which she is currently working. The challenge is that an employee may be accountable to two or more managers, and this can create conflict if those managers are not aligned. The potential benefit, however, is that employees may be more inclined to pay attention to the needs of multiple parts of the business simultaneously.

concept check

1. What are different types of organizational structures?
2. What concepts should guide decisions about how to design structures?

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