Contents

Integrative Cases 621

CHAPTER

1 Organizations and Organization Design

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Learning Objectives

After reading this chapter you should be able to:

1. Discuss current challenges that organizations face.
2. Describe the importance of organizations in society.
3. Describe how the structural dimensions of organizations are shaped by contingencies organizations face.
4. Outline the evolution of organizational design.
5. Compare and contrast organic and mechanistic organization designs, including the contingency factors typically associated with each.
6. Explain the current trend toward bossless organization design.

Chapter Outline

Before reading this chapter, please check whether you agree or disagree with each of the following statements:

MANAGING BY DESIGN QUESTIONS

1 **An organization can be understood primarily by understanding the people who make it up.**

I AGREE _____ I DISAGREE _____

2 **The primary role of managers in business organizations is to achieve maximum efficiency.**

I AGREE _____ I DISAGREE _____

3 **A CEO's top priority is to make sure the organization is designed correctly.**

I AGREE _____ I DISAGREE _____

1.1 A Look Inside General Electric

General Electric (GE) has a glorious heritage. Founded by Thomas Edison in 1878 to generate and distribute electric power, GE became a world leader as a diversified industrial company. For decades, GE had a reputation for excellent and innovative management practices that other companies copied. As a model industrial company, General Electric's stock had been part of the Dow Jones Industrial Average since 1907.

Since the late 1800s, GE moved in and out of multiple businesses as a key part of its strategy and success. In 2019, GE was still a diversified worldwide conglomerate. Its industrial businesses included the power segment (gas and steam power systems), renewable energy (wind turbines), oil and gas (drilling systems), aviation (jet engines), healthcare (MRI machines), transportation (locomotives), and capital (loans to buy equipment).

However, by 2019 GE's value had fallen precipitously from its earlier prosperity, hitting a low of about 10 percent of its former value. How could a company that rose to fame as the best managed company in the world fall on such hard times? The answer to GE's ups and downs lies partly with how its leaders used organization design.

Reginald Jones was CEO from 1972 to 1981 and helped build GE's sophisticated strategic planning system. The GE conglomerate was composed of 43 autonomous businesses, within which it had 10 groups, 46 divisions, and 190 departments that participated in strategic planning. To help manage the massive amounts of paperwork and information required from 43 strategic plans, GE added a management layer to its structure to oversee sectors or groupings of businesses and reduce the load on top management. GE was a respected and highly successful company, and paperwork and bureaucracy seemed to increase along with organization size and complexity.

1.1a The Jack Welch Era 1981–2001

When he was hired as an engineer at GE in the early 1960s, Jack Welch hated the company's bureaucracy so much that he submitted his resignation after only six months on the job. Fortunately for GE, Welch's boss convinced him to stay and

make a difference. After rising to CEO, Welch was quick to begin busting the ever-growing GE bureaucracy. Near the end of his two-decade run as CEO, in 2001, *Fortune* magazine named Welch "Manager of the Century" to recognize his astonishing record at GE and also named GE the "Most Admired Company in the United States." What changes did Welch and GE managers make to achieve these accolades?

Strategy Changes. GE had begun using the advertising slogan "We bring good things to life" in the late 1970s and it continued in the Welch era, with Welch maintaining the strategy of being a conglomerate of diverse businesses. But Welch added a new key objective: each business must become the No. 1 or No. 2 competitor in its industry or risk being cut. GE's new strategy was to be a leader in each of its industries.

Changes in Structure. Welch attacked the bureaucratic layers within GE by first eliminating the sector level of management hierarchy that Reginald Jones created. He continued to fight the over-managed hierarchy until the number of levels was reduced from nine to as few as four. In many cases, department managers, subsector managers, unit managers, and sometimes supervisors were eliminated along with the sector managers. Now the CEO and top managers could deal directly with each business without going through multiple layers of hierarchy. Moreover, Welch stretched senior managers' span of control to 15 or more direct reports to force more delegation and autonomy downward.

Downsizing. Welch's assault on the bureaucracy also involved cutting down the number of employees. GE eliminated tens of thousands of managers and employees through delayering and de-staffing and even more through divestitures. The number of GE employees declined from about 404,000 in 1982 to 292,000 by 1989. Welch was given the nickname "Neutron Jack" because a neutron bomb killed people and left buildings intact. The nickname was reinforced by the CEO's replacement of 12 of his 14 business heads. During this period, Welch was named "toughest boss in America."

A New Culture. Welch wanted a corporate culture based on direct conversations of openness and candor, eyeball to eyeball, between managers and direct reports rather than via formal meetings and bureaucratic paperwork. A practice called Work-Out was one answer. Groups of up to 100 employees from a business unit would gather in a town meeting-style atmosphere. The business unit boss presented a challenge and left the room. Employees divided into teams and attacked problems and bureaucratic inefficiencies in their business unit with new, often dramatic, solutions. On the third day, bosses returned and listened to the teams' presentations. Bosses had about one minute to decide whether to accept or reject each proposal. One boss from an aircraft engine factory accepted 100 of 108 proposals, enabling a transformation in factory operations. Bosses often lost their jobs if they were unable to accept the dramatic change proposals from subordinates. Over 10 years, about 200,000 GE members participated in Work-Out.

Going Global. Welch also focused GE on global expansion. The U.S. market was not big enough. Welch encouraged international expansion by increasing the standard for business unit performance from being the "No. 1 or No. 2" business in your industry to being the No. 1 or No. 2 business in *the world*! To support each company's global effort, he hired a senior manager of International Operations to facilitate each business's overseas expansion. GE managers had to learn to think and act globally.

Performance Management, Stretch Goals, and Control. Welch and his most senior executives were responsible for the progress of GE's top 3,000 executives. They visited each company to review progress toward stated targets, often including "stretch" goals, another concept Welch introduced. Stretch goals used managers' "dreams" as targets that might be impossible to reach but would motivate exceptional accomplishment. In another move, Welch installed a manager evaluation system on a "vitality curve." This annual review process became known as "rank and yank," because the top 20 percent received generous rewards, the vital 70 percent were largely left alone, and the bottom 10 percent were encouraged to leave the company.

E-Business. About two years from retirement, Welch saw the potential of the Internet as "the biggest change I have ever seen." He thought a big, traditional company like GE might be afraid of the new technology, so he required each business unit to establish a full-time team charged with including strategic opportunities for the Internet. Digitizing the company was Welch's final major initiative.

To summarize, the Jack Welch era at GE was the most phenomenal in company history. Welch and GE earned prestigious awards, such as *Financial Times* naming GE the "Most Admired Company in the World." Moreover, Jack Welch became an icon for brilliant management and his name became known in popular culture. GE's market value increased an astonishing 27 times from $18 billion to $500 billion under Welch's guidance. In the year 2000, GE was the most valuable company in the world.

1.1b The Jeff Immelt Era 2001–2017

Welch personally chose Jeff Immelt to become GE's new CEO. Immelt had broad experience at GE, changing jobs often across GE Appliance, GE Plastics, and GE Healthcare, eventually running the healthcare unit.

The External Environment. Immelt and GE faced major environmental challenges almost from Day 1—starting with the September 11, 2001 terrorist attacks that stunned the world. GE also endured the 2002 stock market crash, an oil price collapse, and the 2008 collapse of Wall Street and the long global recession that followed.

Strategy Changes. Immelt shifted GE toward an industrial business focus consistent with GE's industrial roots while simultaneously learning to thrive in the Internet age. He added software capability to GE and predicted GE would become a major software company. Immelt also placed special emphasis on globalization and on more innovations via greater investments in research and development.

Innovation. Under Immelt's watch, GE developed a new concept called "reverse innovation." GE's innovation strategy for decades had been to develop high-end products in the United States and then sell the products internationally with modest adaptations to fit local conditions. Reverse innovation means to develop low-end products in poor countries and then sell those products in wealthy, well-developed countries. One example was the development of a cheap, portable ultrasound machine in China that was also sold successfully in the United States and Europe.

Sustainability. At GE, sustainability means aligning business strategy to meet societal needs, while minimizing environmental impact and advancing social development. Immelt pushed GE to embed sustainability at every level, from high-visibility

initiatives such as Ecomagination (building machines that produce cleaner energy, reduce greenhouse gas emissions, and reduce clean water use) down to day-to-day safety management for employees. Sustainability also means promoting diversity, investing for affordable healthcare, investing in clean energy, and meeting ambitious environmental goals to reduce emissions.

Big Decisions. Immelt's biggest decisions were to sell most of GE Capital and to acquire the French energy business Alstom. GE Capital provided a variety of financial services—credit cards, car loans, real estate loans, subprime mortgages, and equipment leasing. GE Capital was a highly profitable business. After the 2008 financial crisis, however, GE Capital was designated "too big to fail." Investors feared huge losses, so large parts of GE Capital were divested. This was a tough decision because in some previous good years GE Capital provided nearly half of GE's revenue and profits.

The Alstom acquisition decision proved to be something of a disaster. At $13 billion, it was GE's largest industrial acquisition. Managers soon realized not only that Alstom was operating inefficiently, but the demand for its gas-powered generation equipment was in decline. Immelt ordered Alstom to downsize by 12,000 employees. After paying $13 billion for Alstom, GE later took a write down of almost $20 billion.

More Globalization. Immelt pushed international business beyond Welch's earlier goals. He increased global revenue to 55 percent of total revenue compared to 30 percent when he took over. He explained that 90 percent of aircraft engines, 100 percent of gas turbines, and 50 percent of locomotives that GE manufactures leave the country. "That is where the customers are," he said. Immelt championed the launch of GE's Global Growth Organization (GGO), designed to work across the business units to increase sales in markets outside the United States.

Digitalizing for Big Data Analytics. Immelt sponsored a large research effort into a sophisticated data analytics platform called Predix. This cloud-based operating system would allow GE to put sensors on industrial equipment sold to customers (e.g., jet engines, locomotives) that would provide huge volumes of data to analyze machine performance and predict maintenance requirements. These data would enable GE to offer new and profitable services to customers.

To summarize Immelt's era at General Electric, most analysts thought GE fell behind rather than moved ahead. Immelt did all he could over his time as CEO to increase the value of GE stock, but over those 17 years share price declined by close to 30 percent while comparable companies (the S&P 500) rose by 124 percent. GE shed more than $150 billion in value compared to the $480 billion increase during Jack Welch's reign. Some analysts argued that the GE conglomerate should be broken up or dramatically slimmed down by selling its pieces and killing all investments in R&D and innovation. They criticized Immelt for being overly optimistic in his decisions and for not confronting the reality of GE's problems.

1.1c Events Since 2017

In 2017, GE announced that John Flannery, head of GE Healthcare, would follow Immelt as CEO. GE's stock price soon dropped 45 percent. GE hit rock bottom during late 2018 and early 2019—its market value was about 1/10 of its peak under Jack Welch. The stock dividend that had supported GE widows and seniors for

decades was cut to a single penny. The icing on the not-so-pretty cake was when GE was cut from its coveted position in the prestigious Dow Jones Industrial Average.

GE's Board of Directors soon decided that Flannery lacked the experience to handle the flow of crises at GE while he was still learning the company. The new CEO was 55-year-old Larry Culp, Lead Director on GE's Board, who had 14 years' experience as CEO of Danaher Corporation. People are counting on Culp to reinstate the kind of business culture at GE that inspired other companies to copy it. Culp thought GE had become too large and complicated to be managed effectively, and he decided to slim down the company, including selling GE's biotechnology business for $21 billion. During Culp's first few months as CEO in 2019, GE's stock started moving in a positive direction. With hope and hard work, managers, employees, and analysts expect the renewal of GE into an image of its former self will continue.[1]

1.2 Organization Design in Action

Welcome to the real world of organization design. The shifting fortunes of GE illustrate organization design in action. GE managers were deeply involved in organization design each day of their working lives—but many never realized it. Company managers didn't fully understand how the organization related to the environment or how it should function internally. Organization design gives us the tools to evaluate and understand how and why some organizations grow and succeed while others do not. It helps us explain what happened in the past, as well as what might happen in the future, so that we can manage organizations more effectively. Organization design concepts can help Larry Culp and other GE managers analyze and diagnose what is happening and the changes that will help GE keep pace with a fast-changing world. Organization design gives people the tools to explain the decline of GE and recognize the steps managers might take to keep the company competitive.

Similar problems have challenged numerous organizations. Toyota Motor Corporation, for example, had the best manufacturing system in the world and was the unchallenged auto quality leader for decades. But when top managers started implementing high-pressure goals for extensive global growth, the famous quality system was strained to a breaking point. By 2009, Toyota found itself in the middle of a crisis that culminated in the recall of more than 9 million cars due to quality problems.[2] Sales at Papa John's pizza chain dropped after a highly-publicized incident of founder John Schnatter using a racial slur led to the exposure of a corporate culture that belittled women and minorities. Schnatter resigned. The Board of Directors asked an outside firm to oversee an audit of the corporate culture, and the company began holding workshops on diversity and inclusion to try to fix the dysfunctional culture.[3] Or consider Kodak, the company that once ruled the photographic film business. Kodak invented one of the first digital cameras and spent hundreds of millions of dollars developing digital technology, but the fear of cannibalizing their lucrative film business paralyzed managers when the time came to go to market. Kodak filed for bankruptcy in 2012 and is now a shell of the company it was prior to the digital camera revolution.[4]

1.2a Topics

Each of the topics to be covered in this book is illustrated in the opening General Electric case. Indeed, managers at organizations such as General Electric, Toyota,

Kodak, and Papa John's are continually faced with a number of challenges. For example:

- How can the organization adapt to or control such external elements as competitors, customers, government, and creditors in a fast-paced environment?
- What strategic and structural changes are needed to help the organization attain effectiveness?
- How can the organization avoid management ethical lapses that could threaten its viability?
- What changes are needed to address the growing demand for organizations to pay attention to sustainability issues?
- How can managers cope with the problems of large size and bureaucracy?
- What is the appropriate use of power and politics among managers?
- How should internal conflict and coordination between work units be managed?
- What kind of corporate culture is needed and how can managers shape that culture?
- How much and what type of innovation and change is needed?

These are the topics with which organization theory and design is concerned. Organization design concepts apply to all types of organizations in all industries. Managers at Hyundai, for example, turned the Korean auto manufacturer once known for producing inexpensive no-frills cars with a poor reputation into the world's third largest automaker by relentlessly focusing on quality, cost-control, and customer satisfaction. After Google pulled its search engine and Gmail out of China in protest over censorship and government hacking, managers found a way to keep a foothold in the lucrative market by building relationships with local partners such as Mobvoi, Tencent Holdings Ltd., and others. Google has been negotiating to provide software and cloud-hosting services that would run on a data center owned by a Chinese local partner. Managers at the Swedish furniture giant IKEA are undertaking the most dramatic restructuring in company history to cope with rapid changes in shopping habits.[5] All of these companies are using concepts based in organization design. Organization design also applies to nonprofit organizations such as United Way, Best Friends Animal Society, local arts organizations, colleges and universities, and the Make-A-Wish Foundation, which grants wishes to terminally ill children.

BRIEFCASE

As an organization manager, keep these guidelines in mind:

Do not ignore the external environment or protect the organization from it. Because the environment is unpredictable, do not expect to achieve complete order and rationality within the organization. Strive for a balance between order and flexibility.

Organization design draws lessons from organizations such as GE, Google, and United Way and makes those lessons available to students and managers. As our opening example of GE shows, even large, successful organizations are vulnerable, lessons are not learned automatically, and organizations are only as strong as their decision makers. Research shows that many new companies don't survive past their fifth birthday, yet some organizations thrive for 50 or even 100 years. Organizations are not static; they continuously adapt to shifts in the external environment. Today, many companies are facing the need to transform themselves into dramatically different organizations because of new challenges in the environment.

1.2b Purpose of This Chapter

The purpose of this chapter is to explore the nature of organizations and organization design today. Organization design has developed from the systematic study of organizations by scholars. Concepts are obtained from living, ongoing organizations. Organization theory and design has a practical application, as illustrated

by the GE case. It helps managers understand, diagnose, and respond to emerging organizational needs and problems.

We first take a deeper look at the challenges today's managers and organizations face. The next section begins with a formal definition of the organization as an open system and then explores introductory concepts for describing and analyzing organizations, including various structural dimensions and contingency factors. We introduce the concepts of efficiency and effectiveness and describe the most common approach to measuring organizational performance. Succeeding sections examine the history of organization design, the distinction between mechanistic and organic designs, and how organization theory can help people manage complex organizations in a rapidly changing world. The chapter closes with a brief overview of the themes to be covered in this book.

1.2c Current Challenges

Research into hundreds of organizations provides the knowledge base to make GE and other organizations more effective. Challenges organizations face today are different from those of the past, and thus the concept of organizations and organization design is evolving. This chapter's BookMark describes two recent organizational forms that are altering the organizational landscape. The world is changing more rapidly than ever before, and managers are responsible for positioning their organizations to adapt to new needs. Some specific challenges today's managers and organizations face are globalization, intense competition, rigorous scrutiny of sustainability and ethical practices, the need for rapid response, and incorporating digital business and big data analytics.

Globalization. The cliché that the world is getting smaller is dramatically true today. Markets, technologies, and organizations are becoming increasingly interconnected.[6] Managers who can help their companies develop a global perspective are in high demand. For example, consider Ramon Laguarta, a native of Barcelona, Spain, who took over as CEO of PepsiCo in 2018, Indian American Sundar Pichai, CEO of Google, or Medtronic CEO Omar Ishrak, a Bangladesh native who was educated in the United Kingdom and worked in the United States for nearly two decades.

Today's successful organizations feel "at home" anywhere in the world. Companies can locate different parts of the organization wherever it makes the most business sense: top leadership in one country and technical brainpower and production in other locales. Related trends are *global outsourcing,* or contracting out some functions to organizations in other countries (Nike), and *strategic partnering* with foreign firms to gain a global advantage (Google). Cross-border acquisitions and the development of effective business relationships in other countries are vital to many organizations' success. Yet doing business on a global scale is not easy. After a new European Union privacy law went into effect in mid-2018, the French data protection authority fined Google 50 million euros (about $57 million) for not properly disclosing to users how it collected data to provide personalized ads.[7] Uber has pulled out of several global markets, including China, Russia, and Southeast Asia, after it got into trouble defying government regulations in various countries.[8] Another issue concerns outsourcing and contractor relationships. Several garment factory fires in Bangladesh and the collapse of another apparel plant that killed more than 1,100 workers put the spotlight on poor working conditions in that country.

BOOKMARK 1.0 HAVE YOU READ THIS BOOK?

The Vanishing American Corporation: Navigating the Hazards of a New Economy

By Gerald F. Davis

Is the large American corporation dead? No, but in his book *The Vanishing American Corporation,* Gerald F. Davis reminds us just how much the organizational landscape has changed since companies like General Motors, Xerox, and AT&T seemed to rule the world. Davis presents the astounding fact that the number of publicly held corporations in the United States declined by half in less than 20 years, from a high of 7,322 in 1996 to 3,659 in 2015. Why are huge companies shrinking, declining, and sometimes disappearing altogether?

NEW FORMS FOR A NEW CENTURY

One important factor is that new organization forms have emerged that seem a better fit for today's business environment. The large corporation, Davis says "fit well with the requirements of doing business in the 20th century, but it is increasingly bad for 21st century business." He describes two recent design approaches enabled by the twin forces of technology and globalization, labelling them by the companies that clearly exemplify them.

- *Nikefication: The Virtual Network Organization*. In a virtual network form, the company keeps high value-added tasks in-house (in Nike's case, sneaker design and marketing) and outsources other components (such as manufacturing of sneakers) to outside contractor companies, often in low-wage countries. A network form allows a smaller and less complex company to provide goods and services more rapidly and at lower cost. In one year, for instance, Vizio (with 200 employees) sold as many televisions in the United States as Sony (with 150,000 employees). Some companies operate entirely as network organizations, but with the Internet and a growing availability of contractors, "Nikefication is now standard practice across corporate America" Davis points out.
- *Uberization: The Platform-Based Organization.* A newer type of organization, best demonstrated by the ride-hailing service Uber, uses a specific combination of information and communication technologies to connect different groups of people and allow them to engage in mutually-beneficial exchanges. "Such organizations provide the digital platform for a market that matches those who have tasks to do with self-starters willing to do them," Davis writes. Uber, for example, provides the platform that matches customers who need a ride to Uber driver-partners, who are "not employees (absolutely not!) but independent micro-entrepreneurs." This organization form reduces labor costs, enables a company to be extremely agile, and maximizes the speed of customer service.

WHAT DOES IT ALL MEAN?

Davis presents both positive and negative consequences for individuals and societies. With the decline of large corporations and the emergence of new forms, a lifelong career with a single company is a thing of the past. Hierarchies are flattened, so people no longer have a clear path for advancing their careers. They are not employees and have no physical workplace where they meet with others. However, these new forms also offer opportunities. Entrepreneurs and managers can shape businesses that are more local and community based, that give people greater opportunities for participation, and that pay more attention to sustainable business practices. The virtual network and digital platform organization designs will be discussed in Chapters 3 and 9.

The Vanishing American Corporation, by Gerald F. Davis, is published by Berrett-Koehler Publishers.

The problem for organizations such as Walmart, H&M, Target, Apple, Amazon and other big companies that outsource is that similar poor working conditions exist in other low-wage countries such as Pakistan, Cambodia, Indonesia, and Vietnam that produce much of the world's clothing and other products.[9]

Intense Competition. The growing global interdependence creates new advantages, but it also means that the environment for companies has become extremely complex and extremely competitive. Customers want low prices for quality goods and services, and the organizations that can meet that demand will win. Outsourcing firms in low-wage countries can often do work for 50 to 60 percent less than companies based in the United States, for instance, so U.S. firms that provide similar

services have to search for new ways to compete or go into new lines of business.[10] One entrepreneur who developed a new type of battery for notebook computers decided to have it manufactured by a factory in Shenzhen, China. She wanted to produce the product in the United States, but U.S. contract manufacturers wanted millions of dollars up front, a demand not made by any of the manufacturers she met with in China.[11]

Companies in all industries are feeling pressure to drive down costs, keep prices low, and meet shifting demands. Retailers provide a stark example. Tesco, the largest supermarket chain in the United Kingdom, implemented a price-cutting campaign and is slashing thousands of jobs to trim costs as it faces growing competition from discount chains Aldi and Lidl and online shopping sites. Executives at firms including Macy's, J. C. Penney, Family Dollar, and Gap announced the closing of additional stores in early 2019, reflecting a failure to adapt as competition and shopping habits change. Other traditional retailers, including Walmart, Target, and Best Buy, on the other hand, have seen sales increase as their managers have found ways to compete with Amazon online while also finding the right mix of products and services to bring people into their physical stores.[12]

Sustainability, the Green Movement, and Ethics. Today's managers face tremendous pressure to "dial down their single-minded pursuit of financial gain and pay closer attention to [the organization's] impact on employees, customers, communities, and the environment."[13] People are demanding a stronger commitment by organizations to balance profit and public interest. Many companies are embracing the philosophy of sustainability, which refers to economic development that generates wealth and meets the needs of the current generation while saving the environment so future generations can meet their needs as well.[14] Sustainable development has emerged as a key goal for organizational growth and development.[15] As mentioned in the chapter opening case, Jeff Immelt pushed GE to embed sustainability at every level of the company.

Going green has become a new business imperative, driven by shifting social attitudes, new government policies, climate change, and the information technology that quickly spreads news of a corporation's negative impact on the environment. At Interface, an Atlanta-based carpet manufacturer, founder and former chairman Ray C. Anderson implemented "Mission Zero," a pledge to reduce the use and production of virgin raw materials and eliminate the company's impact on the environment. Current CEO Jay Gould is following in Anderson's footsteps, with Interface becoming in 2018 one of the first flooring manufacturers to announce a goal of carbon neutrality. "We really talk about four key stakeholders" Gould says about the company's commitment to sustainable business practices. "Our customers, our employees, our shareholders—and the environment."[16]

Managers are also feeling pressure from the government and the public to hold their organizations and employees to high ethical and professional standards. Following widespread moral lapses and corporate financial scandals, organizations are under scrutiny as never before. Facebook and other tech companies, for instance, have frequently been targeted in recent years by regulators and others demanding more oversight. In early 2019, a British parliamentary committee issued a blistering report concluding that internal Facebook e-mails prove that the company is willing to sacrifice user privacy for the sake of generating more advertising and increasing its revenue. "Social media companies cannot hide behind the claim of being merely a 'platform' and maintain that they have no responsibility themselves in regulating the content of their sites," the report said, calling for new laws regulating the industry. [17] Non-tech companies aren't immune

to the scrutiny. Consulting firm McKinsey & Company recently agreed to a $15 million settlement with the U.S. Justice Department to resolve an investigation into charges that the company failed to properly disclose its financial connections to other parties while working on bankruptcy cases.[18]

Speed and Responsiveness. A fourth significant challenge for organizations is to respond quickly and decisively to environmental changes, organizational crises, or shifting customer expectations. For much of the twentieth century, organizations operated in a relatively stable environment, so managers could focus on designing structures and systems that kept the organization running smoothly and efficiently. There was little need to search for new ways to cope with increased competition, volatile environmental shifts, or changing customer demands. Today, new products, new companies, and even entirely new industries rise and fall faster than ever.

As previously mentioned, the retail industry is undergoing a rapid and dramatic transformation. In what has been called the "retail apocalypse," dozens of retailers, including Payless, Aeropostale, Mattress Firm, Sears, Radio Shack, Bon Ton, and Toys "R" Us, have filed for bankruptcy in recent years. Some have gone out of business entirely, while others are closing stores and struggling to survive.[19] Online retail giant Amazon continues to change the game. Amazon is continuously experimenting with new ideas, pulling the plug quickly on those that don't work out. In early 2019, managers announced that Amazon would shut down all 87 of its U.S. pop-up stores, small kiosk stores that operated in locations such as malls, Kohl's stores, and Whole Foods Market locations. Meanwhile, the company continues to explore a brick-and-mortar strategy, opening more bookstores and 4-Star Stores (which sell products rated 4 stars or higher by Amazon.com customers) and planning for a new line of grocery stores. Founder and CEO Jeff Bezos believes most business decisions have to be made quickly "with somewhere around 70 percent of the information you wish you had."[20]

Managers in other industries must also think fast and act fast. The large consumer products firm Procter & Gamble is cutting its divisions from 10 to 6 and giving managers of those divisions more control and decision-making authority. "There is a need for greater agility," said CEO David Taylor. "Frankly, the volatility we see in many parts of the world . . . has increased meaningfully the speed of change."[21] Considering the turmoil and flux inherent in the world, managers and companies need a mindset of continuous reinvention to succeed, which typically means giving people on the frontlines the power to experiment and make decisions.[22]

Digital Organizations and Big Data Analytics. Today's realm of the Internet, social networking, blogs, online collaboration, web-based communities, podcasting, mobile devices, Twittering, Facebooking, YouTube-ing, and Skype-ing is radically different from the world many established managers are familiar and comfortable with.[23] The digital revolution has changed everything—not just how we communicate with one another, find information, and share ideas, but also how organizations are designed and managed, how businesses operate, and how employees do their jobs.

One significant aspect of the digital revolution is the use of **big data analytics**, which refers to technologies, skills, and processes for searching and examining massive sets of data to uncover hidden patterns and correlations.[24] GE attached data sensors to internal moving parts on its massive machines to analyze billions of data bits to assess wear and predict maintenance needs. Facebook uses the personal data you put on your page and tracks and monitors your online behavior along with everyone else's, then searches through all those data to identify and suggest potential friends. That kind of data

collected by Facebook and Google also explains why ads pop up on your computer screen when you use an Internet browser. Netflix drills through tons of data it collects on its subscribers interests to determine which new shows and movies to offer and how to promote them.[25] However, big data is not just for online companies. Walmart collects more than 2.5 petabytes of data every hour from customer transactions and uses those data to make better decisions (a petabyte is about a million gigabytes or the equivalent of about 20 million filing cabinets full of written data).[26]

The example of how Foot Locker uses data analytics illustrates the benefits and the challenges it can bring.

IN PRACTICE
Foot Locker

FREEDOMPIC/Shutterstock.com

In the fall of 2018, Foot Locker surprised customers and potential customers with an augmented-reality (AR) scavenger hunt, timed to coincide with the release of LeBron 16 King Court Purple sneakers in Los Angeles. People used their smartphones or mobile devices to unlock geo-targeted AR clues throughout the city that would eventualy lead them to where they could find the limited-edition footwear.

Foot Locker managers know that young, tech-savvy "sneakerheads" want tomorrow's shoes today. Meeting that desire means using new technology all across the organization. The company's technology staff has grown by 30 percent over the past three years, with teams working on data apps, interfaces between apps and operating systems, artificial intelligence, augmented reality, and machine learning. To keep in touch with a rapidly shifting environment, Foot Locker does four or five technology releases such as new mobile apps or customer-facing dot-coms a week, and CIO Pawan Verna says at times there are "four or five a day." The company also applies digital technology to rapidly turn digital dreams into real-world products and services.

Verna says the key challenge for Foot Locker in working with AI and emerging digital technology is security. "For example, when we have a product launch . . . billions of bots mimicking customers will try to render our websites and mobile apps useless by staging distributed denial-of-service attacks on our internal and cloud infrastructure." Another challenge is making sure the company is transparent with customers, vendors, and others about the data it collects and how it uses that information.[27]

REMEMBER THIS

- Organization design provides tools to understand, design, and manage organizations more successfully, including issues such as how to adapt to a changing environment, cope with increasing size and complexity, manage internal conflict and coordination, and shape the right kind of culture to meet goals.
- Managers face new challenges, including globalization, intense competition, rigorous scrutiny of sustainability, environmental, and ethical practices, the need for rapid response, and incorporating big data analytics and digital business.
- New organization forms, referred to as Nikefication (virtual network design) and Uberization (digital platform design) are influencing organizations in all industries.

1.3 What Is an Organization?

Organizations are hard to see. We see outcroppings, such as a tall building, a computer workstation, or a friendly employee, but the whole organization is vague and abstract and may be scattered among several locations, even around the world. We know organizations are there because they touch us every day. Indeed, they are so common that we take them for granted. We hardly notice that we are born in a hospital, have our birth records registered in a government agency, are educated in schools and universities, are raised on food produced on corporate farms, use our phones to hail a ride, purchase clothes, or have groceries delivered, buy a house built by a construction company and sold by a real estate agency, borrow money from a bank, turn to police and fire departments when trouble erupts, use moving companies to change residences, and receive an array of benefits from various government agencies.[28] Most of us spend many of our waking hours working in an organization of one type or another.

1.3a Definition

Organizations as diverse as a bank, a consumer products company, a ride-hailing service, a corporate farm, a social networking site, and a government agency have characteristics in common. The definition used in this book to describe organizations is as follows: **organizations** are (1) social entities that (2) are goal-directed, (3) are designed as deliberately structured and coordinated activity systems, and (4) are linked to the external environment.

An organization is a means to an end and it has to be designed to accomplish that end. It might be thought of as a tool or machine to get things done and achieve a specific purpose. The purpose will vary, but the central aspect of an organization is the coordination of people and resources to collectively accomplish desired goals.[29] An organization is not a building or a set of policies and procedures; organizations are made up of people and their relationships with one another. An organization exists when people interact with one another to perform essential functions that help attain goals. Managers and owners deliberately structure organizational resources to achieve the organization's purpose. However, even though work may be structured into separate departments or sets of activities, most organizations today are striving for greater horizontal coordination of work activities, often using teams of employees from different functional areas to work together on projects. Boundaries between departments, as well as those between organizations, are becoming more flexible and diffuse as companies face the need to respond to changes in the external environment more rapidly. An organization cannot exist without interacting with customers, suppliers, competitors, and other elements of the external environment. Some companies are even cooperating with their competitors, sharing information and technology to their mutual advantage. Exhibit 1.1 shows the organization as an **open system** that obtains inputs from the external environment, adds value through a transformation process, and discharges products and services back to the environment.

1.3b From Multinationals to Nonprofits

Some organizations are large, multinational corporations, such as General Electric, Google, and American Express; others are small, family-owned businesses; and still others are nonprofit organizations or governmental agencies. Some manufacture

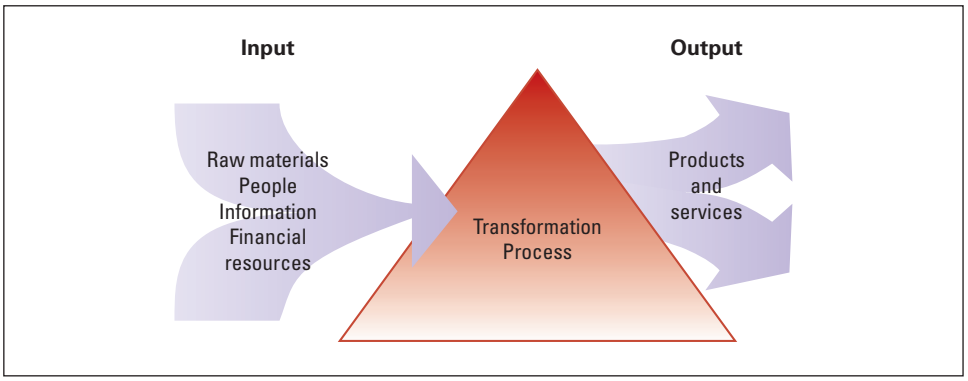


EXHIBIT 1.1
The Organization Is an Open System

products such as jet engines, flat-panel televisions, or smartphones, whereas others provide services such as legal representation, Internet and telecommunications services, mental health resources, or car repair. Later in this text, Chapter 8 will look at the distinctions between manufacturing and service technologies. Chapter 10 discusses size and life cycle and describes some differences between small and large organizations.

Another important distinction is between for-profit businesses and *nonprofit organizations*. All of the topics in this text apply to nonprofit organizations such as United Way, the Nature Conservancy, Habitat for Humanity, and St. Jude Children's Research Hospital, just as they do to businesses such as General Electric, Uber, Netflix, and Taco Bell. However, there are some important distinctions to keep in mind. The primary difference is that managers in businesses direct their activities toward earning money for the company and its owners, whereas managers in nonprofits direct much of their effort toward generating some kind of social impact. The unique characteristics and needs of nonprofit organizations present unique challenges for organizational leaders.[30]

Financial resources for government and charity nonprofits typically come from government appropriations, grants, and donations, rather than from the sale of products or services to customers. In businesses, managers focus on improving the organization's products and services to increase sales revenues. In nonprofits, however, services are typically provided to nonpaying clients, and a major problem for many organizations is securing a steady stream of funds to continue operating. Nonprofit managers, committed to serving clients with limited funds, must focus on keeping organizational costs as low as possible and demonstrating a highly efficient use of resources. Moreover, for-profit firms often compete with nonprofits for limited donations through their own philanthropic fundraising efforts.[31]

New forms of social welfare organizations, called hybrid or dual-purpose organizations, are designed to earn a profit and be self-sufficient rather than raise funds. Balancing the profit-seeking and social welfare sides of the organization is discussed in Chapter 7. Moreover, many nonprofit organizations, such as hospitals and private universities, do have a "bottom line" in the sense of having to generate enough revenues to cover expenses, buy new equipment, upgrade technology, and so forth, so managers often struggle with the question of what constitutes organizational effectiveness. It is easy to measure dollars and cents, but the metrics of success in dual-purpose and nonprofits are much more ambiguous. Managers have to measure intangible goals such as "improve public health," "make a difference in the lives of the disenfranchised," or "enhance appreciation of the arts."

BRIEFCASE

As an organization manager, keep this guideline in mind:

Consider the needs and interests of all stakeholders when setting goals and designing the organization to achieve effectiveness.

Managers in nonprofit organizations also deal with many diverse stakeholders and must market their services to attract not only clients (customers) but also volunteers and donors. This can sometimes create conflict and power struggles among organizations, as illustrated by the Make-A-Wish Foundation, which has found itself at odds with smaller, local wish-granting groups as it expands to cities across the United States. The more kids a group can count as helping, the easier it is to raise funds. Local groups don't want Make-A-Wish invading their turf, particularly at a time when charitable donations in general have declined. "We should not have to compete for children and money," says the director of the Indiana Children's Wish Fund. "They [Make-A-Wish] use all their muscle and money to get what they want."[32]

Thus, the organization design concepts discussed throughout this book, such as dealing with issues of power and conflict, setting goals and measuring effectiveness, coping with environmental uncertainty, implementing effective control mechanisms, and satisfying multiple stakeholders, apply to nonprofit organizations such as the Indiana Children's Wish Fund just as they do to businesses such as General Electric. These concepts and theories are adapted and revised as needed to fit the unique needs and problems of various small, large, profit, or nonprofit organizations.

1.3c Importance of Organizations

It may seem hard to believe today, but organizations are relatively recent in the history of humankind. Even in the late nineteenth century there were few organizations of any size or importance—no labor unions, no trade associations, and few large businesses, nonprofit organizations, or governmental agencies. What a change has occurred since then! The development of large organizations transformed all of society, and, indeed, the modern corporation may be the most significant innovation of the past 150 years.[33]

Organizations are all around us and shape our lives in many ways. But what contributions do organizations make? Why are they important? Exhibit 1.2 indicates seven reasons organizations are important to you and to society. First, recall that an organization is a means to an end. Organizations bring together resources to accomplish specific goals. A good example is Northrup Grumman, which builds nuclear-powered, Nimitz-class aircraft carriers. Putting together an aircraft carrier is an incredibly complex job involving 47,000 tons of precision-welded steel, more than 1 million distinct parts, 900 miles of wire and cable, and more than seven years of hard work by 17,800 employees.[34] How could such a job be accomplished without an organization to acquire and coordinate these varied resources?

Organizations also produce goods and services that customers want at competitive prices. Companies look for innovative ways to produce and distribute desirable goods and services more efficiently. Many manufacturing companies, for example, have redesigned their production processes, applying artificial intelligence, 3-D printing, advanced robotics, and other emerging technologies, to provide products more efficiently and at lower cost.[35] Redesigning organizational structures and management practices can also contribute to increased efficiency. Organizations create a drive for innovation rather than a reliance on standard products and outmoded approaches to management and organization design.

Organizations adapt to and influence a rapidly changing environment. Motorcycle maker Harley-Davidson, in business for well over a century, has been struggling for several years to adapt to a shifting environment. Motorcycle sales overall are declining, and Harley's customer base is made up largely of aging baby-boomers.

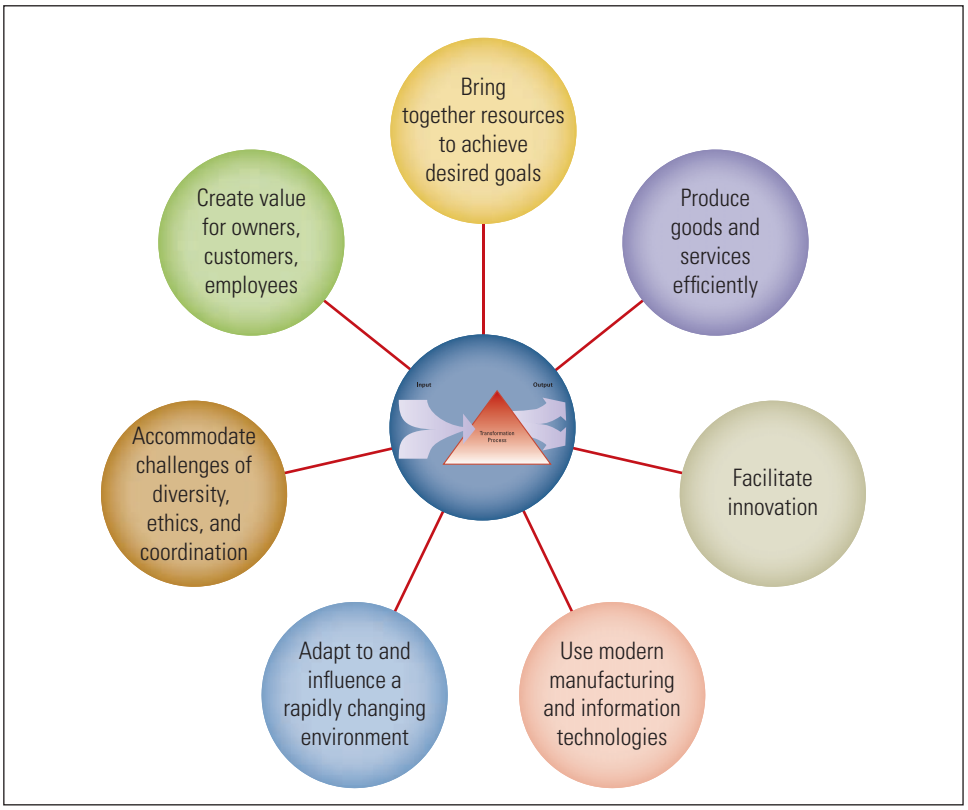


EXHIBIT 1.2
Importance of Organizations

Although Harley has improved efficiency at many of its plants and come out with new models to attract younger riders, the company is still under pressure. In early 2019, Harley announced that its profit for the fourth quarter of 2018 was effectively zero.[36] One company that illustrates how organizations adapt to a changing environment is the fast fashion company Zara.

IN PRACTICE
Zara SA

Zara opened its first clothing retail store in Spain in 1975. During the 1980s, Zara initiated "instant fashions" via a new design, manufacturing, and distribution process that dramatically reduced lead times for new trends. The new process made greater use of information technology and designers worked in teams rather than as individuals.

Zara grew rapidly. The company started expanding throughout Europe in the 1980s and to the United States in 1989. In 2014, Zara adopted a chip technology that allows the company to quickly take inventory via radio signals. The stockroom is notified when an item is sold so the item can be immediately replaced. Zara has nearly perfected a fast-response operation. Just four weeks are needed to design a new product and get finished goods into stores, compared with up to six months for other clothing retailers. It launches about 12,000 new designs each year. Shortening the product cycle means greater success responding to changing customer tastes.

Zara also responds quickly to concerns from customers and others in the environment. Zara received criticism for selling a small child's T-shirt that a customer said closely resembled uniforms worn by concentration camp inmates. Zara immediately removed the shirt and apologized. Greenpeace started a dialogue with Zara about toxic chemicals from clothing production. Zara committed to eradicating hazardous chemicals from its supply chain, becoming the largest retailer to raise awareness for the Greenpeace Detox Campaign and switching to toxic-free production.[37]

Zara and many other organizations have entire departments charged with monitoring the external environment and finding ways to adapt to or influence that environment.

Through all of these activities, organizations create value for their owners, customers, and employees. Managers analyze which parts of the operation create value and which parts do not; a company can be profitable only when the value it creates is greater than the cost of resources.

Finally, organizations must cope with and accommodate today's challenges of workforce diversity and growing concerns over sustainability and ethics, as well as find effective ways to motivate employees to work together to accomplish organizational goals.

REMEMBER THIS

- Organizations are open systems that obtain inputs from the external environment, add value through a transformation process, and discharge products and services back to the environment.
- Many types of organizations exist. One important distinction is between for-profit businesses, in which managers direct their activities toward earning money for the company, and nonprofit organizations, in which managers direct their efforts toward generating some kind of social impact. A newer kind of organization, the hybrid, does both at the same time.
- Organizations are highly important, and managers are responsible for shaping organizations to perform well and meet the needs of society.

1.4 Dimensions of Organization Design

Organizations shape our lives, and well-informed managers can shape organizations. The first step for understanding organizations is to examine the features that describe specific organizational design traits. These features describe organizations in much the same way that personality and physical traits describe people.

Exhibit 1.3 illustrates two types of interacting features of organizations: structural dimensions and contingency factors. **Structural dimensions** provide labels to describe the internal characteristics of an organization. They create a basis for measuring and comparing organizations. **Contingency factors** encompass larger elements that influence structural dimensions, including the organization's size, technology, environment, culture, and goals. Contingency factors describe the organizational setting that influences and shapes the structural dimensions. Contingency factors can be confusing because they represent both the organization and the environment. These factors can be envisioned as a set of overlapping elements that shape an organization's structure and work processes, as illustrated in Exhibit 1.3. To understand and evaluate organizations, one must examine both structural dimensions and contingency factors.[38] These features of organization design interact with one another and can be adjusted to accomplish the purposes listed earlier in Exhibit 1.2.

1.4a Structural Dimensions

Key structural dimensions of organizations include formalization, specialization, hierarchy of authority, complexity, and centralization.[39]

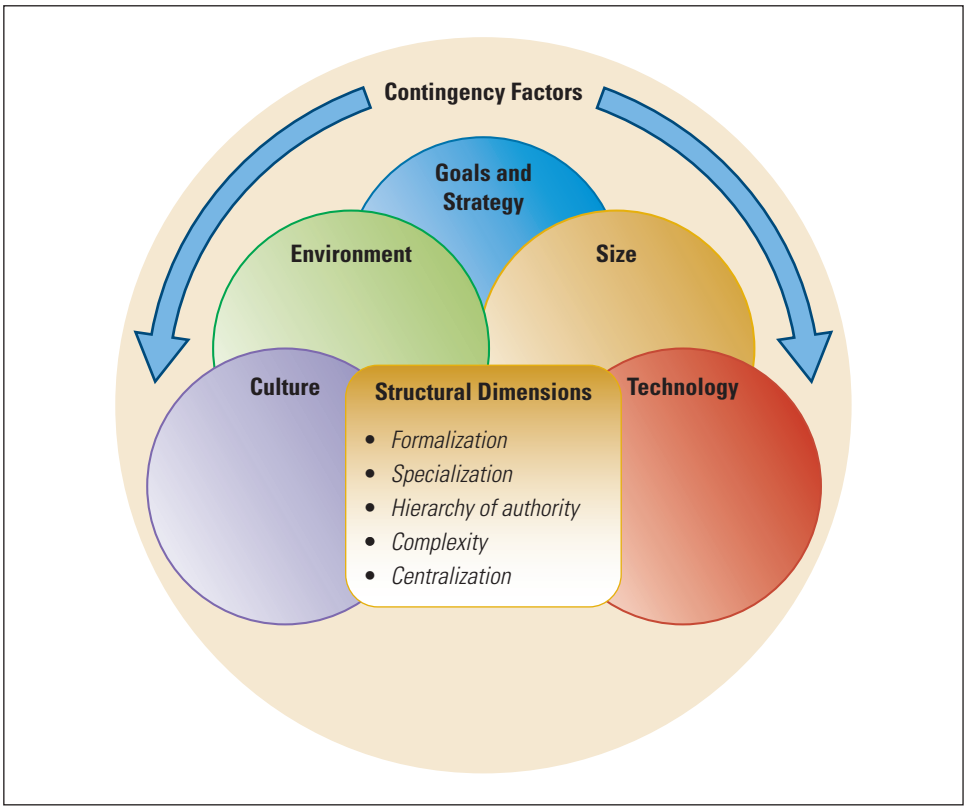


EXHIBIT 1.3
Interacting Structural Dimensions of Design and Contingency Factors

1. *Formalization* pertains to the amount of written documentation in the organization. Documentation includes procedures, job descriptions, regulations, and policy manuals. These written documents describe behavior and activities. Formalization is often measured by simply counting the number of pages of documentation within the organization. Large universities, for example, tend to be high on formalization because they have several volumes of written rules for such things as registration, dropping and adding classes, student associations, dormitory governance, and financial assistance. A small, family-owned business, in contrast, may have almost no written rules and would be considered informal.
2. *Specialization* is the degree to which organizational tasks are subdivided into separate jobs. If specialization is extensive, each employee performs only a narrow range of tasks. If specialization is low, employees perform a wide range of tasks in their jobs. Specialization is sometimes referred to as the *division of labor*.
3. *Hierarchy of authority* describes who reports to whom and the span of control for each manager. The hierarchy is depicted by the vertical lines on an organization chart, as illustrated in Exhibit 1.4. The hierarchy is related to *span of control* (the number of employees reporting to a supervisor). When spans of control are narrow, the hierarchy tends to be tall. When spans of control are wide, the hierarchy of authority will be shorter.
4. *Complexity* refers to the number of distinct departmental units or activities within the organization. For example, GE was incredibly complex. Complexity can be measured along three dimensions: vertical, horizontal, and spatial.

BRIEFCASE

As an organization manager, keep these guidelines in mind:

Think of the organization as a means to an end. It is a way to organize people and resources to accomplish a specific purpose. Describe the organization according to its degree of formalization, specialization, centralization, complexity, and hierarchy. Look at contingency factors of size, technology, the environment, goals and strategy, and the organizational culture.

Vertical complexity is the number of levels in the hierarchy. Different organizational levels possess different stores of knowledge and expertise.[40] Horizontal complexity is the number of departments or occupational specialties existing horizontally across the organization. Spatial complexity is the degree to which an organization's departments and personnel are dispersed geographically. The organization in Exhibit 1.4 has a vertical complexity of five levels. Its horizontal complexity at level 3 would be seven departments. Spatial complexity would be 1 since the offices are all in the same location.

5. *Centralization* refers to the hierarchical level that has authority to make decisions. When decision making is kept at the top level, the organization is centralized. When decisions are delegated to lower organizational levels, it is decentralized. Examples of organizational decisions that might be centralized or decentralized include purchasing equipment, establishing goals, choosing suppliers, setting prices, hiring employees, and deciding marketing territories. Jack Welch worked to decentralize GE.

To understand the importance of paying attention to structural dimensions of organization design, consider the following examples.

IN PRACTICE

Shizugawa Elementary School Evacuation Center and BP Transocean Deepwater Horizon Oil Rig

One newspaper reporter described Japan as "a rule-obsessed nation with a penchant for creating bureaucracy, designating titles and committees for even the most mundane of tasks." When the fishing village of Minamisanriku was ravaged by a tsunami, that propensity served a valuable purpose. The creation of rules, procedures, and authority structures helped create a sense of normalcy and comfort at the Shizugawa Elementary School Evacuation Center, for example. The group of evacuees created six divisions to oversee various aspects of daily life, such as cooking, cleaning, inventory control, and medical care, and each function had detailed rules and procedures to follow. The exhaustive and meticulous procedures kept the Center running smoothly and helped people cope with a devastating situation.

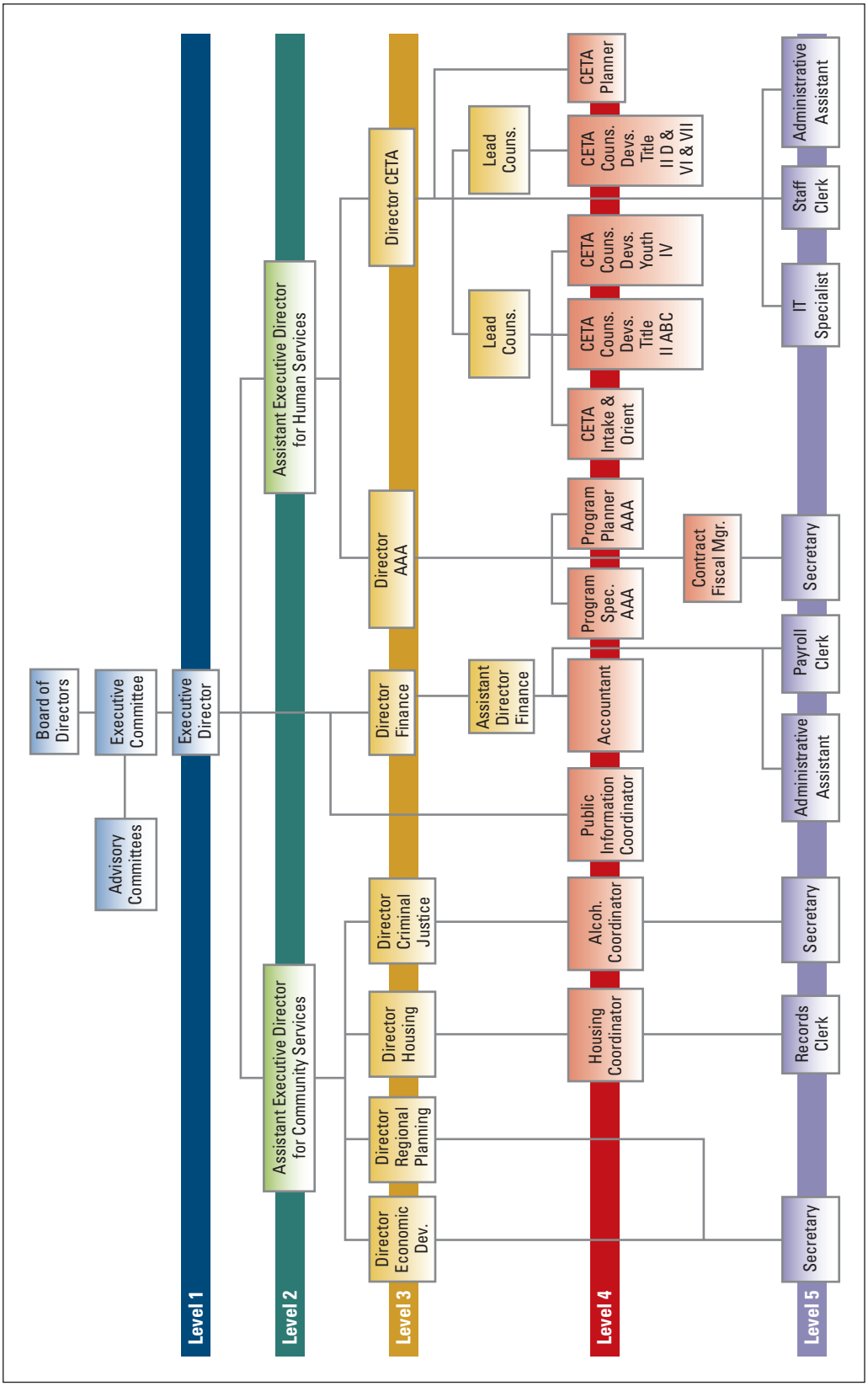
Contrast that smooth operation to what happened after a Transocean oil rig drilling a well for oil giant BP at Deepwater Horizon exploded in the Gulf of Mexico, killing 11 crew members and setting off an environmental disaster. Setting aside the question of what caused the explosion in the first place, once it happened the structure aboard the rig exacerbated the situation. Activities were so loosely organized that no one seemed to know who was in charge or what their level of authority and responsibility was. Twenty-three-year-old Andrea Fleytas issued a mayday (distress signal) over the radio when she realized no one else had done so, but she was chastised for overstepping her authority. One manager said he didn't call for help because he wasn't sure he had authorization to do so. Still another said he tried to call to shore but was told the order needed to come from someone else. Crew members knew the emergency shutdown needed to be triggered, but there was confusion over who had the authority to give the OK. "The scene was very chaotic," said worker Carlos Ramos. "There was no chain of command. Nobody in charge."[41]

1.4b Contingency Factors

Understanding structural dimensions alone does not help us understand or appropriately design organizations. It is also necessary to look at contingency factors, including size, organizational technology, the external environment, goals and strategy, and organizational culture.

1. *Size* can be measured for the organization as a whole or for specific components, such as a plant or division. Because organizations are social systems, size

EXHIBIT 1.4
Organization Chart Illustrating the Hierarchy of Authority for a Community Job Training Program



is typically measured by the number of employees. Other measures such as total sales or total assets also reflect magnitude, but they do not indicate the size of the human part of the system. GE was very large, with hundreds of thousands of employees.

2. *Organizational technology* refers to the tools, techniques, and actions used to transform inputs into outputs. It concerns how the organization actually produces the products and services it provides for customers and includes such things as flexible manufacturing, digital information systems, and the Internet. An automobile assembly line, a social media platform, a college classroom, a ride-hailing app, and an overnight package delivery system are technologies, although they differ from one another.
3. The *environment* includes all elements outside the boundary of the organization. Key elements include the industry, government, customers, suppliers, and the financial community. The environmental elements that affect an organization the most are often other organizations.
4. The organization's *goals and strategy* define the purpose and competitive techniques that set it apart from other organizations. Goals are often written down as an enduring statement of company intent. A strategy is the plan of action that describes resource allocation and activities for dealing with the environment and for reaching the organization's goals. Goals and strategies define the scope of operations and the relationship with employees, customers, and competitors.
5. An organization's *culture* is the underlying set of key values, beliefs, understandings, and norms shared by employees. These underlying values and norms may pertain to ethical behavior, commitment to employees, efficiency, or customer service, and they provide the glue to hold organization members together.[42] At GE, for example, Jack Welch implemented Work-Out sessions to create a culture of open and direct conversation among employees and managers.

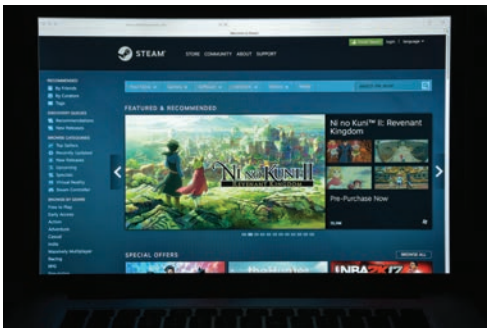
The five structural dimensions and five contingency factors discussed here are interdependent. Certain contingency factors will influence the appropriate degree of specialization, formalization, and so forth for the organization. For example, large organization size, a routine technology, and a stable environment all tend to create an organization that has greater formalization, specialization, and centralization. More detailed relationships among contingency factors and structural dimensions are explored throughout this book.

ASSESS YOUR ANSWER

1 An organization can be understood primarily by understanding the people who make it up.

ANSWER: *Disagree.* An organization has distinct characteristics that are independent of the nature of the people who make it up. All the people could be replaced over time while an organization's structural dimensions and contingency factors would remain similar.

The organizational features illustrated in Exhibit 1.3 provide a basis for measuring and analyzing characteristics that cannot be seen by the casual observer, and they reveal significant information about an organization. Consider, for example, the dimensions of Valve Software compared with those of Walmart.



Casimiro/Alamy Stock Photo

IN PRACTICE
Valve Software

Valve Software Corporation, the maker of classic games such as Counter-Strike, Half-Life, Left 4 Dead, Portal, and the popular digital distribution platform Steam, has been "boss free since 1996," as its website proclaims. Valve's unique organization structure caused a minor media blitz after someone posted the employee handbook online a few years ago, but Valve has been functioning smoothly without bosses since it was founded. Co-founders Gabe Newell and Mike Harrington, former Microsoft employees, wanted to create a flat, fast organization that allowed employees maximum flexibility. It sounds like a dream for employees, but many people don't adapt to the "no-structure structure" and leave for more traditional jobs. At Valve, everyone has a voice in making important decisions. Any employee can participate in hiring decisions, which are usually made by teams. There are no promotions, only new projects, with someone emerging as the de facto leader. Firings are rare, but teams decide together if someone isn't working out. Team meetings are highly informal and people are invited to share feelings as well as business ideas.

Compare Valve's approach to that of Walmart, which achieves its competitive edge through internal cost efficiency. A standard formula is used to build each store, with uniform displays and merchandise. Walmart's administrative expenses are the lowest of any chain. The distribution system is a marvel of efficiency. Goods can be delivered to any store in less than two days after an order is placed. Stores are controlled from the top, although store managers have some freedom to adapt to local conditions. Employees follow standard procedures set by management and have little say in decision making. However, performance is typically high, and most employees consider that the company treats them fairly.[43]

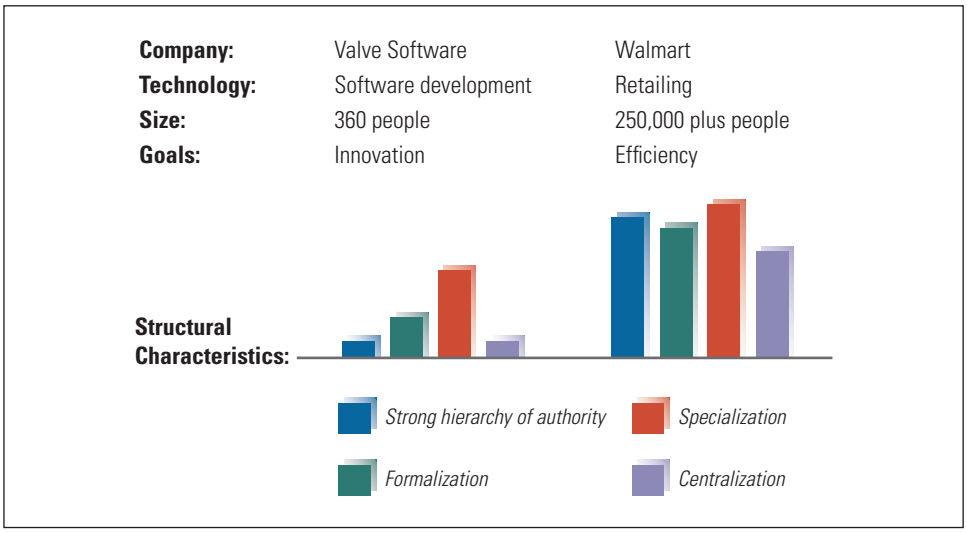
Exhibit 1.5 illustrates several structural dimensions and contingency factors of Valve Software and Walmart. Valve is a small organization that ranks very low with respect to formalization and centralization and has a medium degree of specialization. Horizontal collaboration to serve customers with innovative products is emphasized over the vertical hierarchy. Walmart is much more formalized, specialized, and centralized, with a strong vertical hierarchy. Efficiency is more important than new products and services, so most activities are guided by standard regulations. Rules are dictated from the top and communication flows down a strong vertical chain of command.

Structural dimensions and contingency factors can thus tell a lot about an organization and about differences among organizations. These various organization design features are examined in more detail in later chapters to determine the appropriate level of each structural dimension needed to perform effectively based on various contingency factors.

1.4c Performance and Effectiveness Outcomes

The whole point of understanding structural dimensions and contingency factors is to design the organization in such a way as to achieve high performance and effectiveness. Managers adjust various aspects of the organization to most efficiently

EXHIBIT 1.5
Differing Characteristics of Two Organizations



and effectively transform inputs into outputs and provide value. **Efficiency** refers to the amount of resources used to achieve the organization's goals. It is based on the quantity of raw materials, money, and employees necessary to produce a given level of output. **Effectiveness** is a broader term, meaning the degree to which an organization achieves its goals.

Defining goals and measuring the organization's progress toward attaining them is the most common way managers assess effectiveness. For example, at GE, described in the opening case, Jeff Immelt set new goals for sustainability, as well as goals in other areas, such as innovation and global growth. A small hardware store might set weekly sales goals. In a manufacturing company, managers might set specific targets in areas such as conformity-to-specifications quality, flexibility (both product mix and volume), and speed and timeliness of delivery.[44] To be effective, all organizations need clear, focused goals and appropriate strategies for achieving them. The concept of effectiveness, including goals and strategies and various approaches to measuring effectiveness, will be discussed in detail in Chapter 2.

An alternative approach to measuring effectiveness, the **stakeholder approach**, assesses diverse organizational activities by looking at what various organizational stakeholders want from the organization, and the satisfaction level of each. A **stakeholder** is any group within or outside of the organization that has a stake in the organization's outcomes. Examples of stakeholders include:

- *Customers,* who want high quality products and services provided in a timely manner at a reasonable price.
- *Employees,* who want adequate pay and benefits, good working conditions, and appropriate supervision.
- *Stockholders,* who want a good financial return on their investment.

Managers carefully balance the needs and interests of various stakeholders in setting goals and striving for effectiveness. The satisfaction level of each group can be assessed as an indication of the organization's performance.[45] The stakeholder approach will be discussed in detail in Chapter 7.

2 The primary role of managers in business organizations is to achieve maximum efficiency.

ASSESS YOUR ANSWER

ANSWER: *Disagree*. Efficiency is important, but organizations must respond to a variety of stakeholders, who may want different things from the organization. Managers strive for both efficiency and effectiveness in trying to meet the needs and interests of stakeholders. Effectiveness is often considered more important than efficiency.

REMEMBER THIS

- Structural dimensions and contingency factors provide labels for measuring and analyzing an organization. These characteristics may vary widely from organization to organization.
- Structural dimensions include formalization, specialization, hierarchy of authority, complexity, and centralization.
- Contingency factors include size, organizational technology, environment, goals and strategy, and culture.
- Managers strive to design organizations to achieve both efficiency and effectiveness.
- Defining clear goals and measuring progress toward achieving them is the most common approach to measuring effectiveness.

1.5 The Evolution of Organization Design

Organization design is not a collection of facts; it is a way of thinking about organizations and how people and resources are organized to collectively accomplish a specific purpose.[46] Organization design is a way to see and analyze organizations more accurately and deeply than one otherwise could. The way to see and think about organizations is based on patterns and regularities in organizational design and behavior. Organization scholars search for these regularities, define them, measure them, and make them available to the rest of us. The facts from the research are not as important as the general patterns and insights into organizational functioning gained from a comparative study of organizations. Insights from organization design research can help managers improve organizational efficiency and effectiveness, as well as strengthen the quality of organizational life.[47] One area of insight is how organization design and management practices have varied over time in response to changes in the larger society.

1.5a Historical Perspectives

You may recall from an earlier management course that the modern era of management theory began with the classical management perspective in the late nineteenth and early twentieth century. The emergence of the factory system during the Industrial Revolution posed problems that earlier organizations had not encountered. As work was performed on a much larger scale by a larger number of workers, people

began thinking about how to design and manage work in order to increase productivity and help organizations attain maximum efficiency. The classical perspective, which sought to make organizations run like efficient, well-oiled machines, is associated with the development of hierarchy and bureaucratic organizations and remains the basis of much of modern management theory and practice. In this section, we will examine the classical perspective, with its emphasis on efficiency and organization, as well as other perspectives that emerged to address new concerns, such as employee needs and the role of the environment. Elements of each perspective are still used in organization design, although they have been adapted and revised to meet changing needs. These different perspectives can also be associated with different ways in which managers think about and view the organization, called manager frame of reference. Complete the questionnaire in the "How Do You Fit the Design?" box to understand your frame of reference.

Efficiency Is Everything. Pioneered by Frederick Winslow Taylor, **scientific management** emphasizes scientifically determined jobs and management practices as the way to improve efficiency and labor productivity. Taylor proposed that workers "could be retooled like machines, their physical and mental gears recalibrated for better productivity."[48] He insisted that management itself would have to change and emphasized that decisions based on rules of thumb and tradition should be replaced with precise procedures developed after careful study of individual situations.[49] To use this approach, managers develop precise, standard procedures for doing each job, select workers with appropriate abilities, train workers in the standard procedures, carefully plan work, and provide wage incentives to increase output.

Taylor's approach is illustrated by the unloading of iron from railcars and reloading finished steel for the Bethlehem Steel plant in 1898. Taylor calculated that with correct movements, tools, and sequencing, each man was capable of loading 47.5 tons per day instead of the typical 12.5 tons. He also worked out an incentive system that paid each man $1.85 per day for meeting the new standard, an increase from the previous rate of $1.15. Productivity at Bethlehem Steel shot up overnight. These insights helped to establish organizational assumptions that the role of management is to maintain stability and efficiency, with top managers doing the thinking and workers doing what they are told.

The ideas of creating a system for maximum efficiency and organizing work for maximum productivity are deeply embedded in our organizations. A *Harvard Business Review* article discussing innovations that shaped modern management put scientific management at the top of its list of 12 influential innovations.[50]

How to Get Organized. Another subfield of the classical perspective took a broader look at the organization. Whereas scientific management focused primarily on the technical core—on work performed on the shop floor—**administrative principles** looked at the design and functioning of the organization as a whole. For example, Henri Fayol proposed 14 principles of management, such as "each subordinate receives orders from only one superior" (unity of command) and "similar activities in an organization should be grouped together under one manager" (unity of direction). These principles formed the foundation for modern management practice and organization design.

The scientific management and administrative principles approaches were powerful and gave organizations fundamental new ideas for establishing high productivity and increasing prosperity. Administrative principles in particular contributed to the development of **bureaucratic organizations**, which emphasized designing and

HOW DO YOU FIT THE DESIGN?

EVOLUTION OF STYLE

This questionnaire asks you to describe yourself. For each item, give the number "4" to the phrase that best describes you, "3" to the item that is next best, and on down to "1" for the item that is least like you.

1. My strongest skills are:
- ___ **a.** Analytical skills
- ___ **b.** Interpersonal skills
- ___ **c.** Political skills
- ___ **d.** Flair for drama

2. The best way to describe me is:
- ___ **a.** Technical expert
- ___ **b.** Good listener
- ___ **c.** Skilled negotiator
- ___ **d.** Inspirational leader

3. What has helped me the most to be successful is my ability to:
- ___ **a.** Make good decisions
- ___ **b.** Coach and develop people
- ___ **c.** Build strong alliances and a power base
- ___ **d.** Inspire and excite others

4. What people are most likely to notice about me is my:
- ___ **a.** Attention to detail
- ___ **b.** Concern for people
- ___ **c.** Ability to succeed in the face of conflict and opposition
- ___ **d.** Charisma

5. My most important leadership trait is:
- ___ **a.** Clear, logical thinking
- ___ **b.** Caring and support for others
- ___ **c.** Toughness and aggressiveness
- ___ **d.** Imagination and creativity

6. I am best described as:
- ___ **a.** An analyst
- ___ **b.** A humanist
- ___ **c.** A politician
- ___ **d.** A visionary

Scoring: Compute your scores according to the following rating. The higher score represents your way of viewing the organization and will influence your management style.

Structure = 1a + 2a + 3a + 4a + 5a + 6a = _____
Human Resource = 1b + 2b + 3b + 4b + 5b + 6b = _____
Political = 1c + 2c + 3c + 4c + 5c + 6c = _____
Symbolic = 1d + 2d + 3d + 4d + 5d + 6d = _____

Interpretation: Organization managers typically view their world through one or more mental frames of reference. (1) The *structural frame* of reference sees the organization as a machine that can be economically efficient, with vertical hierarchy and routine tasks that give a manager the formal authority to achieve goals. This managerial way of thinking became strong during the era of scientific management when efficiency was everything. (2) The *human resource frame* sees the organization as its people, with managerial emphasis given to support, empowerment, and belonging. This managerial way of thinking gained importance after the Hawthorne Studies. (3) The *political frame* sees the organization as a competition for scarce resources to achieve goals, with managerial emphasis on building agreement among diverse groups. This managerial way of thinking reflects the need for organizations to share information, have a collaborative strategy, and have all parts working together. (4) The *symbolic frame* sees the organization as theater, with managerial emphasis on symbols, vision, culture, and inspiration. This managerial way of thinking is important for managing an adaptive culture in a learning organization.

Which frame reflects your way of viewing the world? The first two frames of reference—structural and human resource—are important for newer managers at the lower and middle levels of an organization. These two frames usually are mastered first. As managers gain experience and move up the organization, they should acquire political and collaborative skills (Chapter 13) and also learn to use symbols to shape cultural values (Chapter 10). It is important for managers not to be stuck in one way of viewing the organization because their progress may be limited.

Source: Roy G. Williams and Terrence E. Deal, *When Opposites Dance: Balancing the Manager and Leader Within* (Palo Alto, CA: Davies-Black, 2003), 24–28. Reprinted with permission.

managing organizations on an impersonal, rational basis through such elements as clearly defined authority and responsibility, formal recordkeeping, and uniform application of standard rules. Although the term *bureaucracy* has taken on negative connotations in today's organizations, bureaucratic characteristics worked extremely well for the needs of the Industrial Age. One problem with the classical perspective, however, is that it failed to consider the social context and human needs.

What About People? Early work on industrial psychology and human relations received little attention because of the prominence of scientific management. However, a major breakthrough occurred with a series of experiments at a Chicago electric company, which came to be known as the **Hawthorne Studies**. Interpretations of these studies at the time concluded that positive treatment of employees improved their motivation and productivity. The publication of these findings led to a revolution in worker treatment and laid the groundwork for subsequent work examining treatment of workers, leadership, motivation, and human resource management. These human relations and behavioral approaches added new and important contributions to the study of management and organizations.

However, the hierarchical system and bureaucratic approaches that developed during the Industrial Revolution remained the primary approach to organization design and functioning well into the 1980s. In general, this approach worked well for most organizations until the past few decades. During the 1980s, though, it began to cause problems. Increased competition, especially on a global scale, changed the playing field.[51] North American companies had to find a better way.

Can Bureaucracies Be Flexible? The 1980s produced new corporate cultures that valued lean staff, flexibility and learning, rapid response to the customer, engaged employees, and quality products. Organizations began experimenting with teams, flattened hierarchies, and participative management approaches. For example, in 1983, a DuPont plant in Martinsville, Virginia, cut management layers from eight to four and began using teams of production employees to solve problems and take over routine management tasks. The new design led to improved quality, decreased costs, and enhanced innovation, helping the plant be more competitive in a changed environment.[52] Rather than relying on strict rules and hierarchy, managers began looking at the entire organizational system, including the external environment.

Since the 1980s, organizations have undergone even more profound and far-reaching changes. Flexible approaches to organization design have become prevalent. Recent influences on the shifting of organization design include the Internet and other advances in information technology and big data analytics; globalization and the increasing interconnection of organizations; the rising educational level of employees and their growing quality-of-life expectations; and the growth of knowledge- and information-based work as primary organizational activities.[53]

BRIEFCASE

As an organization manager, keep these guidelines in mind:

Be cautious when applying something that works in one situation to another situation. All organizational systems are not the same. Use organization design concepts to identify the correct structure and management systems for each organization.

1.5b It All Depends: Key Contingencies

Many problems occur when all organizations are treated as similar, which was the case with scientific management and administrative principles that attempted to design all organizations alike. The structures and systems that work in the retail division of a conglomerate will not be appropriate for the manufacturing division. The organization charts and financial procedures that are best for an entrepreneurial Internet firm like Instagram will not work for a large food processing plant at Oscar Mayer or a large nonprofit organization such as United Way.

A basic premise of this text is that effective organization design means understanding various contingencies and how organizations can be designed to fit contingency factors. Contingency factors include organization size, technology, environment, goals and strategy, and organizational culture, as defined previously and shown in Exhibit 1.3. **Contingency** means that one thing depends on other things, and for organizations to be effective there must be a "goodness of fit" between their design and various contingency factors.[54] What works in one setting may not work in another setting. There is no "one best way." Contingency theory means *it depends*. For example, a government agency may experience a certain environment, use a routine technology, and desire efficiency. In this situation, a management approach that uses bureaucratic control procedures, a hierarchical structure, and formalized communications would be appropriate. Likewise, free-flowing design and management processes work best in a high-tech company that faces an uncertain environment with a non-routine technology. The correct approach is contingent on the organization's situation. In the following section, we examine two fundamental approaches to organization design, along with the typical contingency factors associated with each approach.

3 A CEO's top priority is to make sure the organization is designed correctly.

ANSWER: *Agree.* Top managers have many responsibilities, but one of the most important is making sure the organization is designed correctly. Organization design organizes and focuses people's work and shapes their response to customers and other stakeholders. Managers consider both structural dimensions and contingency factors as well as make sure the various parts of the organization work together to achieve important goals.

ASSESS YOUR ANSWER

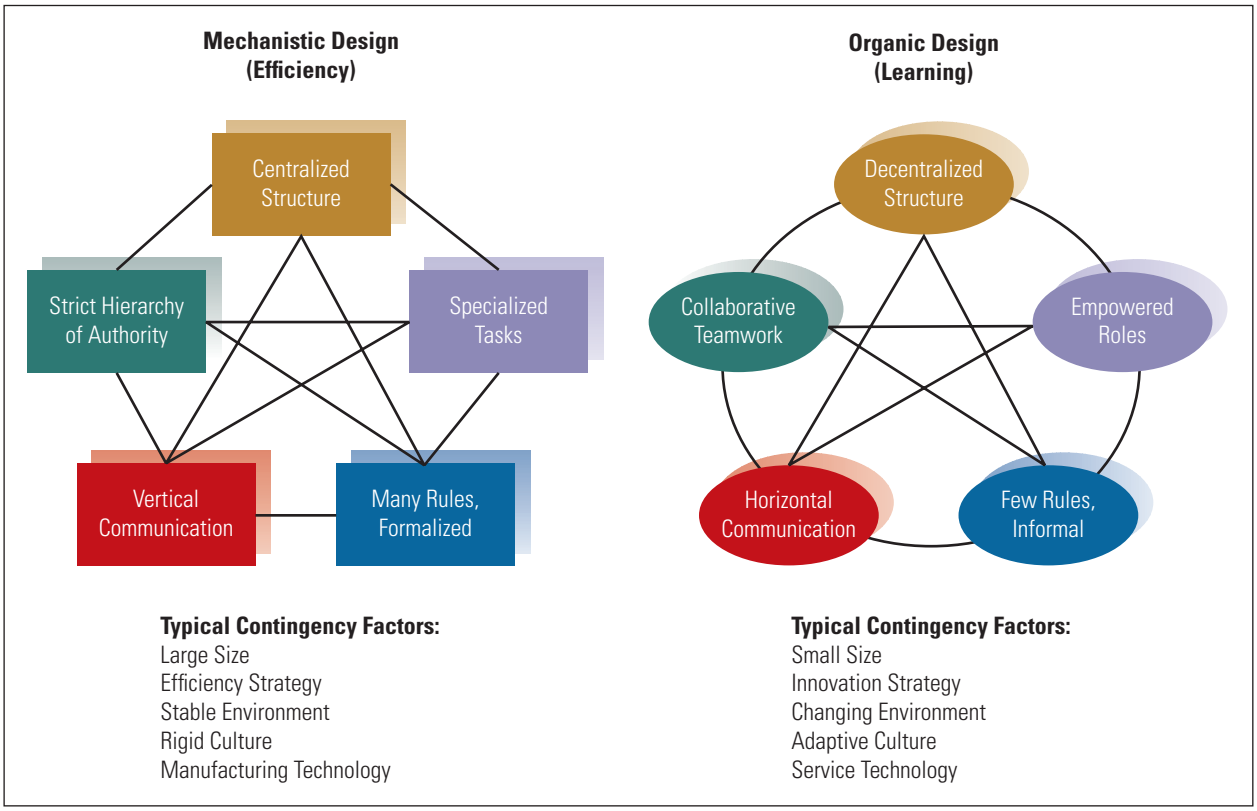
REMEMBER THIS

- Organization design perspectives have varied over time and managers can understand organizations better by gaining a historical perspective.
- Many problems occur when all organizations are treated as alike, which is the case with some historical design perspectives. Effective organization design also requires understanding various contingencies.
- Contingency means that one thing depends on other things, and for organizations to be effective there must be a "goodness of fit" between their design and their contingency factors, such as size, technology, environment, goals and strategy, and culture.

1.6 The Contrast of Organic and Mechanistic Designs

Organizations can be categorized along a continuum ranging from a mechanistic design to an organic design. Tom Burns and G. M. Stalker first used the terms *organic* and *mechanistic* to describe two extremes of organization design after

EXHIBIT 1.6
The Contrast of Organic and Mechanistic Designs



observing industrial firms in England.[55] In general, a **mechanistic** design means that the organization is characterized by machine-like standard rules, procedures, and a clear hierarchy of authority. Organizations are highly formalized and are also centralized, with most decisions made at the top. A mechanistic design is concerned primarily with efficiency. An **organic** design means that the organization is much looser, free-flowing, and adaptive. Rules and regulations often are not written down or, if written down, are loosely applied. People may have to find their own way through the system to figure out what to do. The hierarchy of authority is looser and not clear-cut. Decision-making authority is decentralized. The organic design is concerned primarily with learning and adaptation. Managers communicate a clear sense of direction and purpose and then empower employees at all levels. Knowledge and information are widely shared, and challenging the status quo is encouraged.[56] Various contingency factors will influence whether an organization is more effective with a primarily mechanistic or a primarily organic design. Exhibit 1.6 summarizes the differences in organic and mechanistic designs based on five elements: structure, tasks, formalization, communication, and hierarchy. The exhibit also lists the typical contingency factors associated with each type of design.

- *Centralized Versus Decentralized Structure.* Centralization and decentralization pertain to the hierarchical level at which decisions are made. In a mechanistic design, the structure is centralized, whereas an organic design uses

BRIEFCASE

As an organization manager, keep these guidelines in mind:

Think about whether the organization should have a mostly mechanistic design (associated with large size, efficiency strategy, a stable environment, a rigid culture, and a manufacturing technology) or a mostly organic design (associated with smaller size, innovation strategy, a changing environment, an adaptive culture, and a service technology).

decentralized decision making. **Centralization** means that decision authority is located near the top of the organizational hierarchy. Knowledge and control of activities are centralized at the top of the organization, and employees are expected to do as they are told. With **decentralization**, decision-making authority is pushed down to lower organizational levels. In a highly organic organization, knowledge and control of activities are located with employees rather than with supervisors or top executives. People are encouraged to take care of problems by working with one another and with customers, using their discretion to make decisions.

- *Specialized Tasks Versus Empowered Roles*. A **task** is a narrowly defined piece of work assigned to a person. With a mechanistic design, tasks are broken down into specialized, separate parts, as in a machine, with each employee performing activities according to a specific job description. A **role**, in contrast, is a part in a dynamic social system. A role has discretion and responsibility, allowing the person to use his or her judgment and ability to achieve an outcome or meet a goal. In an organization with an organic design, employees play a role in the team or department and roles may be continually redefined or adjusted.
- *Formal Versus Informal Systems*. With a mechanistic design, there are numerous rules, regulations, and standard procedures. Formal systems are in place to manage information, guide communication, and detect deviations from established standards and goals. With an organic design, on the other hand, there are few rules or formal control systems. Communication and information sharing are informal.
- *Vertical Versus Horizontal Communication*. Mechanistic organizations emphasize vertical communication up and down the hierarchy. Top managers pass information downward to employees about goals and strategies, job instructions, procedures, and so forth, and in turn ask that employees provide information up the hierarchy concerning problems, performance reports, financial information, suggestions and ideas, and so forth. In an organic organization, there is greater emphasis on horizontal communication, with information flowing in all directions within and across departments and hierarchical levels. The widespread sharing of information enables all employees to have complete information about the company so they can act quickly. In addition, organic organizations maintain open lines of communication with customers, suppliers, and even competitors to enhance learning capability.
- *Hierarchy of Authority Versus Collaborative Teamwork*. In organizations with a mechanistic design, there is a close adherence to vertical hierarchy and the formal chain of command. Work activities are typically organized by common function from the bottom to the top of the organization and there is little collaboration across functional departments. The entire organization is controlled through the vertical hierarchy. An organic design, on the other hand, emphasizes collaborative teamwork rather than hierarchy. Structure is created around horizontal workflows or processes rather than departmental functions, with people working across department and organizational boundaries to solve problems. Organic design thus encourages *intrapreneurship,* so that people across the organization are coming up with and promoting new ideas that respond to needs of customers.[57] Self-directed teams are the fundamental work unit in highly organic organizations.

REMEMBER THIS

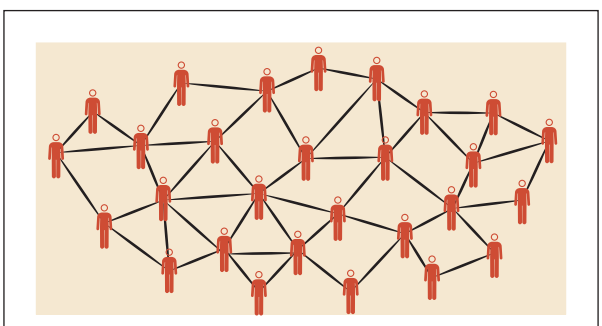
- Organization designs fall on a scale ranging from mechanistic to organic. Various contingency factors will influence whether an organization is more effective with a primarily mechanistic or a primarily organic design.
- A mechanistic design is characterized by a centralized structure, specialized tasks, formal systems, vertical communication, and a strict hierarchy of authority and is associated with contingency factors such as large size, an efficiency strategy, a stable environment, manufacturing technology, and a rigid culture.
- An organic design is characterized by a decentralized structure, empowered roles, informal systems, horizontal communication, and collaborative teamwork and is associated with small size, a learning and innovation strategy, a changing environment, service technology, and an adaptive culture.
- Challenges in today's environment are causing many organizations to shift to more organic designs, although mechanistic characteristics are still valuable for some situations.

1.7 The Emerging Bossless Design Trend

To some extent, organizations are still imprinted with the hierarchical, formalized, mechanistic approach that arose in the nineteenth century with Frederick Taylor. Yet current challenges require greater flexibility for most organizations.[58] One issue pushing the trend toward extreme decentralization is the growth of knowledge-based work, where ideas and expertise are the primary sources of value creation. In a knowledge-based organization, managers rarely have all the expertise needed to solve problems or create the products and services the organization needs to succeed. People at all levels must be continually contributing ideas. The need for rapid response as the environment or customer needs change quickly, and the ability to share information throughout the company with information technology are other factors leading to greater decentralization. When everyone has access to the information they need and the training to make good decisions, having layers of managers just eats up costs and slows down response time.

A few organizations have shifted to an extremely organic, "bossless" design.[59] In a bossless company, there are typically no job titles, no seniority, and no managers or executives. People work together on an equal basis, as illustrated in the visual in Exhibit 1.7 and described previously in the example of Valve. A few bossless work environments, such as W. L. Gore and the French company FAVI, have existed for decades, and this has become a real trend in recent years. Many bossless companies, such as Valve, Netflix (video streaming and rentals),

EXHIBIT 1.7
Everyone Is Nearly Equal in a Bossless Organization Design



and Peakon (human resources and employee engagement software) are in technology-related industries, but companies as diverse as GE Aviation (aviation manufacturing), W. L. Gore & Associates (best known for Gore-Tex fabrics), Whole Foods (supermarkets), and Semco (diversified manufacturing) have succeeded with bossless structures. Morning Star provides one of the most interesting examples of a bossless work environment.

IN PRACTICE
Morning Star

Many people are surprised to learn that the world's largest tomato processor is a company that has no titles or promotions, no hierarchy, and no managers. Morning Star, where 400 or so employees (called colleagues) produce over $700 million a year in revenue, relies on contract-style agreements called Colleague Letters of Understanding (CLOUs). If a colleague needs an expensive piece of equipment to fulfil her CLOU, she can buy it without seeking permission. Similarly, if someone needs an additional worker, he can go ahead and hire one. Founder Chris Rufer organized Morning Star based on the principles of self-management:

- No one has a boss
- Employees negotiate responsibilities with their peers
- Everyone can spend the company's money
- There are no titles or promotions
- Compensation is decided by peers

How does such a system work? As the company grew from the original 24 colleagues to around 400, problems occurred. Some people had trouble working in an environment with no bosses and no hierarchy. Thus, Rufer created the Morning Star Self-Management Institute to provide training for people in the principles and systems of self-management. Every colleague now goes through training, in groups of 10 to 15 people, to learn the skills of how to work effectively as part of a team, how to handle the responsibilities of "planning, organizing, leading, and controlling" that were formerly carried out by managers, how to balance freedom and accountability, how to understand and effectively communicate with others, and how to manage conflicts. "Around here," one colleague said, "nobody's your boss and everybody's your boss."[60]

In a bossless work environment such as that at Morning Star, nobody gives orders, and nobody takes them. Accountability is to the customer and the team rather than to a manager. There can be many advantages to a bossless work environment, including increased flexibility, greater employee initiative and commitment, and better, faster decision making.[61] However, bossless work environments also present new challenges. Costs may be lower because of reduced overhead, but money has to be invested in ongoing training and development for employees so they can work effectively within a bossless system and manage themselves. The culture also must engage employees and support the non-hierarchical environment.

REMEMBER THIS

- Current challenges require greater flexibility and decentralization for most organizations.
- Some organizations have shifted to an extremely organic, "bossless" design.
- Bossless work environments present challenges such as the need for ongoing training and development and a culture that engages employees.

1.8 Framework for the Book

How does a course in organization design differ from a course in management or organizational behavior? The answer is related to the concept called *level of analysis*.

1.8a Levels of Analysis

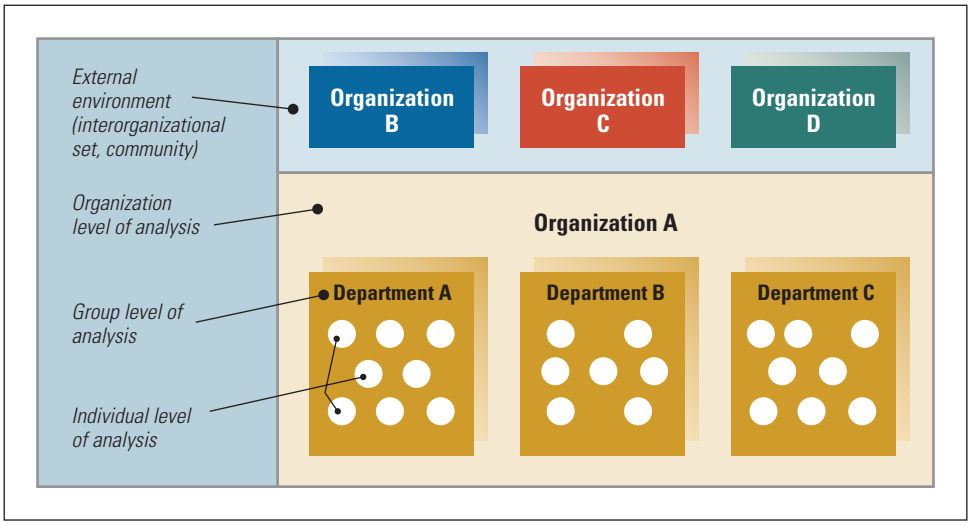
Each organization is a system that is composed of various subsystems. Organization systems are nested within systems, and one **level of analysis** has to be chosen as the primary focus. Four levels of analysis normally characterize organizations, as illustrated in Exhibit 1.8. The individual human being is the basic building block of organizations. The human being is to the organization what a cell is to a biological system. The next higher system level is the group or department. These are collections of individuals who work together to perform group tasks. The next level of analysis is the organization itself. An organization is a collection of groups or departments that combine into the total organization.

Organizations themselves can be grouped together into the next higher level of analysis, which is the interorganizational set and community. The inter-organizational set is the group of organizations with which a single organization interacts. Other organizations in the community make up an important part of an organization's environment.

Organization design focuses on the organizational level of analysis, but with concern for groups and the environment. To explain the organization, one should look not only at its characteristics but also at the characteristics of the environment and of the departments and groups that make up the organization. The focus of this book is to help you understand organizations by examining their specific characteristics, the nature of and relationships among groups and departments that make up the organization, and the collection of organizations that make up the environment.

Are individuals included in organization design? Organization design does consider the behavior of individuals, but in the aggregate. People are important, but

EXHIBIT 1.8
Levels of Analysis in Organizations



Source: Based on Andrew H. Van De Ven and Diane L. Ferry, *Measuring and Assessing Organizations* (New York: Wiley, 1980), 8; and Richard L. Daft and Richard M. Steers, *Organizations: A Micro/Macro Approach* (Glenview, IL: Scott, Foresman, 1986), 8.

they are not the primary focus of analysis. Organization design is distinct from organizational behavior.

Organizational behavior is the micro approach to organizations because it focuses on the individuals within organizations as the relevant units of analysis. Organizational behavior examines concepts such as motivation, leadership style, and personality and is concerned with cognitive and emotional differences among people within organizations.

Organization theory and design is a macro examination of organizations because it analyzes the whole organization as a unit. Organization design is concerned with people aggregated into departments and organizations and with the differences in structure and behavior at the organization level of analysis. Organization design might be considered the sociology of organizations, while organizational behavior is the psychology of organizations.

Organization design is directly relevant to top- and middle-management concerns and partly relevant to lower management. Top managers are responsible for the entire organization and must set goals, develop strategy, interpret the external environment, and decide organization structure and design. Middle management is concerned with major departments, such as marketing or research, and must decide how the department relates to the rest of the organization. Middle managers must design their departments to fit work-unit technology and deal with issues of power and politics, intergroup conflict, and information and control systems, each of which is part of organization theory and design. Organization design is only partly concerned with lower management because this level of supervision is concerned with employees who operate machines, create services, or sell goods. Organization design is concerned with the big picture of the organization and its major departments.

BRIEFCASE

As an organization manager, keep this guideline in mind:

Make yourself a competent, influential manager by using the frameworks that organization design provides to interpret and understand the organization around you.

1.8b Plan of the Book

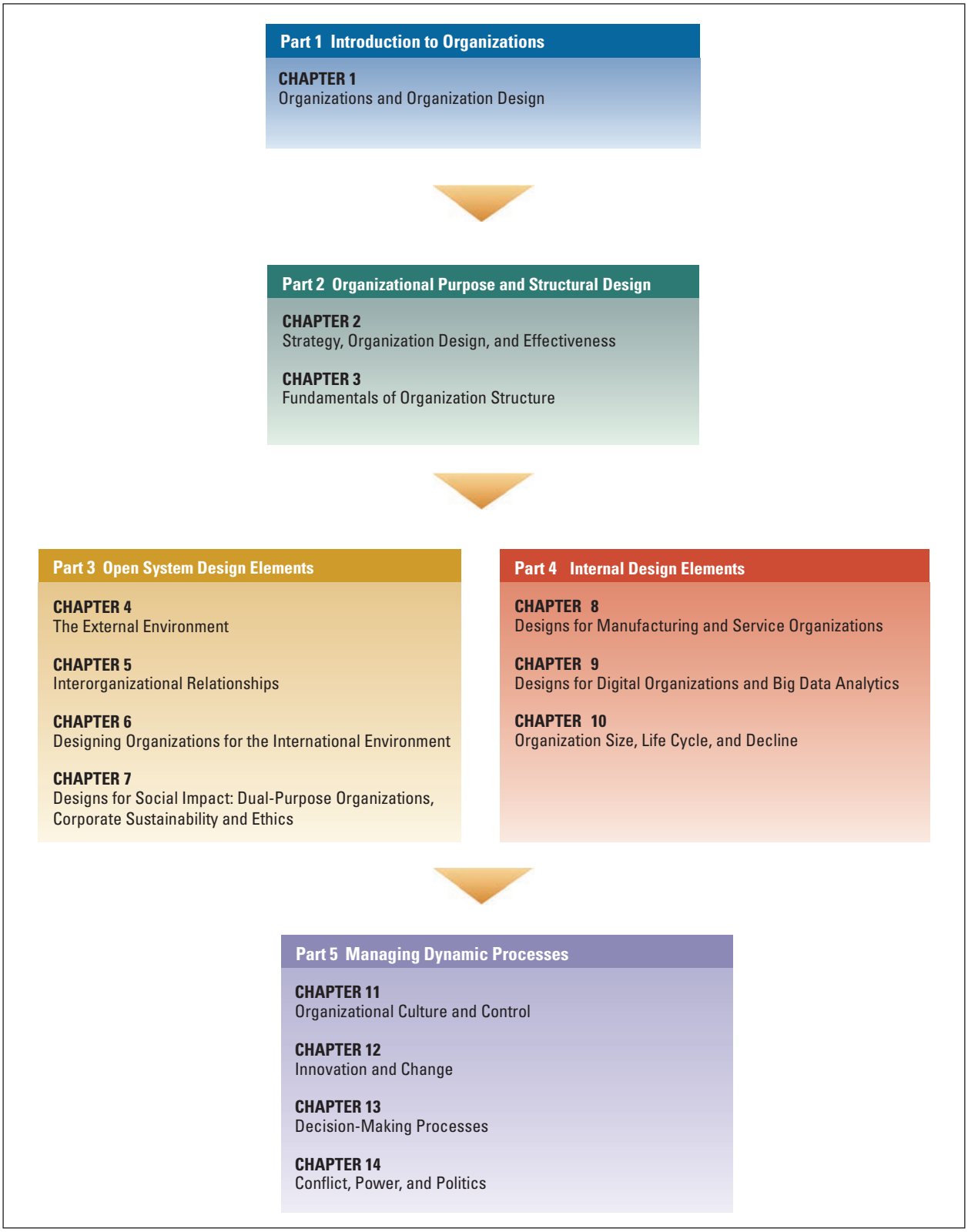
The topics within the field of organization design are interrelated. Chapters are presented so that major ideas unfold in logical sequence. The framework that guides the organization of the book is shown in Exhibit 1.9. Part 1 introduces the basic idea of organizations as social systems and the essential concepts of organization design. This discussion provides the groundwork for Part 2, which is about strategic management, goals and effectiveness, and the fundamentals of organization structure. This section examines how managers help the organization achieve its purpose, including the design of an appropriate structure, such as a functional, divisional, matrix, or horizontal structure. Part 3 looks at the various open system elements that influence organization structure and design, including the external environment, interorganizational relationships, the global environment, and designing for social impact.

Parts 4 and 5 look at processes inside the organization. Part 4 describes how organization design is related to the contingency factors of manufacturing and service technology, and organizational size and life cycle. Part 5 shifts to dynamic processes that exist within and between major organizational departments and includes topics such as innovation and change, culture and control, decision-making processes, managing intergroup conflict, and power and politics.

1.8c Plan of Each Chapter

Each chapter begins with opening questions to immediately engage the student in the chapter content. Theoretical concepts are introduced and explained in the body of the

EXHIBIT 1.9
Framework for the Book



chapter. Several *In Practice* segments are included in each chapter to illustrate the concepts and show how they apply to real organizations. Each chapter also contains a *How Do You Fit the Design?* questionnaire that draws students more deeply into a particular topic and enables them to experience organization design issues in a personal way. A *BookMark* is included in each chapter to present organizational issues that today's managers face in the real world. These short book reviews discuss current concepts and applications to deepen and enrich the student's understanding of organizations. The examples and book reviews illustrate the dramatic changes taking place in management thinking and practice. Key points for designing and managing organizations are highlighted in the *Briefcase* items throughout the chapter. A *Remember This* section at the end of each major section reviews and explains important theoretical concepts.

REMEMBER THIS

- Organization theory and design is a macro examination of organizations because it analyzes the whole organization as a unit.
- Most concepts in organization theory and design pertain to the top- and middle-management levels of the organization. This book is concerned more with the topics of those levels than with the operational-level topics of supervision and motivation of employees, which are discussed in courses on organizational behavior.

KEY CONCEPTS

administrative principles
big data analytics
bureaucratic organizations
centralization
contingency factors
contingency
decentralization
effectiveness
efficiency
Hawthorne Studies
level of analysis
mechanistic
open system
organic
organization theory and design
organizational behavior
organizations
role
scientific management
stakeholder
stakeholder approach
structural dimensions
task

DISCUSSION QUESTIONS

1. What is one contingency factor that might help explain the poor performance of GE when Jeffrey Immelt was CEO? Explain.
2. Describe some ways in which the digitalization of business has influenced or affected an organization with which you are familiar, such as your college or university, a local retailer or restaurant, a volunteer organization, a club to which you belong, or even your family. Can you identify both positive and negative aspects of this influence?
3. A handful of companies on the *Fortune* 500 list are more than 100 years old, which is rare. What organizational characteristics do you think might explain 100-year longevity?
4. Can an organization be efficient without being effective? Can an inefficient organization still be an effective one? Explain your answers.
5. What is the difference between formalization and specialization? Do you think an organization high on one dimension would also be high on the other? Discuss.
6. What does *contingency* mean? What are the implications of contingency theory for managers?
7. What are the primary differences between an organic and a mechanistic organization design? Which type of organization do you think would be easier to manage? Discuss.
8. What does it mean to say an organization is an open system? How is the stakeholder approach related to the concept of open systems?

9. What are some differences one might expect for measuring effectiveness expectations for a nonprofit organization versus a for-profit business? Do you think nonprofit managers have to pay more attention to stakeholders than do business managers? Discuss.

10. Early management theorists believed that organizations should strive to be logical and rational, with a place for everything and everything in its place. Discuss the pros and cons of this approach for organizations today.

CHAPTER 1 WORKSHOP Measuring Dimensions of Organizations

Individually or in a small group of two, interview two employees who are in different organizations or who are in the same organization but in different parts and doing different jobs. Ask each person to answer the following questions on a four-point scale from Definitely False, Mostly False, Mostly True, Definitely True. You will be asked to analyze the patterns of scores for the two respondents.

Formalization	Definitely False	Mostly False	Mostly True	Definitely True
1. There is a written description for my job.	_____	_____	_____	_____
2. There is a chart showing where people are in the hierarchy.	_____	_____	_____	_____
3. There is a written record of each person's job performance.	_____	_____	_____	_____
4. There is a written document that tells what to do in a crisis.	_____	_____	_____	_____
5. We have written procedures here for most situations.	_____	_____	_____	_____

Formalization Score _____. (Sum questions 1 to 5 giving four points for each Definitely True, three points for each Mostly True, two points for each Mostly False, and one point for each Definitely False.)

Centralization	Definitely False	Mostly False	Mostly True	Definitely True
6. A person who works in this job cannot expect to make all his or her own decisions.	_____	_____	_____	_____
7. Any decision I make has to have my boss's approval.	_____	_____	_____	_____
8. Even small matters are typically referred to someone higher up for a decision.	_____	_____	_____	_____
9. I participate in the decision to hire staff at my level.	_____	_____	_____	_____
10. How things are done here is left up to the person doing the work.	_____	_____	_____	_____

Centralization Score _____. (Sum questions 6 to 8, giving four points for each Definitely True, three points for each Mostly True, two points for each Mostly False, and one point for each Definitely False. *Reverse score* items 9 and 10, giving one point for each Definitely True, two points for each Mostly True, three points for each Mostly False, and four points for each Definitely False.)

Technology (Work Variety)	Definitely False	Mostly False	Mostly True	Definitely True
11. My job has new things happening every day.	_____	_____	_____	_____
12. One thing around here is the high variety of work.	_____	_____	_____	_____
13. There is something different to do here every day.	_____	_____	_____	_____
14. The work here is very routine.	_____	_____	_____	_____
15. People like me do about the same job in the same way most of the time.	_____	_____	_____	_____

Technology Score _____. (Sum questions 11 to 13, giving four points for each Definitely True, three points for each Mostly True, two points for each Mostly False, and one point for each Definitely False. *Reverse score* items 14 and 15, giving one point for each Definitely True, two points for each Mostly True, three points for each Mostly False, and four points for each Definitely False.)

Questions

1. What are the main differences between the three scores for the two people you interviewed?
2. Do you notice any patterns in the three scores, such as a higher score on one characteristic is associated with a higher or lower score on another characteristic?
3. Which of the interviewees seemed more satisfied in their work? Do you think satisfaction is related to their scores on formalization, centralization, and technology? Explain.

CASE FOR ANALYSIS | Craft Originalities, Inc.

Craft Originalities, Inc. was started by an entrepreneur named Bradley (Bibby) Burnett in rural Alabama. After a variety of failed attempts at self-employment, Bibby began to have some success making wooden toys in 1981. During the next few years, he put his efforts into making a collection of 15 toys and selling them via direct mail and some TV advertising. He had no sales representatives. One day a visiting salesperson offered to take on Bibby's line of toys, which was the start of using outside sales representatives to sell his product line. He never did hire an in-house salesperson, relying instead on outside companies that specialized in selling to retail outlets.

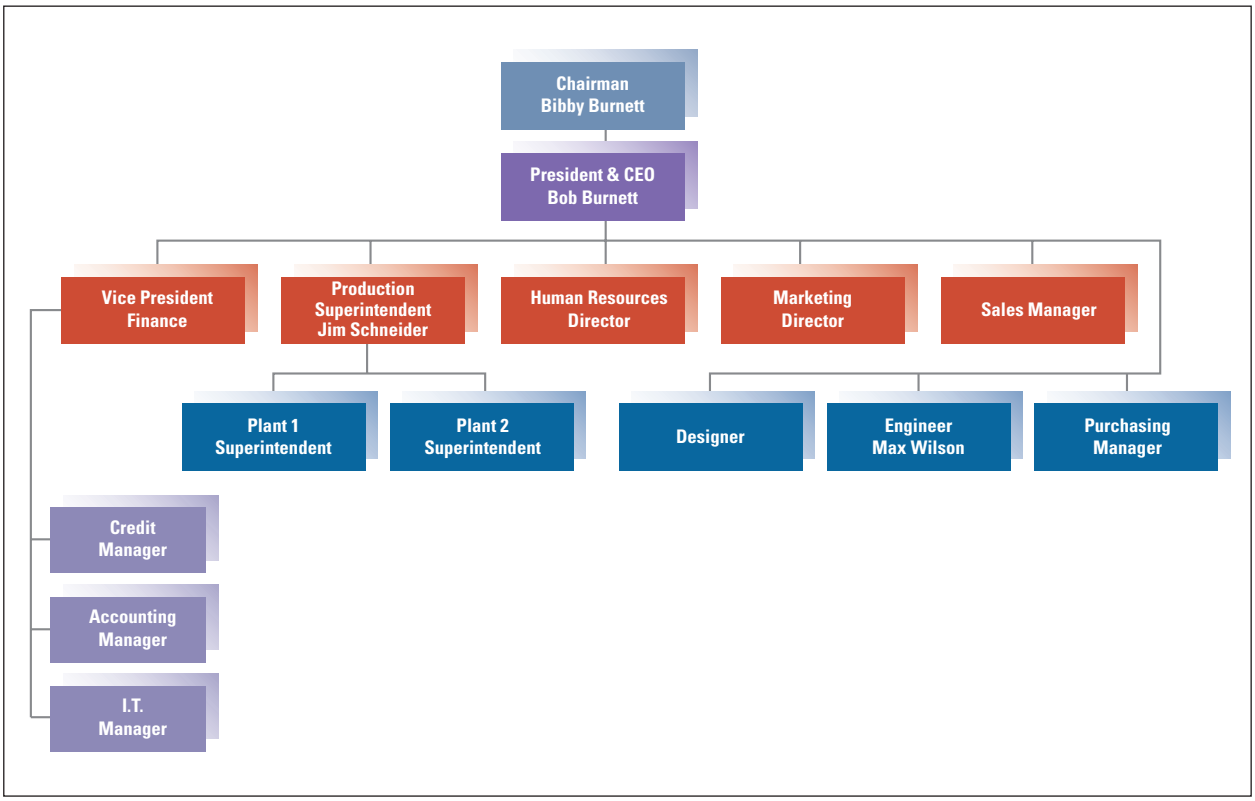
Bibby's first attempt at a tradeshow was successful. His last-minute entry into a regional gift show brought home $30,000 in sales. Unfortunately, he lacked the money to produce the toys, until a friend made him a loan. He acquired two old buildings on a nearby farm and started a small manufacturing shop. He and his wife started visiting all available tradeshows as a way to build business. Sales reached $150,000 in 1984, $300,000 in 1985, $500,000 in 1987, and over $1 million in 1988, doubling almost every year. In 1990 Bibby moved Craft Originalities, Inc. into a newer 60,000 square-foot building. Sales continued to increase through the mid-1990s, with total sales passing $15 million. By 2004 sales boomed to almost $70 million and then started leveling off.

By 2007, although sales were steady, the financial situation at Craft Originalities was tight. The company now occupied two 60,000 square foot buildings and had almost 800 employees. A second shift was in operation, but Bibby could see that production was generally inefficient. Then the 2007—2008 financial crisis hit, and sales dropped sharply. By 2010, the sharp decline in sales had stopped but the sales picture was still bad, and inventory space was maxed out with finished goods. Inventory tied up capital, so Craft Originalities added to the layoffs that had started in 2009.

At this point Bibby realized that he needed help. He had managed the fast growth period of his company, but he was older now and managing the decline seemed beyond his experience. He decided to ask his son Bob Burnett to run the business. Bob had not wanted to be part of the business when he graduated from college, so he had worked his way up in an auto parts manufacturer. Bob decided to replace Bibby as CEO of Craft Originalities, Inc.

The company was in critical condition. Sales had dropped off and there were losses or no profits for three years. The number of employees fell from 800 to about 550. Bob Burnett realized how bad things were: "When I took over, sales were running 30 percent off and we could not get credit from our suppliers. We were on a cash-only basis. Inventory was still high, accounts receivable were taking four months or more for us to collect, and manufacturing did not have a superintendent to oversee the operation." The situation looked grim. Bob was also unhappy with the low quality of company foremen and managers. Many positions were filled with his father's and mother's relatives and friends. There were no professional managers. Even the office area and accounting seemed informal and casual, not like a business should be run. Everything done informally without standardization reflected his dad's personality and leadership style. There were no policies and few written rules and regulations covering things like safety or vacations. When a big decision needed to be made, people went to Bibby. Key decisions reflected Bibby's free-form personality. This approach worked for many years, but it was not working now. The organization chart for Craft Originalities is shown in Exhibit 1.10.

EXHIBIT 1.10
Organization Chart for Craft Originalities, Inc., 2012



Marketing

Craft Originalities was one of four companies that accounted for about 60 percent of sales of wooden decorative products in the Southeastern United States. Sales were seasonal, peaking with Christmas, and doing well at Easter and Thanksgiving, with steady sales at a lower rate the rest of the year. The product line now consisted of over 800 items and included almost anything a customer could want. The largest item was a tea-cart and the smallest a clothespin-type desk paper clip. New products were developed at a rate of about 50 per year based on items Bibby saw at trade shows and would copy. Practically no items were dropped because there was no precise data on individual product sales or profit. Bob estimated that the top 250 products sold over 1,000 units a year. Bob wanted to spend most of his time on marketing. He attended all trade shows and learned firsthand what competitors were doing and what customers were buying. He felt the outside sales reps had not kept Craft Originalities informed about what was changing in the market. The Sales Manager was responsible for coordinating new products with the companies for whom the external sales representatives worked and for dealing with customer complaints or exchanges.

Bob decided to hire a local woman with good design talent to set up a design department. She soon came up with a new theme line of items that was very popular at trade shows and became the talk of the industry. He asked the marketing manager to engage a New York advertising agency for a professional program of advertising and publicity. Bob also applied an immediate price increase in an effort to end the year with a profit.

Production

There were two production plants within a 10-mile radius. Kiln dry lumber, mainly high-quality Ponderosa pine, was inventoried in truck trailers and covered sheds at the rear of each plant. The lumber sizes seemed totally random, dependent on the tree. The lengths ranged from 8 to 16 feet and the thickness ranged from 3/8" to 6/8".

The rough mill (raw lumber processed into useful pieces) foreman reviewed the batch of production orders he was given each week and decided on the "panels" of wood the plant would need. A panel is a sheet of wood milled to a desired thickness and with length and width dimensions needed for specific products. The necessary panels would be made in the rough mill from lumber or obtained by purchasing glued panels from vendors. Craft Originalities spent about as much on purchased panels as it did on raw lumber, paying about twice as much for a square-foot of panel as for a square-foot of lumber. Employees in the Surfacing department worked the wood to the desired thickness for the final product, which was the finished dimension plus some excess for sanding. Ripsaws cut the lumber to the needed width and cut-off saws took care of the length.

The plant superintendent worked with the machine room foreman to decide on the sequence in which orders would be processed. Scheduled due-dates for each department were written on the orders by the production control supervisor, who followed up on the actual flow of orders only if a crisis developed in the machine room, where workers shaped panels into the final form. The tools in the machine room included shapers, molders, routers, and borers, which required some skill to master. Work that used patterns and jigs lowered the skill requirements, although still needing skills that were higher than for most jobs in the plant. This part of the plant was the noisiest and dustiest.

In the third department, sanding, the wood pieces were sanded by women working mainly at individual stations. The sanded components were moved to a nearby temporary storage area on carts, which originated at machining. There were six to eight wooden parts in an average item. In addition, there were purchased items such as glass or metal parts.

The assembly foreman checked on the arrival of all parts for an order. Assembly began when all parts were available. Workers assembled the items using glue, screws, nail guns, or hammer and nails. Jigs assisted the work where possible, and usually only one person worked on an order. Little skill was needed for assembly, and dust and noise were not a problem in this area.

The assembled items moved to the separate finishing area. Here they were dipped by hand into stains and sprayed with several clear coats. After oven drying, the items proceeded to packing. Most items were packed individually into cartons made in the company's separate small plant. Finishing and packing employed about 50 people. The new finished goods warehouse was two miles away.

Most jobs did not require high skill levels. The average jobs in the rough mill and machine room, where the skilled jobs were located, required no more than five weeks to master because the workers usually had developed some skills in previous positions. Elsewhere in the plants, a week of training was usually adequate. Everyone but the supervisors and workers considered the work pace quite slow.

Production Problems

Bob felt that production efficiency was a major problem. From talking with machinery salespeople and other visitors to the plant, he believed the machinery was generally adequate. Based on what he knew about competitors' operations, he felt his labor cost must be reduced. His initial attempts to work with the plant superintendents and the various supervisors to systematically speed up output met with no success. The supervisors saw no need to identify improvements in the plant or to develop techniques for bringing about more efficiency. To help the supervisors begin to improve their operations, Bob scheduled a weekly production meeting starting in June 2010. At the meeting the supervisors were to examine the total dollar output and total costs for each plant for the past week, compare it to the labor goal of 32 percent, which was set by Bob, and think about what could be done to improve operations. Unfortunately, good data on each department's performance were not available. The plant superintendent and his supervisors volunteered no ideas about what specifically limited last week's output. Bob persisted and some discussion of problems began after about three months. Bob's opinion was that this kind of thinking and planning was not required under his father's management. The supervisors in general felt nothing was wrong in the plant and seemed puzzled at the thought of doing anything except continuing what they had always done. They had no experience working in other plants.

In March of 2011, after a good deal of thought and search, Bob hired two college-educated employees to help with the production system. The first was Jim Schneider, age 38, who was hired to be general superintendent over everyone in production in both plants, replacing the current superintendent, who went back to his previous job as a foreman. The other, Max Wilson, age 27, was to be manufacturing engineer. It appeared to Bob that the plant simply needed better management rather than any single big change that could be purchased from the outside. Both new people were college trained in business and engineering and had work experience in the wood industry.

Bob expected some resistance to the new hires from the replaced superintendent and most of the supervisors. The new hires were briefed on this problem. As expected, the change did not advance smoothly. Complaints and rumors were frequent, and Bob ignored them to the extent possible. However, after three months with the new people in place, the complaints persisted and—perhaps more importantly—the new superintendent did not appear to have command of people in the plants. He had not

developed an assessment of what needed to be changed and had no comprehensive plan for improvement. Bob also saw evidence that Jim had some major difficulties supervising people. One of the supervisors who did not appear to be part of the rumor campaign and was conscientiously concerned about the company, gave Bob examples of the new superintendent's mistakes. Bob felt that he may have made a mistake hiring Jim. Max's responsibilities had narrowed to mostly technical tasks. He was supervising the five-person repair crew, engineering some new products, examining procedures for producing samples of new products, and beginning to examine a major redesign of the rough mill area.

Major Competitor

Craft Originalities' major regional competitor was Saint Crafters, Inc. A manager of outside sales reps who was familiar with both Craft Originalities and Saint Crafters provided a comparison of the two companies to Bob. Demand for Saint Crafters' products exceeded their capacity, and the overflow demand, in this person's opinion, was the main reason Craft Originalities existed. Saint Crafters had no debt and its equipment was described as new. The company was located in a small community where the workers were highly skilled for this kind of business. The manager characterized the average Originalities worker as about two-thirds as capable as Saint Crafters' workers. The quality of manufacture of Saint Crafters' products was considered better than Craft Originalities. Moreover, Saint Crafters' manufacturing superintendent scheduled long runs in manufacturing with the objective of having three months' inventory of top priority items. It sounded like more of a mass production process rather than producing separate small batches for each new order the way Craft Originalities did.

The observer also noted that two-thirds of the equipment at Craft Originalities sat idle at any given time and that neither capacity nor optimum production mix had ever been analyzed. The largest production run he claimed to have seen had been about 250 pieces. The cost of each new setup was notable. He commented that Craft Originalities had the most informal and least structured or systematic operation he had ever seen, with the slowest pace for this type of work. The observer felt that the employees knew only the simplest way of doing a job. Only one person in the company, for example, was able to count the board feet of lumber. He stated that this was a skill that the smallest cabinet shop would have and that it was essential for any kind of usage control.

The Workforce

Bob was interested in newer concepts of management. He frequently referred to the latest book or sent a copy of an article to his managers. The behavioral writings made a lot of sense to him and he was interested in the concept of corporate culture. Participative management systems and teamwork environments were things Bob wanted Craft Originalities to try. However, he recognized his managers and the workforce were not ready for this approach. His managers manipulated more than cooperated, and the workers for the most part were neither highly skilled nor educated. When he discussed the workers' desires with the supervisors, he was told they just wanted a retirement program and higher pay, nothing else. Bob wondered whether this was what the supervisors wanted for themselves.

As a basis for considering a change in management style and culture, Bob contacted a professor from his alma mater and hired him to conduct an employee attitude survey. All employees completed the written questionnaire in small groups. The survey included questions developed specifically to assess the Craft Originalities' culture and employee attitudes. Although the wording was considered simple, when answering open-ended questions several of the workers did not understand words such as "stimulating" or "ambitious," and it sometimes became necessary to read the entire questionnaire to them.

The study showed that minorities accounted for 80 percent of the employees, with white females the largest group at 40 percent. The workforce was 58 percent female, 57 percent white, and 39 percent over 45 years old. Roughly as many people had been with the company under two years as over 10 years. The pay was only a little above the legal minimum, but many workers felt fortunate to have their jobs. There did not appear to be a morale crisis. Many of the questions pertained to aspects of the work culture that could be improved. A few of the statements and answer scores to the closed-ended questions are below. Each question was answered on a scale of 1 = strongly disagree to 5 = strongly agree:

My pay is fair for this kind of job.	2.26
My coworkers are good to work with.	4.14
I enjoy my work.	4.13
Morale is good here.	3.55
I like the way my supervisor treats me.	4.02
My complaints are heard by management.	3.22
The supervisors do a poor job.	2.35

I am fortunate to have this job.	3.95
Communications are poor.	2.91
I enjoy my work.	4.13
I look for ways to improve my work.	4.21
The company is well run.	3.29

The survey revealed no critical problems. However, the workers were relatively unsophisticated, and Bob was concerned they might not have expressed themselves accurately on the instrument, especially since other people were present and their supervisor may have read the questions to them.

Bob pondered what the survey results meant. He wondered whether there was any need to push ahead with a more participative culture. He still saw the need to improve production efficiency.

Questions

1. Assuming the survey scores are accurate, what conclusions can you draw about Craft Originalities' culture? What is your evidence?
2. If Craft Originalities adopted a mass production manufacturing process similar to its competitor, Saint Crafters, how do you think that would affect the attitude scores of the workers? Explain.
3. How do you think the rural environment might have influenced the lack of formalization and the casual work environment at Craft Originalities? Discuss.

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