GAINING THE EDGE

CYPRESS SEMICONDUCTOR THRIVES ON "TURBO MBO"

When the Cypress Semiconductor Corporation was founded in 1983, the president and CEO, Dr. Thurman John Rodgers (more commonly known as "T. J.") instituted a management by objectives (MBO) program that obtains positive results. Starting from scratch, the organization now has an annual income in excess of $200 million, more than 1300 employees, and 4 subsidiaries.

Cypress's basic mission is to be a profitable $1 billion semiconductor company that ships quickly, operates efficiently, and is a technological leader. The company competes by producing more than 130 complex, state-of-the-art computer chips for specialized markets. The management by objectives system, which Rodgers likes to call "Turbo MBO," helps the company manage its intricate operations by having employees set goals each week that are then tracked by computer. "Producing a semiconductor is a very unforgiving entity," says Rodgers. "If it takes 1000 tasks to make one and you do 999 right but then you forget one or do one wrong, the semiconductor will not work. The [MBO] system forces management to stick its nose in a big book every single week and find out what is going on. We can't afford surprises."

As part of the overall system, senior management and the board of directors develop broad corporate goals for a 5-year period and engage in strategic planning to determine how best to reach the goals. The process involves a review of the projected sales, marketing, and manufacturing plans, and it also considers other important variables such as the number of employees and the amount of capital involved relative to expected outcomes. The 5-year plan is updated annually, and the results are passed to middle managers, who then develop goals and related plans (often called tactical goals and plans) at their level to be accomplished during the coming year. The tactical goals and plans are given to project and program leaders at the next lower level, who develop goals and plans (often called operational goals and plans) that are oriented to the current year and frequently to an even shorter period, such as the immediate quarter. Within the goals and plans developed at the strategic, tactical, and operational levels, the Turbo MBO system operates on a weekly basis.

In addition to establishing five-year and annual goals, Cypress Semiconductor Corporation sets and monitors weekly goals through a computerized management by objectives (MBO) program. Employees map out their goals at weekly meetings (as shown here), which are conducted by project leaders. The goals are entered into a central computer system and reviewed by higher levels of management. The MBO program has paid off in high employee morale, market success, and good financial management of the company.

The weekly goal cycle starts on Monday, when every project leader holds a meeting with members of the project group to review the status of various goals that are due and map out what each group member will do that week. Individuals may attend more than one project group meeting if they work on multiple projects, agreeing to specific goals at each meeting. Each employee normally has three to ten goals he or she is expected to achieve. The goals may be as simple as ordering a new filing cabinet or as complex as making a critical change in the circuitry of a new chip. All the new goals for the week are put into a computer system so that more than 40 managers have access to the data through their personal computers. The system is designed to report goals that are delinquent (past due) and identify individuals who are delinquent on three or more goals.

On Tuesdays, managers review the goals put into the computer the previous day; they consider such issues as priorities, timeliness, equity of work loads, and appropriate progress on projects. Adjustments are made to ensure that the necessary goals for the week can be accomplished. On Wednesday afternoons, Rodgers and his seven vice presidents review the status of various goals. The computer system allows a review from two viewpoints: the manager responsible and the project or program.

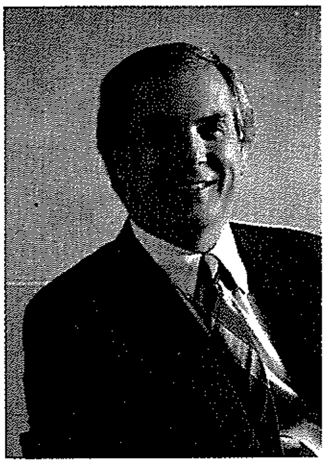
If a manager is more than 35 percent behind in the accomplishment of goals, the appropriate vice president must explain why and discuss what will be or is being done to remedy the situation. If the problem is an aberration that occurs during one week and will be rectified the following week, the matter is dropped. If the shortfall persists, however, the vice president must assist the manager in rectifying the problem. Subsequently, the vice presidents review their own goals with the group, explaining any shortfalls of 20 percent or more. Rodgers himself monitors shortfalls at the vice presidential level; if there is no improvement in a month or so, he will determine the reasons for the continuing problem and take corrective action. Such actions could include devoting more resources to the project, revising time schedules, or possibly altering goals.

The remainder of the Wednesday afternoon meeting is devoted to reviewing the status of goals for significant projects, as well as considering critical management ratios, such as revenue per employee, revenue to gross capital, performance to original schedule, sales and administration as a percent of revenue, and other measures for which goals have been set for the company as a whole. By the end of this weekly meeting, goals have been reviewed and revised where appropriate. At this point, a printout of everyone's weekly goals is distributed to each employee.

A permanent record of each employee's goal accomplishments is made monthly. These records are accumulated and used as input for each employee's annual performance evaluation, which is the basis for annual merit increases.

Each manager spends about 6 hours per week working on the Turbo MBO system, which is generally liked by organization members even though it does take some time to learn how to use the system. Employees tend to favor the system because it is largely "bottom-up" in the sense that they are able to set their own goals within the overall-goals framework. Managers are enthusiastic because the system keeps communications at a high level between themselves and the employees who have goals in their areas. Cypress's financial backers laud it because it keeps the company performing according to plan.

Like all systems, the Cypress MBO system is not flawless. Managers indicate that it is sometimes possible to cheat the system by developing elaborate-sounding goals that actually take little time to accomplish. Also, since there are no assigned priorities, it can be difficult for employees to know which goals should have priority until a project leader or manager indicates that a particular



Planning is at the heart of the success of Steve Bostic, the founder of American Photo Group. Bostic developed his multimillion dollar business with a simple approach: systematically buy up struggling regional photo processors to create a national photo processing company that would produce quality work while cutting costs through economies of scale. Bostic was so successful in his endeavor that Eastman Kodak bought him out. Now Bostic has started a new company built around an automated photo machine. His goal: blanket the country with the machines and create a $1 billion business.

goal is important. Rodgers points out also that managers can acquire a false sense of security by thinking they are doing their best by constantly meeting their goals, even though they are not extending themselves. Furthermore, some employees can use their goals as excuses for not doing unexpected jobs, by claiming that they are fully committed.

Despite these limitations, Turbo MBO has been very effective for Cypress Semiconductor. Employee turnover is about 18 percent in an industry whose turnover rate averages about 40 percent. Cypress itself has been valued at 2.25 × sales, whereas other major companies in the field are valued at less than 1 × sales. The company has received numerous awards, including the Wall Street Transcript Silver award, for being among the best financially managed companies in the industry. Thus goal setting and planning through its MBO system has paid off handsomely for Cypress.[1]

Rodgers learned the value of goals and planning while he was a project manager at American Microsystems (another high-technology firm), where he filled blackboards with lists of "several hundred things to get done, who would do it, and when." Turbo MBO at Cypress is essentially a computerized refinement of that system, an innovation that has helped Cypress succeed in a very competitive industry. While few organizations have MBO systems in which goals are set as often as weekly, there is strong support in the management literature for the importance of goals and the related planning, which jointly form the heart of the planning function. In this chapter, we examine the overall planning process, including the development of the mission of the organization. We also consider the nature of organizational goals and examine a model that helps explain how goals facilitate performance. We next probe the link between goals and plans, considering how plans differ according to level, extent of recurring use, and time horizon, as well as examining the role of goals and plans in promoting innovation. Finally, we explore the steps in the management by objectives process and review the major strengths and weaknesses of MBO.

THE OVERALL PLANNING PROCESS

How was Steve Bostic, head of the American Photo Group, able to build the company from $149,000 to $78 million in annual sales before selling the high-technology photography group to Eastman Kodak for a reported $45 million? Bostic attributes his success to having a vision, being able to put specifics down on paper, and having things "well planned and well thought out."[2] As Bostic's experience suggests, a good idea of the overall mission of the organization, accompanied by more specific goals on paper and carefully configured plans, can be important to the success of an organization. In this section, we briefly explore these major components of the planning process before examining them more closely here and in various other sections of this chapter.

Major Components of Planning

Goal A future target or end result that an organization wishes to achieve

One could argue that it is virtually impossible for organizations to function without at least some goals and plans. A **goal** is a future target or end result that an organization wishes to achieve. Many managers and researchers use the term "goal" interchangeably with "objective." Others consider "goal" to be a broader term, encompassing a longer time horizon, and use "objective" to refer to more narrow targets and shorter time frames.[3] We use both terms interchangeably in

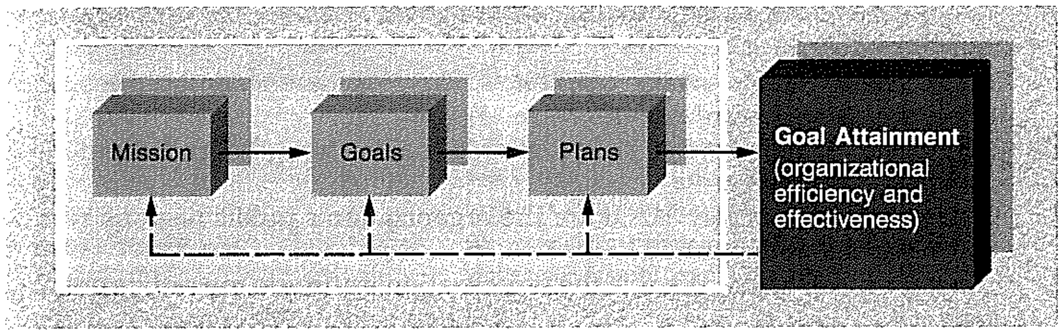


Figure 5-1 The overall planning process.

this text for the sake of simplicity and because it is clear from the context whether a broad or narrow scope or a long or short time frame is involved (at least when the distinction is important to the concepts being examined).

Whereas a goal is a future end result that an organization wants to achieve, a **plan** is the means devised for attempting to reach a goal. The planning function encompasses both goals and plans. *Planning* is the management function that involves setting goals and deciding how best to achieve them. An overall view of the planning process is shown in Figure 5-1. Hopefully, the setting of goals and developing of plans leads to goal attainment and, ultimately, to organizational efficiency and effectiveness. As the diagram indicates, the planning process also involves the mission of the organization.

Plan The means devised for attempting to reach a goal

Organizational Mission

Essentially, the planning process builds on the **mission** of the organization, the organization's purpose or fundamental reason for existence. A **mission statement** is a broad declaration of the basic, unique purpose and scope of operations that distinguishes the organization from others of its type.[4] A mission statement serves several purposes. For managers, it can be a benchmark against which to evaluate success. For employees, a mission statement defines a common purpose, nurtures organizational loyalty, and fosters a sense of community among members. For external agencies, such as investors, governmental agencies, and the public at large, mission statements help provide unique insight into an organization's values and future directions.[5] In highlighting the importance of mission statements, noted management consultant Peter Drucker argues that the mission statement defines the organization. He points out, "Only a clear definition of the mission and purpose of the organization makes possible clear and realistic business objectives."[6] In some organizations, the mission statement is explicit in the sense that it is a formal written document; in others, the mission may be more implicitly understood. Of course, in the latter case, there is the danger that various organization members may have different perceptions of the organization's mission, perhaps without realizing it.[7]

Mission The organization's purpose or fundamental reason for existence

Mission statement A broad declaration of the basic, unique purpose and scope of operations that distinguishes the organization from others of its type

One study estimates that about 60 percent of the Fortune 500 companies have written mission statements.[8] A related study of the mission statements of 75 firms from the Business Week 1000 indicates that mission statements tend to be made up of some or all of the following nine components:[9]

1. *Customers.* Who are the organization's customers?
2. *Products or services.* What are the organization's major products or services?
3. *Location.* Where does the organization compete?
4. *Technology.* What is the firm's basic technology?

5. *Concern for survival.* What is the organization's commitment to economic objectives?
6. *Philosophy.* What are the basic beliefs, values, aspirations, and philosophical priorities of the organization?
7. *Self-concept.* What are the organization's major strengths and competitive advantages?
8. *Concern for public image.* What are the organization's public responsibilities, and what image is desired?
9. *Concern for employees.* What is the organization's attitude toward its employees?

Excerpts from mission statements that match each of these components are shown in Table 5-1. Laura Nash, a management researcher who has studied mission statements, reports that her favorite mission statement hangs, yellow with age, on the wall of a Boston shoe repair shop. It reads: "We are dedicated to the saving of soles, heeling, and administering to the dyeing."[10]

If mission statements are so important, then why don't more organizations have them written down? One reason is that explicitly developing such statements causes managers to confront directly such fundamental issues as "What is our business?" Thus it is very possible that considerable controversy may arise in attempting to develop a mission statement. Another reason is that managers may be so busy with day-to-day matters that they neglect developing the long-term vision that a mission statement entails.[11] Finally, a lack of knowledge about what should go into a mission statement may be part of the reason why more organizations do not have mission statements. In the study of Fortune 500 firms mentioned earlier, about 10 percent of the CEOs responding requested help from the researchers on how to develop a mission statement.[12]

THE NATURE OF ORGANIZATIONAL GOALS

As we have seen, organizational goals form one of the important elements in the overall planning process. Research on the potential usefulness of goals over several decades has highlighted the importance of goals in enhancing organizational efficiency and effectiveness.[13] In this section, we assess the major benefits of goals and examine how goals differ according to organizational level.

Benefits of Goals

The use of goals has several major benefits.[14] For one thing, goals can increase performance. Increases in performance due to setting challenging goals frequently range from 10 to 25 percent, and they are sometimes even higher. Furthermore, such increases have occurred with a variety of employee groups, including clerical personnel, maintenance workers, production workers, salespeople, managers, engineers, and scientists.[15]

Another benefit of goals is that they help clarify expectations. When goals are set, organization members are more likely to have a clear idea of the major outcomes that they are expected to achieve. Without goals, organization members can all be working very hard but may collectively accomplish very little—as if they were rowers independently rowing the same boat in different directions and together making very little progress.

Goals also facilitate the controlling function, because goals provide benchmarks against which progress can be assessed so that corrective action can be taken as needed. Thus goals help individuals gauge their progress, as well as

Table 5-1 Major Components of Mission Statements and Sample Excerpts

Major Components	Sample Excerpts
Customers	The purpose of Motorola is to honourably serve the needs of the community by providing products and services of superior quality at a fair price to our customers. (Motorola)
Products or services	We provide our customers with retail banking, real estate finance, and corporate banking products which will meet their credit, investment, security, and liquidity needs. (Carteret Savings and Loan Association)
Location	Sara Lee Corporation's mission is to be a leading consumer marketing company in the United States and internationally. (Sara Lee Corporation)
Technology	Du Pont is a diversified chemical, energy, and specialty products company with a strong tradition of discovery. Our global businesses are constantly evolving and continually searching for new and better ways to use our human, technological, and financial resources to improve the quality of life of people around the world. (Du Pont)
Concern for survival	To serve the worldwide need for knowledge at a fair profit by gathering, evaluating, producing, and distributing valuable information in a way that benefits our customers, employees, authors, investors, and our society. (McGraw-Hill)
Philosophy	It's all part of the Mary Kay philosophy—a philosophy based on the golden rule. A spirit of sharing and caring where people give cheerfully of their time, knowledge, and experience. (Mary Kay Cosmetics)
Self-concept	Crown Zellerbach is committed to leapfrogging competition within 1000 days by unleashing the constructive and creative abilities and energies of each of its employees. (Crown Zellerbach)
Concern for public image	The company feels an obligation to be a good corporate citizen wherever it operates. (Eli Lilly and Company)
Concern for employees	To compensate its employees with remuneration and fringe benefits competitive with other employment opportunities in its geographical area and commensurate with their contributions toward efficient corporate operations. (Public Service Electric and Gas Company)

Source: Adapted from Fred David, "How Companies Define Their Mission," *Long Range Planning,* February 1989, pp. 92–93.

assist managers in maintaining control over organizational activities. The situation at W. W. Grainger, Inc., based in Skokie, Illinois, serves as an example. The company sells equipment such as sump pumps, industrial staplers, warehouse fans, and commercial air conditioners to contractors, small manufacturers, and distributors. During the 1970s, Grainger charged premium prices but also provided premium service. Unfortunately, the emphasis on service gradually took a back seat to other priorities and by the early 1980s, earnings began to slow. The

Recognizing the contributions that employees make in meeting company goals can increase the motivation of workers. Each year W. W. Grainger, an Illinois-based company specializing in industrial and commercial equipment, sponsors a Service Recognition Dinner to show appreciation for employee accomplishments.

company reacted by placing major displays within reach of its customers in its branches, which now number more than 300, and renewing its emphasis on service. With half its sales stemming from its 24,000-item catalog, the company has put considerable effort into training its rows of telephone operators, who wear headsets and take orders from customers. A board at the front of the room keeps a tally on progress. On one day in fall, 1989, for example, 1.6 percent of the 367 callers had to listen to a recording while waiting to order. The goal is 0 percent. "Three years earlier, 25 percent was the norm," says one branch manager.[16]

Yet another benefit of goals is increased motivation. The added motivation develops from meeting goals, feeling a sense of accomplishment, and receiving recognition and other rewards for reaching targeted outcomes.

An intriguing study conducted by goal-setting researchers Gary P. Latham and Edwin A. Locke demonstrates the benefits of goal setting. The situation involved drivers of logging trucks for a forestry-products company in the western United States. The unionized drivers were concerned that if their trucks were overloaded, they could be fined by the highway department and subsequently lose their jobs, so they seldom loaded their trucks to more than 63 percent of capacity. Interestingly, the company had not provided any goals concerning the level at which the company expected drivers to load their trucks.

In an experiment aimed at improving the situation, the company coordinated a plan with the union that included a goal of loading to 94 percent of each truck's legal capacity and an agreement that no driver would be reprimanded if the goal was not met. No monetary reward or fringe benefits were offered. However, verbal praise was given when drivers loaded their trucks to greater levels than they had previously. Results for the first month of the experiment showed that the trucks were hauling 80 percent of their capacity, more than they ever had before. In the second month, however, performance decreased to 70 percent of capacity. Interviews with the drivers revealed that they were testing management to determine whether action would be taken against drivers who did not reach the goal. When the drivers realized that no action was going to be taken, they increased their performance. Overall performance reached over 90 percent in the third month and remained there for more than the following 7 years. The savings to the company were more than $250,000 in the 9-month period during which the study was conducted.[17] Thus the goals clarified expectations, helped increase motivation, provided standards against which progress could be gauged, and led to significant increases in performance. The experiment is one of many studies that support the importance of goal setting throughout the organization.[18]

Levels of Goals

Organizations typically have three levels of goals: strategic, tactical, and operational, as shown in Figure 5-2. (Also shown are three parallel levels of plans, which will be discussed later in this chapter.)

Strategic Goals. Strategic goals are broadly defined targets or future end results set by top management. Such goals typically address issues relating to the organization as a whole and may sometimes be stated in fairly general terms. Strategic goals are sometimes called *official goals* because they are formally stated by top management.[19] At Cypress Semiconductor, for example, one official goal related to productivity is to provide the very highest quality product coupled with on-time delivery. One outcome has been that the company recently was

Strategic goals Broadly defined targets or future end results set by top management

Figure 5-2 Levels of goals and plans.

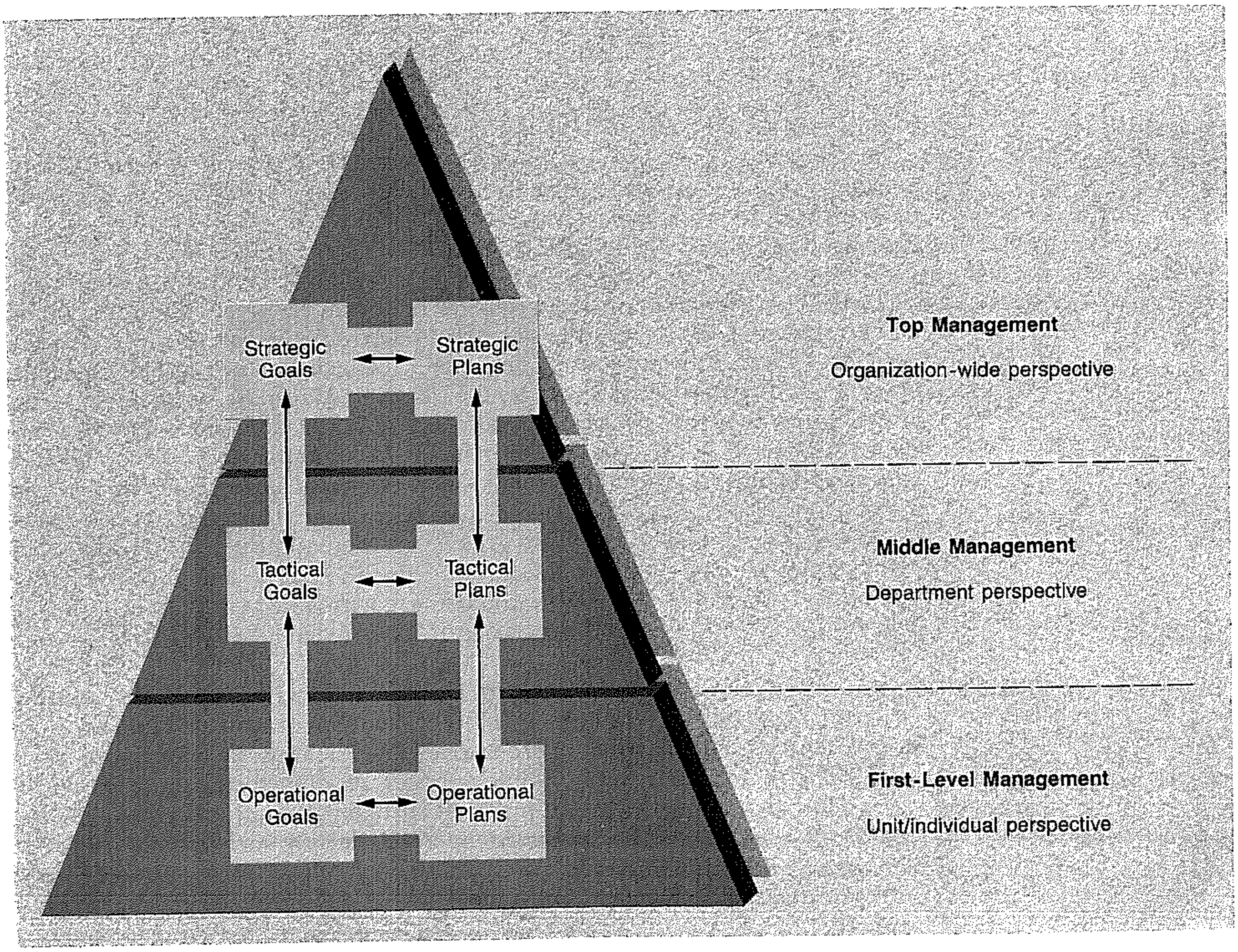


Table 5-2 Eight Major Areas for Strategic Goals

Major Area	Description
Market standing	Desired share of present and new markets, including areas in which new products are needed, and service goals aimed at building customer loyalty
Innovation	Innovations in products or services, as well as innovations in skills and activities required to supply them
Human resources	Supply, development, and performance of managers and other organization members; employee attitudes and development of skills; relations with labor unions, if any
Financial resources	Sources of capital supply and how it will be utilized
Physical resources	Physical facilities and how they will be used in the production of goods and services
Productivity	Efficient use of resources relative to outcomes
Social responsibility	Responsibilities in such areas as concern for the community and maintenance of ethical behavior
Profit requirements	Level of profitability and other indicators of financial well-being

Source: Based on Peter F. Drucker, *Management: Tasks, Responsibilities, Practices*, Harper & Row, 1974, pp. 100–117.

recognized by Hughes (a subsidiary of General Motors) as one of only three suppliers to achieve a zero-defect, 100 percent on-time delivery record.[20]

Management consultant Peter Drucker suggests that business organizations need to set goals in at least the eight major areas shown in Table 5-2. The eight areas encompass a number of aspects that are important to the health and survival of most profit-making organizations.

Tactical goals Targets or future end results usually set by middle management for specific departments or units

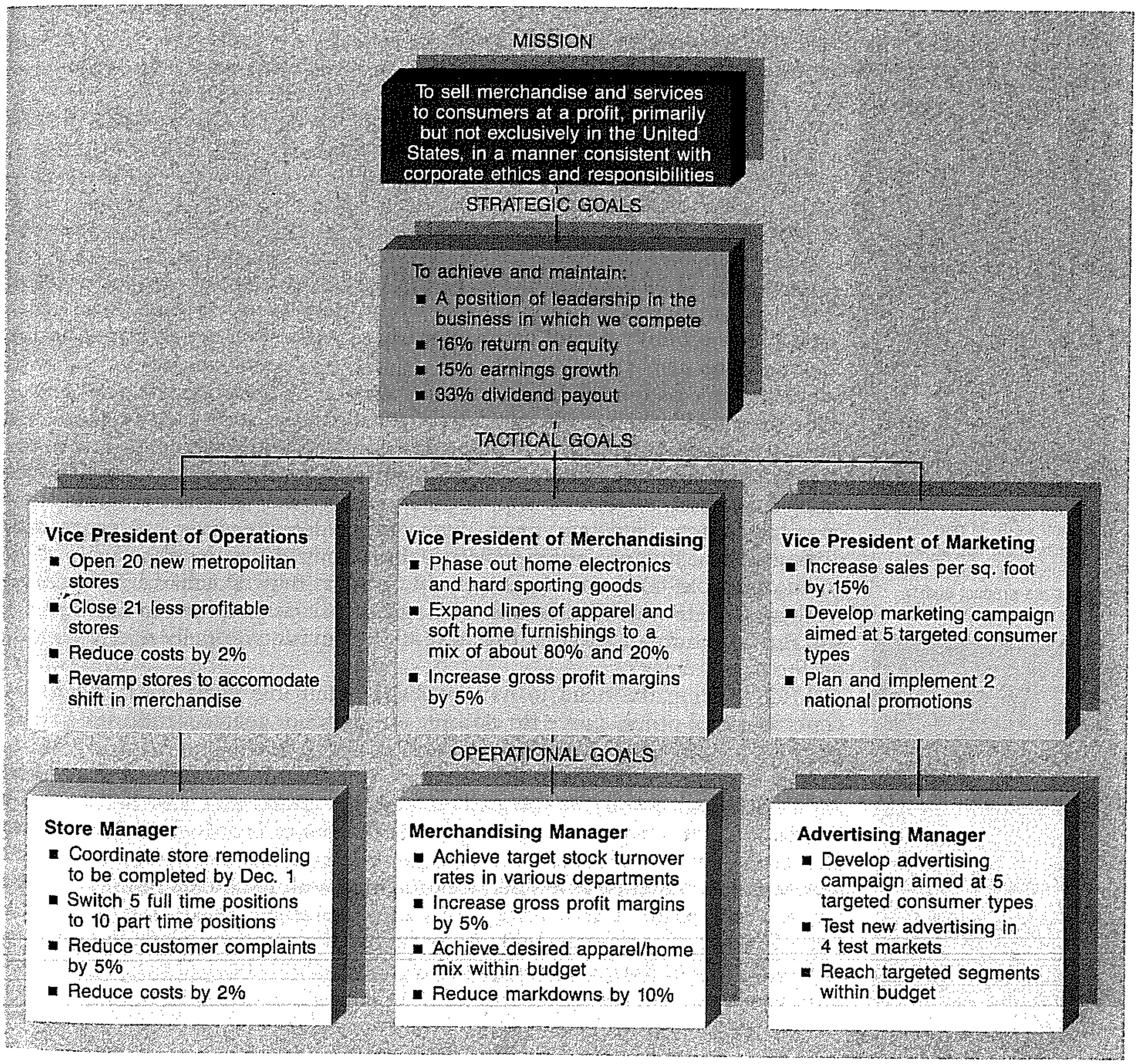
Tactical Goals. Tactical goals are targets or future end results usually set by middle management for specific departments or units. Goals at this level spell out what must be done by various departments to achieve the results outlined in the strategic goals. Tactical goals tend to be stated in more measurable terms than is sometimes true of strategic goals. For example, at Cypress Semiconductor, a tactical goal for the Static Random-Access Memories (SRAM) Group, the largest of Cypress's product divisions, might be to achieve preferred supplier status with specified customers. For instance, Cypress recently received preferred SRAM supplier status from AT&T, a designation earned by only four other semiconductor suppliers (Motorola, Hitachi, Fujitsu, and Toshiba).[21] The preferred status makes it easier to do business with a firm and usually leads to increased future orders.

Operational goals Targets or future end results set by lower management that address specific measurable outcomes required from the lower levels

Operational Goals. Operational goals are targets or future end results set by lower management that address specific, measurable outcomes required from the lower levels. For example, in order to achieve the tactical and strategic goals related to product quality and on-time delivery, manufacturing units within divisions such as the SRAM Group must set stringent operational goals aimed at zero defects and 100 percent on-time delivery. Reflecting such operational goals, the computerized MBO system at Cypress keeps close track of unscheduled orders (orders on backlog for which more than 3 days are required to schedule production) and performance on the quality dimension.[22]

Hierarchy of Goals. The three levels of goals can be thought of as forming a *hierarchy of goals*. With a hierarchy, goals at each level need to be synchronized so that efforts at the various levels are channeled ultimately toward achieving the major goals of the organization. In this way, the various levels of goals form a *means-end chain,* in which the goals at the operational level (means) must be achieved in order to reach the goals at the tactical level (end). Likewise, the goals at the tactical level (means) must be reached in order to achieve the goals at the strategic level (end). In the case of Cypress Semiconductor, the company cannot meet its strategic goal of high quality and on-time delivery without reaching related goals at the tactical and operational levels. Similarly, the partial hierarchy of goals presented in Figure 5-3, based on the mission and several strategic objectives of JC Penney, illustrates how goals at various levels fit together to support a united effort geared to ultimately accomplishing organizational goals.

Figure 5-3 Hypothetical hierarchy of goals. (Mission and strategic goals are based on the JC Penney publication *Managing in the Tradition of Partnership*.)



HOW GOALS FACILITATE PERFORMANCE

In order to make effective use of goals, managers need to understand just how goals can facilitate performance. A model reflecting major research on using goals, much of it conducted by goals expert Edwin A. Locke and his associates, is shown in Figure 5-4 on the facing page. The model has several major components.[23] In this section, we consider the various components, highlighting particularly the goal content, goal commitment, work behavior, and feedback aspects.

Goal Content

Goals that are effective in channeling effort toward achievement at the strategic, tactical, and operational levels have a content that reflects five major characteristics. Goals should be challenging, attainable, specific and measurable, time-limited, and relevant.

Challenging. Extensive research indicates that, within reasonable limits, challenging, difficult goals lead to higher performance. Assuming that the goals are accepted, people tend to try harder when faced with a challenge. For example, Kronus, Inc., a Waltham, Massachusetts, maker of innovative electronic time clocks with software that ties into computerized company payroll systems, was losing money with founder and inventor Mark Ain at the helm. One of the first actions taken by an outsider brought in to manage the company was raising sales quotas by 60 percent, a goal that was easily met by the 94 sales and service offices. Back to developing new products, Ain mused, "I'm a bad manager."[24] Interestingly, when individuals are asked to do their "best," they typically do not perform nearly as well as when they have specific, challenging goals.

This bootmaker at L. L. Bean is working under a new company motto: "Get it right the first time." The mail order company's reputation for quality and service had suffered in recent years under the pressure of unrealistic sales goals. In one year customers returned almost $80 million worth of purchases. Now management has scaled back its goals for growth and reemphasized product quality and customer service.

Attainable. Although goals need to be challenging, they usually work best when they are attainable. At some point, individuals are making maximum use of their skills and abilities and cannot achieve higher performance levels. Developing goals that are almost impossible to achieve may discourage rather than energize workers and may make them feel inadequate. Even with extremely difficult goals, though, individuals usually attempt to achieve as much of the goal as possible—*if* they are given credit for what they do achieve. Still, asking workers to achieve difficult, but attainable, goals is more likely to engender sustained performance over a period of time than is continually asking them to do the impossible.[25]

Recognizing the need to have realistic, attainable goals, L. L. Bean, the venerable mail-order source for clothing and outdoor gear, recently scaled back its goal of reaching $1 billion in sales by 1992. The decision was made in order to protect Bean's reputation for service. One symptom indicating that customers were not satisfied was the $80 million worth of goods that they had returned during 1987, an amount accounting for 14 percent of Bean's sales. The returns cost the company $18 million in postage and handling costs. As a result, the company has launched a new service campaign with the theme "Get it right the first time." "We don't mind fewer new customers as long as we do it right," says Leon Gorman, Bean's president. Accordingly, the company plans to grow at a rate of about 5 to 8 percent, compared with growth of about 23 percent over the past 10 years.[26]

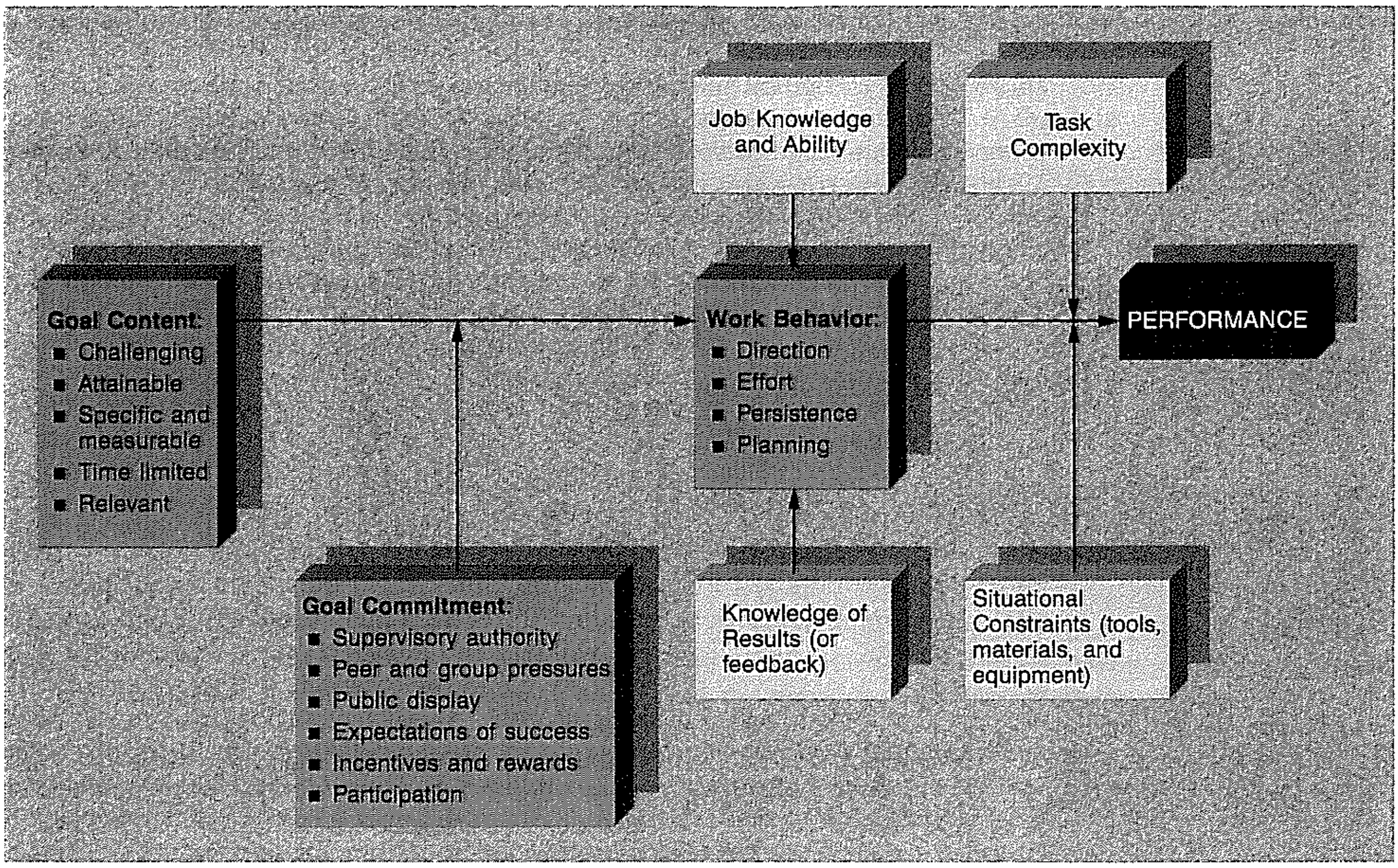


Figure 5-4 Model of how goals facilitate performance. (Adapted from Thomas W. Lee, Edwin A. Locke, and Gary P. Latham, "Goal Setting Theory and Job Performance," in Lawrence A. Pervin, ed., *Goal Concepts in Personality and Social Psychology*, Lawrence Erlbaum, Hillsdale, N.J., 1989.)

Specific and Measurable. To be effective, goals need to be specific and measurable so that it is clear what is expected and when the goal has been achieved. When possible, goals should be stated in quantitative terms. *Quantitative goals* encompass objective numerical standards that are relatively easy to verify. At Rubbermaid, Inc., a company with a reputation for innovative products, a quantitative goal is to derive 30 percent of its sales from products that are less than 5 years old. For some purposes, though, qualitative goals are more appropriate. *Qualitative goals* involve subjective judgment about whether or not a goal is reached. An example of a qualitative goal for Rubbermaid is to develop an idea and prototype for a new plastic desk accessory that is useful, long-lasting, and inexpensive.[27]

Time-Limited. Goals also need to be time-limited; that is, there should be a defined period of time within which the goals must be accomplished. Otherwise, goals have little meaning, since individuals can keep putting off achieving them. At Cypress Semiconductor, the weekly goals (which are reviewed at the project level every Monday and at other levels on Tuesdays and Wednesdays) keep attention focused on achieving goals within the desired time frame. In many organizations, goals are set annually but may be reviewed at various times during the year, such as quarterly.[28]

Relevant. Goals are more likely to engender support when they are clearly *relevant* to the major work of the organization and the particular department or work unit. For example, Jack Stack, head of the Springfield Remanufacturing Corporation in Springfield, Missouri, learned an important lesson about goals and relevancy after he took the helm of the ailing equipment manufacturing plant. The company had contracted to ship 800 tractors to the Soviet Union, but there was a shortage of some parts that were needed to complete the tractors, which were due to be shipped in less than a month. In desperation, Stack put up a huge sign that read, "Our Goal: 800 Tractors." The workers responded by coming in at night to figure out what parts were missing from which tractors; they then got the parts through every means they could think of. As a result, the very difficult goal was met.[29]

For guidelines on how to go about actually setting goals, see the Practically Speaking discussion, "How to Set Goals."

Goal Commitment

Goal commitment One's attachment to, or determination to reach, a goal

A critical element in using goals effectively is getting individuals and/or work groups to be committed to the goals they must carry out. **Goal commitment** is one's attachment to, or determination to reach, a goal.[30] Without commitment, setting specific, challenging goals will have little impact on performance. If you are like most people, you probably have had the experience of having someone attempt to interest you in a difficult goal to which you felt no commitment. Perhaps it was a relative wanting you to achieve a college degree in a major that you believed did not match your capabilities and/or interests. Chances are that you felt little commitment to the goal. Similarly, in work situations, appropriate goals can be set, but such goals are not likely to enhance performance without the goal commitment of organization members. How, then, can a manager gain commitment to important organizational goals? Research indicates that five major factors positively influence goal commitment: supervisory authority, peer and group pressure, public display of commitment, expectations of success, and incentives and rewards. We also discuss a potential sixth factor, participation.

Supervisory Authority. Individuals and groups are often willing to accept a goal and become committed to it when the goal and reasons for it are explained by a person with supervisory authority, usually one's boss. With this approach, goals are essentially assigned by the supervisor, who provides an explanation of the need for the goals and any necessary instructions to his or her employees. The explanation and instructions are likely to be more effective when the supervisor is supportive in the sense of providing encouragement and offering opportunities for individuals to ask questions, rather than just telling subordinates to meet the goals. Trust in the supervisor also may facilitate the commitment process.

Peer and Group Pressure. Pressure from peers and work group members can enhance goal commitment when everyone's efforts are channeled in the same direction. This is because enthusiasm about potential accomplishments becomes infectious. In addition, successful individuals can serve as role models to others who observe their efforts. On the other hand, peer and group pressure can detract from goal commitment, particularly if the goals are perceived as unfair.

Public Display. Recent evidence suggests that commitment to difficult goals is higher when the commitment is public (made in front of others) than when it is

HOW TO SET GOALS

There are six main steps in setting goals to obtain optimal results:

1. *Specify the goal to be reached or tasks to be done.* What do you want to accomplish? Do you want to increase sales? Reduce costs? Improve quality? Boost customer service? Maybe, at the moment, you are thinking that you would like to obtain an A in a particular course this semester (perhaps the one involving this textbook).

2. *Specify how the performance will be measured.* Some outcomes can be measured more easily than others. For example, some outcomes, such as number of units sold and dollar volume of sales, can be measured fairly easily. Work outcomes (the results achieved) typically are measured according to one of three parameters:

Physical units: For example, quantity of production, market share, number of errors, number of rejects (quality control)

Time: For example, meeting deadlines, servicing customers, completing a project, coming to work each day, being punctual

Money: For example, profits, sales, costs, budgets, debts, income

Similarly, many course-of-study outcomes can be measured in terms of physical units (such as number of questions answered correctly on examinations and grades received on papers and assignments) and in terms of time (such as meeting deadlines for assignments and attending classes).

Sometimes, outcomes are difficult to measure, perhaps because the measurement process would be too costly or because the outcomes are affected by factors beyond an individual's control. In such cases, it may be necessary to measure behaviors or actions rather than outcomes. For example, if a manager's goal of overcoming worker resistance to certain impending changes is likely to be significantly affected by the actions of others, it may be possible to measure crucial activities instead of outcomes. Such activities might include whether the manager clearly explains why the change is needed, outlines how the change will affect others, and listens to employee's concerns. When possible, though, the goal-setting process should focus on outcomes.

3. *Specify the standard or target to be reached.* This step builds on the type of measure chosen in step 2 by spelling out the *degree* of performance to be included in the goal. For example, the target might be producing 40 units per hour, reducing errors by 2 percent, completing a project by Dec. 15, answering the telephone within three rings, or increasing sales by 10 percent.

In pursuit of the general objective of attaining an A in a particular course, one might set targets of answering correctly at least 90 percent of the questions on the midterm and final exams, offering one knowledgeable point during the discussion part of each class, and fulfilling written assignments at a level of quality likely to earn high grades. Setting subgoals, such as the number of textbook pages to be read and outlined each day, also can help goal achievement.

4. *Specify the time span involved.* To have a positive impact on performance, goals need to have a time span within which they are to be completed. In a production situation, the goal may be stated in terms of production per hour or day. In a service situation, the time frame may be oriented toward delivering the service. For example, a photocopier repair service may have the goal of responding to customer calls within 2 hours. Other goals, such as major projects, may have time spans involving several months or even years.

For instance, your goals for the semester may involve a few months, while goals associated with obtaining your degree and further building your career may span several years.

5. *Prioritize the goals.* When multiple goals are present, as is likely with most jobs, goals need to be prioritized so that effort and action can be directed in proportion to the importance of each goal. Otherwise, individual effort can be focused improperly.

For example, suppose that in the course in which you wish to obtain an A, examinations count 70 percent, a paper counts 20 percent, and discussion in class counts 10 percent. In this case, a goal related to the examinations should be given first priority, while goals related to the paper and the class discussion should receive second and third priority, respectively.

6. *Determine coordination requirements.* Before a set of goals is finalized, it is important to investigate whether achieving the goals depends on the cooperation and contributions of other individuals. If so, coordination with the other individuals may be necessary. In organizations, such coordination vertically is usually relatively easy. It may be more difficult, but nevertheless important, to achieve coordination horizontally, particularly if some of the individuals report to other managers outside your work unit.

In the case of the course in which you are attempting to excel, your efforts may require coordination with your boss (if you are employed) so that your work schedule allows you sufficient study time before exams. If you plan ahead, you also may be able to get parents, a spouse, or friends to help you out with other duties at crucial times during the semester, such as right before exams, so that you have plenty of time to review.[31]

private. At Nordstrom's, the Seattle-based apparel, shoe, and soft-goods retailer known for excellent customer service, store managers must publicly state their sales goals at regional meetings. Once a manager has declared store sales goals, a top executive shows goals for the same store developed by a "secret committee." Managers whose goals fall below those of the secret committee are booed, while those with goals above the secret committee level are cheered.[32]

Expectations of Success. Goal commitment is more likely when individuals or groups perceive that they have high expectations of success—that is, they perceive that they have high probabilities of performing well on the tasks involved in reaching the goal. Managers can foster such expectations through instruction and coaching in the areas in which an individual needs assistance in order to be successful. If goals involve tasks that individuals believe they cannot accomplish, they are unlikely to be committed to them.

Incentives and Rewards. Goal commitment is also enhanced by incentives and rewards. Incentives are offered during the goal-setting process, while rewards occur upon goal achievement. Some incentives may be tangible, such as money, while others may be intangible, such as challenge of the job, anticipation or positive feelings about accomplishment, feedback, competition (as long as it is constructive), and recognition for goal attainment. At Nordstrom's, salespeople with especially good results are honored monthly as "All-Stars" and receive $100 and large discounts on store merchandise. The salespeople who achieve the most are inducted annually into the Pace Setters Club, which also makes them eligible for major discounts. The names of managers who excel at reaching their goals are engraved on a plaque in the executive headquarters of the company.[33] On the other hand, if workers fear that producing more will lead to negative outcomes, such as layoffs, commitment to high production goals will be low.

Participation. Although research indicates that participation is not usually needed to gain goal commitment, having individuals participate in the goal-setting process can be an effective means of engendering goal commitment. Participation can be particularly helpful in developing plans for implementing goals. As a result, managers often include subordinates in goal setting and the subsequent planning of how to achieve the goals. Still, it is useful to know that participation is not a necessary ingredient in goal commitment, because complete participation of all affected persons often is not feasible.[34]

For instance, tactical and operational goals often must be set to achieve strategic goals that have been developed at the upper levels of management. While there may be some negotiation possible with upper management to alter goals that are unfeasible, middle and lower levels often must find ways of implementing goals that are necessary for the achievement of strategic objectives, rather than altering the goals themselves. Fortunately, goal-setting research suggests that organization members will usually attempt to support goals when they understand why the goals are important for the organization, regardless of whether they have participated in setting them.

Work Behavior

Given goals and commitment, how does the goal-setting process ultimately influence behavior? Research so far suggests that goal content and goal commitment affect an individual's actual work behavior by influencing four work behavior factors: direction, effort, persistence, and planning.

Direction. Goals provide direction by channeling attention and action toward activities related to those goals, rather than to other activities. Thus goals to which we are committed can help us make better choices about the activities that we will undertake.

Effort. In addition to channeling activities, goals to which we are committed boost effort by mobilizing energy. As indicated by the research on goal setting, individuals are likely to put forth more effort when goals are difficult than when they are easy.

Persistence. Persistence involves maintaining direction and effort in behalf of a goal until it is reached, a requirement that may involve an extended period of time. Commitment to goals makes it more likely that we will persist in attempting to reach them.

Planning. In addition to the relatively direct effects on direction, effort, and persistence, goals also have an important indirect effect on work behavior by influencing planning. Goal setting affects planning because individuals who have committed themselves to achieving difficult goals are likely to develop plans or methods that can be used to attain those goals. With easy goals, however, little planning may be necessary.

Other Process Components

Several other components ultimately influence the impact of goals on job performance. For one thing, *job knowledge and ability* are likely to affect an individual's work behavior and prospects for reaching goals, even when there is strong commitment. For another, the *complexity of the task* may affect the degree to which goal-directed work behaviors influence job performance. According to related studies, the impact of goals on performance is greater with relatively simple tasks (such as basic arithmetic, toy assembly tasks, or basic typing) than with more complex ones (such as supervision or engineering projects).[35] The reason seems to be that the effect of goals on the direction, effort, and persistence of work behavior, as well as on planning, is dissipated somewhat into different aspects of a complex task. In contrast, with a simple task, direction, effort, persistence, and planning can focus in one direction only. Regardless of whether tasks are simple or complex, as noted earlier, goals need to be challenging in order to have a significantly positive impact on performance. Goals can be set at a challenging level even for relatively simple tasks (such as reaching a typing proficiency of 60 words per minute while making no more than 1 error per minute—a likely challenging, but attainable, goal for a reasonably good typist).

Situational constraints constitute still another element that influences the impact of goals on performance. Having the proper tools, materials, and equipment is important for achieving difficult goals. Finally, *knowledge of results* or feedback about progress toward goals is a particularly important aspect of using goals effectively in organizations. While goals set the target, knowledge of results ultimately impacts goal achievement by enabling individuals to gauge their progress toward goal attainment. For example, an individual learning to play golf can gauge the adequacy of his or her golf swing by observing the path and distance that the ball travels relative to targets or goals. Not surprisingly, strong evidence suggests that neither goals nor knowledge of results *alone* is sufficient for performance improvement. Instead, *both* goals and knowledge of results are necessary (imagine the difficulty of learning to play golf if one attempted to practice in the dark).[36] One company that has benefited from using goals to influence performance in a positive way is the Matsushita Electric Industrial Company (see the following Case in Point discussion).

CASE IN POINT: Quality and Productivity Increase at Matsushita

The Matsushita Electric Industrial Company (MEIC) employs more than 1200 people at a former Motorola plant in Franklin Park, Illinois, that produces television receivers and microwave ovens. Within 5 years after this Japanese company acquired the plant from Motorola, quality had improved significantly. In-process defects had dropped from 1.4 to .07 defects per television set or microwave oven. In addition, productivity (the ratio of inputs, such as materials and labor, to outputs) had increased 30 percent. For example, the labor required to produce a color television receiver had been cut in half. These gains were achieved through a combination of managerial practices designed to revitalize an already skilled labor force and improvements in equipment, technology, and training.

In the area of managerial practice, manufacturing and quality control personnel meet every 6 months to set quality goals for the products manufactured. The group considers such issues as the number of defects allowed and the time allotted to complete the assembly of each item produced. Bar charts are then kept that indicate which areas are above, near, or below their targets. Once a week, all operations in the plant cease for 10 or 15 minutes while supervisors meet with their crews to consider progress relative to goals in such areas as quality, productivity, absenteeism, and scrap.

Special effort is made to improve performance on a particularly designated assembly line, called the "model line." Workers on that line and various support personnel, such as quality experts and engineers, meet once a week to gauge progress and consider new ideas. New practices that have proved successful on the model line are then adapted to fit other lines.

A quality-emphasis month is declared twice a year. Slogan and poster competitions, crossword puzzles with quality terms, suggestion contests, and other methods are used to boost awareness. Winners are entertained at a restaurant and given a modest reward.

The underlying purpose of these activities is to improve quality and productivity by creating an environment that will be conducive to cooperation and problem solving. The various activities also serve to emphasize the goals, encourage commitment, and provide knowledge about results, all important elements in making the goal-setting process effective.

Matsushita Electric also attempts to provide the equipment and technology that are necessary to meet the goals. For example, automated equipment developed in Japan was brought in to facilitate chassis assembly. Product design changes reduced the number of required workers by 26 percent, as equipment and design engineers worked together to make quality products easier to manufacture. Newly developed assembly lines allow workers to control their own work flow individually. In place of a continuous, conveyor-paced line, operators can use foot levers to detour work to their station and to forward finished pieces to the next workstations. Closed-circuit television systems were installed to broadcast information about quality, such as particular defect types and how to prevent them, as well as information on progress toward quality goals.

Training also is an important part of the Matsushita Electric approach. New employees receive up to 5 days of classroom training, as well as on-the-job training, to increase their job knowledge and improve their skill levels. The training also provides a forum in which managers can assess whether new workers have the ability to perform adequately and can determine whether they like the working conditions.[37]

Thus, goal setting has been an important tool in increasing productivity and quality at Matsushita Electric. Still, care must be taken to use goal setting properly, lest problems arise.

Potential Problems with Goals

Although there are many positive features associated with using goals in organizations, there also are some potential pitfalls to be avoided.[38] These potential problems and possible solutions are summarized in Table 5-3.

For one thing, setting difficult goals increases the risk that they will not be reached. Failure to reach anticipated goals can have serious business implications, hence only calculated risks (rather than goals with only a small prospect of success) should be considered. For another, high goals often increase the stress levels of organization members. Up to a point, some increased stress is likely to be beneficial. Beyond a certain point, excessive stress may have a detrimental effect on performance, suggesting that it would be wise to lower goals or provide additional help, such as added staff or further training, to make reaching the goals more feasible. Still another danger is that failure to meet high goals may lead individuals to experience feelings of self-doubt and inadequacy, as well as anger toward those perceived as thwarting goal achievement. Such feel-

Table 5-3 Potential Goal-Setting Problems and Possible Solutions

Potential Problems	Possible Remedies
Excessive risk taking	Analyze risk; avoid careless or foolish risks.
Increased stress	Eliminate unnecessary stress by adjusting goal difficulty, adding staff, and offering training in necessary skills.
Undermined self-confidence (due to failure)	Treat failure as a problem to be solved rather than a signal to punish.
Ignored nongoal areas	Make sure goals encompass key areas.
Excessive short-run thinking	Include some long-term goals.
Dishonesty and cheating	Set example of honesty, avoid using goals punitively, offer help in overcoming difficulties, give frequent feedback, and be open to information indicating goals are inappropriate.

Source: Based on Edwin A. Locke and Gary P. Latham, *Goal Setting: A Motivational Technique That Works*, Prentice-Hall, Englewood Cliffs, N.J., 1984, pp. 171–172.

ings are less likely when goals are used as guidelines, rather than as tools to punish those who do not quite reach their targets. When goals are not met, the supervisor and subordinate should meet and consider the problems and how they can be corrected. Of course, continual failure to meet reasonable goals may require further training, transfer, or some other action to resolve the problem.

Yet another potential pitfall is that there may be a tendency to ignore nongoal areas. A major advantage of goals is that they focus attention on the behaviors that are most important (causing less attention to be given to less important aspects). At the same time, managers need to make sure that the major key areas involved are included in the goal setting. Another potential danger is that goals will encourage excessive short-range thinking, an accusation sometimes made against U.S. managers. However, goals can encourage a focus on the long term if they are set for 2, 3, or 5 years or even longer periods of time (perhaps with subgoals that apply to shorter time periods). Finally, goal setting may encourage dishonesty and cheating. This tendency can be minimized by deemphasizing punishment for shortfalls in meeting goals, providing frequent feedback about progress, offering help in overcoming difficulties, and being open to information that suggests that the goals are inappropriate, perhaps because the situation has changed. Of course, goals should be changed only when there is sufficient evidence that they are inappropriate.

LINKING GOALS AND PLANS

Goals and plans are closely related. Even though an organization may establish goals at the strategic, tactical, and operating levels, these goals will have little meaning unless careful consideration is given to how the goals will actually be achieved. While goals are the desired ends, plans are the means that will be used to bring about the desired ends. The importance of developing plans becomes apparent when one considers that there may be more than one means of reaching a particular goal. Plans differ by level in the organization and also by extent of recurring use.

Levels of Plans

In much the same way that there are levels of goals, plans also differ according to level in the organization (see Figure 5-2). Thus there are strategic, tactical, and operational plans.[39]

Strategic plans Detailed action steps mapped out to reach strategic goals

Strategic Plans. Strategic plans are detailed action steps mapped out to reach strategic goals. Strategic plans address such issues as how to respond to changing conditions, how to allocate resources, and what actions should be taken to create a unified and powerful organizationwide effort ultimately aimed at strategic goals.[40] Strategic plans generally are developed by top management in consultation with the board of directors and with middle management. Strategic plans typically cover a relatively long time horizon that may extend 3 to 5 years or more into the future. At Cypress Semiconductor, for example, strategic planning considers the future 5 years ahead. Comprehensive statements of strategic plans in organizations often include the mission and goals because these form the basis for strategic action steps. We discuss issues related to strategic planning at considerable length in the next chapter.

Tactical Plans. **Tactical plans** are the means charted to support implementation of the strategic plan and achievement of tactical goals. Tactical plans tend to focus on intermediate time frames, usually encompassing 1 to 3 years. For the most part, tactical plans are developed by middle managers, who may consult lower-level managers before making commitments to top-level management. Tactical plans outline the major steps that particular departments will take to reach their tactical goals. Generally, tactical plans are more specific and concrete than strategic plans. In developing tactical plans, managers may consider a number of possibilities before settling on a final plan (the plan is, of course, subject to change, should things not progress as expected). Tactical plans are important to the success of strategic plans. For example, middle-level managers at Cypress Semiconductor develop tactical plans that support top-level strategic plans.

Tactical plans The means charted to support implementation of the strategic plan and achievement of tactical goals

Operational Plans. **Operational plans** are the means devised to support implementation of tactical plans and achievement of operational goals. Operational plans generally consider relatively short time frames of less than 1 year, such as requirements for a few months, weeks, or even days. Plans at this level are usually developed by lower-level managers in conjunction with the middle management levels. Operational plans spell out specifically what must be accomplished over short time periods in order to achieve operational goals. For example, at Cypress Semiconductor, considerable emphasis is placed on operational plans covering 1 week. Unless operational goals are achieved in organizations, tactical and strategic plans will not be successful and goals at those levels will not be achieved.

Operational plans The means devised to support implementation of tactical plans and achievement of operational goals

Plans According to Extent of Recurring Use

Plans can also be categorized according to the extent to which they will be used on a recurring or ongoing basis. There are two types of plans: single-use plans and standing plans (see Figure 5-5).

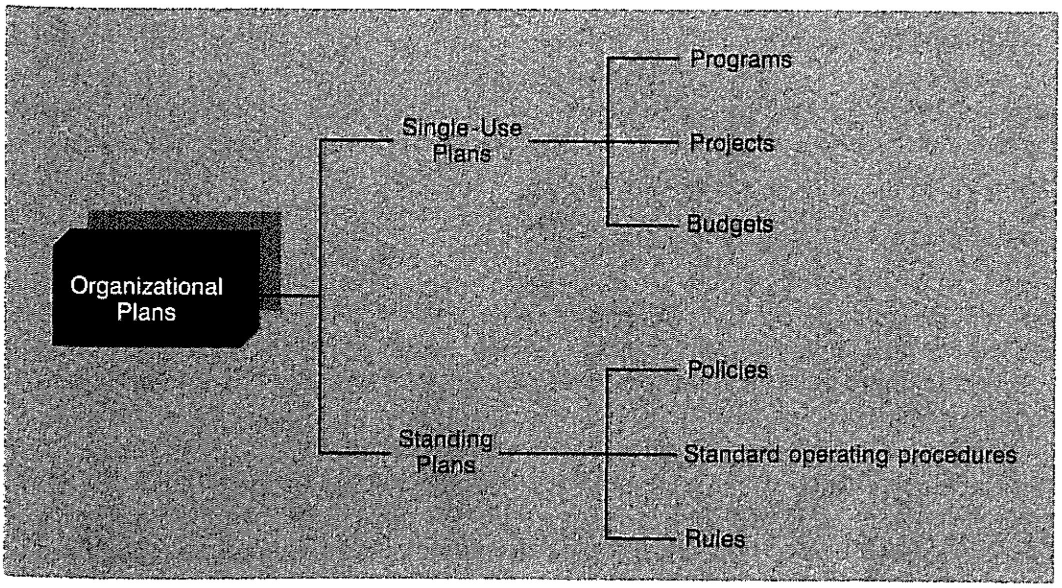


Figure 5-5 Plans according to extent of recurring use.

After studying the customer service operations of 12 other companies, Rosemarie Greco, president of Fidelity Bank in Philadelphia, has developed a standing plan for dealing with complaints from customers. She established one telephone line to deal with the complaints of 14 different business segments in the bank. She personally handles the major problems of clients and reviews all other complaints and inquiries. As a result of her complaint policy and procedures, customer satisfaction increased from 57 percent to 87 percent within 2 years.

Single-use plans Plans aimed at achieving a specific goal that, once reached, will most likely not recur in the future

Program A comprehensive plan that coordinates a complex set of activities related to a major nonrecurring goal

Project A plan that coordinates a set of limited-scope activities that do not need to be divided into several major projects in order to reach a major nonrecurring goal

Standing plans Plans that provide ongoing guidance for performing recurring activities

Policy A general guide that specifies the broad parameters within which organization members are expected to operate in pursuit of organizational goals

Procedure A prescribed series of related steps to be taken under certain recurring circumstances

Single-Use Plans. **Single-use plans** are plans aimed at achieving a specific goal that, once reached, will most likely not recur in the future. There are two major types of single-use plans: programs and projects.

A **program** is a comprehensive plan that coordinates a complex set of activities related to a major nonrecurring goal. Programs typically involve several different departments or units of the organization, are composed of several different projects, and may take more than 1 year to complete. Programs usually include six basic steps: (1) dividing what is to be done into major parts, or projects, (2) determining the relationships among the parts and developing a sequence, (3) deciding who will take responsibility for each part, (4) determining how each part will be completed and what resources will be necessary, (5) estimating the time required for completion of each part, and (6) developing a schedule for implementing each step.[41] Programs frequently have their own budgets. A *budget* is a statement that outlines the financial resources needed to support the various activities included in the program. An example of a program is the 20,000-mile optical-fiber network recently built by U.S. Sprint at a cost of several billion dollars. Stretching from coast to coast, each pair of fiber strands within the cable can handle 16,000 simultaneous conversations.[42] Installing the Sprint network was a nonrecurring goal, because once the network was completed, there was no need to be concerned with redoing it for a considerable period of time.

A **project** is a plan that coordinates a set of limited-scope activities that do not need to be divided into several major projects in order to reach a major nonrecurring goal. Projects also often have their own budgets. A project may be one of several related to a particular program. For example, the fiber-optic program of Sprint consisted of many smaller projects involving laying the fiber-optic cable in various locations. Conversely, a project may be a separate, self-contained set of activities sufficient to reach a particular goal. For instance, at U.S. Sprint, work continues on a project to develop a voice card that would allow a caller to speak into a phone and have a Sprint computer recognize the voice and automatically bill the call.[43] The voice-card project is a self-contained activity that will not need to be repeated once the project is completed.

Standing Plans. **Standing plans** are plans that provide ongoing guidance for performing recurring activities. The three main types of standing plans are policies, procedures, and rules.[44]

A **policy** is a general guide that specifies the broad parameters within which organization members are expected to operate in pursuit of organizational goals. Policies do not normally dictate exactly what actions should be taken. Rather, they provide general boundaries for action. For example, policies frequently spell out important constraints. Many retail stores, for instance, have a policy requiring that returned merchandise be accompanied by a sales receipt. Similarly, policies also often outline desirable actions. At the Hechinger Company, a Maryland-based retailer of hardware and home and garden products, returns are accepted even when the customer has obviously abused the item. In fact, a Hechinger manager can have a dozen roses sent to customers who are particularly upset.[45]

A **procedure** is a prescribed series of related steps to be taken under certain recurring circumstances. Well-established and formalized procedures often are called *standard operating procedures* (SOPs). Unlike policies, which tend to be fairly general, procedures provide detailed step-by-step instructions as to what should be done. As such, they do not allow much flexibility or deviation. For example, banks typically have SOPs governing how tellers handle deposits. Because they specify detailed desired actions in recurring circumstances, SOPs frequently are good tools for training new employees. Of course, if they are allowed to become outdated, SOPs may cause employees to learn, and continue to do, things that are no longer appropriate or needed.

A **rule** is a statement that spells out specific actions to be taken or not taken in a given situation. Unlike procedures, rules do not normally specify a series of steps. Instead, they specify exactly what must be or must not be done, leaving little flexibility or room for deviation. For example, most colleges and universities have rules specifying the circumstances under which a course may be dropped after a certain date.

Rule A statement that spells out specific actions to be taken or not taken in a given situation

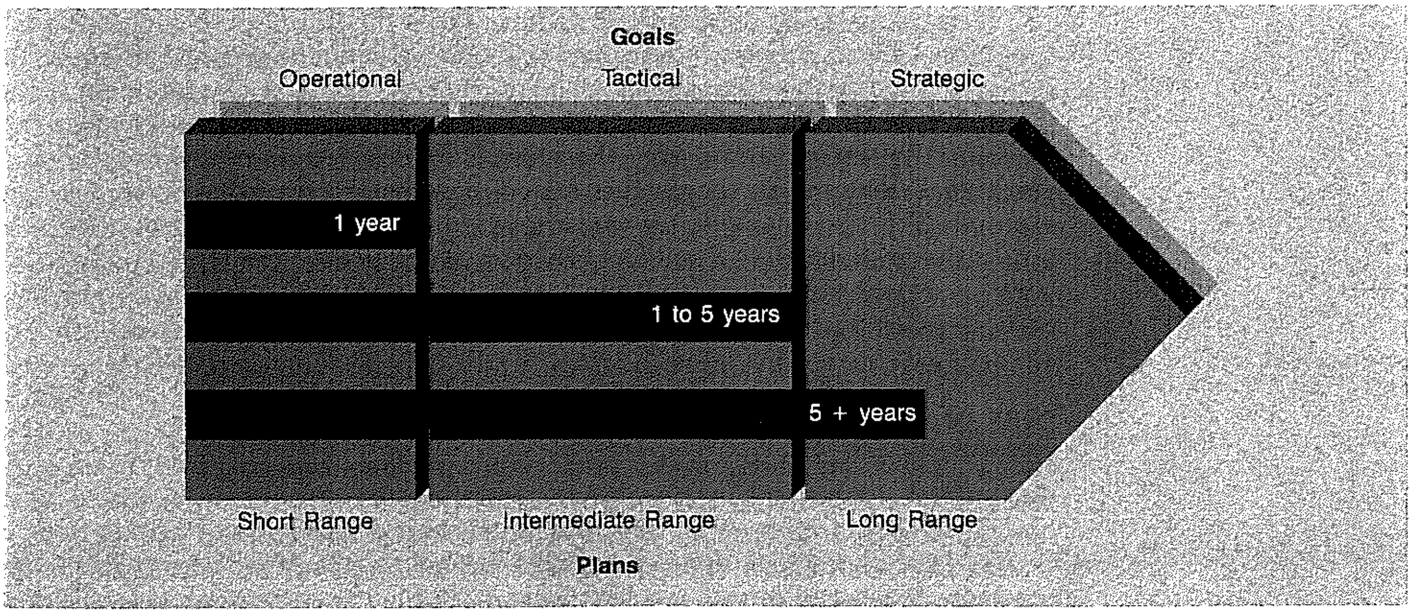
Time Horizons of Goals and Plans

The different levels of goals and plans are related to different time horizons (see Figure 5-6). Strategic goals and plans usually address long-range issues involving time periods of 5 years or more. The period varies somewhat depending on the industry. When the environment changes rapidly, long-range planning may focus on periods that are even less than 5 years; when the environment is relatively stable (such as that of the utility industry), long-range planning may extend to periods of 10 to 20 years. Tactical goals and plans typically address intermediate-range issues involving periods that usually vary from 1 to 5 years. Operational goals and plans are mainly oriented toward short-range issues spanning periods of 1 year or less.

Promoting Innovation: The Role of the Planning Process

Research evidence suggests that the overall planning process can play a vital role in innovation in organizations through the mission, goals, and plans components. Creativity expert Teresa M. Amabile argues that the basic orientation of an organization toward innovation must stem primarily from the highest levels.[46] Ideally, the CEO envisions a future for the organization that is based on innovation and then attempts to communicate that vision to organization mem-

Figure 5-6 Time horizons for goals and plans.



bers. One primary means of signaling the importance of innovation is the organizational mission statement, which can also address the general areas in which innovation is to be emphasized. For example, the mission statement for Cypress Semiconductor designates the major types of "leading-edge process technologies" that will be emphasized, and it specifies, "Cypress's products are strategic components for next-generation computation, instrumentation, telecommunication, military, and aerospace systems." Thus Cypress has clearly committed itself to innovation in attempting to provide those "next-generation" components, and its mission statement also provides some general information about the major areas of innovation.[47] The vision incorporated in such mission statements helps highlight the importance of innovation and motivate organization members to innovate.

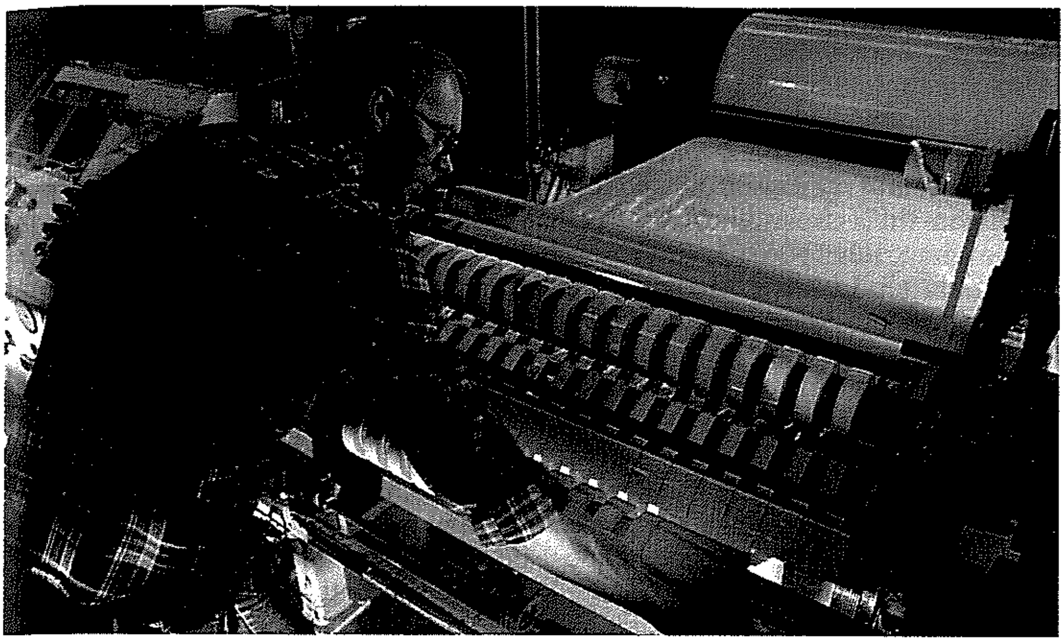
The goals component of the planning process can also support innovation. For example, translating a mission into strategic goals might lead to the following specification: "Within 5 years, the organization will be the number-one provider of state-of-the-art semiconductor chips in a [specified broad] area." The "state-of-the-art" designation signals the need for product innovation. A corresponding goal at the tactical level might be: "Within 2 years, the programmable logic devices division will introduce 20 new products." Finally, at the operational level, a goal for a particular work unit might be: "Within 1 year, the unit will have a working prototype that meets the following general specifications. . . ." Thus goals at each level can be used to encourage innovation.

The plans component of the planning process also plays a role in innovation. While goals calling for innovative outcomes can be stated in at least general terms, actual plans for achieving innovative outcomes, such as new products, often are somewhat looser than might be the case with situations in which exactly what must be done to reach a goal is relatively predictable. The use of general plans for achieving innovative outcomes reflects the difficulty of specifying exactly what should be done when seeking innovative breakthroughs and nurturing new ideas, particularly in product or service development. Of course, managers can take a number of steps to increase the possibilities that innovative goals will be met by making sure that organizational conditions foster innovation. We discuss several of these conditions, such as organizational structure, resource levels, communication patterns, and leadership in subsequent chapters.

Plans can also be used to help achieve goals that do not themselves represent innovative outcomes but, rather, rely on innovative means. For example, a goal might focus on a desired end result, such as cost cutting or quality improvement, yet the development of plans can encourage finding innovative means of reaching the target. In this way, the focus is on developing innovative ways to reach goals that are not themselves stated in terms of innovative outcomes. For example, 3M, a company that is well known for encouraging the development of innovative products (we discuss this aspect of 3M in Chapter 11), recently used goals as a vehicle to encourage the search for innovative means of supporting necessary cost-cutting efforts (see the following Case in Point discussion).

CASE IN POINT: 3M Mines the Work Force for Ideas

A company with a strong reputation for innovative products, 3M has a vast catalog of 60,000 items ranging from Scotch brand transparent tape to floppy disks. Nearly one-third of the company's $12 billion in annual sales comes from products developed during the past 5 years. While the company has excelled at



Slitting tape is now a more efficient operation at 3M's tape factory. By moving the tape coating and slitting machines next to each other and giving the operators responsibility in quality control, the factory has been able to coordinate output and cut down on both inventory and manufacturing time.

churning out new product offerings, innovation in its factories has not always kept stride. The relative lack of innovation at the factory level did not matter greatly until recently, when global rivals began developing their own new products, often at costs lower than 3M's. In reacting to the threat, 3M instituted a major cost-cutting effort aimed at reducing costs in its manufacturing sector. Rather than laying off workers and closing plants, as companies often do, 3M asked each of its over 40 divisions to develop ideas aimed at streamlining operations and boosting productivity.

In dealing with the need for cost cutting, CEO Allen F. Jacobson used an approach that is similar to that used for product innovation. "What we had to do was put people to work on some clear objectives," he says. Jacobson had determined that by 1990 3M needed to improve productivity, speed manufacturing cycles, and cut expenses caused by poor quality. The amount of change for the better that was needed in each area was 35 percent. The initiative came to be called the J-35 program (the "J" is for Jake, Jacobson's nickname).

To meet the overall objective of 35 percent, each division and each individual factory set up specific goals. Instead of implementing companywide policies on where costs were to be cut, Jacobson left it up to the various managers to determine how to meet the goals. Jacobson reasoned that each division might face different challenges in meeting the goals, while plant managers would be in the best position to know where to make necessary changes.

Results have been encouraging. At an Aberdeen, South Dakota, plant that assembles workplace respirators, workers decided that the plant setup was inefficient. After each of seven steps in the manufacturing process, filter materials were placed into a warehouse to await the next step. The result was that the filters made seven different trips back to the warehouse.

To remedy the situation, teams of factory workers helped untangle the flow of materials and components throughout the plant. Their recommendations were relatively radical in that the workers decided to eliminate the traditional assembly line. Instead, the new work flow design called for organizing the machinery into work cells, where all the steps necessary to produce a respirator could be done quickly in a logical sequence. The new setup eliminated the need to send unfinished filters to the warehouse between manufacturing steps. These changes and a new inventory control system helped improve quality and reduce wasted materials by 54 percent.

To encourage such innovative ideas, 3M has worked at rewarding good ideas. At Aberdeen, pizza parties were staged for workers when they reached their goals, and they also received trophies. In order to encourage the workers to coordinate their efforts, individual bonuses were tied to the innovative solutions of the team. The J-35 program has helped the company greatly reduce the costs of its goods sold at the same time that the company has increased research spending.[48]

Potential Obstacles to Planning

Several potential obstacles threaten the ability of organizations to develop effective plans. One barrier is a rapidly changing environment, which makes planning more difficult because plans must be altered frequently. Another obstacle to effective planning is a view among some managers that planning is unnecessary, a stance that may arise when managers have at least a general idea in their heads about future directions and means of reaching organizational goals. Steve Bostic, whose American Photo Group tallied a 52,244 percent increase in sales over a 5-year period before he sold the company to Kodak, argues that plans must be put on paper: "I want people to buy into the plan, so it isn't just my plan anymore. It becomes theirs as well. That way, I know everybody is following the same road map when we go out into the real world." Bostic argues that unless the plan is specific enough to be put on paper, communications with others about the plan will be vague, and they will not be able to give the plan their full support. Meanwhile, Bostic has started another company, the R. Stevens Corporation, built around the idea of an automated photo machine, which is something like an automated teller machine for photo processing.[49] Another potential barrier to planning is the day-to-day work pressures on managers that may channel managerial attention away from doing planning even when they believe that planning is beneficial.[50] Yet another barrier is poor preparation of line managers in terms of their planning knowledge and skills. Finally, effective planning can sometimes be thwarted if staff specialists are allowed to dominate the planning process, leading to low involvement by managers who must ultimately implement the plans.[51]

Organizations can take several steps to reduce the obstacles to planning. One step is encouraging strong top-management support for the planning process. Top-level managers can signal their commitment by being personally involved in the planning process and by maintaining an ongoing interest in how the plans are being implemented. Such commitment encourages managers at lower levels to engage in and support planning. Another step is making sure that planning staffs, often known as corporate planners, maintain a helping role, rather than do the actual planning. A **planning staff** is a small group of individuals who assist top-level managers in developing the various components of the planning process. Such staffs typically help monitor both internal and external environments in order to generate data for strategic decisions by top management. They also suggest possible changes in organizational missions, goals, and plans.[52] From the 1960s through the early 1980s, the influence of corporate planners grew to the point where they often dominated the planning process, leaving line managers with minor roles. By the mid-1980s, many organizations reacted by reducing the role of planning staffs.[53] For instance, when John F.

Planning staff A small group of individuals who assist top-level managers in developing the various components of the planning process

Welch, Jr., took over as chairman at General Electric, he cut the corporate planning group from 58 to 33. Other corporate planners were cut in various divisions and units throughout the company. For example, in GE's major appliance group, the planning staff was cut from 25 to 0 so that managers in the group could be directly involved in the planning process.[54]

The moves at GE reflect another step that organizations can take to reduce the obstacles to planning. Top management can actively involve the managers who will be primarily responsible for carrying out the plans. One part of that involvement entails providing such managers with training in the planning process. Yet another step managers can take in surmounting obstacles is reviewing plans frequently, particularly when the environment tends to change rapidly. To cope with a rapidly changing environment, managers can also engage in contingency planning. **Contingency planning** is the development of alternative plans for use in the event that environmental conditions evolve differently than anticipated, rendering original plans unwise or unfeasible.[55]

Contingency planning The development of alternative plans for use in the event that environmental conditions evolve differently than anticipated, rendering original plans unwise or unfeasible

MANAGEMENT BY OBJECTIVES

One method used by a number of organizations to facilitate the linking of goals and plans is management by objectives. **Management by objectives (MBO)** is a process through which specific goals are set collaboratively for the organization as a whole and every unit and individual within it; the goals then are used as a basis for planning, managing organizational activities, and assessing and rewarding contributions.[56] MBO usually incorporates considerable participation among managers and subordinates in setting goals at various levels.

Management by objectives (MBO) A process through which specific goals are set collaboratively for the organization as a whole and every unit and individual within it; the goals are then used as a basis for planning, managing organizational activities, and assessing and rewarding contributions

Although the origins of MBO are not completely clear, General Electric appears to be the first organization that implemented the process and noted management consultant Peter Drucker is generally credited with being the first individual who wrote about it.[57] Since then, MBO has been used by a wide variety of organizations to help coordinate the goal-setting and planning processes at various levels so that the collective efforts of organization members ultimately support organizational goals.[58] Organizations that have used MBO include Purex, Black and Decker, Tenneco, Texas Instruments, Wells Fargo Bank, Boeing, and Westinghouse.[59] The term "management by objectives" also is sometimes used to describe the more limited application of goal setting to a particular organizational subunit and its members.

Steps in the MBO Process

There can be considerable variation in the way that MBO is practiced across organizations.[60] Most viable MBO processes include the following six steps (see Figure 5-7):[61]

1. *Develop overall organizational goals.* Goals at this stage are based on the overall mission of the organization and address targets to be achieved by the organization as a whole (e.g., a certain rate of return for a given period or a specific increase in market share). These goals are essentially strategic goals set by top management.

2. *Establish specific goals (or objectives) for various department, subunits, and individuals.* In this step, goals are set for various levels in the organization so that the cumulative effect leads to reaching the overall organizational goals set in

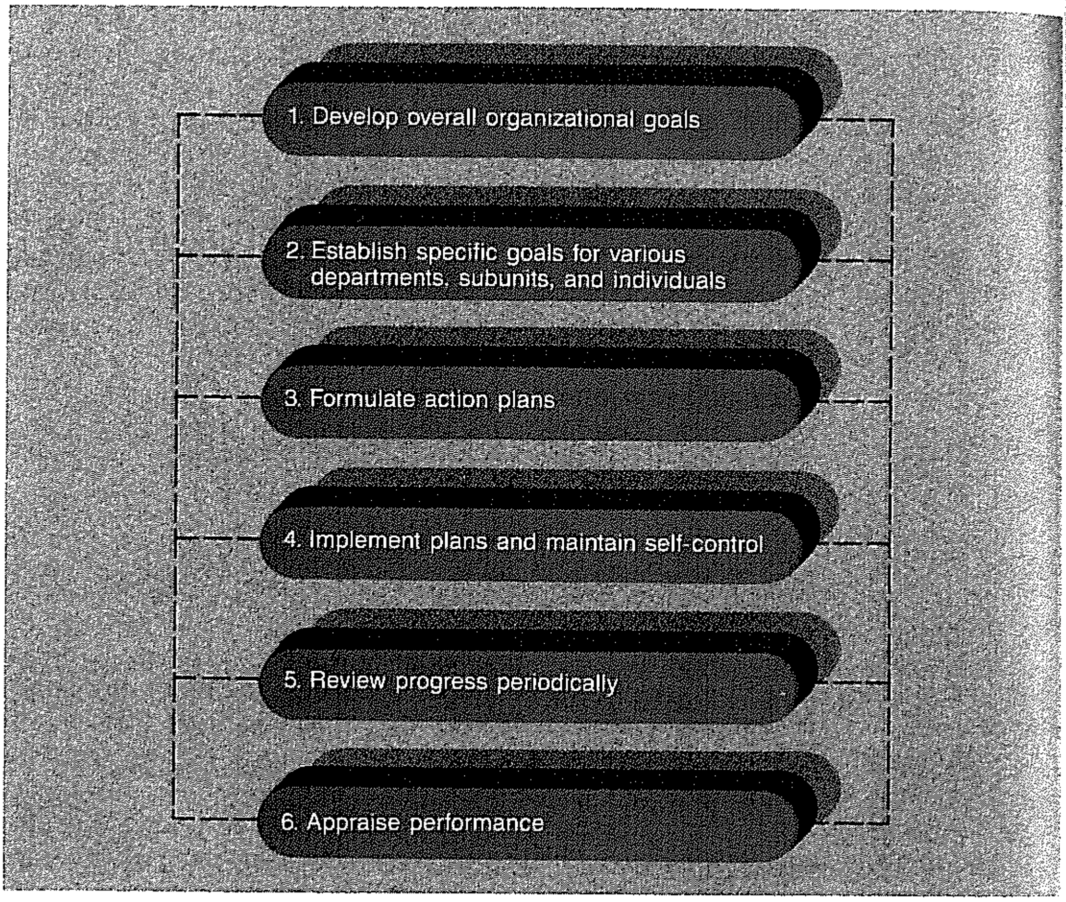


Figure 5-7 Steps in the MBO process.

the previous step. This stage of the process begins when upper-level managers formulate specific objectives that they plan to accomplish, usually related to their own departments or areas of responsibility (such as marketing or production). These goals are usually developed in collaboration with managers at the next level. For example, the head of the marketing department may set a goal of increasing sales volume to 100,000 for a certain product during the coming year, a goal set in collaboration with the regional sales managers. Then the regional sales managers confer with their district managers in setting goals at the regional levels. For example, the eastern sales manager may set a goal of increasing sales volume to 25,000 for the particular product as the eastern region's contribution toward the 100,000 goal of the marketing department at the national level. The process, which is sometimes referred to as the cascading of goals, continues until all units at various levels have specific goals for the coming year. At each level, goals are typically set in key areas, where results are critical to the success of the organization.

Although many organizations follow the top-down process just described, some organizations pursue a more bottom-up approach, in which goals are proposed by lower levels on the basis of what they believe they can achieve. Goals are then developed at the tactical level that are based on the proposed goals provided by the operational level. These tactical goals are then proposed to the strategic level. Usually, though, a bottom-up approach is conducted following at least some general guidelines developed at the strategic level. In any event, with MBO, there typically is some give-and-take among levels before goals at the various levels are finalized.

3. *Formulate action plans.* Once goals are set, there is a need to develop action plans that focus on the methods or activities necessary to reach particular goals. In essence, an *action plan* is a description of what is to be done, how, when, where, and by whom in order to achieve a goal. Action plans help access the feasibility of reaching goals, aid identifying problem areas, assist in spelling out areas in which resources and assistance will be needed, and facilitate the search for more efficient and effective ways to achieve objectives. Such plans usually are developed by subordinates in conjunction with their supervisors.

4. *Implement and maintain self-control.* A basic notion underlying MBO is that once goals are set and action plans determined, individuals should be given considerable latitude in carrying out their activities. The rationale is that individuals know what they are supposed to achieve, have plans mapped out, and can gauge their progress against set goals. Therefore, it should not be necessary for the supervisor to become as involved in the individual's day-to-day activities as might be the case without goals and action plans. The notion of self-control is particularly true with respect to managerial positions. Of course, supervisors still need to be kept informed about progress and any unanticipated difficulties that arise. Supervisors also may need to provide coaching and support if subordinates are having difficulties.

5. *Review progress periodically.* Periodic reviews are important to ensure that plans are being implemented as expected and that goals ultimately will be met. Such reviews provide a good opportunity for checking performance to date, identifying and removing obstacles, solving problems, and altering action plans that are not achieving the expected results. Reviews also make it possible to assess the continuing appropriateness of the goals and to change them if necessary or to add new goals if required by changing conditions. How frequently progress reviews are held will depend on how quickly situations change, but quarterly reviews are common.

6. *Appraise performance.* At the end of the goal-setting cycle, which usually runs for a period of 1 year, managers meet with each of their subordinates to conduct an appraisal of performance over the cycle. The appraisal typically focuses on the extent to which goals were met, as well as on shortfalls, the reasons for them, and actions that can be taken to prevent the same difficulties in the future. The appraisal session includes praise and recognition for areas in which the subordinate has performed effectively, as well as discussion of areas in which the subordinate could benefit from future development of knowledge and skills. Goals and plans for the next cycle may also be discussed at this point.

As Figure 5-7 indicates, feedback from each step may lead to the revision of prior goals or the setting of future ones. While constant revision of prior goals tends to defeat the purpose of MBO, some revisions may be necessary to accommodate major changes in circumstances. The purpose of the goal-setting and planning processes is essentially to coordinate efforts toward important organizational goals. If those goals need changing, then efforts probably require redirecting as well; hence corresponding goals at various levels should be changed also.

Strengths and Weaknesses of MBO

As suggested by the successful use of MBO at Cypress Semiconductor, management by objectives has a number of major strengths (see Table 5-4).[62] For one thing, MBO aids the coordination of goals and plans and, thereby, increases the prospects for ultimately achieving long-term organizational goals. For another, it

Table 5-4 Strengths and Weaknesses of MBO

Strengths	Weaknesses
1. Aids coordination of goals and plans	1. Tends to falter without strong, continual commitment from top management
2. Helps clarify priorities and expectations	2. Necessitates considerable training of managers
3. Facilitates vertical and horizontal communication	3. Can be misused as a punitive device
4. Fosters employee motivation	4. May cause overemphasis of quantitative goals

helps clarify priorities and spell out what outcomes are needed at each level so that individuals know what is expected of them. For example, Illinois Health Care Associations experienced declining membership, lower credibility with members, and reduced revenues before instituting an MBO system that helped members collaborate on future directions and coordinate activities.[63] Yet another strength is that MBO facilitates communication among the various levels and among peers at the same level when coordination is needed to achieve mutual goals. MBO also aids controlling by providing benchmarks against which progress can be evaluated. Finally, MBO can increase motivation by providing employees with feedback about their progress and recognition for accomplishments.

On the other hand, MBO also has several potential weaknesses (see Table 5-4). One potential weakness is that successful operation of an MBO system tends to falter without strong, continual commitment from top management. The necessary commitment includes the willingness to set top-level goals, communicate the goals to other organizational levels, participate with immediate subordinates in establishing individual goals, provide the resources necessary to achieve goals at various levels, and offer feedback regarding goal accomplishment. Another weakness is that managers may not be adequately trained to set appropriate goals and coach employees when necessary. Still another weakness is that MBO can be misused as a punitive device for failure to meet goals, rather than as a means of encouraging employee motivation and development. Finally, MBO systems may overemphasize quantitative goals and production.

The possible implications of these latter two potential weaknesses can be seen in the case of MiniScribe, a computer disk-drive company. The Colorado-based company had been doing poorly before Q. T. Wiles, who had a reputation for resuscitating ill companies, took over the helm. The company's stock quintupled within 2 years on the basis of strong financial reports before it was finally revealed that the data were bogus. Interviews with current and former executives, employees, competitors, suppliers, and others familiar with the company revealed major internal difficulties. Wiles set unrealistic sales goals and used an abusive management style that created such pressure that managers began to falsify data through such steps as booking shipments as sales and simply fabricating figures.[64] At Nordstrom's, the Seattle-based retailer, some present and former employees have complained of extreme pressure to meet sales goals. A recent investigation by the Washington State Department of Labor and Industries found that the company systematically violated state law by failing to pay employees for the time spent doing such duties as delivering merchandise to customers or working on inventory.[65]

Assessing MBO

Because of the possible weaknesses, MBO has not always reached its potential. Although it has been successful in some organizations, MBO has failed in others.[66] According to one estimate, MBO has been used in almost half the Fortune 500 companies, yet it has been successful only about 20 to 25 percent of the time. Failures of MBO systems seem to stem from a lack of adequate support from top management and poor goal-setting and communication skills among managers who must implement the system.[67] Hence the way in which MBO is operated by managers may undermine its effectiveness. While overall organizational or strategic goals are important to the MBO process, they are also a critical element in strategic management, a subject that we explore in the next chapter.

CHAPTER SUMMARY

Major components of the overall planning process are the mission, goals, and plans of the organization. The mission is the organization's purpose or fundamental reason for existence. The mission statement, a broad declaration of the basic, unique purpose and scope of operation that distinguishes the organization from others of its type, has several purposes. The statement can be a benchmark against which to evaluate success; a means of defining a common purpose, nurturing loyalty, and fostering a sense of community among members; and a signal about values and future directions. A goal is a future target or end result that an organization wishes to achieve. A plan is a means devised for attempting to reach the goal.

Goals have several potential benefits. They can increase performance, clarify expectations, facilitate the controlling function, and help increase motivation. Organizations typically have three levels of goals: strategic, tactical, and operational. These three levels of goals can be conceptualized as a hierarchy of goals.

A number of key components help explain how goals facilitate performance. Goal content is one component; goals should be challenging, attainable, specific and measurable, time-limited, and relevant. Goal commitment is another key component and can usually be positively influenced through supervisory authority, peer and group pressure, public display of commitment, expectations of success, and incentives and rewards. Participation also may engender goal commitment. Work behavior is also a major component; goal content and goal commitment influence the direction, effort, persistence, and planning aspects of work behavior. Other major components are job knowledge and ability, complexity of task, and situational constraints. Care must be taken to avoid a number of potential problems with goal setting.

In much the same way that there are levels of goals, plans also differ according to level in the organization. Thus there are strategic, tactical, and operational plans. Plans also can be categorized according to the extent to which they will be used on a recurring basis. Single-use plans usually will not need to be repeated in the future and include programs and projects. Standing plans are used on a recurring basis and include policies, procedures, and rules. The different levels of goals and plans are related to different time horizons, with strategic goals and plans usually focused on long-range issues 5 years or more in the future, tactical goals and plans aimed at intermediate-range issues 1 to 5 years in the future, and operational goals and plans oriented toward 1 year or less. Research suggests that the planning process can help promote innovation through a mission statement that signals the importance of innovation, goals aimed at innovative outcomes, and loose plans that allow latitude in the innovation process or focus on innovative means of reaching goals. Managers must take steps to reduce or avoid several potential obstacles to developing plans.

Management by objectives includes the following steps: develop overall organizational goals; establish specific goals for various departments, subunits, and individuals; formulate action plans; implement and maintain self-control; review progress periodically; and appraise performance. MBO has several strengths and weaknesses. Failures of MBO systems seem to stem from a lack of adequate support from top management and poor goal-setting and communication skills among managers who must implement the system.

MANAGERIAL TERMINOLOGY

contingency planning (179)
goal (156)
goal commitment (166)
management by objectives (MBO) (179)
mission (157)
mission statement (157)
operational goals (162)
operational plans (173)
plan (157)
planning staff (178)
policy (174)
procedure (174)
program (174)
project (174)
rule (175)
single-use plans (174)
standing plans (174)
strategic goals (161)
strategic plans (172)
tactical goals (162)
tactical plans (173)

QUESTIONS FOR DISCUSSION AND REVIEW

1. Outline the major components in the overall planning process. Trace these components for an organization with which you are familiar.
2. Define the concept of organizational mission, and explain the purposes of a mission statement. Think of an organization that you would like to establish. What type of mission would you develop?
3. Outline the major benefits of goals. Describe a situation in which you have observed the major benefits of goals.
4. Explain how goals and plans differ according to organizational level. Describe how goals and plans may be different at the various levels of management at your college or university.
5. Describe the major components in the model indicating how goals facilitate performance. Give an example of a situation in which you have seen goals work well and an example of a situation in which goals did not seem to work. Use the model to explain the successful situation and the failure situation.
6. Explain how to set goals. Give four examples of goals that you might set for yourself during the coming semester.
7. Delineate several potential problems with goal setting. Give an example of how two of these potential problems might apply in an organization with which you are familiar (perhaps an organization on campus). What steps might you take to avoid such problems?
8. Explain the various types of single-use and standing plans. Give an example of each type of plan at your college or university.
9. Assess the role of goals and plans in promoting innovation. Explain how goals and plans helped 3M reduce costs in its manufacturing sector.
10. Explain the steps in the management by objectives process and assess the strengths and weaknesses of MBO.

DISCUSSION QUESTIONS FOR CHAPTER OPENING CASE

1. Trace the overall planning process at Cypress Semiconductor.
2. Assess the benefits of the use of goals at Cypress, and explain how the goal-setting process works.
3. Evaluate the strengths and weaknesses of MBO as practiced by Cypress.

MANAGEMENT EXERCISE: WORKING WITH MBO

You have recently received your degree and have accepted a position as a department head at a local hardware store that is part of a small, but growing, chain. The chain uses an MBO system. Some of the strategic goals are reaching $400 million in annual sales within 5 years, building a reputation for excellent customer service, and having a double-digit return on investment throughout the period. Some of the tactical goals include opening six new stores each year for the next 3 years, opening one new store in your district this year, reaching annual sales of $1 million, earning a return on investment of 14 percent, increasing customer satisfaction by 5 percentage points on the annual survey, and having departmental sales of $40,000 for each employee in the department.

On the basis of these strategic and tactical goals, draft some goals for the operational level of your sales department.

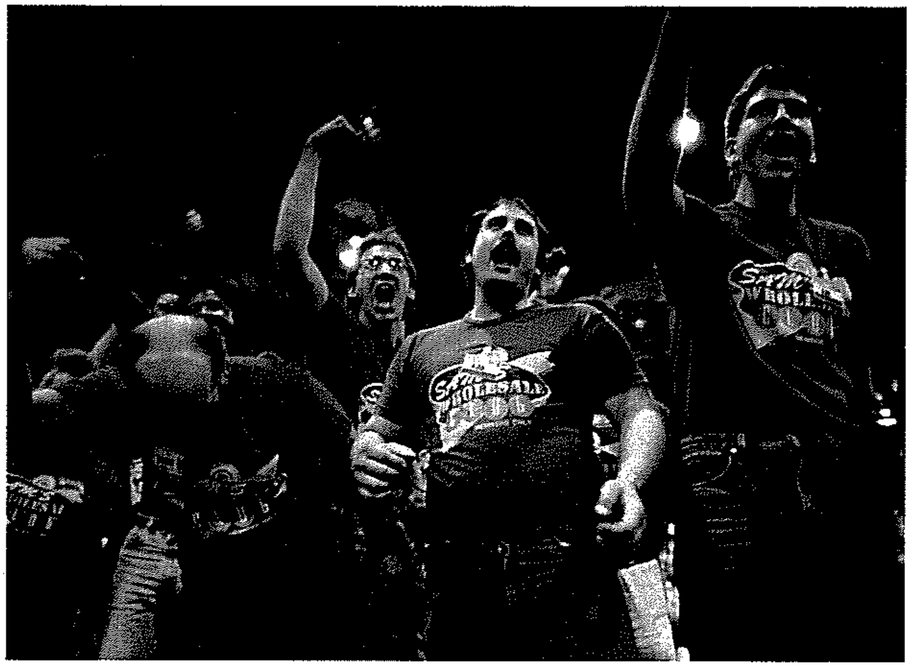
WAL-MART LEAPFROGS THE COMPETITION

He stands on the nearest box, table, or platform and shouts to the crowd: "Give me a W!" The enthusiastic, resounding "W" from the associates gathered for the Saturday morning meeting all but shakes the building. So it goes for all the letters in Wal-Mart, before everyone joins in the chorus, "Wal-Mart, we're number 1!" The energy and enthusiasm displayed on this Saturday morning has played a major role in the phenomenal growth of Wal-Mart Stores, Inc. Today Wal-Mart is in the process of passing K-Mart and becoming second only to Sears, Roebuck and Company, which still holds the title as America's leading retailer.

The success of the company can be traced directly to founder Samuel Moore Walton, who grew up in the four-state area of Arkansas, Missouri, Oklahoma, and Kansas. After graduating from the University of Missouri in 1940 with a degree in economics, he immediately accepted a position with J. C. Penney as a management trainee; but that career was interrupted by Army service in World War II. Soon after returning from military duty, he opened the first Walton's Ben Franklin store (a five-and-dime type of store) in Versailles, Missouri. After losing his lease in 1950, Walton moved his business to Bentonville, Arkansas, where he opened a Walton 5 & 10. He also continued to establish Ben Franklin franchises and had 15 by 1962, when he opened the first Wal-Mart Discount City. By 1969, when the company was incorporated as Wal-Mart Stores, Inc., there were 18 Wal-Mart and 15 Ben Franklin stores operating throughout Arkansas, Missouri, Kansas, and Oklahoma. From 1970 to 1979, annual sales grew from $44 million to $1.248 billion, and there were 276 Wal-Mart stores in 11 states. The steady expansion since that time has resulted in sales of more than $20 billion and 1355 stores (including 120 Sam's Wholesale Clubs and 14 DOT Discount Drug stores) in the 27 central and southern states of the nation. The west, northwest, and northeast are considered prime target areas for the future.

Wal-Mart has followed a strategy of building and expanding in areas where the local population is under 50,000. One or two stores are built, and then a distribution center is constructed nearby that will support further expansion in the geographic area. Other stores are then built within a day's drive of the distribution center. Wal-Mart currently has 19 distribution centers, which are widely considered to be major factors in the company's spectacular success.

Wal-Mart's mission stresses three major elements, or principles: value and aggressive service for customers, partnership with associates (employees), and strong relationships with the communities in which stores are located. As part of the effort toward aggressive customer service, a "greeter" welcomes customers at the door with a smile and offers them directions, if needed. Associates throughout the stores are trained to look customers in the eye, greet them, and ask them if they would like help. In the area of value, the prices are probably lower than at any other store in the area.



Wal-Mart Stores, the discount store chain that includes Sam's Wholesale Club outlets, blankets the southern and central states with 1355 stores. Founder Samuel Walton built up his booming business by servicing small communities bypassed by the big retailers; now the company is poised to spread into the larger metropolitan areas. In this picture cashiers at a new Sam's Wholesale Club in Flint, Michigan, cheer at the opening day ceremonies. Walton treats employees as partners in the organization and gives them important roles to play in achieving both corporate and individual store goals.

The Wal-Mart relationship with associates is based on the premise that they are partners in the organization. Associates have access to information about their stores, such as costs, freight charges, and profit margins, that many other organizations show only to general managers. Associates play a major role in achieving various overall Wal-Mart and individual store goals.

In building relationships with the community, each store participates in one fund-raising project each year in its local community. The funds raised are then matched by funds from the Wal-Mart Foundation. Each store also awards a $1000 scholarship to a deserving student each year. Annually, Wal-Mart contributes several million dollars to both the Children's Miracle Network and the United Way.

Goals play an important part in the way that Wal-Mart is managed. Goals are developed using MBO as part of the planning process. At Wal-Mart, the top level of management provides some guidelines in areas such as profits and growth; these are then used as a basis for setting goals at the division and store levels. Most of the more specific tactical goals are developed at the division level and then are forwarded to the corporate or top level, where they are reviewed and are used to formulate the final goals at the strategic level. Stores also have some input into the goals that are ultimately set and have annual operational goals of their own to achieve. Some of the specific goals set at Wal-Mart during a recent annual goal-setting effort included the following:

- Adding 20 percent more floor space by opening 115 new stores and expanding 60 existing stores (Another 30 stores were scheduled for remodeling.)
- Opening 10 to 12 new Sam's Wholesale Clubs and doubling the sales of this division
- Opening one new DOT Discount Drug store
- Adding three more distribution centers
- Trying out 25,000- to 35,000-square-foot store prototypes in small communities (The regular Discount City store has 60,000 to 90,000 square feet of sales space.)
- Pursuing a "Buy American" plan to give preference to stocking merchandise manufactured in the United States.

Wal-Mart usually sets some goals aimed at innovation, such as testing the 25,000- to 35,000-square-foot store prototypes. Wal-Mart also has recently been experimenting with Hypermart USA stores; each one is basically a huge combination Wal-Mart and grocery store.

Individual stores generally are expected to achieve at least a 10 percent increase in sales over the previous year. Stores also have profit goals. Associates receive a share of the profits above the goals set for each store. In addition, associates play a major role in reducing "shrinkage," the losses experienced by each store from theft and damage. Each store has a goal for shrinkage; if that goal is surpassed, every associate in the store receives an annual bonus of up to $200. Through its system of rewards for exceeding store goals, Wal-Mart has kept its shrinkage to just over 1 percent (which amounts to about $200 million annually), compared with an industry average of 2 percent. Once goals are set, the various levels engage in action planning to determine the specific means that will be used to achieve the goals.

Goals are monitored throughout the fiscal year to ensure that they are being achieved as intended. Rarely are they not met, but on some occasions Wal-Mart has not been pleased with the performance of some stores and has sold them. For example, the Ben Franklin stores were phased out in 1976 to make room for more Wal-Mart stores. A line of Helen's Arts and Crafts stores was sold. Wal-Mart also tried a do-it-yourself building concept that failed. It is reported that some executives would like to sell the DOT Discount Drug chain. Thus not all of Wal-Mart's ventures have been successful from the company's point of view.

On balance, however, Wal-Mart has been extremely successful. A $1000 investment in Wal-Mart's initial stock offering in 1970 would be worth more than half a million dollars today. Wal-Mart is frequently among the leaders in *Fortune*'s survey of the most admired corporations in America. It was named one of the five best-managed U.S. companies by *Business Month* in December 1988. The company is still growing at a rate of more than 20 percent a year.[68]

QUESTIONS FOR CHAPTER CONCLUDING CASE

1. Trace the overall planning process at Wal-Mart.
2. Use the goal-setting process to explain why the use of goals at Wal-Mart enhances performance.
3. Describe the MBO process at Wal-Mart.

CHAPTER SIX

STRATEGIC MANAGEMENT

CHAPTER OUTLINE

The Concept of Strategic Management
The Strategic Management Process
Importance of Strategic Management
Levels of Strategy
Promoting Innovation: Modes of Strategic Management

The Role of Competitive Analysis in Strategy Formulation
Environmental Assessment
Organizational Assessment

Formulating Corporate-Level Strategy
Grand Strategies
Portfolio Strategy Approaches

Formulating Business-Level Strategy
Porter's Competitive Strategies
Assessing Porter's Strategies

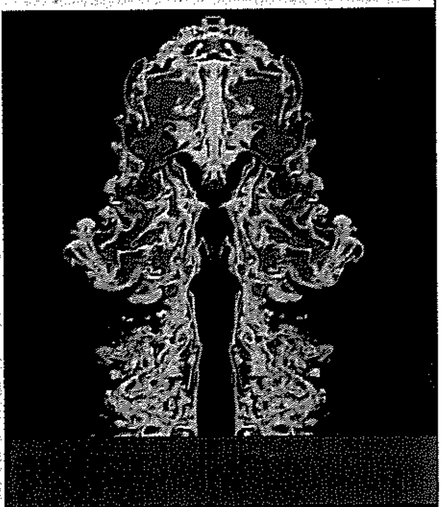
Formulating Functional-Level Strategy

Strategy Implementation
Carrying Out Strategic Plans
Maintaining Strategic Control

LEARNING OBJECTIVES

After studying this chapter, you should be able to:

- Explain the concept of strategic management and differentiate among the three main levels of strategy.
- Outline the major components of the strategic management process.
- Distinguish among three major modes of strategy formulation and explain how each can be used to promote innovation.
- Describe the role of competitive analysis in strategy formulation and the major approaches to such analysis.
- Enumerate the main generic strategies available at the corporate level.
- Explain the three major portfolio strategy approaches for use at the corporate level.
- Describe Porter's competitive strategies for the business level.
- Explain the role of strategies at the functional level.
- Outline the process of strategy implementation.



GAINING THE EDGE

THE MAGIC RETURNS TO DISNEY

By the early 1980s, the magical kingdom of Walt Disney Productions had lost its sparkle. It seemed that the creative juices in the company had slowly ebbed after the death in 1966 of Walt Disney, creator of such luminaries as Mickey Mouse, Minnie Mouse, and Donald Duck. Walt Disney's immediate successors were wary of tampering with what had been a successful formula and, thus, made changes only slowly. As a result, attendance at the Disney theme parks in California and Florida began to level off, Tomorrowland began to lose its forward look, and, for the first time in almost three decades, no Disney-produced show was appearing on television. With few exceptions, Disney movies were dismal failures at the box office.

Rumors began to circulate that outside investors might acquire the company, sell off many of its valuable assets (such as its film library, movie studio, and real estate), and leave only the declining theme parks. Alarmed at the potential demise of the magical empire, Roy Disney, Walt Disney's nephew and the company's largest shareholder, resigned from the board of directors and joined with other major investors in insisting on a new regime at the top.

The dire situation reversed dramatically after the board brought in Michael D. Eisner as chairman and chief executive officer and Frank G. Wells as president and chief operating officer. Eisner, who has a creative bent, had been an extremely successful president of Paramount Pictures while Frank Wells, a lawyer with a strong financial background, had been a noteworthy vice-chairman of Warner Brothers. When the two took charge at Disney in September 1984, they quickly began to infuse the company with a renewed entrepreneurial spirit. "We saved Disney from the enemy and kept Disney together," says Eisner. "What's more, we discovered that our major assets were the Disney name, the Disney culture, its movies and library. So we began our management of these assets by revitalizing them, and intertwining them with new assets. We have introduced new movies, new ideas, new theme parks, and new executives."

One major move was revamping Disney World and Disneyland to such an extent that the number of visitors to the parks has increased dramatically. Others included opening Tokyo Disneyland; introducing the *Mickey and Donald* cartoon series to China Central Television, where it is the most popular children's program; signing an agreement with the French goverment to build and operate a $2 billion theme park near Paris called Euro Disneyland (scheduled to open in 1992); and returning Disney to network television with the *Disney Sunday Night Movie* on ABC, hosted by Eisner himself.

The company, now called the Walt Disney Company, has three main operating divisions: filmed entertainment, consumer products, and theme parks and resorts. In the filmed entertainment division, the new management team has converted Walt Disney Studios from a lackluster performer that had only 3 percent of the movie market to a studio that has been leading the pack with such hits as *Honey, I Shrunk the Kids, Dead Poets Society*, and *Dick Tracy*, as well as sequels to its earlier huge successes, *Three Men and a Baby* and *Good Morning, Vietnam*. Many such films are adult fare, released under Touchstone and other labels.

The consumer-products division ensures that Disney products, such as Mickey Mouse watches, sweatshirts, stuffed animals, and crib linen, are available throughout the world. The items are all manufactured under license. Annual sales in Japan alone commonly are in the $1 billion range. Disney also has a new chain of U.S. retail stores that has performed well beyond expectations, so much so that premier malls are vying for the 100 stores that will be open by 1992. The Disney label dominates the charts in children's records.

In May 1989, the theme parks and resorts division opened a new $500 million movie studio theme park at Disney World in Orlando. Drawing record crowds, the studio park, a joint venture with MGM, has been so successful that plans are under way to double its size by 1992. The previous regime at Disney was so cautious that top management allowed investors to build and own Tokyo Disneyland, which opened in Tokyo in 1983, with Disney receiving only 10 percent of all admission receipts and 5 percent of all sales at the facility. Nevertheless, Disney World, Disneyland, and Tokyo Disneyland together account for about 56 percent of Disney's revenues and 64 percent of operating profits. The U.S. parks provide operating margins of 30 percent. Recently, Disney has been adding hotels on Disney World property and has spent more than $1 billion on new attractions such as Typhoon Lagoon water rides and the Pleasure Island area, which provides nightlife, including comedy and dance acts, as well as beer, wine, and liquor. The company also is planning a major expansion of Disneyland, which perhaps will include another site in California.

Mickey and Minnie Mouse draw huge crowds to Tokyo Disneyland, but the Disney company earns only 10 percent of the operating receipts. That is because the cautious management team that took over after Walt Disney's death in 1966 sold the rights to build and own Tokyo's theme park. Reluctance to take the bold measures that would match the founder's vision sent the Disney company into a decline. In 1984, however, power passed to a new management team whose creative strategies have turned the company around in all three of its divisions—filmed entertainment, consumer products, and theme parks and resorts.

Many of the ideas for films, consumer products, and park attractions originate with Eisner himself, who counts on Wells to squelch his more impractical suggestions, such as his vision of a 43-story hotel in the shape of Mickey Mouse. Other ideas begin with the famous Disney Imagineering division, an innovative group that is mainly responsible for dreaming up new ideas and figuring out how they can be engineered to work. It is the Imagineering group, for example, that envisions and ultimately builds new attractions, such as the new ride at Disney World that simulates zipping along the path of the human bloodstream, including visits to the heart and brain.

While Imagineering is the company's think tank, financial aspects of projects also are important. Accordingly, after Imagineering develops design and engineering requirements for a project, the project is then submitted to a six-person strategic planning group, which reviews the project's compatibility with strategic directions and checks to make sure that the financial aspects make sense. Then, together, the two groups outline a budget and a schedule before the package goes to Wells and Eisner, who quickly make the final decision about whether or not to proceed.

In providing strategic directions, Eisner and Wells encourage synergy among various divisions, so the efforts of one division often help those of others. For example, suppose the animation studio creates a cartoon character like Roger Rabbit to appear in films. The consumer-products division then often can license the character to merchandisers who manufacture stuffed animals and other products, such as T-shirts, which can be sold in Disney retail stores and in the theme parks. The character also may become the basis for a costumed figure in the parks and possibly the subject of new rides or attractions.

In Eisner's view, his chief duty at Disney is leading creatively and being an orchestrator, thinker, inventor, and cheerleader for new ideas. Wells keeps close tabs on financial aspects. So far their efforts have returned the magic to Disney and pleased investors as well. Revenues have climbed at an average annual rate of 23 percent, while net income has grown at an annual rate of almost 50 percent since the duo took the helm.[1]

How were Eisner and Wells able to take a languishing company and make it so visibly prosperous again? Their success stems in part from their strong commitment to Disney's growth and their ability to map out important strategic directions for the company. To make sure that the company and its various parts stay on track, the six-person strategic planning group reviews each project for compatibility with the strategic plan before the project is sent to Eisner and Wells for final approval. In Chapter 5, we consider various levels of goals and plans, including those at the strategic level. Strategic goals and plans are a particularly important part of the managerial planning function because they ultimately determine the overall direction of the organization. Accordingly, in this chapter, we take a more thorough look at strategic-level planning issues, exploring in depth how companies like Disney are managed strategically. We begin by examining the concept of strategic management, including how modes of strategic management can influence innovation. We then consider how competitive analysis can form the basis for developing effective strategies aimed at gaining an edge over competitors. We next analyze policy formulation at the corporate, business, and functional levels. Finally, we probe the process of strategy implementation.

THE CONCEPT OF STRATEGIC MANAGEMENT

Strategies Large-scale action plans for interacting with the environment in order to achieve long-term goals

Strategic management A process through which managers formulate and implement strategies geared to optimizing strategic goal achievement, given available environmental and internal conditions

Most well-run organizations attempt to develop and follow **strategies,** large-scale action plans for interacting with the environment in order to achieve long-term goals.[2] A comprehensive statement of an organization's strategies, along with its mission and goals, constitutes an organization's strategic plan.[3] To learn where such strategies originate and how they are put into action, we need to examine carefully an aspect of the planning function called strategic management. **Strategic management** is a process through which managers formulate and implement strategies geared to optimizing strategic goal achievement, given available environmental and internal conditions.[4] This definition recognizes that strategic management is oriented toward reaching long-term goals, weighs important environmental elements, considers major internal characteristics of the organization, and involves developing specific strategies. Thus the strategic management process encompasses a major part of the planning process introduced in Chapter 5.

The Strategic Management Process

Strategy formulation The process of identifying the mission and strategic goals, conducting competitive analysis, and developing specific strategies

Strategy implementation The process of carrying out strategic plans and maintaining control over how those plans are carried out

The strategic management process is made up of several major components, as shown in Figure 6-1. The process begins with identifying the organization's mission and strategic goals, concepts that are discussed in depth in Chapter 5. The process also includes analyzing the competitive situation, taking into consideration both the external environment and relevant organizational factors. Once the situation has been carefully analyzed, managers can begin to develop, or formulate, various strategies that can be used to reach strategic goals. The part of the strategic management process that includes identifying the mission and strategic goals, conducting competitive analysis, and developing specific strategies is often referred to as **strategy formulation.** In contrast, the part of the strategic management process that focuses on carrying out strategic plans and maintaining control over how those plans are carried out is known as **strategy implementation.**[5] Strategy implementation is increasingly highlighted as a distinct part of the strategic management process because even the most brilliantly formulated strategies must be implemented effectively in order to reach strategic goals.

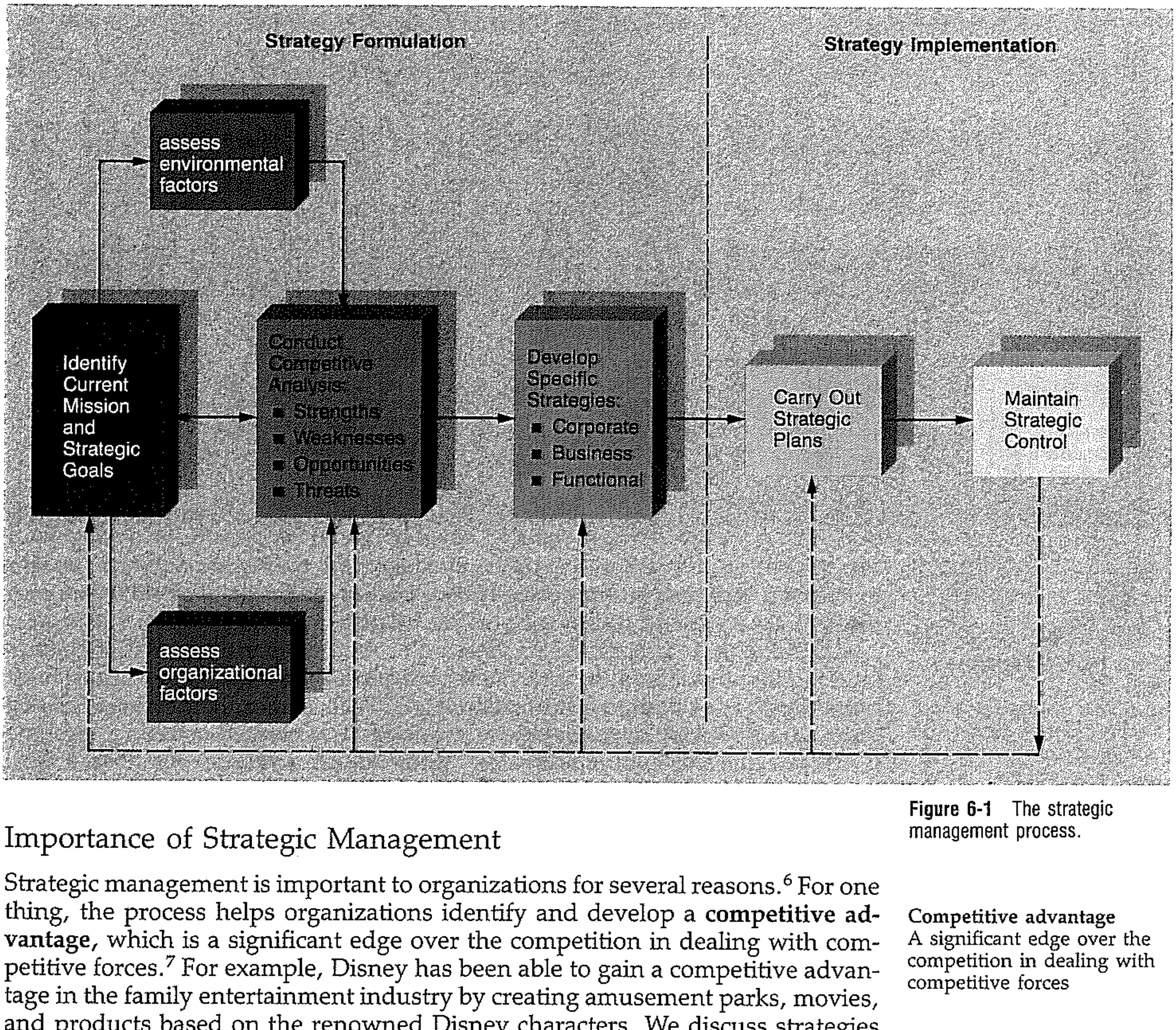


Figure 6-1 The strategic management process.

Importance of Strategic Management

Strategic management is important to organizations for several reasons.[6] For one thing, the process helps organizations identify and develop a **competitive advantage**, which is a significant edge over the competition in dealing with competitive forces.[7] For example, Disney has been able to gain a competitive advantage in the family entertainment industry by creating amusement parks, movies, and products based on the renowned Disney characters. We discuss strategies aimed at gaining a competitive advantage in greater detail in later sections of this chapter.

Competitive advantage A significant edge over the competition in dealing with competitive forces

Another reason for the importance of strategic management is that it provides a sense of direction so that organization members know where to expend their efforts. Without a strategic plan, managers throughout the organization may concentrate on day-to-day activities only to find that a competitor has maneuvered itself into a favorable competitive position by taking a more comprehensive, long-term view of strategic directions. For example, the Rayovac Corporation, a battery and flashlight maker based in Madison, Wisconsin, had fallen behind competitors in the early 1980s because of its aging product line, outdated packaging, and slowness in entering the market for alkaline batteries (which became the industry standard). Since that time, a new chairman and vice-chairman, the husband-and-wife team of Thomas and Judith Pyle, have rejuvenated the company partially through a variety of innovative new products, such as the Luma 2, a sleek flashlight with an extremely bright krypton

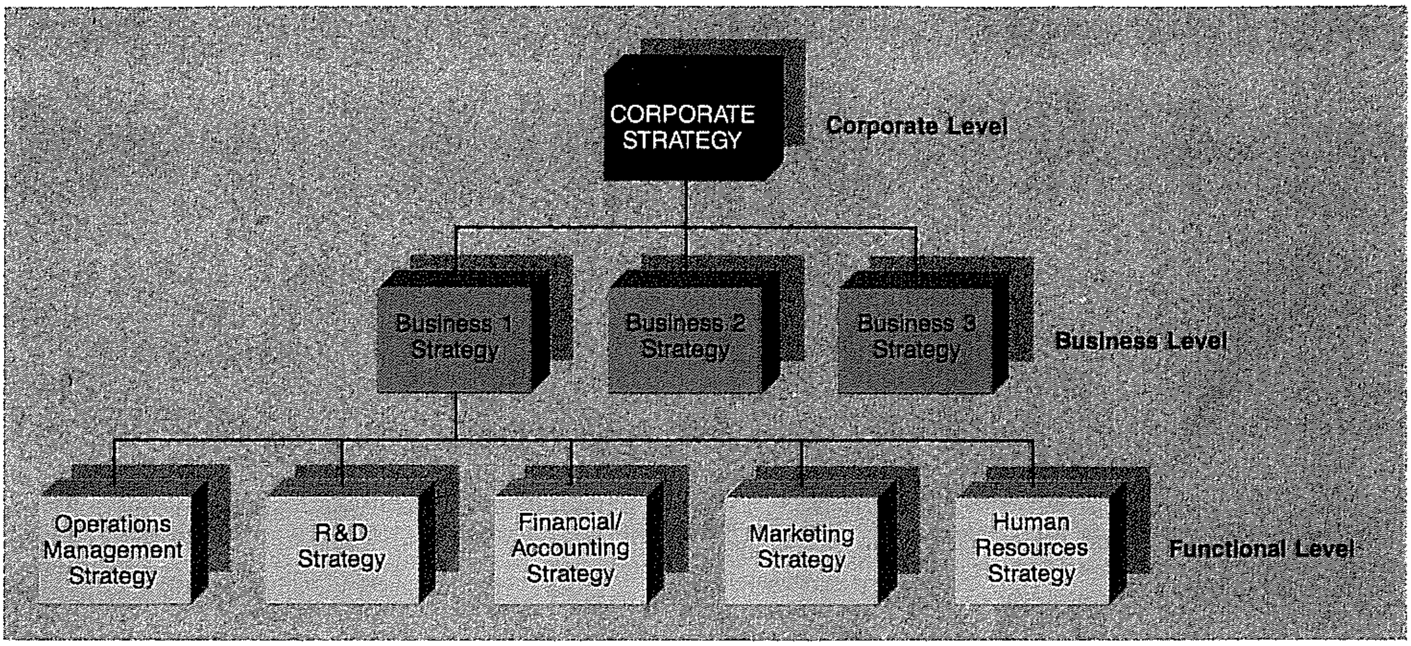


Figure 6-2 Levels of strategy. (Adapted from John A. Pearce II and Richard B. Robinson, Jr., *Strategic Management: Strategy Formulation and Implementation*, 3d ed., Irwin, Homewood, Ill., 1988, p. 9.)

light and a lithium-powered, long-lasting backup bulb. Rayovac says that with the backup system, the flashlight should work for about 10 years.[8]

Yet another reason for the importance of strategic management is that it can help highlight the need for innovation and provide an organized approach for encouraging new ideas related to strategies.[9] For instance, Disney has a special procedure for handling major innovations, whereby new ideas and accompanying financial considerations are forwarded to the strategic planning group, which evaluates them for compatibility with the firm's overall strategy. In addition, the process can be used to involve managers at various levels in planning, thus making it more likely that the managers will understand the resulting plans and be committed to their implementation.[10]

Finally, studies support the existence of a link between strategic management and organizational financial performance, although results have not always been consistent.[11] Of course, assessments of strategic management should also consider other important outcomes, such as the satisfaction of various organizational stakeholders (see Chapter 4) and the extent to which the organization adequately deals with relevant factors in the environment (see Chapter 3).

Levels of Strategy

Many organizations develop strategies at three different levels: corporate, business, and functional. The three levels are shown in Figure 6-2.[12]

Corporate-level strategy A type of strategy that addresses what businesses the organization will operate, how the strategies of those businesses will be coordinated to strengthen the organization's competitive position, and how resources will be allocated among the businesses

Corporate-Level Strategy. Corporate-level strategy addresses what businesses the organization will operate, how the strategies of those businesses will be coordinated to strengthen the organization's competitive position, and how resources will be allocated among the businesses. Strategy at this level is typically developed by top management, often with the assistance of strategic planning personnel, at least in large organizations.[13]

The board of directors also is involved in developing corporate-level strategy, although the degree of board participation varies (see Table 6-1). The three areas in which boards of directors can typically be most helpful within the strate-

Table 6-1 Degree of Involvement in Strategic Management by Board of Directors

Degree of Involvement	Board Actions
Low	Approves mission, strategic goals, and strategies; conducts limited competitive analysis
Moderate	Helps develop mission and strategic goals; conducts limited analysis of competitive situation; approves strategies
High	Helps develop mission and strategic goals; conducts extensive analysis of competitive situation, as well as proposed strategies

Source: Adapted from Frank T. Paine and Carl R. Anderson, *Strategic Management*, Dryden, Chicago, 1983, p. 370.

gic management process are advising on new directions for growth, suggesting when major changes are needed in strategy, and providing input on the timing of major investments.[14]

Business-Level Strategy. **Business-level strategy** concentrates on the best means of competing within a particular business while also supporting the corporate-level strategy. Strategies at this level are aimed at deciding the type of competitive advantage to build, determining responses to changing environmental and competitive conditions, allocating resources within the business unit, and coordinating functional-level strategies. Business-level strategies are usually established for each strategic business unit. A **strategic business unit (SBU)** is a distinct business, with its own set of competitors, that can be managed reasonably independently of other businesses within the organization.[15] Most often, the heads of the respective business units develop business strategies, although such strategies are typically subject to the approval of top management. When an organization comprises only a single business, corporate-level and business-level strategies essentially are the same. Thus the corporate-level and business-level distinction applies only to organizations with separate divisions that compete in different industries.[16]

Business-level strategy A type of strategy that concentrates on the best means of competing within a particular business while also supporting the corporate-level strategy

Strategic business unit (SBU) A distinct business, with its own set of competitors, that can be managed reasonably independently of other businesses within the organization

Functional-Level Strategy. **Functional-level strategy** focuses on action plans for managing a particular functional area within a business in a way that supports the business-level strategy. Strategies at this level address main directions for each of the major functional areas within a business, such as manufacturing or operations, marketing, finance, human resources management, accounting, research and development, and engineering. Functional-level strategies are important because they often reflect strong functional competencies that can be used to competitive advantage. Functional strategies usually are developed by functional managers and are typically reviewed by business unit heads.

Functional-level strategy A type of strategy that focuses on action plans for managing a particular functional area within a business in a way that supports the business-level strategy

Coordinating Levels of Strategy. Coordinating strategies across the three levels is critical in maximizing strategic impact. The strength of the business-level strategy is enhanced when functional-level strategies support its basic thrust. Similarly, the corporate level is likely to have greater impact when business-level strategies complement one another in bolstering the corporate-level strategy.[17] Thus the three levels must be closely coordinated as part of the strategic management process.

In the next several sections, we examine more thoroughly strategy formulation at the three major levels, and we consider aspects of the strategic management process beyond the identification of the organization's mission and strategic goals. (These latter topics are discussed in Chapter 5.) First, though, we look at three overall modes of strategy formulation and examine their potential for influencing the degree of innovation in organizations.

Promoting Innovation: Modes of Strategic Management

Modes of strategic management are the actual kinds of approaches taken by managers in formulating and implementing strategies. They address the issues of who has the major influence in the strategic management process and how the process is carried out.[18] Research indicates that managers tend to use one of three major approaches to, or modes of, strategic management: entrepreneurial, adaptive, and planning.[19] The mode selected is likely to influence the degree of innovation that occurs within the organization. Innovation is particularly important in the context of strategic management, because organizations that do not continually incorporate new ideas are likely to fall behind competitively, particularly when the environment is changing rapidly.[20] As we saw in the Disney situation, the failure to innovate adequately after Walt Disney's death almost led to the company's demise. Although innovation can be associated with all three modes, it frequently plays a major role in the entrepreneurial mode.

Entrepreneurial mode An approach in which strategy is formulated mainly by a strong visionary chief executive who actively searches for new opportunities, is heavily oriented toward growth, and is willing to make bold decisions or to shift strategies rapidly

Entrepreneurial Mode. In the **entrepreneurial mode,** strategy is developed mainly by a strong visionary chief executive who actively searches for new opportunities, is heavily oriented toward growth, and is willing to make bold decisions or to shift strategies rapidly when deemed desirable. The entrepreneurial mode is most likely to be found in organizations that are young or small, have a strong leader, or are in such serious trouble that bold moves are their only hope.[21] Not surprisingly, in the entrepreneurial mode, the extent to which the strategic management process encourages innovation depends largely on the orientation of top leaders. Their personalities, power, and information enable them to overcome obstacles and push for change. Conversely, strong leaders also are in a position to thwart innovative activities, should they be so inclined.[22] For example, J. Mitchell Boyd, the chairman and chief executive of Shoney's, Inc., a Nashville-based company that operates or franchises more than 1500 chain restaurants in 30 states, spent only 6 months in his position before resigning under pressure from the company's founder and major stockholder, Raymond L. Danner. Danner, who had previously retired from the top spot, clashed with Boyd over strategic directions and other matters. Danner believed emphasis should be placed on day-to-day operations and on efforts to minimalize costs. In contrast, Boyd wanted to increase spending on marketing, advertising, and promoting the company's image. He also began experimenting with menu changes rather than following the traditional Shoney's menu. Ironically, profits had risen significantly after Boyd took charge.[23]

Adaptive mode An approach to strategy formulation that emphasizes taking small incremental steps, reacting to problems rather than seeking opportunities, and attempting to satisfy a number of organizational power groups

Adaptive Mode. The **adaptive mode** of strategy formulation, which is mainly a "muddling through" approach, emphasizes taking small incremental steps, reacting to problems rather than seeking opportunities, and attempting to satisfy a number of organizational power groups. The adaptive mode is most likely to be used by managers in established organizations that face a rapidly changing environment and yet have several coalitions, or power blocks, that make it difficult to obtain agreement on clear strategic goals and associated long-term plans.[24] For example, before London-based Grand Metropolitan PLC purchased Pillsbury, including the Burger King chain, the chain was plagued by constant turnover, marketing problems, inconsistent service, and angry franchisees who frequently told Pillsbury what to do. Grand Met is now working to put the chain back on track through a strategy that emphasizes doing "whatever it takes to create a positive, memorable experience." Concrete measures include increasing the number of field representatives who visit Burger King stores, highlighting cleanliness, and rewarding employees who take the initiative in improving service by doing things differently.[25] With the adaptive approach, the degree of innovation fostered by the strategic management process is likely to depend on the ability of managers to agree on at least some major goals and basic strategies that set essential directions. In addition, lower-level managers must have some flexibility in carrying out the basic strategy rather than being given extremely detailed plans to follow; this approach might be effective in a more stable environment or one in which agreement among coalitions is easy to obtain.[26] Without at least some agreement among high-level managers on major goals and directions, however, the adaptive mode may be ineffective in moving the organization in viable strategic directions.

Planning Mode. The **planning mode** of strategy formulation involves systematic, comprehensive analysis, along with integration of various decisions and strategies. With the planning mode, executives often utilize planning specialists to help with the strategic management process. The ultimate aim of the planning mode is to understand the environment well enough to influence it. The planning mode is most likely to be used in large organizations that have enough resources to conduct comprehensive analysis, have an internal situation in which agreement is possible on major goals, and face an environment that has enough stability to enable the formulation and implementation of carefully conceived strategies. For example, the managers at Disney are able to engage in considerable planning because of its relatively stable environment. Disney's recent plans include entry into the convention hotel business with its Dolphin Hotel, operated by the Sheraton Corporation, and Swan Hotel, run by the Westin Hotel Company. Combined, the two hotels offer 2350 rooms and more than 200,000 square feet of convention space inside Disney World. The hotels were heavily booked well in advance of their opening in 1990.[27] With the planning mode, innovation is most likely to occur when strategies explicitly articulate needs for product and service innovation and when top-level managers, such as those at Disney, help integrate efforts in the direction of encouraging innovation.[28]

Planning mode An approach to strategy formulation that involves systematic, comprehensive analysis, along with integration of various decisions and strategies

Assessing the Modes. Each mode can be relatively successful as long as it is matched to an appropriate situation. In fact, it may be possible to use different modes within the same organization. For example, a top-level manager may adopt an entrepreneurial mode for a new business that is just starting and use the planning mode for strategic management of the rest of the organization.[29] Each of these modes can either promote organizational innovation or stifle it, depending on how the mode is used.

Still, operating effectively in any of the three modes requires a knowledge of the strategic management process. In carrying out the process, once the mission and strategic goals are determined, managers engage in competitive analysis.

THE ROLE OF COMPETITIVE ANALYSIS IN STRATEGY FORMULATION

SWOT analysis A method of analyzing an organization's competitive situation that involves assessing organizational strengths (S) and weaknesses (W), as well as environmental opportunities (O) and threats (T)

Before managers can devise an effective strategy for gaining a competitive edge, they need to analyze carefully the organization's competitive situation. This involves assessing both the environmental and the organizational factors that influence an organization's ability to compete effectively. Such an assessment can be made with SWOT analysis.[30] **SWOT analysis** is a method of analyzing an organization's competitive situation that involves assessing organizational strengths (S) and weaknesses (W), as well as environmental opportunities (O) and threats (T). Identifying opportunities and threats entails an assessment of relevant environmental factors.

For SWOT analysis purposes, an *opportunity* is an environmental condition that offers significant prospects for improving an organization's situation relative to competitors. Conversely, a *threat* is an environmental condition that offers significant prospects for undermining an organization's competitive situation. On the other hand, strengths and weaknesses apply to internal characteristics. A *strength* is an internal characteristic that has the potential of improving the organization's competitive situation. In contrast, a *weakness* is an internal characteristic that leaves the organization potentially vulnerable to strategic moves by competitors. Some of the types of issues that might be considered in SWOT analysis are shown in Table 6-2. Note that both environmental and organizational factors must be assessed.

Environmental Assessment

In analyzing opportunities and threats, managers need to consider elements in the general environment, or mega-environment, that have the potential of positively or adversely influencing an organization's ability to reach its strategic goals. Such elements are broad factors, including technological, economic, legal-political, sociocultural, and international influences. Managers also need to assess major elements in the organization's task environment, which includes the more specific outside elements with which the organization interfaces in conducting its business. Such elements include customers, competitors, and suppliers. Elements of the general, as well as the task, environment are discussed in greater detail in Chapter 3.

Five competitive forces model Porter's approach to analyzing the nature and intensity of competition in a given industry in terms of five major forces

Porter's Five Competitive Forces Model. One particularly helpful means of addressing the strategic implications of certain aspects of an organization's task environment is a model developed by strategy expert Michael E. Porter. The **five competitive forces model,** as it is called, is an approach to analyzing the nature and intensity of competition in a given industry in terms of five major forces. The collective strength of these forces directly affects the profit potential, or long-term return on investment, available to businesses operating in the particular industry. The five competitive forces are rivalry, bargaining power of customers, bargaining power of suppliers, threat of new entrants, and threat of substitute products or services. The major reasons for lower profit potential are summarized in Table 6-3.

Rivalry is the extent to which competitors continually jockey for position by using such tactics as price competition, advertising battles, product introductions, and increased customer service or warranties. All these tactics have the ability to lower profits for the various competitors in the industry either by

Table 6-2 Major Issues to Consider in SWOT Analysis

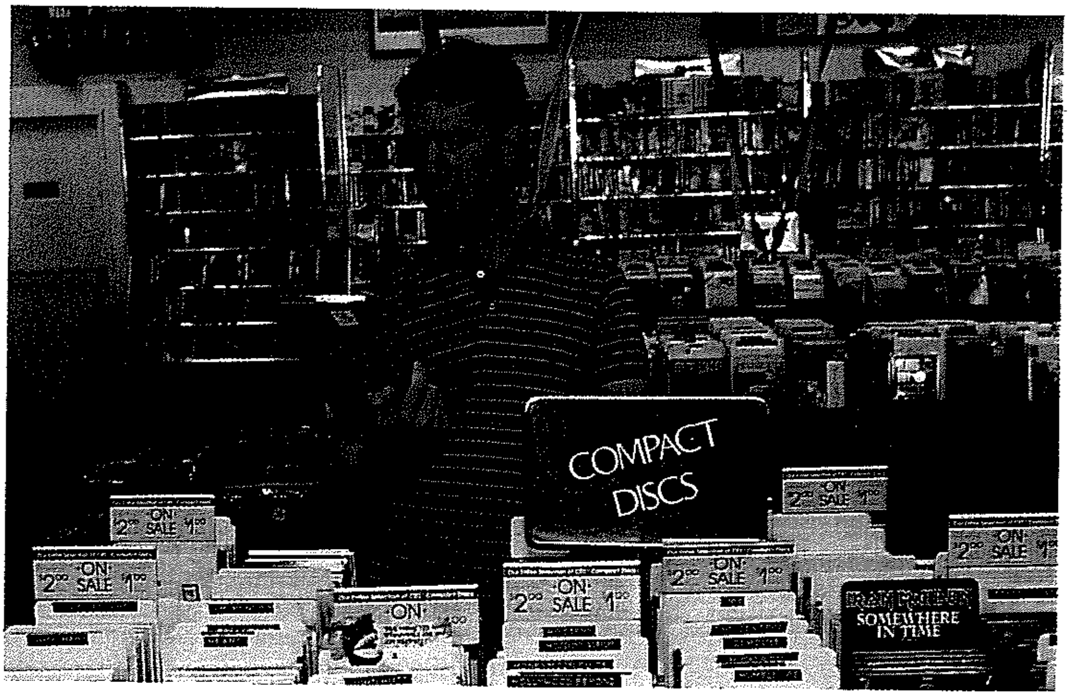
POTENTIAL INTERNAL STRENGTHS A distinctive competence Adequate financial resources Good competitive skill Well thought of by buyers An acknowledged market leader Well-conceived functional area strategies Access to economies of scale Insulated (at least somewhat) from strong competitive pressures Proprietary technology Cost advantages Better advertising campaigns Product innovation skills Proven management Ahead on experience curve Better manufacturing capability Superior technological skills Other?	POTENTIAL INTERNAL WEAKNESSES No clear strategic direction Obsolete facilities Subpar profitability because . . . Lack of managerial depth and talent Missing some key skills or competence Poor track record in implementing strategy Plagued with internal operating problems Falling behind in R&D Too narrow a product line Weak market image Weaker distribution network Below-average marketing skills Unable to finance needed changes in strategy Higher overall unit costs relative to key competitors Other?
POTENTIAL EXTERNAL OPPORTUNITIES Serve additional customer groups Enter new markets or segments Expand product line to meet broader range of customer needs Diversify into related products Vertical integration Falling trade barriers in attractive foreign markets Complacency among rival firms Faster market growth Other?	POTENTIAL EXTERNAL THREATS Entry of lower-cost foreign competitors Rising sales of substitute products Slower market growth Adverse shifts in foreign exchange rates and trade policies of foreign governments Costly regulatory requirements Vulnerability to recession and business cycle Growing bargaining power of customers or suppliers Changing buyer needs and tastes Adverse demographic changes Other?

Source: Reprinted from Arthur A. Thompson, Jr., and A. J. Strickland III, *Strategic Management: Concepts and Cases*, 5th ed., BPI/Irwin, Homewood, Ill., 1990, p. 91.

Table 6-3 Porter's Five Competitive Forces Model

Competitive Forces	Reasons for Lower Profit Potential
Rivalry	Various competitive tactics among rivals lower prices that can be charged or raise costs of doing business.
Bargaining power of customers	Customers force price reductions or negotiate increases in product quality and service at the same price.
Bargaining power of suppliers	Suppliers threaten price increases and/or reductions in the quality of goods or services.
Threat of new entrants	New entrants bid prices down or cause incumbents to increase costs in order to maintain market position.
Threat of substitute products or services	Availability of substitutes limits the prices that can be charged.

Source: Based on Michael E. Porter, *Competitive Strategy*, Free Press, New York, 1980, pp. 3–28.



Strong rivalry among competitors poses a threat to a company's plans and goals. For example, as major record companies have increased their artistic offerings on compact disc (CD), the intensified competition has caused prices of CDs to fall. One result is that profit margins in the industry have been shrinking.

lowering the prices that can be charged or raising the costs of doing business. For example, the magazine industry has become so competitive that a number of magazines are being forced out of business. The News Corporation recently discontinued its *In Fashion* magazine, which was aimed at young women. After Diamandis Communications acquired ABC Publishing's *High Fidelity* and *Modern Photography*, it took them out of circulation and used their circulation lists to boost its own *Stereo Review* and *Popular Photography*. At the same time, several publishers have been reporting lower profit margins because they are selling subscriptions at a discount, offering bargain cover prices at newsstands, and accommodating advertiser pressures for special rates (rather than running the risk of losing advertisers to rival publications.)[31] Thus the magazine industry illustrates Porter's premise that the greater the rivalry, the lower the profit potential for businesses operating in the industry.

The *bargaining power of customers* is the extent to which customers are able to force down prices, bargain for higher quality or more service at the same price, and play competitors against each other. Customers tend to be powerful when the quantities they purchase are large in proportion to a seller's total sales, when the products or services represent a significant portion of a customer's costs, or when the items needed are standard in the supplier industry. For instance, U.S. suppliers in the auto parts industry have found that they must offer better quality at lower prices than they did in the past in order to gain orders from Japanese automakers operating plants in the United States. Such measures are necessary particularly because many Japan-based auto parts suppliers have built U.S. plants, providing alternative sources of supplies.[32] The greater the bargaining power of customers, the lower the profit potential in the industry.

The *bargaining power of suppliers* is the extent to which suppliers can exert power over businesses in an industry by threatening to raise prices or reduce the quality of goods and services provided to those businesses. Suppliers tend to be powerful when there are only a few suppliers selling to many businesses in an industry, when there are no substitutes for the products or services provided by the suppliers, or when the suppliers' products or services are critical inputs to the buyer's business. The greater the bargaining power of suppliers, the lower the profit potential for businesses operating in the industry.

For example, French makers of champagne are running into difficulties because of a shortage of land for growing grapes in the Champagne region of France, famous for producing ideal grapes that have made the sparkling wine increasingly popular throughout the world. One result is that Moët & Chandon, France's biggest champagne producer, pays $1.75 a pound for grapes compared with $0.14 in Spain. Given that a bottle of champagne requires 3.3 pounds of grapes, production costs are $5 per bottle less in Spain. To remedy the supply shortage, Moët and various other French champagne makers, such as Pommery et Greno and Laurent-Perrier, are purchasing wineries and land suitable for growing grapes in the United States (mainly in California and Oregon), as well as in Australia, Spain, Latin America, and elsewhere. Still, a debate rages over the comparative virtues of grapes grown in France versus those grown in other locations. Executives of a premier champagne producer, Veuve Clicquot, for instance, argue that top-quality champagne requires grapes from France's Champagne region, affording area growers considerable power as suppliers.[33]

The *threat of new entrants* is the extent to which new competitors can enter the same product or service markets. New entrants bring added capacity and possibly substantial resources. The results are price wars and/or increases in costs for existing businesses, which frequently must increase expenditures (for adding advertising, a larger sales force, better service, etc.) in order to maintain market position. The threat of entry depends on the barriers to entry that exist and the likely reaction against the new entrant from existing competitors. High barriers to entry exist when large capital investments are required to enter a business (as is the case in the steel industry), when established competitors have products or services that are perceived as unique by loyal customers (e.g., a brand-name perfume), or when economies of scale make it difficult for a new entrant to start small and gradually build up volume (e.g., television manufacturing).

When barriers to entry are high and new entrants can expect vigorous reaction from existing competitors, the threat of new entrants is low. For example, Anheuser-Busch, the nation's largest brewer, recently announced that it would start matching the steep discounts that smaller competitors were offering to invade some of the brewer's markets. Because of economies of scale, Anheuser-Busch's costs per barrel of beer are substantially lower than those of competitors, giving it heavy ammunition in a price war. With the handwriting on the wall, the smaller brewers quickly discontinued much of their heavy price-cutting.[34] In contrast, when barriers are low and new entrants can expect mild reactions from incumbent competitors, the threat of new entrants is high and, consequently, the profit potential for the industry is low.

The *threat of substitute products or services* is the extent to which businesses in other industries offer substitute products. For example, artificial sweeteners can be substituted for sugar, electricity can often be substituted for gas in producing energy, and wallpaper can be substituted for paint as an indoor wall covering. The Coca-Cola Company has been attempting to get workers in small offices to switch from coffee to Coke by providing a compact new machine, called the BreakMate, which chills water, carbonates it, and mixes it with Coca-Cola syrup before dispensing the soft drink into 6½-ounce cups.[35] The availability of substitutes constrains the prices that firms in an industry (such as the coffee industry) can charge because of the danger that customers will be encouraged to switch to the substitutes (such as Coca-Cola) as prices rise. As a result, the availability of substitute products or services reduces the profit potential for the industry.

Assessing Porter's Model. Porter argues that organizations need to give speci consideration to the nature of a particular industry in determining new areas which to do business and in formulating strategies. The greater the competiti forces, the greater the threat that the organization's strategic goals may not b reached because of reduced profit potential. On the other hand, the weaker th competitive forces, the greater the opportunities for operating successfull Hence, in an analysis of potential environmental threats and opportunities, th competitive forces model is a particularly useful tool.

Organizational Assessment

In conducting a competitive analysis, managers also need to give considerabl attention to how organizational factors affect the competitive situation. Mor specifically, managers need to assess major internal strengths and weaknesse as they influence the ability of the organization to compete.

Distinctive competence A strength that is unique and that competitors cannot easily match or imitate

Strengths are important because they are potential sources of competitiv advantage. A strength that is unique and that competitors cannot easily matc or imitate is known as a **distinctive competence.** Distinctive competences can b exploited in gaining a competitive advantage precisely because competitors wil have difficulty following suit.[36] Of course, the distinctive competence must b able to provide results that are important to customers or clients. For example by taking advantage of its distinctive competence in research and development 3M has produced a broad range of useful product innovations over a sustainec period of time.[37]

Such strengths often make it possible to develop organizational *synergy*, ir which two or more units working together have greater impact than is possible with the units operating independently (see Chapter 2). In a strategy-related sense, synergy occurs mainly when the distinctive competencies of some departments or businesses make significant differences in the ability of other departments or businesses to operate effectively.[38] For example, at Hewlett-Packard, a major centralized R&D unit called Hewlett-Packard Laboratories conducts high-risk, long-term research that frequently benefits product development at the company's more than 50 divisions. The centralized R&D unit receives 15 percent of the Hewlett-Packard R&D budget and conducts research that is too costly for individual divisions to undertake.[39]

On the other hand, organizational weaknesses are important if they leave the organization vulnerable to competitor actions that will have an adverse effect on the organization. For instance, the Kerr-McGee Corporation, an Oklahoma City–based energy company, ran into trouble with its oil and gas explorations during the 1970s and early 1980s when its salary levels failed to keep up with those offered by competitors, causing most of its exploration and production talent to defect. Since that time, the company has been rebuilding its staff, with the result that the exploration staff recently made two significant oil reserve finds in the North Sea.[40]

Functional audit An exhaustive appraisal of an organization and/or its individual businesses conducted by assessing the important positive and negative attributes of each major functional area

One common aid in assessing internal organizational strengths and weaknesses is a functional audit. A **functional audit** is an exhaustive appraisal of an organization and/or its individual businesses conducted by assessing the important positive and negative attributes of each major functional area.[41] For instance, a functional audit might assess such aspects as the appropriate segmentation and targeting of markets by the marketing department, the currency of equipment in the operations department, and the availability of working capital from the finance department. Of course, a functional audit would address many more aspects of each department and consider other departments as well.[42]

In determining which aspects to consider in conducting a functional audit, managers might find it useful to compile a list of the internal characteristics that appear to be the *key success factors* in the industry.[43] The list can then be used as the basis for the organizational assessment of the relevant functional areas. (In compiling the list, managers will need to have information about competitors. Some ideas about obtaining such data are given in Chapter 3 in the Practically Speaking discussion, "Keeping Tabs on Competitors.") Analysis of environmental opportunities and threats, as well as organizational strengths and weaknesses, then sets the stage for developing corporate-level strategies.

FORMULATING CORPORATE-LEVEL STRATEGY

Corporate-level strategy addresses the overall strategy that an organization will follow. Corporate strategy development generally involves selecting a grand strategy and using portfolio strategy approaches to determine the various businesses that will make up the organization.

Grand Strategies

A **grand strategy** (sometimes called a *master strategy*) provides the basic strategic direction at the corporate level.[44] There are several generic types, which can be grouped into three basic categories: growth, stability, and defensive grand strategies.[45] These strategies and their major subcategories are shown in Figure 6-3.

Grand strategy A master strategy that provides the basic strategic direction at the corporate level

Growth. **Growth strategies** are grand strategies that involve organizational expansion along some major dimension. In business organizations, growth typically means increasing sales and earnings, although other criteria (such as number of geographic locations) are possible. Similarly, not-for-profit organizations can grow in terms of revenue, clients served, or other criteria. Three major growth strategies are concentration, vertical integration, and diversification.

Growth strategies Grand strategies that involve organizational expansion along some major dimension

Concentration focuses on effecting the growth of a single product or service or a small number of closely related products or services. Concentration usually takes place through *market development* (gaining a larger share of a current market or expanding into new ones), *product development* (improving a basic product or service or expanding into closely related products or services), or *horizontal integration* (adding one or more businesses that are similar, usually by purchasing such businesses). For example, France-based Groupe Michelin recently engaged in horizontal integration when it took over the Uniroyal Goodrich Tire Company, making Michelin the world's largest tire manufacturer. Indicative of its strategy of high concentration, more than 90 percent of Michelin's annual sales are based on tires.[46]

Concentration An approach that focuses on effecting the growth of a single product or service or a small number of closely related products or services

Vertical integration involves effecting growth through the production of inputs previously provided by suppliers or through the replacement of a customer role (such as that of a distributor) by disposing of one's own outputs. When a business grows by becoming its own supplier, the process is known as *backward integration*.[47] One interesting organization that is prospering partially through backward integration is PGA Tour, Inc., the professional golf association headed by Commissioner Deane Beman. When Beman took over the organization in 1973, its annual revenues from professional golfing events were $3.1 million. Today, annual revenues top $100 million. This is partly because Tour

Vertical integration An approach that involves effecting growth through the production of inputs previously provided by suppliers or through the replacement of a customer role by disposing of one's own outputs

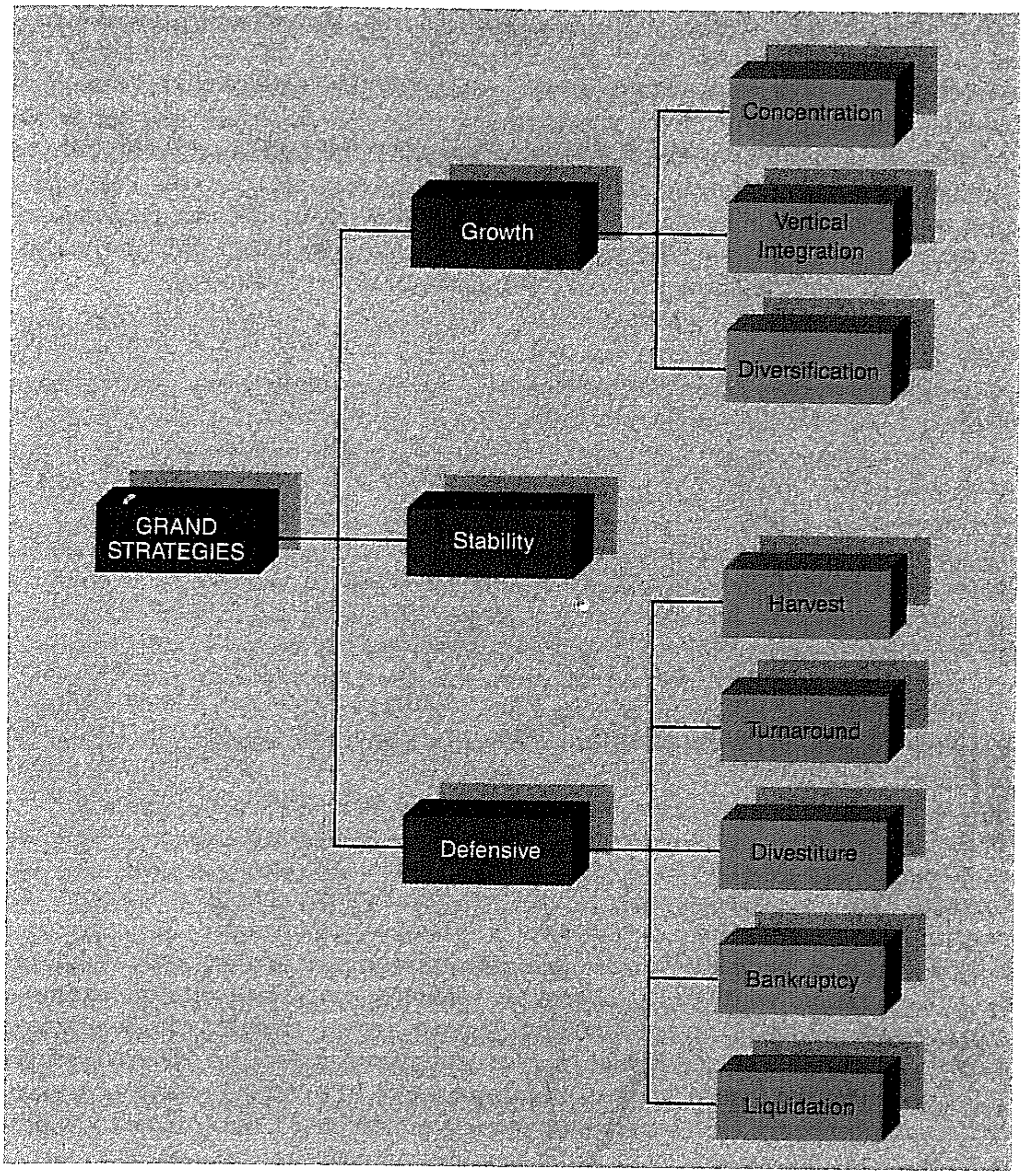


Figure 6-3 Types of grand strategies.

now owns, operates, or licenses more than 13 courses and clubs used each year for Tour events; the remainder of the time, the courses and clubs are available to members, who pay dues. Thus Tour has not only become its own supplier of sites for tournaments but also receives dues revenues; in addition, it often gets close to 20 percent of the gains from residential development on certain properties next to courses. In another move toward vertical integration, Tour has been working on producing its own telecasts of games for national television, rather than having relatively high-cost network personnel supply the production services.[48] When organizational growth encompasses a role previously fulfilled by a customer, the process is known as *forward integration*. Liz Claiborne, Inc., has recently engaged in forward integration by opening Liz Claiborne and First Issue retail stores to sell directly to individuals, rather than selling exclusively through department stores and outlets owned by others. According to one study, organizations are more likely to use a vertical integration strategy when product or service demand is reasonably certain, rather than highly uncertain.[49]

Diversification entails effecting growth through the development of new areas that are clearly distinct from current businesses. In addition to diversifying for growth reasons, organizations often diversify to reduce the risk that can be associated with single-product or -industry operations.[50] *Conglomerate diversification* takes place when an organization diversifies into areas that are unrelated to its current business. Organizations that adopt a conglomerate diversification strategy often are referred to as *conglomerates*. For example, Textron, Inc., a conglomerate, has an aerospace business that is being adversely affected by the current downturn in defense spending. However, its two other major businesses, commercial products (auto parts, lawn mowers, fasteners, etc.) and financial services (Paul Revere Insurance and other financial and leasing services) have helped cushion the effects.[51] Because of the diversity of businesses involved, conglomerates can be difficult for top management to administrate effectively.[52] *Concentric diversification* occurs when an organization diversifies into a related, but distinct, business. With concentric diversification, businesses can be related through products, markets, or technology. In the case of The Limited, Inc., the concentric diversification was through related products, mainly women's clothing (see the following Case in Point discussion).

Diversification An approach that entails effecting growth through the development of new areas that are clearly distinct from current businesses

CASE IN POINT: The Unlimited Limited

When Leslie Wexner opened his first women's clothing store in Columbus, Ohio, in 1963 with a $5000 stake, few would have predicted that the shop was the beginning of a major women's clothing empire. Wexner called his first shop "The Limited" because it offered only women's sportswear. He got the idea of specializing after working in his parent's clothing store and noticing that office garments and fancy dresses did not sell nearly as fast as sportswear. When he attempted to persuade his parents to concentrate on sportswear and eliminate the other merchandise, they insisted that the shop needed a wide variety of clothing to attract customers. In fact, his father told him: "You'll never be a merchant." Within a year, the son's new shop proved to be so successful that the parents closed up their store and joined forces with their "merchant" son. By 1969, when The Limited, Inc., made a public stock offering, Wexner had opened six stores. Seven years later, there were 100 The Limited stores; that number had increased more than sevenfold by the end of the 1980s.

Along with the growth of The Limited stores, there have been shifts in emphasis. While The Limited originally targeted women between 15 and 25, Wexner found that he was losing these customers as they grew older. Accordingly, he repositioned The Limited to appeal to women in the 20-to-35 age bracket and started a new chain, the Limited Express, to appeal to teenagers and women in their early twenties.

In order to keep the company growing at a fast pace, Wexner also has expanded into other areas related to women's clothing. For example, in 1981, he bought a small chain of lingerie stores, called Victoria's Secret, and expanded it to more than 300 stores within 7 years. He also purchased the Lane Bryant stores in 1982 and eliminated the tall and largest sizes because of the relatively small market. Instead, he expanded offerings in sizes 14 through 20, noting that 40 percent of women are size 14 or larger. The acquisition of the Lane Bryant chain marked the first time that Wexner had entered the size 14 and above market.

Next, Wexner bought the Lerner chain, which he called the "McDonald's of the clothing business" because it was the largest women's clothing chain when he purchased it in 1985. It was also close to bankruptcy, owing largely to poor management, including abysmal inventory control. Lerner now carries the same type of merchandise found in The Limited stores, but the items are geared to a lower-priced market.

More recently, according to The Limited chain's president, Verna K. Gibson, the chain has developed a larger version of its The Limited stores. The new International Fashion stores, with about 12,500 square feet of floor space (compared with 3700 at regular The Limited stores), can accommodate the usual The Limited fare along with career clothing, lingerie, and children's apparel. Thus The Limited and its various related chains, now numbering more than 3000 outlets, continue to experiment with creative ways to keep the company growing, mainly in women's clothing or closely related areas, such as men's and children's clothing.[53]

All three growth strategies, including the diversification approach used by The Limited, can be implemented through internal growth or through acquisition, merger, or joint venture. With internal growth the organization expands by building on its own internal resources. An **acquisition** is the purchase of all or part of one organization by another; while a **merger** is the combining of two or more companies into one organization. (We discuss mergers and acquisitions further in Chapter 7.) Finally, a joint venture occurs when two or more organizations provide resources to support a given project or product offering (see Chapter 3.) Thus there are several alternative routes to implementing particular growth strategies.

Acquisition The purchase of all or part of one organization by another

Merger The combining of two or more companies into one organization

Stability. A **stability strategy** involves maintaining the status quo or growing in a methodical, but slow, manner. Organizations might choose a stability strategy for a number of reasons. For instance, if a company is doing reasonably well, managers may not want the risks or hassles associated with more aggressive growth. This is often the case in small, privately owned businesses, which constitute the largest group likely to adopt a strategy of stability. For example, Bob Sidell started California Cosmetics after formulating special cosmetics to cope with the skin problems of teenage actors appearing in the TV show *The Waltons*. Within 3 years, Sidell and his partner, Paula Levey, had developed their mail-order operation into a company with annual sales of $10 million. Such fast growth, though, brought botched orders, rising complaints, and returns and nondeliveries in the 17 percent range. After some initial cutbacks to gain stability, the company plans to grow much more slowly. "We'll probably never be the richest folks on the block," says Levey. "But we're going to be around years from now."[54] Another major reason for choosing stability is that it provides a chance to recover. An organization that stretched its resources during a period of accelerated growth may need to attain stability before it attempts further accelerated growth. On the other hand, if managers believe that growth prospects are low, they may choose a stability strategy in an attempt to hold on to current market share. (Worsening situations, however, may call for defensive strategies.) Finally, a stability strategy may even occur through default if managers are unconcerned with their strategic direction.

Stability strategy A strategy that involves maintaining the status quo or growing in a methodical, but slow, manner

Defensive. Defensive strategies (sometimes called *retrenchment strategies*) focus on the desire or need to reduce organizational operations usually through cost reductions (such as cutting back on nonessential expenditures and instituting

Defensive strategies Strategies that focus on the desire or need to reduce organizational operations usually through cost and/or asset reductions hiring freezes) and/or asset reductions (such as selling land, equipment, and businesses).[55] Defensive strategies include harvest, turnaround, divestiture, bankruptcy, and liquidation.

Harvest entails minimizing investments while attempting to maximize short-run profits and cash flow, with the long-run intention of exiting the market.[56] A harvest strategy is often used when future growth in the market is doubtful or will require investments that do not appear to be cost-effective. For example, when vacuum tubes became obsolete because of the late 1940s' invention of the transistor and subsequent advanced solid-state circuitry, many large producers of vacuum tubes (e.g., Western Electric, General Electric, and Westinghouse) gradually phased out their production.[57] With a harvest strategy, the resulting short-run profits often are then used to build other businesses with better future prospects.

Harvest A strategy that entails minimizing investments while attempting to maximize short-run profits and cash flow, with the long-run intention of exiting the market

A **turnaround** is designed to reverse a negative trend and restore the organization to appropriate levels of profitability. Such efforts often require at least temporary reductions in order to conserve funds. (The term "turnaround" is sometimes used more loosely to denote a major shift from a negative direction to a positive one.) A **divestiture** involves an organization's selling or divesting of a business or part of a business. One study found that when divestitures are congruent with corporate or business strategies outlined in company publications, they have a positive effect on the price of the firm's stock; conversely, when divestitures are conducted in the absence of clear strategic goals, they generally have a negative market effect.[58]

Turnaround A strategy designed to reverse a negative trend and restore the organization to appropriate levels of profitability

Divestiture A strategy that involves an organization's selling or divesting of a business or part of a business

Under Chapter 11 of the Federal Bankruptcy Act, **bankruptcy** is a means whereby an organization that is unable to pay its debts can seek court protection from creditors and from certain contract obligations while it attempts to regain financial stability. For example, two U.S. subsidiaries of the Canada-based Campeau Corporation, the Allied Stores Corporation and Federated Department Stores, Inc., filed for bankruptcy in January 1990, constituting the largest retailing bankruptcy in U.S. history. The chains include such well-known stores as Bloomingdale's, Abraham & Straus in New York, Rich's in Atlanta, and Burdines in Florida. The Campeau empire ran into a cash-flow problem when sales were slower than expected, and the company experienced difficulty in paying debts associated with its recent acquisitions.[59] **Liquidation** entails selling or dissolving an entire organization. Liquidation usually occurs when serious difficulties, such as bankruptcy, cannot be resolved.

Bankruptcy A strategy in which an organization that is unable to pay its debts can seek court protection from creditors and from certain contract obligations while it attempts to regain financial stability

Liquidation A strategy that entails selling or dissolving an entire organization

Portfolio Strategy Approaches

While grand strategies address an organization's overall direction, portfolio strategy approaches help managers determine the types of businesses in which the organization should be engaged. More specifically, a **portfolio strategy approach** is a method of analyzing an organization's mix of businesses in terms of both individual and collective contributions to strategic goals. The concept is analogous to that of an individual attempting to assemble a group, or portfolio, of stocks that provide balance in terms of risk, long-term growth, and other factors that may be important to the individual. Three of the most frequently used major portfolio approaches are the BCG growth-share matrix, the GE business screen, and the product/market evolution matrix. Each uses a two-dimensional matrix, which measures one variable along one dimension and another along a second dimension to form four or more cells. Portfolio approaches apply to analyzing existing or potential strategic business units.

Portfolio strategy approach A method of analyzing an organization's mix of businesses in terms of both individual and collective contributions to strategic goals

BCG growth-share matrix A four-cell matrix (developed by the Boston Consulting Group) that compares various businesses in an organization's portfolio on the basis of relative market share and market growth rate

BCG Growth-Share Matrix. One of the earliest portfolio approaches to gain extensive use is the four-cell matrix developed by the Boston Consulting Group (BCG), a prominent management consulting firm. The **BCG growth-share matrix,** shown in Figure 6-4, compares various businesses in an organization's portfolio on the basis of relative market share and market growth rate. Relative market share is determined by the ratio of a business's market share (in terms of unit volume) compared to the market share of its largest rival. Market growth rate is the growth in the market during the previous year relative to growth in the economy as a whole.[60] In the BCG matrix shown in Figure 6-4, each business is plotted on the matrix and then illustrated by a circle, with the size of the circle indicating the particular business's percent revenue relative to the revenues generated by other businesses in the portfolio. The resulting matrix divides the businesses into four categories.

The *star* has a high market share in a rapidly growing market. Because of the high growth potential, stars often require substantial investment capital beyond what they are able to earn themselves. For example, General Electric recently spent $2.3 billion to acquire a chemical business that was part of the Borg-Warner Corporation. Combined with GE's own chemical operations, the chemical business previously owned by Borg-Warner (and now operating under the GE name) gives GE a larger presence and a star in the fast-growing plastics business.[61]

A *question mark* (often also called a *problem child*) has a low market share in a rapidly growing market. Question marks present somewhat of a dilemma for their organizations: they require substantial investment to take advantage of the rapidly growing market, yet their low market share usually means that they have limited ability to generate substantial amounts of cash themselves; thus,

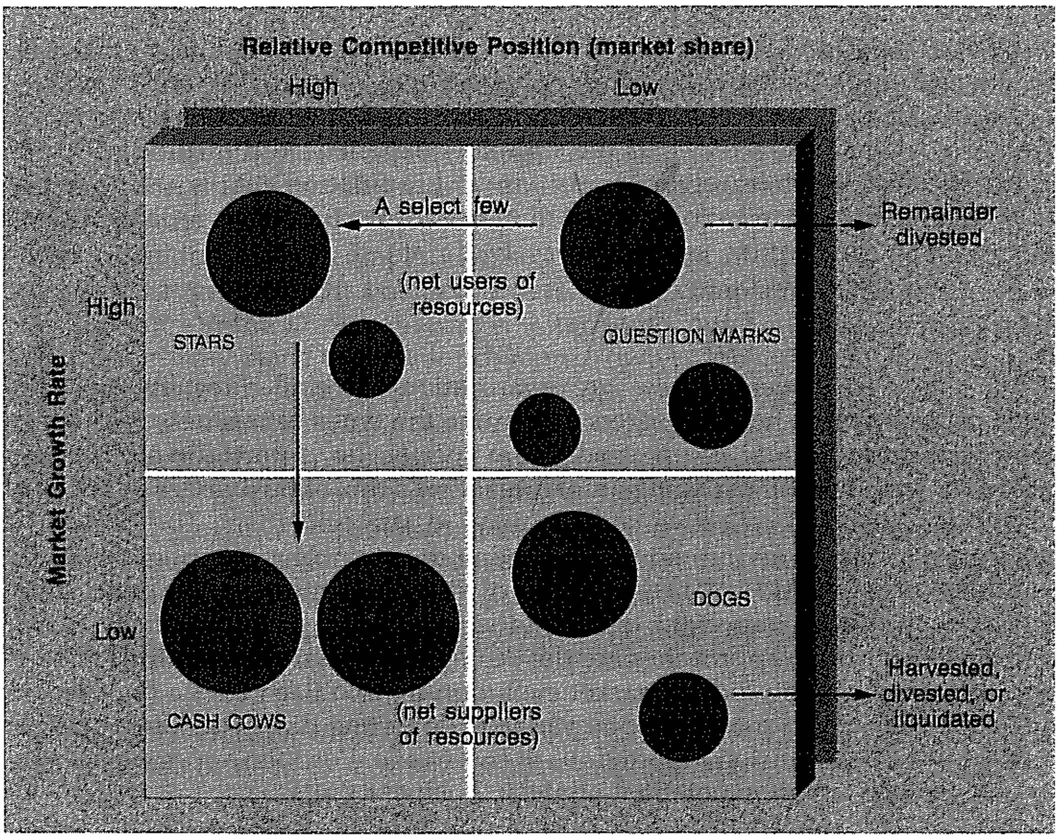
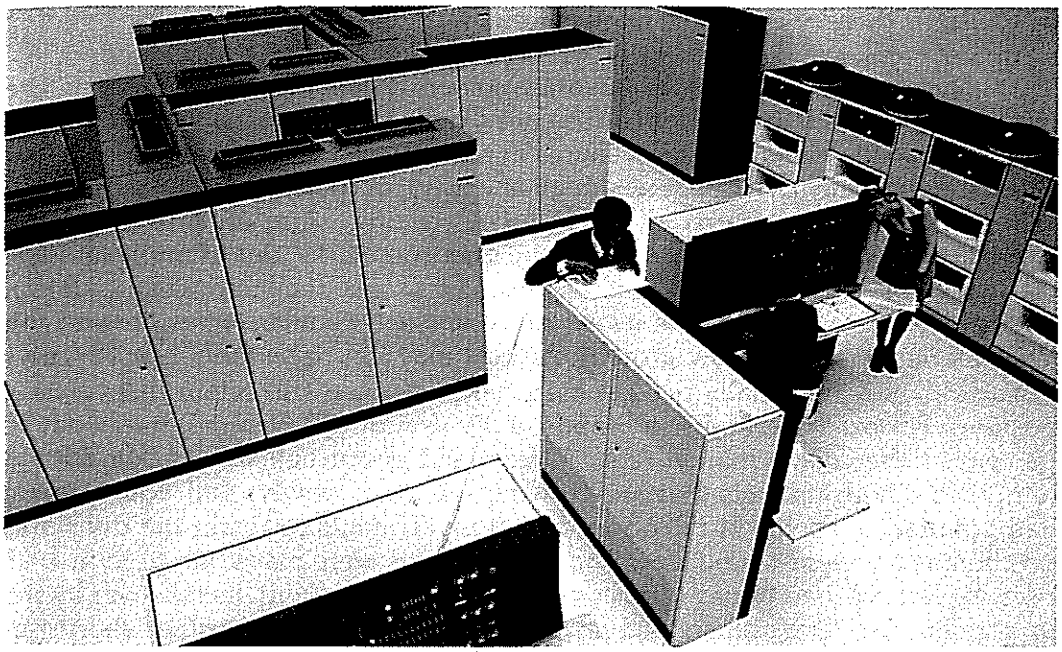


Figure 6-4 BCG growth-share matrix. (Adapted from John A. Pearce II and Richard B. Robinson, Jr., *Strategic Management: Strategy Formulation and Implementation,* 3d ed., Irwin, Homewood, Ill., 1988, p. 280.)



IBM's System/370 mainframe has been a cash cow for the company for many years. Its market share is close to 70 percent, and it pulls in about 50 percent of IBM's total revenues and 65 percent of its profits. But now the 370's market is under siege from technologically advanced computers that can do the same kinds of jobs for less cost. The 370's "milking" days may be drawing to a close.

they are "cash hogs." For example, Cincinnati-headquartered Roto-Rooter, Inc., is best known as a service that uses a motor-driven auger to snake through drains and clogged sewer lines to drill out obstructions. Since acquiring Roto-Rooter in the early 1980s, the Chemed Corporation has attempted to expand the company into residential plumbing repair work and industrial pipe cleaning. So far, Roto-Rooter has about 1 percent of the plumbing market, but it will take considerable further funding to build up what might be the first large national plumbing company.[62] With question marks, managers usually must either provide substantial cash to fuel growth or divest the business.

The *cash cow* has a high market share in a slowly growing market; as a result, it tends to generate more cash than is necessary to maintain its market position. Cash cows often are former stars and can be valuable in a portfolio because they can be "milked" to provide cash for stars and question marks. For instance, the drain-cleaning business of Roto-Rooter provides excess cash that has been used to open new company outlets and buy back old franchises to facilitate the buildup of the plumbing business.[63]

A *dog* has a low market share in an area of low growth and usually generates only a modest cash flow or may even have a small negative cash flow. Usually, dogs are harvested, divested, or liquidated. For example, General Electric sold a consumer electronics division that was only marginally profitable to the French electronics giant Thompson S.A. in 1988. Thompson was interested in the acquisition as a means of acquiring operations in the United States.[64]

Overall, the BCG matrix suggests using revenues from cash cows to fund the growth of stars, as well as to build the market share of those question marks with the best prospects. Dogs and the remaining question marks are usually divested unless they provide sufficient positive cash flow to justify retaining them, at least in the short run. One recent study suggests that dogs may generate more cash than they are generally given credit for and that managers, therefore, should evaluate them carefully before taking the divestiture step.[65]

The BCG matrix is useful in providing a means of viewing a set of businesses as a portfolio with differing cash flows and cash requirements.[66] The matrix also helps develop a rationale for prioritizing resource allocations across businesses, thereby assisting managers in formulating strategies for building some businesses and divesting others.

Still, the BCG matrix does have a number of shortcomings.[67] Among the most important is that the matrix does not directly address the majority of businesses that have average market shares in markets of average growth (note that the matrix has only two categories, high and low, for each dimension). Generalizations based on the matrix also may be misleading, since organizations with low market shares may not necessarily be question marks. For example, at West Germany–based Daimler-Benz, managers raise car production only after careful debate, lest the Mercedes lose its exclusive image.[68] Similarly, businesses with large market shares in slow growth markets may not necessarily be cash cows because they may actually need substantial investments to retain their market position. For example, Nabisco Brands (a division of RJR Nabisco) has about 30 percent of the cookie market (e.g., Oreos) and about half the cracker market (e.g., Ritz), both markets that are growing relatively slowly. Still, RJR Nabisco had planned to spend $4 billion in capital investments to retain the division's position as a low-cost producer. The expenditures were placed on hold in 1989 because Nabisco had to pay off massive debts associated with its takeover by the investment firm of Kohlberg Kravis Roberts & Company.[69] Another shortcoming of the matrix is that it provides little guidance regarding which question marks to support and which dogs to salvage. Finally, one survey suggests that executives dislike the BCG terminology. According to one executive, "We try to avoid the use of words such as 'cash cow' or 'dog' like the plague. If you call a business a dog, it'll respond like one. It's one thing to know that you are an ugly duckling—much worse to be told explicitly that you are."[70] Despite these shortcomings, the BCG matrix does have research support in terms of its ability to differentiate among businesses for purposes of thinking about strategy.[71]

GE Business Screen. Another popular portfolio matrix is the GE business screen, developed by General Electric with the help of McKinsey & Company.[72] The **GE business screen** (also often called the GE planning grid) is a nine-cell matrix that is based on long-term industry attractiveness and on business strength (see Figure 6-5). The major factors to consider in assessing these two dimensions are summarized in Figure 6-5. On the screen, or grid, each business is represented by a circle, with the size of the circle proportional to the size of the industry (measured by total industry sales) in which the business competes. (Note that the meaning of the circle differs from that in the BCG matrix, in which the circle represents the particular business's percent revenue relative to the revenues generated by other portfolio businesses). The pie slice within the circle shows the business's market share within the industry.

GE business screen A nine-cell matrix (developed by General Electric with McKinsey & Company) that is based on long-term industry attractiveness and on business strength

In the GE screen, the three cells at the upper left of the matrix represent situations of long-term industry attractiveness and business strength; the strategic prescription for businesses in these cells is *grow and build*. The three cells at the opposite end of the matrix (lower right) represent situations of relatively low industry attractiveness and weak business strength, indicating that the strategy generally should be *harvest and/or divest*. The remaining cells depict mixed situations in which the strategy usually is *hold and maintain*.

The GE business screen has three main advantages over the BCG matrix.[73] For one thing, the terminology is potentially more palatable to managers, particularly in the harvest and/or divest section of the grid. In addition, multiple factors are considered in determining where a business fits on the two dimensions; thus the GE screen includes more information about businesses. Finally, the three categories for industry attractiveness and business strength result in

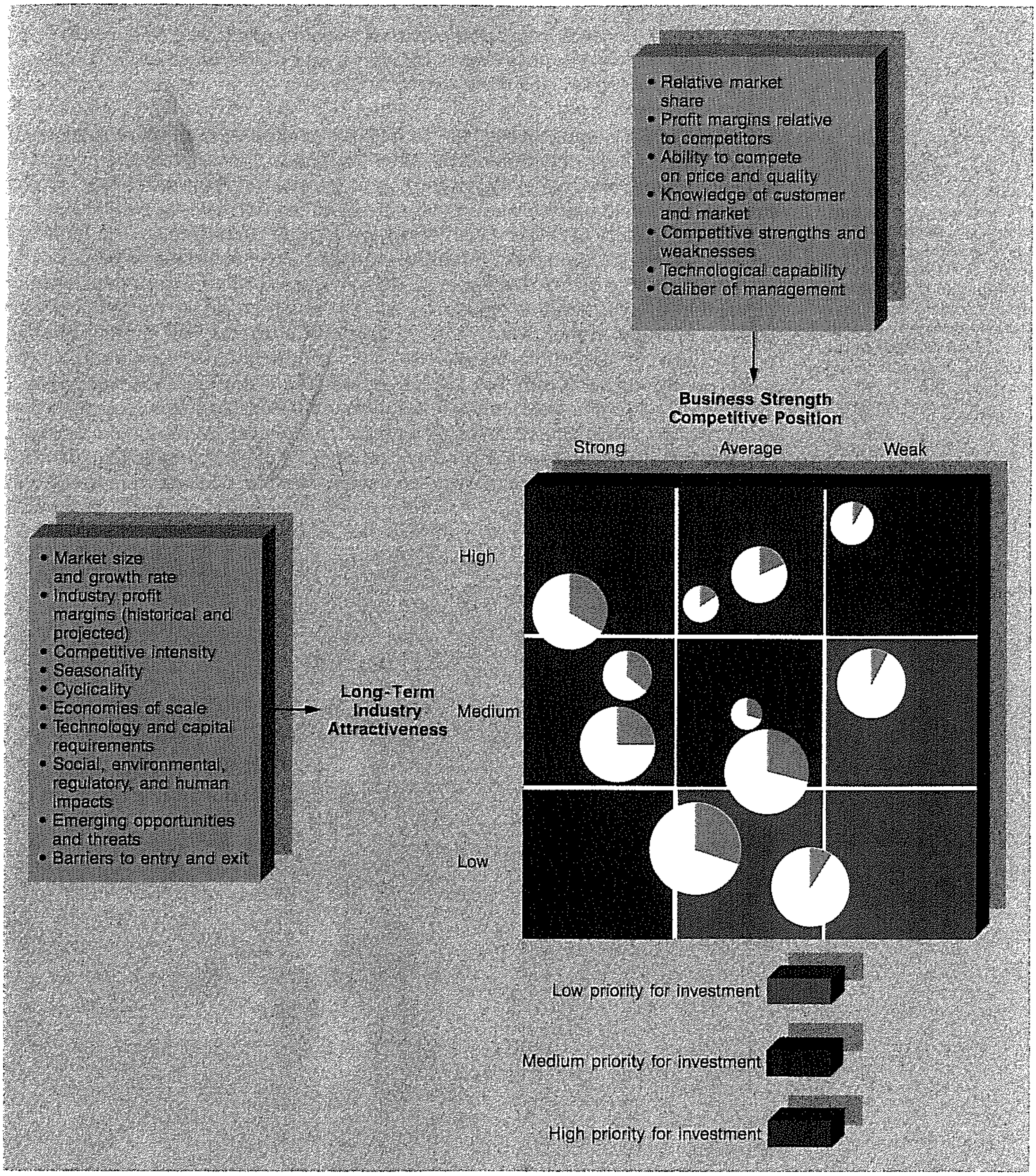


Figure 6-5 GE business screen. (Reprinted from Arthur A. Thompson, Jr., and A. J. Strickland III, *Strategic Management: Concepts and Cases*, 5th ed., BPI/Irwin, Homewood, Ill., 1990, p. 201.)

finer distinctions among businesses, particularly those that are average. Still, the screen does not specify the strategies that should be followed by various businesses, nor does it provide a means for identifying businesses that are just about to move into a period of high growth.[74]

Product/market evolution matrix A 15-cell matrix (developed by Hofer) in which businesses are plotted according to the business unit's business strength, or competitive position, and the industry's stage in the evolutionary product/market life cycle

Product/Market Evolution Matrix. To help resolve the issue of identifying companies, particularly new businesses, that are about to accelerate their growth, strategy researcher Charles W. Hofer has suggested a further refinement.[75] The **product/market evolution matrix** (sometimes called the *life-cycle portfolio matrix*) is a 15-cell matrix in which businesses are plotted according to the business unit's business strength, or competitive position, and the industry's stage in the evolutionary product/market life cycle (see Figure 6-6). The first dimension, the business unit's competitive position, is similar to the business strength, or competitive position, dimension in the GE screen. On the second dimension, the product/market evolution matrix uses the product/market evolution stage, rather than long-term industry attractiveness (as did the GE business screen). The new second dimension shows the industry's stage in the evolutionary life cycle, starting with initial development and proceeding through the growth, competitive shakeout, maturity and saturation, and decline stages. The maturity and saturation stage is particularly important because it often lasts for an ex-

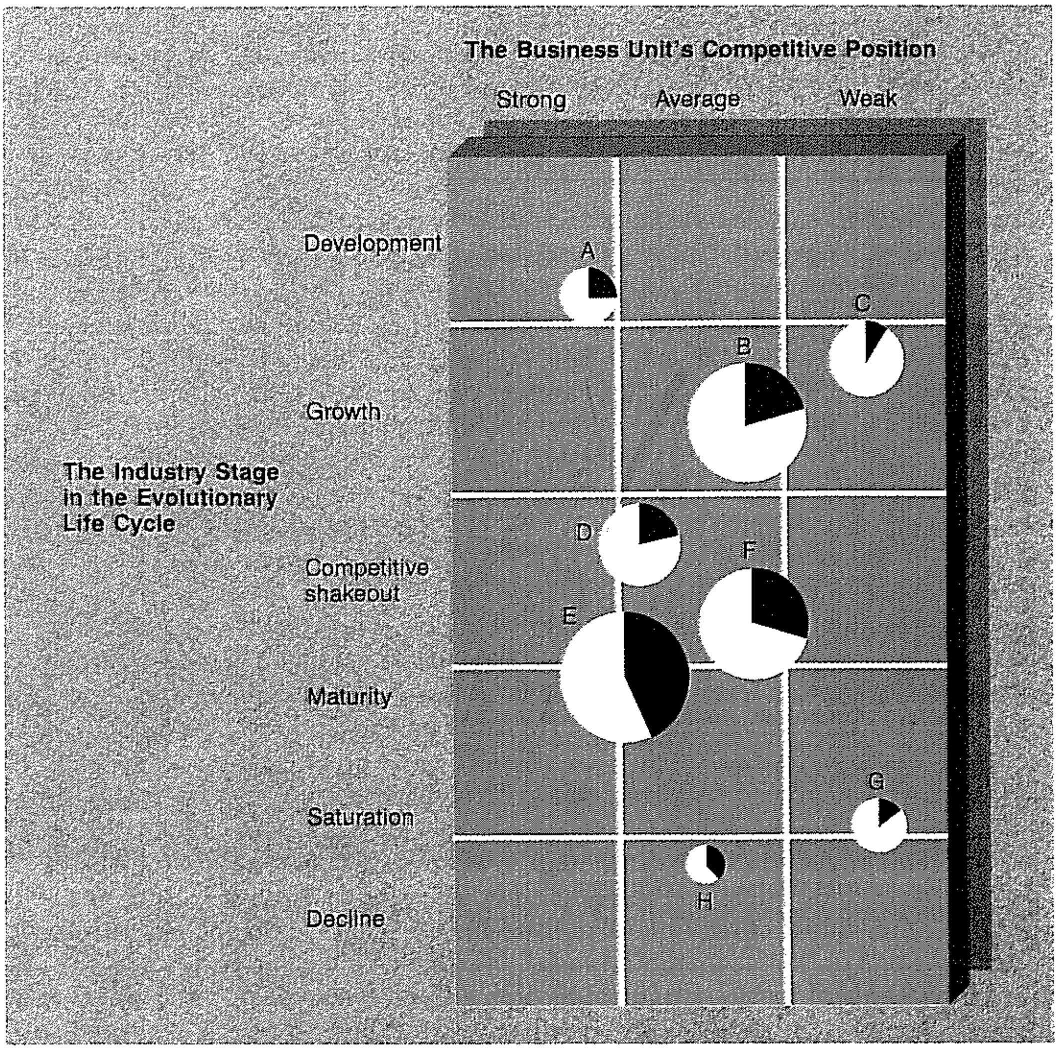


Figure 6-6 Product/market evolution matrix. (Reprinted from Arthur A. Thompson, Jr., and A. J. Strickland III, *Strategic Management: Concepts and Cases*, 5th ed., BPI/Irwin, Homewood, Ill., 1990, p. 204.)

tended period of time. An industry is said to have reached *maturity* when growth slows and the market moves toward the saturation point, where demand is limited to replacement of the product or service.[76] The challenge in the maturity and saturation stage is preserving or slowly expanding market share while avoiding the decline stage.[77] As in the GE screen, the size of the circle representing each business is proportional to the size of the industry in which the business competes, while the pie slice within the circle shows the business's market share within the industry.

The data shown in Figure 6-6 suggest that business A has good prospects for growth and should be developed. Business E is a well-established business that would be considered a star in BCG matrix terminology, although it is moving toward maturity. Business F is gradually losing its competitive position but is a probable cash cow. Business G is most likely a candidate for divesting or liquidating and would be considered a dog.

Assessing the Portfolio Matrixes. Each portfolio matrix offers a somewhat different perspective that is likely to be useful in the strategy formulation process. Therefore, it is possible to use one or more. Regardless of the number of matrixes used, they are basically tools to enhance thinking in terms of the mix of businesses in an organization's portfolio. For example, the Westinghouse Electric Corporation recently has been using a portfolio approach to divest many of its traditional businesses (e.g., light bulbs, electric motors, and transformers) in favor of more than 70 small new businesses, mainly in high-growth service sectors (such as broadcasting, financial services, truck refrigeration, and waste disposal). The new configuration of businesses, which makes the company less vulnerable to an economic downturn, has led to a significant boost in profits for Westinghouse.[78] Portfolio matrixes, however, do not provide advice about specific strategies for various businesses. Such specifics are addressed by strategies at the business level.

FORMULATING BUSINESS-LEVEL STRATEGY

Business-level strategy is concerned with how a particular business competes. Considerable research has been conducted on strategic alternatives for individual businesses within an organization (or for organizations that operate a single business). The best-known approach for developing strategy at the SBU level is based on the research of strategy expert Michael E. Porter.

Porter's Competitive Strategies

Porter has outlined three generic business-level strategies that can be used to gain competitive advantage over other firms operating in the same industry.[79] The strategies are termed "generic" because they are widely applicable to a variety of situations. Still, they are more specific than the generic strategies reviewed earlier that apply to the corporate level. Porter's three strategies are cost leadership, differentiation, and focus. Common requirements for successfully pursuing Porter's competitive strategies are summarized in Table 6-4.

Cost leadership strategy A strategy outlined by Porter that involves emphasizing organizational efficiency so that the overall costs of providing products and services are lower than those of competitors

Cost Leadership. A **cost leadership strategy** involves emphasizing organizational efficiency so that the overall costs of providing products and services are lower than those of competitors. This low-cost approach entails careful attention

Table 6-4 Common Requirements for Successfully Pursuing Porter's Competitive Strategies

Generic Strategy	Commonly Required Skills and Resources	Common Organizational Requirements
Overall cost leadership	Substained capital investment and access to capital Process engineering skills Intense supervision of labor Products designed for ease in manufacture Low-cost distribution system	Tight cost control Frequent, detailed control reports Structured organization and responsibilities Incentives based on meeting strict quantitative targets
Differentiation	Strong marketing abilities Product engineering Creative flair Strong capability in basic research Corporate reputation for quality or technological leadership Long tradition in the industry or unique combination of skills drawn from other businesses Strong cooperation from channels	Strong coordination among functions in R&D, product development, and marketing Subjective measurement and incentives instead of quantitative measures Amenities to attract highly skilled labor, scientists, or creative people
Focus	Combination of the above policies directed at the particular strategic target	Combination of the above policies directed at the particular strategic target

Source: Reprinted from Michael E. Porter, *Competitive Strategy*, Free Press, New York, 1980, pp. 40–41.

A low-cost strategy has to be balanced against product quality. H. J. Heinz installed high-speed dicing machines to cut production costs of Tater Tots at its Ore-Ida plant, but the machines diced the potatoes too thin, resulting in mushy Tots. Company managers decided to slow down the machines in order to put the crisp back into their product. Increased sales have more than paid for the increased production costs.

to minimizing necessary costs in every aspect of the business, such as developing efficient production methods, keeping tight controls on overhead and administrative costs, seeking savings by procuring supplies at low prices, and monitoring costs in other areas (such as promotion, distribution, and service). Lower costs enable an organization to gain an edge over competitors by offering lower prices and potentially earning above-average profits because of higher profit margins or large sales volumes. For instance, Louisville-based Humana, Inc., a publicly owned health-care company, claims that the reason why it recently has been achieving a significantly higher return on equity than others in the industry and has been realizing pretax profit margins of around 10 percent is that it is the lowest-cost producer of health care in the United States.[80]

Of course, for a cost leadership strategy to be effective, achieving lower costs cannot be done at the expense of necessary quality. For example, the H. J. Heinz Company ran into difficulties at its Ore-Ida division when cost-cutting efforts related to Heinz's low-cost strategy caused changes in manufacturing methods for popular Tater Tots frozen spuds. Sales began to decline because, as a result of the changes, the Tater Tot insides were mushy and the outsides had lost their light and crispy coating. With the changes reversed, Tater Tots now have more than 55 percent of the market for frozen fried potatoes.[81]

A low-cost strategy is not without risks. To be effective, the strategy usually requires that a business be *the* cost leader, not just one of several. Otherwise, two or more businesses vying for cost leadership can engage in a rivalry that drives profits down to extremely low levels. thus the business must have a cost advantage that is not easily or inexpensively imitated, and it must stay abreast of new technologies that can alter the cost curve. In addition, managers still must consider making at least those product or service innovations that are very important to customers, lest competitors, using a differentiation strategy, lure customers away with significant product or service improvements.

Differentiation. A **differentiation strategy** involves attempting to develop products and services that are viewed as unique in the industry. Successful differentiation allows the business to charge premium prices, leading to above-average profits. Differentiation can take many forms—for example, design or brand image (Baker in furniture, Coach in handbags, Ralph Lauren in menswear), technology (Hewlett-Packard in laser printers, Coleman in camping equipment, Hyster in lift trucks), customer service (IBM in computers, Crown Cork and Seal in metal cans, and Nordstrom's in apparel retailing), features (Jenn-Air in electric ranges), quality (Xerox in copiers, Milliken in textiles, Swarovski in rhinestones), and selection (Echlin in auto parts). With differentiation, a company still cannot afford to ignore costs, but costs are not as important as perceptions of product or service uniqueness.

Differentiation strategy A strategy outlined by Porter that involves attempting to develop products and services that are viewed as unique in the industry

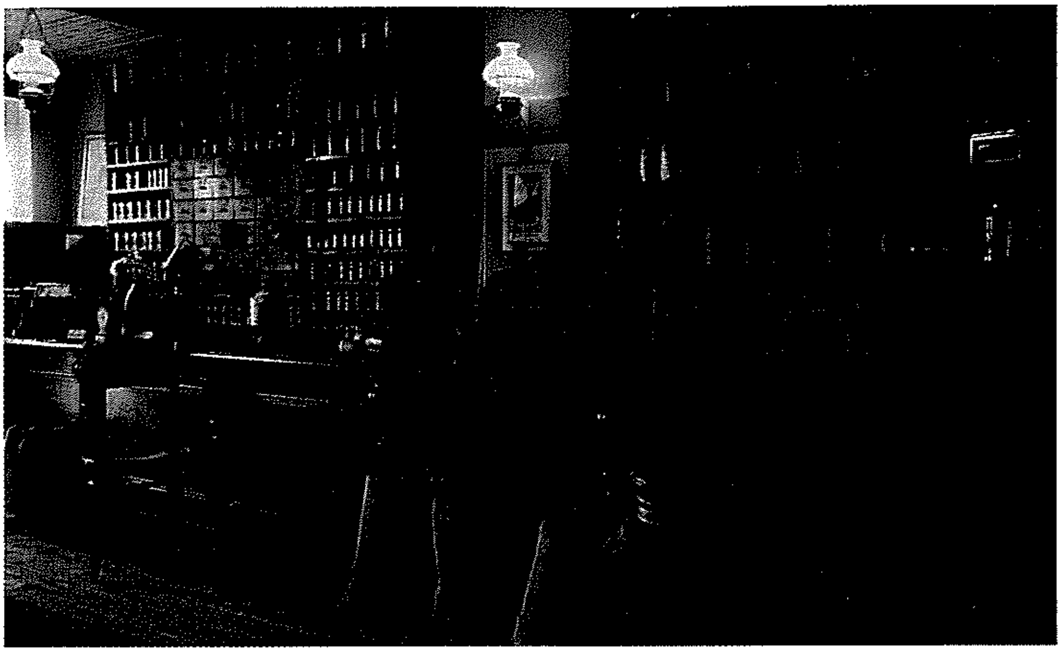
Still, there are vulnerabilities associated with a differentiation strategy. If costs are too high, customers may choose less costly alternatives, even though they forgo some desirable features. Also, customer tastes and needs can change, so businesses following a differentiation strategy must carefully assess customers' shifting requirements. Differentiation, of course, works best when the differentiating factor is both important to customers and difficult for competitors to imitate. While differentiation usually is aimed at a fairly broad market, a focus strategy concentrates on a narrow niche.

Focus. A **focus strategy** entails specializing by establishing a position of overall cost leadership, differentiation, or both, but only within a particular portion, or segment, of an entire market. The segment may be a particular group of customers, a specific geographic area, or a certain part of the product or service line. The rationale is that by specializing the organization can serve the market segment more effectively than can competitors who attempt to cover the entire market. The focus strategy still relies on a low-cost or a differentiation approach, or perhaps both, to establish a strong position within the particular market segment, or niche. The differentiation within a focus strategy can occur by tailoring products to the specialized needs of the market segment. A cost advantage may be simultaneously possible because a firm may be able to offer better prices on custom orders even though another firm may have the cost leadership in serving the larger-volume needs of the broader market. An example of a company that has successfully used a focus strategy is Baxters of Speyside (see the following Case in Point discussion).

Focus strategy A strategy outlined by Porter that entails specializing by establishing a position of overall cost leadership, differentiation, or both, but only within a particular portion, or segment, of an entire market

CASE IN POINT: Baxters of Speyside Focuses on Specialty Foods

"We take the produce of the hills and glens of Bonnie Scotland and make beautiful things," says Gordon Baxter, chairman, summing up the basic approach that has made Scotland's specialty food producer, Baxters of Speyside, a major success. Baxters of Speyside has become a popular brand name in Britain and increasingly elsewhere, with premium soups, jams, and other specialties. For example, the company offers soups with such intriguing names as Cream of Pheasant, Cream of Scampi, Cock-a-Leekie, and Royal Game. These innovative



It started in 1868 as a grocery store in a tiny town of the Scottish highlands; today Baxters of Speyside sells about $33 million worth of soups, jams, and specialty foods in the British Isles each year. Baxters has been so successful because the firm never lost sight of its special segment of the market—premium foods. Baxters' family proprietorship and exotic recipes help to differentiate the firm and are an important part of the company's focus strategy.

products have helped establish the company's reputation in Britain's premium-food market, where overseas customers are willing to pay as much as twice the price of competing brands for Baxters of Speyside specialties. Baxter's wife, Ena, developed most of the exotic recipes; now, a team of chefs and food technologists help her.

The family-run company, with annual sales topping $40 million, has evolved from a grocery store founded in 1868 by Baxter's grandfather in Fochabers, a remote location along the River Spey in Morayshire, 65 miles northeast of Aberdeen, Scotland. Baxter's father added a jam factory and began selling items to two of Britain's best-known department stores, Harrods and Fortnum & Mason, during the 1920s and 1930s. After the company was almost destroyed during World War II, Baxter and his brother rebuilt and expanded it. Since then, several of Baxter's children have joined the company, adding a fourth generation of involvement.

Capitalizing on its unusual products and location, Baxter and his entourage often wear kilts and even bring along bagpipes on sales trips to the United States. "Scotland is very projectable," he says. According to one salesperson at Harrods in London, Baxters of Speyside products sell partly because customers visualize the product being carefully stirred by hand in a pot, even though the foods are made in a modern factory. They also imagine that the Baxters themselves actually stalk the game and gather the ingredients. Still, most of the ingredients do come from local suppliers, giving some credence to the vision.

Sales began to grow significantly when Baxter was able to persuade some of Britain's chain retailers, such as Tesco Stores, J. Sainsbury, and Waitrose Supermarkets, to carry the premium brand. As a result, the company has about 77 percent of Britain's premium soup market. "Supermarkets today in America and Britain are all trading up," he says happily. Based on a suggestion from a Hilton Hotel executive, the company moved quickly to package its premium jams in special 1½-ounce jars that are now sold to such customers as Hilton and Trusthouse Forste hotels and BA airlines.

With only about 4 percent of its total sales in the United States, the potential for growth is great. Not surprisingly, Baxter's files contain letters from many

U.S. companies, such as General Foods, General Mills, Libby's, Carnation, RJR Nabisco, Colgate-Palmolive, Campbell, and Heinz, expressing interest in purchasing Baxters of Speyside. Baxters operates within its cash flow. The company has no debt; the Baxter family owns 96.5 percent of the shares. Profit margins are above the industry average.[82]

Despite the success of Baxters of Speyside, there are some areas that a business adopting a focus strategy needs to monitor. The major risks are possibilities that costs for the focused firm will become too great relative to those of less focused competitors, differentiation will become less of an advantage as competitors serving broader markets embellish their products, and competitors will begin focusing on a group *within* the customer population being served by the firm with the focus strategy. For example, Roadway Package Systems (RPS) is attempting to invade the market for door-to-door ground delivery of packages, currently dominated by United Parcel Service (UPS). RPS contracts with 2500 independent individuals to lease or buy distinctive white RPS delivery trucks. The individuals then pick up and deliver packages in a particular territory for RPS. The independents are paid for work performed, rather than receiving the higher unionized wages and generous benefits typical of UPS. While UPS limits packages to 70 pounds and also delivers to residents, RPS has set a 100-pound limit and restricts delivery to businesses. With about 150 terminals so far, RPS can deliver to about 75 percent of the United States, and another 80 terminals are planned by the mid-1900s.[83]

Assessing Porter's Strategies

Studies of Porter's generic strategies have mainly supported the view that companies pursuing one of these strategies are likely to be more profitable than those not adopting one of these generic types.[84] Still, some studies have produced evidence showing that a minority of firms have successfully pursued broad markets by simultaneously using both differentiation and low-cost strategies.[85] Porter has argued that such an effort aimed at broad markets (as opposed to narrow ones, which are the domain of a focus strategy) will leave an organization stuck in the middle. A major reason is that attempting to pursue a differentiation strategy requires an expenditure of funds that makes it difficult to achieve cost leadership. While debate continues on the issue, one researcher notes that an example of a situation in which differentiation might be compatible with low cost is one in which a differentiated product achieves high growth, leading to sufficient volume to enable economies of scale (and, therefore, lower costs).[86]

Regardless of which generic strategy is used, the ability to carry it out successfully depends on distinctive competencies. Such distinctive competencies typically develop at the functional level.

FORMULATING FUNCTIONAL-LEVEL STRATEGY

Functional-level strategies support the basic thrust of strategy at the business level. The role of functional strategies is spelling out the specific ways that functional areas can be used to bolster the business-level strategy. For example, under a product differentiation strategy, the R&D department might be called upon to accelerate the innovation process in order to provide new products in advance of the competition. Along similar lines, marketing might develop a plan to support the new product lines using premium prices, distribution through

GAINING THE EDGE

AMERICA'S MOST SUCCESSFUL ENTREPRENEUR

Ken Olsen, president of the Digital Equipment Corporation (DEC), has been tagged by *Fortune* magazine as "America's most successful entrepreneur" with good reason. Over a span of just three decades, he has led DEC from zero to over $12 billion in annual revenues. Adjusting for inflation, that makes DEC bigger than the Ford Motor Company at Henry Ford's death, U.S. Steel when Andrew Carnegie sold it, and Standard Oil during John D. Rockefeller's leadership.

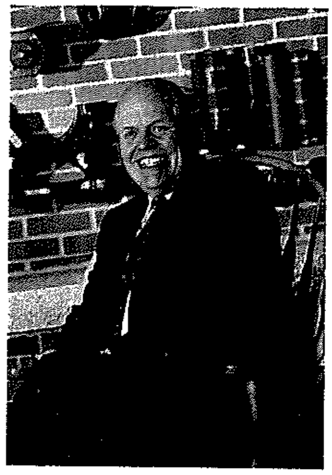
One of Olsen's favorite managerial techniques is issuing his own moral tales, known as "parables" at DEC. He sends them most frequently to senior mangers via the company's electronic mail system. When the parables appear, managers often gather around terminals speculating on the true meaning of the message. Presented below is an edited version of one of his parables, which was ultimately followed by a reorganization:

> I am in the market for a backhoe. The other day I stopped at a Ford place to get literature on tractors. They had colored brochures with beautiful pictures and glowing descriptions, and plain black-on-yellow data sheets filled with numbers.
>
> The four models which I think may cover my needs seem to be made by four different product organizations that compete with each other in who can make the most expensive and beautiful brochure. But no way would the brochures explain why one Ford tractor might have advantages over another. The data sheets vary from two to eight pages, and there is no consistency in the way data is presented. There is no way to compare the four tractors.
>
> If I don't get tired of the whole idea of a backhoe, I'll try seeing the salesman next time. But I am not sure he would understand the differences between the models, and I would feel intimidated by my lack of knowledge. I am always embarrassed when salesmen act surprised that I don't know how deep a ditch I want to dig, how heavy a load I want to lift, or how high I want to lift it.
>
> Sometime I'd like to have you explain whether there is a parallel at Digital in this or not.

In this parable, Olsen was diagnosing organizational difficulties that were plaguing DEC at the time. For 19 years the company had operated with a structure that was somewhat unusual when it was first adopted. Each product line was the responsibility of a product manager who oversaw development, marketing, pricing, inventories, and the profit picture for the product line but who "bought" services from centralized manufacturing, sales, engineering, and field service departments. The services were bought by negotiating a price for needed service and then transferring funds from the product-line budget to the service department providing the support. Over the years the structure had evolved into 18 separate product-line groups, or divisions, each concentrating on developing products for specific industries, such as engineering or education.

Originally, this structure was one of DEC's strong points because it enabled the company to respond quickly to the special demands of each kind of customer. Eventually, however, the product-line groups became fiefdoms that grew more protective of their own interests and lost sight of the company's long-range goals. As a result, DEC found itself behind the prevailing trend toward personal computers and office automation products that could be linked, stymied in efforts to enter new markets that overlapped product groups, and bogged down in increasing product-group conflicts over limited central engineering and manufacturing resources.

Intent upon retaining DEC's innovative character, Olsen turned his attention to a reorganization, staying up nights dictating enough memos to keep four secretaries busy during the day. Finally, Olsen took action to organize the company along more conventional functional lines. To speed up product development and improve coordination among product lines, he combined the engineering and manufacturing operations under one head. Olsen also placed sales and marketing under another senior vice president. Now groups of salespeople would specialize on a given industry, but they would be knowledgeable about all the various DEC products, rather than just selling one small group of products. Combining sales forces also led to a better utilization of salespeople because they could be better aligned to the size of particular markets.



Ken Olsen, the President of Digital Equipment Corporation, took a once innovative organizational structure that was no longer working and revamped it. As a result, DEC was able to develop successful new products and increase its profits.

As part of the changes, the growing headquarters' bureaucracy was pruned and, to help decentralize decision making and encourage innovative ideas, several committees were developed to assist with product strategy, marketing and sales, and management, respectively. The new measures have helped produce successful new products such as the popular VAX computers and related network systems—products based on proprietary DEC technology. Now, DEC faces new challenges as the computer field grows even more fiercely competitive. More organizational changes will likely ensue. Company members say that Olsen's engineering background is reflected in the way that he manages the company: taking things apart that do not work and revamping them until they do.[1]

Put yourself in Ken Olsen's shoes. If you were managing an internationally known and highly successful company, but saw your company start to fall behind competitors in meeting customer needs, you might well do what Ken Olsen did. Olsen engaged in the managerial function of *organizing*, the process of allocating and arranging human and nonhuman resources so that planned goals can be achieved. Organizing is important to managers because it is the means they use to align work with resources so that organizational plans and decisions (discussed in Part Two) can be made and carried out effectively.

As the DEC situation illustrates, even the best intentions and plans can go awry when the way in which the organization is structured and resources are deployed encourages counterproductive actions. Often, means of organizing that work under one set of circumstances become inappropriate as the situation changes. As a result, organizing is an ongoing management function. Managers need to give frequent consideration to organizing issues in order to keep the organization moving on target. As we begin this first chapter of Part Three, we initially probe the nature of organization structure. We also explore major considerations in dividing work in ways that are meaningful to individuals and that are likely to energize their efforts to put forth their best performance. We then review major ways of grouping jobs and units in developing an overall organization structure. We next investigate several important methods of coordinating efforts up and down the hierarchy. Finally, we examine methods of horizontal coordination that not only help various departments and units synchronize their efforts but also encourage innovation.

THE NATURE OF ORGANIZATION STRUCTURE

If you are like most people, you have probably had the experience of running into a problem that made you want to speak to the supervisor or next in command in an organization. Under such conditions, you would probably respond with disbelief if you were told that no one knew who the supervisor was or whose job it was to handle a complaint like yours. We expect such matters to be worked out—at least by organizations that have some hope of long-run survival. In essence, we expect that the organizations with which we deal have developed reasonably effective organization structures.

Organization Structure Defined

Organization structure The formal pattern of interactions and coordination designed by management to link the tasks of individuals and groups in achieving organizational goals

Organization structure is the formal pattern of interactions and coordination designed by management to link the tasks of individuals and groups in achieving organizational goals. The word "formal" in this context refers to the fact that organization structures typically are created by management for specific purposes related to achieving organizational goals and, hence, are official, or formal, outcomes of the organizing function. Organizations also have informal structures, or patterns of interaction, which are not designed by management but which emerge usually because of common interests or friendship. We discuss informal patterns of interaction further when we consider groups in Chapter 16.

Organization design The process of developing an organization structure

The process of developing an organization structure is sometimes referred to as **organization design.** Organization structure consists mainly of four elements:[2]

1. The assignment of tasks and responsibilities that define the jobs of individuals and units
2. The clustering of individual positions into units and of units into departments and larger units to form an organization's hierarchy
3. The various mechanisms required to facilitate vertical coordination, such as the number of individuals reporting to any given managerial position and the degree of delegation of authority
4. The various mechanisms needed to foster horizontal coordination, such as task forces and interdepartmental teams

One aid to visualizing structure is the organization chart. Thus we briefly examine the notion of the organization chart and review the related concept of the chain of command before analyzing the four main elements of organization structure in greater detail.

The Organization Chart

Organization chart A line diagram that depicts the broad outlines of an organization's structure

The **organization chart** is a line diagram that depicts the broad outlines of an organization's structure. Organization charts vary in detail, but they typically show in visual form the various major positions or departments in the organization, the way the various positions are grouped into specific units, reporting relationships from lower to higher levels, and official channels for communicating information.[3] Some charts show titles associated with the positions, as well as the current position holders. An overall organization chart indicating the major managerial positions and departments in the Acacia Mutual Life Insurance Company, based in Washington, D.C., is shown in Figure 10-1.

Because organization charts facilitate understanding the overall structure of organizations, many organizations have found them useful. Such charts are particularly helpful in providing a visual map of the chain of command.

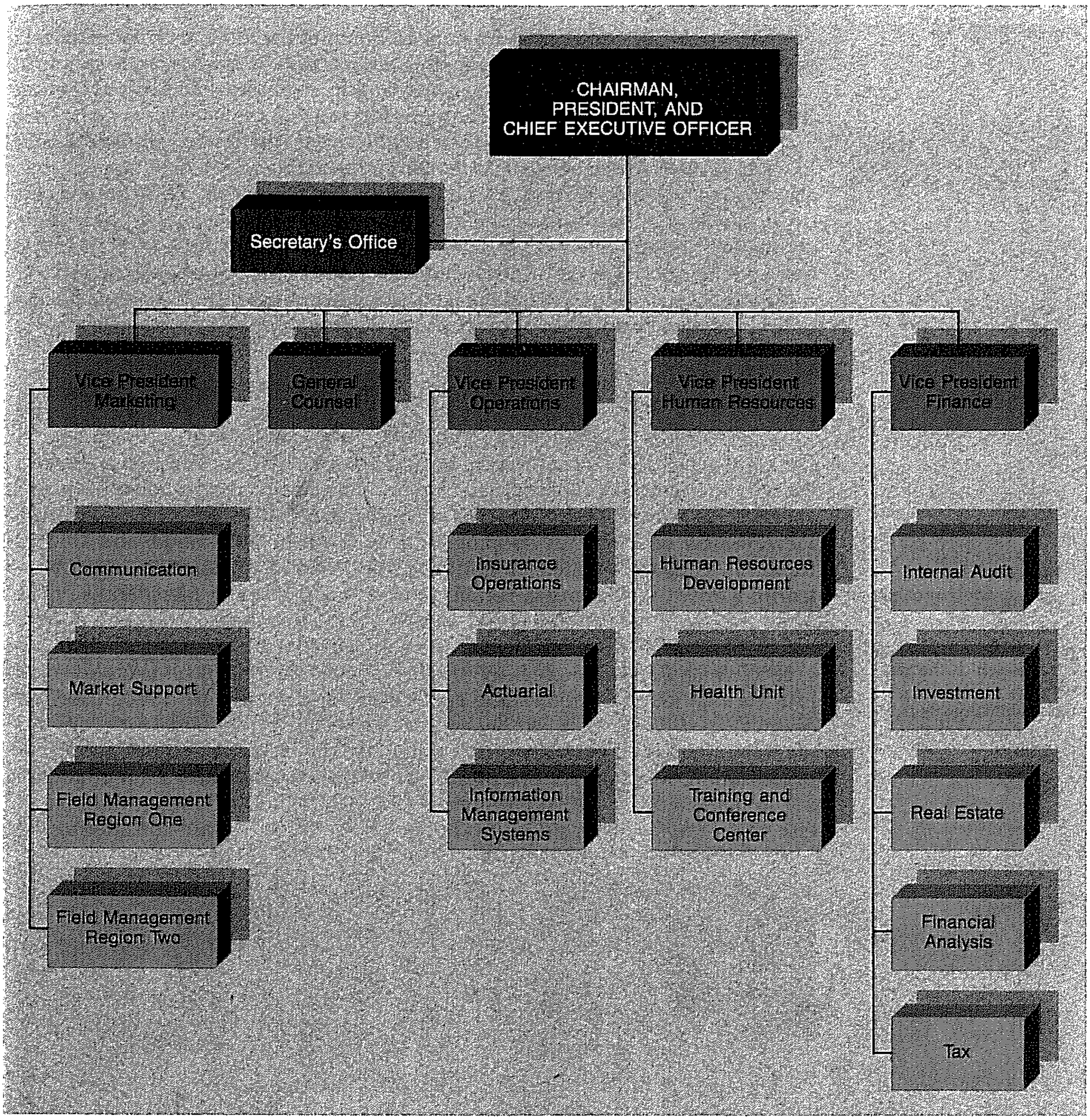


Figure 10-1 Organization chart for the Acacia Mutual Life Insurance Company.

Chain of Command

The **chain of command** is the unbroken line of authority that ultimately links each individual with the top organizational position through a managerial position at each successive layer in between. The concept of chain of command stems from two basic principles developed by contributors to the classical management viewpoint (see Chapter 2): unity of command and the scalar principle. *Unity of command* means that an individual should have only one boss at any

Chain of command The unbroken line of authority that ultimately links each individual with the top organizational position through a managerial position at each successive layer in between given point in time. The *scalar principle* states that there should be a clear line of authority from the position of ultimate authority at the top to every individual in the organization.[4] Thus the basic idea is that each individual in an organization should be able to identify his or her boss and trace the line of authority through the organization all the way to the very top position.

Today, most organizations that include more than a few individuals are likely to have organization charts showing the chain of command and the basic structure of the organization. Although such charts provide a broad view, they do not include all aspects of the structure picture. For example, organization charts do not normally include detailed information about how work is divided into specific jobs. Yet, as noted earlier in defining organization structure, the design of jobs is an important aspect of structure. Therefore, it is the subject to which we now turn.

JOB DESIGN

Work specialization The degree to which the work necessary to achieve organizational goals is broken down into various jobs

Different types of jobs can involve very different activities. A job as a buyer for Macy's, the New York–based department store chain, may involve keeping in contact with various suppliers in a certain specialty area (such as shoes), previewing new offerings, developing sources for in-house brands, and studying trends in consumer tastes. In contrast, the job of a salesperson may include learning about new items in certain departments, keeping merchandise neatly arranged, helping customers, and ringing up sales at the register. The differing activities of the buyer and the salesperson reflect **work specialization,** the degree to which the work necessary to achieve organizational goals is broken down into various jobs. Without some specialization, it would be difficult for most organizations to function, simply because it is usually impossible for every organization member to have the entire range of skills necessary to run an effective organization. Most of us have probably experienced the frustration of attempting to make a purchase only to find that the salesperson filling in for someone else cannot answer our questions about the products we are considering.

The store manager, buyer, and marketing manager of Scarbrough's Department Store in Austin, Texas, all share the organizational goal of selling merchandise and making a profit, but each specializes in particular tasks to achieve that goal. Their jobs are designed to give them individual challenges but also to aid in the coordination of their efforts.

On the other hand, even jobs with similar titles can differ substantially in the activities performed. For example, a job as an administrative assistant may include typing, filing, and photocopying, or it could involve such activities as coordinating meetings and travel, investigating trouble spots, and making decisions about a certain range of issues. What is included in a given job depends on **job design,** the specification of task activities associated with a particular job.

Job design The specification of task activities associated with a particular job

Job design is important to the organizing function for two major reasons. For one thing, task activities need to be grouped in reasonably logical ways; otherwise, it may be very difficult for organization members to function efficiently. For another, the way that jobs are configured has an important influence on employee motivation to perform well. (We discuss specific concepts of motivation in Chapter 13.) Thus managers need to consider both efficiency and motivational issues in designing jobs that will facilitate effective performance.

Approaches to Job Design

There are four major approaches to job design: job simplification, job rotation, job enlargement, and job enrichment.[5]

Job Simplification. Job simplification is the process of configuring, or designing, jobs so that jobholders have only a small number of narrow activities to perform (see Figure 10-2*a*). Economist Adam Smith was one of the first to highlight the advantages of work specialization and simplification. Using his now-famous example involving pins, Smith pointed out that an individual working alone could make 20 pins per day, while 10 people working on specialized tasks could make 48,000 pins per day.[6] The simplification idea was further popularized by Frederick Taylor through his scientific management viewpoint, which emphasizes reducing jobs to narrow tasks and training workers in the best way to do them (see Chapter 2).

Job simplification The process of configuring jobs so that jobholders have only a small number of narrow activities to perform

Under job simplification, it is possible to gain major production efficiencies by designing optimum ways to perform tasks, having individual workers perform only one or a small number of the tasks, and providing a quality control mechanism (such as quality control inspectors). Because the jobs are simple and repetitive, workers are almost interchangeable, making training new workers relatively easy. Perhaps the most obvious example of job simplification is the assembly-line approach commonly used to make automobiles. Unfortunately, job simplification can be carried too far, creating narrow, repetitive jobs that are not conducive to motivating employees. Instead, such jobs often result in negative side effects, such as worker boredom, low job satisfaction, absenteeism, turnover, and sabotage.[7]

Job Rotation. Job rotation is the practice of periodically shifting workers through a set of jobs in a planned sequence (see Figure 10-2*b*). The approach is often aimed at reducing the boredom associated with job simplification by providing some variety of tasks. Job rotation also has the advantage of *cross-training* workers (training them to do the tasks involved in several jobs) so that there is maximum flexibility in job assignments. Although job rotation can be useful in alleviating monotony and boredom, its advantage with simple jobs may be short-lived. With simple jobs, employees are likely to learn the new jobs quickly and become relatively bored again.

Job rotation The practice of periodically shifting workers through a set of jobs in a planned sequence

Job rotation is generally more successful as an employee development tool, whereby employees are rotated through a series of more challenging jobs in order to increase their capabilities, expand job assignment flexibility, and in-

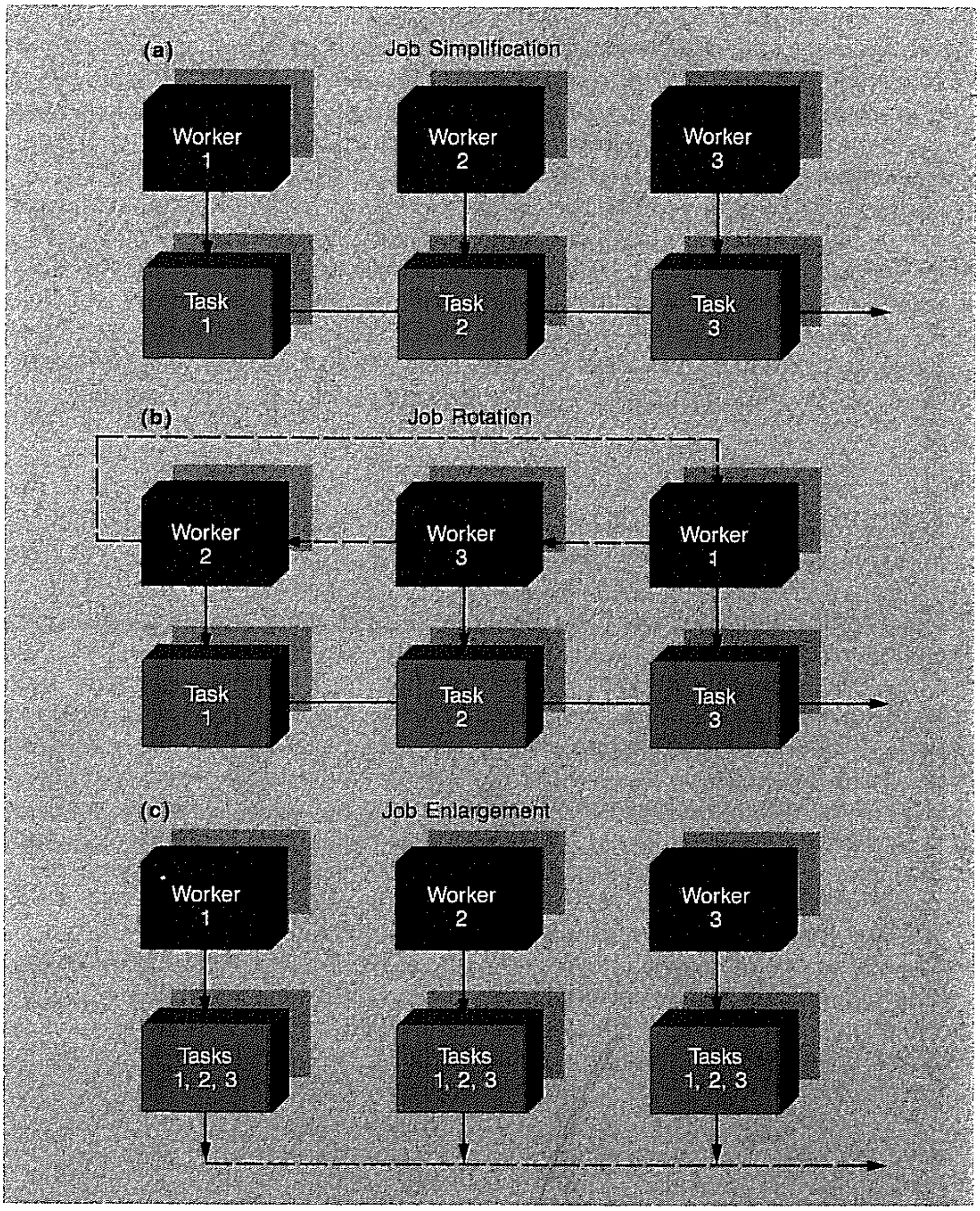
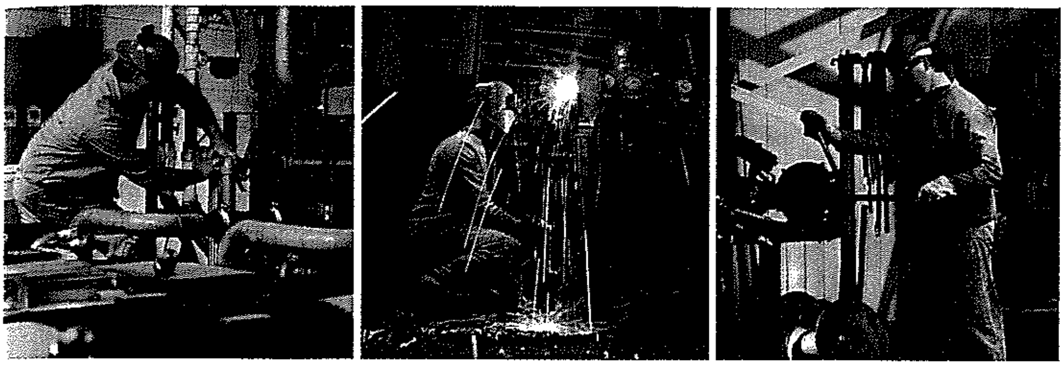


Figure 10-2 Major approaches to job design.

crease their understanding of various aspects of the organization. At Morgan Guaranty, for example, the bank makes a regular practice of rotating managers through various departments. One result is that the managers tend to be more cooperative with one another because they either have been or will be in the other person's job at some point.[8] As part of Digital Equipment Corporation's management training program, new recruits are rotated through three 1-year job assignments.[9] Job rotation across different units or geographic locations may also help stimulate innovation, since it helps promote the exchange of ideas.[10] Potential problems with job rotation are that departments may view the rotating individuals as temporary help (and give them only trivial things to do) and also may question their departmental loyalty.

Job enlargement The allocation of a wider variety of similar tasks to a job in order to make it more challenging

Job Enlargement. Job enlargement is the allocation of a wider variety of similar tasks to a job in order to make it more challenging (see Figure 10-2*c*). For exam-



This worker at National Steel can fix a hydraulic leak, weld an iron frame, and cut a hose section. By mixing job tasks and broadening responsibilities instead of restricting workers to narrow routine tasks, the company has been able to increase job satisfaction as well as improve the speed and quality of production.

ple, Maytag changed the assembly process for washing machine pumps so that each worker could assemble a complete pump rather than apply only one part on an assembly line.[11] Job enlargement broadens **job scope,** the number of different tasks an employee performs in a particular job. Although it is an improvement over narrow job specialization, job enlargement has generally had somewhat limited success in motivating employees. The primary reason is that a few more similar tasks often do not provide sufficient challenge and stimulation.

Job scope The number of different tasks an employee performs in a particular job

Job Enrichment. **Job enrichment** is the process of upgrading the job-task mix in order to increase significantly the potential for growth, achievement, responsibility, and recognition. The concept of job enrichment was pioneered by Frederick Herzberg, whose work during the late 1960s highlighted the importance of the content of jobs as a significant force in motivation.[12] Job enrichment increases **job depth,** the degree to which individuals can plan and control the work involved in their jobs. For example, U.S. Shoe traded traditional assembly lines for a modular approach at its 11 Ohio and Kentucky factories. Each module has a team of nine workers who switch tasks, decide among themselves about how to meet quality and productivity goals, and receive bonuses for meeting or exceeding them. The company has become the first U.S. shoemaker in a number of years to export women's fashion footwear to European countries.[13]

To guide job enrichment efforts, job design researchers Richard Hackman and Greg Oldham have developed the **job characteristics model.**[14] The model, shown in Figure 10-3, involves three main elements: core job characteristics, critical psychological states, and outcomes. According to the model, motivating through the design of jobs involves providing five *core job characteristics:*

1. **Skill variety** is the extent to which the job entails a number of activities that require different skills.
2. **Task identity** is the degree to which the job allows the completion of a major identifiable piece of work, rather than just a fragment.
3. **Task significance** is the extent to which the worker sees the job output as having an important impact on others.
4. **Autonomy** is the amount of discretion allowed in determining schedules and work methods for achieving the required output.
5. **Feedback** is the degree to which the job provides for clear, timely information about performance results.

The more that these core characteristics are reflected in jobs, the more motivating the jobs are likely to be.

The motivational value of these characteristics stems from workers' experiencing three *critical psychological states:* feeling the work is meaningful, knowing

Job enrichment The process of upgrading the job-task mix in order to increase significantly the potential for growth, achievement, responsibility, and recognition

Job depth The degree to which individuals can plan and control the work involved in their jobs

Job characteristics model A model developed to guide job enrichment efforts that include consideration of core job characteristics, critical psychological states, and outcomes

Skill variety The extent to which the job entails a number of activities that require different skills

Task identity The degree to which the job allows the completion of a major identifiable piece of work, rather than just a fragment

Task significance The extent to which the worker sees the job output as having an important impact on others

Autonomy The amount of discretion allowed in determining schedules and work methods for achieving the required output

Feedback The degree to which the job provides for clear, timely information about performance results

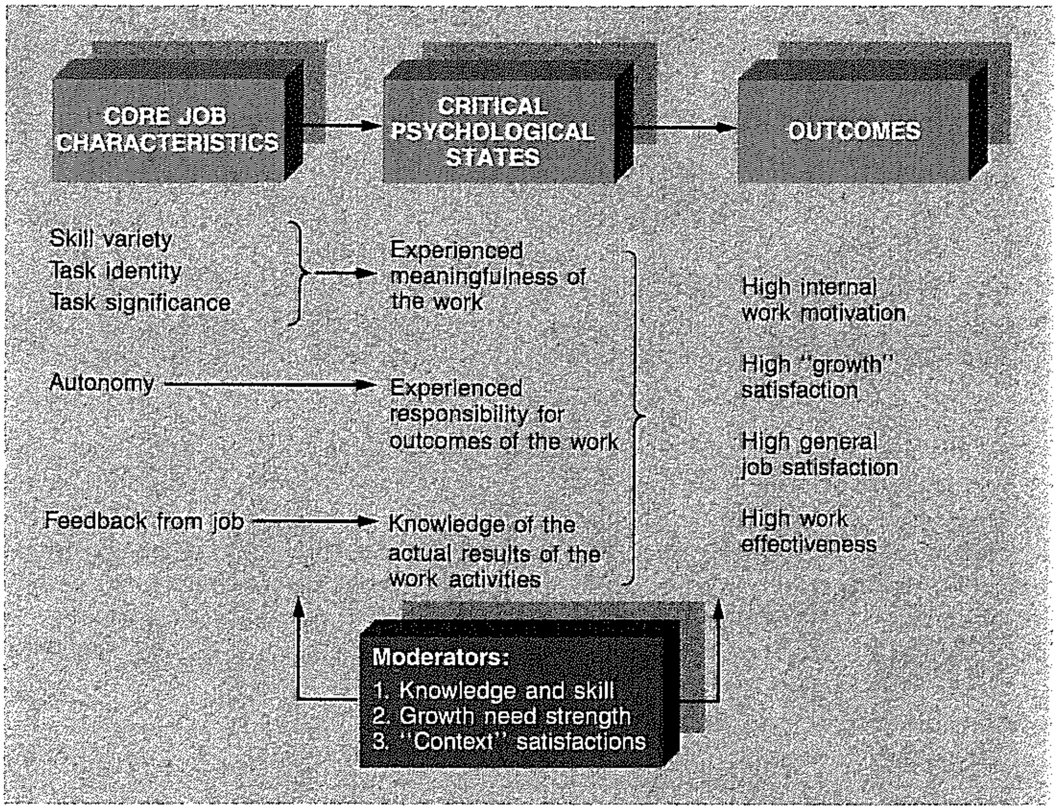


Figure 10-3 Job characteristics model. (Reprinted from J. Richard Hackman and Greg R. Oldham, *Work Redesign*, Addison-Wesley, Reading, Mass., 1980, p. 90.)

that they are responsible for the outcomes, and actually finding out about results. According to the model, these critical states then lead to the major outcomes shown, including higher internal work motivation, greater satisfaction of growth needs, higher general job satisfaction, and increased work effectiveness. The increased work effectiveness usually stems from higher work quality, although greater quantity may sometimes result, depending largely on the improvements made in the flow of work. Research has found that workers may differ in their reactions to increases in the core job characteristics (see the moderators shown in Figure 10-3). Not surprisingly, individuals are more likely to feel motivated by the job changes if they have the knowledge and skills they need to perform well in the redesigned job, if they have high **growth-need strength** (the degree to which an individual needs personal growth and development on the job), and if they feel satisfied with other aspects of the job context (such as supervision, pay, coworkers, and job security). Considerable research support exists for the importance of the job characteristics model, particularly as it relates to the job satisfaction of workers.[15] One organization that has successfully used the job characteristics model to implement job enrichment is First National Bank of Chicago (see the following Case in Point discussion).

Growth-need strength The degree to which an individual needs personal growth and development on the job

CASE IN POINT: Job Enrichment at First National Bank of Chicago

First National Bank of Chicago recently used the job characteristics model to redesign jobs in its unit that prepares letters of credit for businesses. Preparation of the letters, which let businesses know how much credit the bank is willing to extend, was fragmented into a "paperwork assembly line" that involved narrow skills, little sense of the overall product and its impact on client businesses, limited autonomy, and virtually no feedback from clients. For example, one person's whole job was feeding tape into a Telex machine.

Although the unit was notorious for poor service, managers had little success in their attempts to improve the quality and speed of the process. One survey of employees in the line-of-credit department showed that 80 percent of the staff members were dissatisfied with their jobs. The 20 percent who were satisfied were managers and technical professionals. Even the managerial jobs were limited. There was one manager for about every five workers. According to Lawrence F. Buettner, the bank's vice president for documentary products, the tasks of managers "were basically attendance and work-flow monitoring, with a little disciplinary follow-up thrown in." On the basis of the survey, a group of workers were asked to help with the redesign of their jobs. The aim was to involve the entire staff in bringing about change. "We wanted to solicit opinions without threatening people," Buettner says.

The redesign ultimately resulted in eliminating a layer of management and changing the jobs so that each employee would perform customer contact work (resulting in higher task identity, task significance, and feedback) and would perform research, writing, costing, and other letter-preparation tasks (resulting in increased skill variety, autonomy, and task identity) associated with a specific client group. The changes also led to staff reductions (mainly through attrition and transfers) of about 40 percent, extensive training of the staff, and pay increases of $7000 to $8000 per year for those remaining (because they now had higher-skilled jobs). Within a year, profits related to the department rose by $2 million, employee morale rose dramatically, and customer satisfaction increased significantly. The greater customer satisfaction was related to faster turnaround time, greater accuracy, and an increased ability to handle sudden increases in work.[16]

Although the job characteristics model assists managers in redesigning jobs to make them more motivating, related research indicates that the process may be more complex than the model indicates.[17] One complicating factor is suggested by the emerging **social information-processing approach** to job design, which argues that individuals often form impressions of their jobs from socially provided information, such as comments by supervisors and coworkers. Thus individuals' reactions to jobs may reflect not only the reality of job characteristics but also perceptions of them. For example, continual coworker complaints that a job is boring may encourage others to view the work as boring also, despite actual job characteristics to the contrary.[18] The implication of this finding is that managers need to be concerned not only with actual job characteristics but also with other influences on employee job perceptions.[19] Considering the job content is one method of organizing work to meet both organizational and worker needs; another method is devising alternative work schedules.

Social information-processing approach An approach arguing that individuals often form impressions of their jobs from socially provided information, such as comments by supervisors and coworkers

Alternative Work Schedules

A related aspect of designing jobs is creating **alternative work schedules,** schedules based on adjustments in the normal work schedule rather than in the job content or activities. The basic objective of this approach is to increase worker job satisfaction and motivation by arranging work schedules that allow individuals to meet the needs associated with both personal life and work life. Three

Alternative work schedules Schedules based on adjustments in the normal work schedule rather than in the job content or activities major types of alternative work schedules are flextime, the compressed workweek, and job sharing.

Flextime A work schedule that specifies certain core hours when individuals are expected to be on the job and then allows flexibility in starting and quitting times as long as individuals work the total number of required hours per day

Flextime. **Flextime** is a work schedule that specifies certain core hours when individuals are expected to be on the job and then allows flexibility in starting and quitting times as long as individuals work the total number of required hours per day. For example, a company may have core hours between 10 a.m. and 3 p.m. (with an hour for lunch). Workers may then choose various schedules, such as 7 a.m. to 4 p.m. or 10 a.m. to 7 p.m., that comprise 8 hours of work per day and include the core hours. One recent study showed that the most popular core period is 9 a.m. to 3 p.m., but 9 a.m. to 4 p.m. is also common.

Major advantages of flextime are improvements in employee morale, accommodation of the needs of working parents, decreased tardiness, and reductions in traffic problems because workers can avoid the peak congestion times. Flextime also often results in lower absenteeism and lower turnover. Major disadvantages include lack of supervision during some hours of work, unavailability of key people during certain periods, understaffing during some periods, and coordination difficulties if the outputs of some employees are inputs for other employees. Also, keeping track of the various schedules may increase administrative work. Overall, however, flextime has been a successful innovation, and its use appears to be growing at a rate of about 1.5 percent per year.[20]

Compressed workweek A work schedule whereby employees work four 10-hour days or some similar combination, rather than the usual five 8-hour days

Compressed Workweek. The **compressed workweek** is a work schedule whereby employees work four 10-hour days or some similar combination, rather than the usual five 8-hour days. Some companies close for 3 days each week, which often provides operating economies, such as reduced energy use by cutting down on heating and cooling for the 3 days off. For example, at the Alabama-based Birmingham Steel Corporation, workers put in 12-hour days, working 3 days one week and 4 days the following week. The schedule has had a major positive effect on productivity by cutting the number of shifts and time-consuming changeovers from three to two.[21]

Other organizations coordinate employee schedules to remain open for 5 days each week. The basic idea behind the compressed workweek, sometimes called the 4/40 workweek, is to make the job attractive to employees by providing 3 (usually consecutive) days off per week. Potential disadvantages include possible fatigue, loss of productivity, and accidents, as well as difficulties interfacing with other organizations that operate on traditional workweek schedules. More research is needed on the effects of the compressed workweek. According to one study, the compressed workweek had initially led to greater worker job satisfaction and higher performance, but the positive effects disappeared within 2 years.[22]

Job sharing A work practice in which two or more people share a single full-time job

Job Sharing. **Job sharing** is a work practice in which two or more people share a single full-time job. With job sharing, one person can work in the morning and the other in the afternoon, or they can alternate days or develop some other workable sharing schedule. Individuals who share jobs may be parents who are sharing work and family responsibilities or mothers attempting to juggle both home and work activities. One survey of 348 U.S. and Canadian firms found that 11 percent had job sharing. In 90 percent of the cases in which job sharing existed, each job sharer received half the normal full-time salary for the job.[23]

TYPES OF DEPARTMENTALIZATION

While the way in which individual jobs are arranged is one important dimension of organization structure, a second important aspect is departmentalization. **Departmentalization** is the clustering of individuals into units and of units into departments and larger units in order to facilitate achieving organizational goals.[24] Differing overall patterns of departmentalization often are referred to as *organization designs*.

Departmentalization The clustering of individuals into units and of units into departments and larger units in order to facilitate achieving organizational goals

By determining how individuals will be grouped, departmentalization influences the way an organization operates in several ways.[25] For one thing, the pattern of departmentalization has a direct bearing on the need for supervisors and their linkage into the chain of command. For another, groupings created by departmentalization usually exert a major influence on how resources are shared. For example, members of the same unit often have a common budget, as well as shared facilities (e.g., office space) and equipment (such as photocopy machines). Yet another influence of departmentalization is that individuals often are evaluated to some degree as a unit (e.g., by their overall sales or service record) and, hence, have a structural incentive to coordinate their activities. Finally, members of groups created by departmentalization often must interact frequently and, as a result, may begin to adopt the perspective of their particular group and view others as outsiders. This group perspective often helps members synchronize their productive efforts within their group. Yet this same group perspective may make it more difficult for members to work effectively across units, often necessitating managerial action to encourage coordination. We discuss methods of horizontal coordination later in this chapter.

Four of the most commonly used patterns of departmentalization are functional, divisional, hybrid, and matrix. Briefly, the *functional structure* groups positions into units on the basis of similarity of expertise, skills, and work activities (e.g., marketing, accounting, production or operations, and human resources). In contrast, the *divisional structure* groups positions into units according to the similarity of products or markets (e.g., a separate division for each of several products). The *hybrid structure* combines aspects of both the functional and divisional forms, with some jobs grouped into departments by function and others grouped by products or markets. Finally, the *matrix structure* superimposes, or overlays, a horizontal set of divisional reporting relationships onto a hierarchical functional structure. We discuss these methods of departmentalization, or organization design, in greater detail, including their major advantages and disadvantages, in Chapter 11.[26]

Regardless of the organization design, however, managers typically need to take further steps to achieve the vertical and horizontal coordination that makes a structure effective. In the next section, we discuss methods of vertical coordination.

METHODS OF VERTICAL COORDINATION

Although the functional, divisional, and hybrid types of departmentalization provide basic structures within which individuals carry out organizational work activities, there are a number of additional mechanisms that are important to effective vertical coordination. **Vertical coordination** is the linking of activities at the top of the organization with those at the middle and lower levels in order to achieve organizational goals. Five particularly important means of achieving ef-

Vertical coordination The linking of activities at the top of the organization with those at the middle and lower levels in order to achieve organizational goals fective vertical coordination are formalization, span of management, centralization versus decentralization, delegation, and line and staff positions.[27]

The Role of Formalization

Formalization The degree to which written policies, rules, procedures, job descriptions, and other documents specify what actions are (or are not) to be taken under a given set of circumstances

One common method of achieving vertical coordination is formalization. **Formalization** is the degree to which written policies, rules, procedures, job descriptions, and other documents specify what actions are (or are not) to be taken under a given set of circumstances.[28] Policies, rules, procedures, and other means of formalization help bring about vertical coordination by specifying expected behaviors in advance.[29] For example, policies provide general guidelines within which organization members are expected to operate; procedures spell out actions to be taken under certain recurring circumstances; and rules specify what should or should not be done in a given situation (see Chapter 5). Job descriptions detail the tasks and activities associated with particular jobs (see Chapter 12). Formal rules and procedures were an important aspect of the ideal bureaucracy outlined by German sociologist Max Weber (see Chapter 2). He saw rules and procedures, along with a well-defined hierarchy, as tools for helping large organizations operate more smoothly.

Indeed, most organizations rely on at least some means of formalization. For example, major student organizations to which you may belong are likely to have written policies about basic qualifications for office, as well as procedures governing how elections should be conducted. Without such means of formalization, it would be necessary to decide these issues each year, a situation that could be time-consuming and might lead to significant inequities. On the other hand, extensive rules and procedures about what activities the organization should sponsor and exactly how everything should be done would likely be stifling. Not surprisingly, research supports the notion that being too highly formalized can lead to cumbersome operations, slowness in reacting to change, and low levels of creativity and innovation.[30] For example, in her study of how and why companies differ in their levels of innovation, management expert Rosabeth Moss Kanter found that narrowly defined job descriptions and high degrees of formalization at the middle management levels depressed the amount of innovation.[31]

Even at lower levels, excessive emphasis on rules and regulations can cause difficulties. When J. Bildner & Sons, Inc., a Boston-based upscale grocery store, began an ill-fated expansion attempt, the company developed formal policies and rules that unwittingly sometimes thwarted the company's intended emphasis on service. In one instance, a customer at a recently opened New York store inquired about the cost of buying a roasted turkey for Christmas. Rather than quoting a price based on the cost of the turkey and a reasonable markup for profit, the manager followed the rules and multiplied the price per slice by the number of slices in a turkey. Naturally, the price was absurd and the customer walked out.[32] As a result of such dysfunctional occurrences, a number of innovative companies, such as Nordstrom's (the Seattle-based apparel, shoe, and soft-goods retailer that is noted for good service), are attempting to allow discretion where possible.

When organizations are small, they usually can run very informally, with few written documents specifying policies and procedures. As they grow, however, organizations tend to require additional degrees of formalization in order to coordinate the efforts of growing numbers of individuals. The challenge is to avoid becoming overly formalized. Consider the experience of Celestial Seasonings as it grew larger, became part of a giant company, and then became an independent company again (see the following Case in Point discussion).

CASE IN POINT: Celestial Seasonings Retains Its Innovative Flair

The origins of Celestial Seasonings, makers of herbal tea, are legendary. In 1970, Mo Siegel and his friend Wyck Hay gathered herbs in the mountains of Colorado, mixed their first blend of herb tea, loaded the mixture in muslin bags sewn by their wives, and began selling the tea to local health stores.

The company took the name "Celestial Seasonings," which was the nickname of an early investor's girlfriend. Tea names, chosen by Mo's friends and company members, were equally whimsical, beginning with Mo's 24 Herb Tea, Red Zinger Herb Tea, and Morning Thunder Tea. The tea was packaged in colorful recyclable boxes that featured such idyllic scenes as charging buffalo and picnicking couples. Up to that time, herb teas had largely been somewhat bitter-tasting brews used for medicinal purposes. The fledgling company changed all that with its flavorful new creations, which soon found themselves on supermarket shelves, and virtually created the herb tea industry.

From the start, the company operated relatively informally, encouraged employee participation in decision making, and had a dedication to all-natural ingredients. In the early days, major decisions were made in all-company meetings lasting as long as 8 hours, volleyball games were played every lunch hour, and toddling children could be found playing in Mo's office. As Celestial grew, the company brought in managers from such major corporations as Pepsi, Coca-Cola, Smuckers, and Lipton to help. Automation became a necessity as the amount of tea blended per day approached 8 tons. Still, the company managed to retain its informality, eschewing such symbols of hierarchical status as time clocks and reserved parking places. Employees were asked to contribute ideas in such areas as new ways to automate, possible new teas, and names for new flavors (often chosen through employee contests).

The success of the innovative herb tea company attracted the attention of Kraft, Inc., which bought Celestial from Mo Siegel in 1984 for approximately $40

Celestial Seasonings' colorful boxes are a familiar sight on supermarket shelves. Beginning as a very informal home-based venture among friends, it quickly grew into a multimillion dollar business entailing various formalized procedures. Nevertheless, Celestial Seasonings has been able to retain a great deal of its original unconventional spirit.

million, with assurances that the company would be left alone to continue its solid growth. By 1989, Kraft decided to get out of the beverage business and attempted to sell Celestial to the tea company's archrival, Thomas J. Lipton, Inc. When an antitrust suit filed by R. C. Bigelow, Inc., a small competitor in the herb tea market, blocked the sale, Kraft agreed to sell Celestial Seasonings to its management and a venture capital firm.

"Although Kraft let us operate as an independent business," says Barnet Feinblum, who was promoted to president when Siegel left, "little by little we were having to comply with Kraft's policies, whether it was employee benefit plans or decisions on purchasing equipment. If we had continued that way, Celestial Seasonings would have gradually and inexorably become just like Kraft." Celestial Seasonings' management came to view its giant parent as hopelessly slow and cautious. Feinblum remembers missing one opportunity because of Kraft's lengthy lead time in purchasing Italian teabagging machines. Caryn Ellison, Celestial Seasonings' vice president of finance, recalls the endless paperwork and says that she produced plans by the ream when she was director of planning. "They wanted our financial results to be completely predictable," says Ellison. "We're used to being much more flexible."

Kraft did double Celestial Seasonings' advertising budget, a move that enabled the company to hire actress Mariette Hartley as a spokesperson for television spots that were extremely successful. By early 1988, sales began to approach $50 million, compared with $27 million in 1983, and Celestial Seasonings had captured 51 percent of the market. Despite the debt stemming from the purchase of the company from Kraft, morale at Celestial Seasonings has soared. Celestial Seasonings is continuing its entrepreneurial spirit with expansion plans and more exotic teas in the development stages.[33]

As the Celestial Seasonings situation illustrates, too much formalization can begin to stifle an organization, particularly when it is relatively small. On the other hand, even Celestial Seasonings has had to develop policies, such as using only natural ingredients, and rules, such as procedures for cleaning various spice ingredients imported from all over the world. In addition to formalization, span of management is an important means of vertical coordination.

Span of Management

Span of management, or **span of control** The number of subordinates who report directly to a specific manager

Span of management, or **span of control,** is the number of subordinates who report directly to a specific manager. Span of management is important to vertical coordination because it has a direct bearing on the degree to which managers can interact with and supervise subordinates. With too many subordinates, managers can become overloaded, experience difficulty coordinating activities, and lose control of what is occurring in their work units. On the other hand, with too few subordinates, managers are underutilized and tend to engage in excessive supervision of subordinates, leaving subordinates little discretion in doing their work.[34]

Because of the importance of span of control to managers, classical management theorists attempted to identify optimum numbers for such spans. Their estimates ranged from a span of about 5 at upper levels to a span as broad as 25 at lower levels of the organization.[35] Thus classical theorists recognized that the situation has some bearing on the most effective span. More recently, researchers have identified a variety of factors that influence the span of control that will be effective in a given situation.[36]

Factors Influencing Span of Management. In general, research suggests that spans of management can be wider under the following conditions:[37]

- *Low interaction requirements.* When the work is such that subordinates are able to operate without frequent interaction with each other and/or with their superiors, managers can supervise more individuals.
- *High competence levels.* High job-related skills and abilities of managers and/or subordinates make it possible for managers to handle more subordinates.
- *Work similarity.* When employees in a given unit do similar work, it is easier for a manager to maintain adequate supervision than when tasks vary widely.
- *Low problem frequency and seriousness.* When problems, particularly serious ones, are infrequent, there is less need for managerial attention.
- *Physical proximity.* When subordinates are located within close physical proximity of one another, managers can coordinate activities more easily.
- *Few nonsupervisory duties of manager.* Managers can handle more subordinates when they have few nonsupervisory duties to perform, such as doing part of the work themselves.
- *Considerable available assistance.* Managers can supervise more subordinates when they have considerable additional help, such as assistant and secretarial support.
- *High motivational possibilities of work.* When the work itself offers a high challenge, subordinates are more likely to increase their performance levels because of opportunities to exercise discretion, making it less necessary for continual managerial involvement.

Levels in the Hierarchy. Although it is not always obvious to the casual observer, spans of management for various managerial positions directly impact the number of hierarchical levels in an organization. A **tall structure** is one that has many hierarchical levels and narrow spans of control. In contrast, a **flat structure** is one that has few hierarchical levels and wide spans of control.

Tall structure A structure that has many hierarchical levels and narrow spans of control

Flat structure A structure that has few hierarchical levels and wide spans of control

To understand how span of control is related to the number of levels, it is helpful to contrast the two hypothetical organizations depicted in Figure 10-4. In both cases, the organizations have 4096 nonsupervisory employees at the bottom level.[38] However, organization A has seven hierarchical levels, while organization B has only five levels. The reason is tied to differences in spans of control. In organization A, the span of control for each managerial position is 4, requiring 1024 first-line supervisors, 256 at the next level, and so on. In organization B, the span of control for each management position is 8, requiring only 512 first-line supervisors, 64 managers at the next level, and so on. As a result, organization A is 2 levels taller and requires 811 *more* managers.

If one wanted to reduce the number of hierarchical levels in organization A, the only way to do so without reducing the number of employees at the bottom is to increase spans of control. Of course, in a real organization, spans of control would not be uniformly the same throughout the whole organization as they are in Figure 10-4. Still, the principle is the same. When average spans of control in an organization are narrow, the implication is a tall organization. Very tall organizations raise administrative overhead (because there are more managers to be paid, given office space, etc.), slow communication and decision making (because of the many levels), make it more difficult to pinpoint responsibility for various tasks, and encourage the formation of dull, routine jobs.[39]

Downsizing The process of significantly reducing the layers of middle management, expanding spans of control, and shrinking the size of the work force

Because of such problems with tall structures, many companies recently have been downsizing. **Downsizing** is the process of significantly reducing the layers of middle management, expanding the spans of control, and shrinking

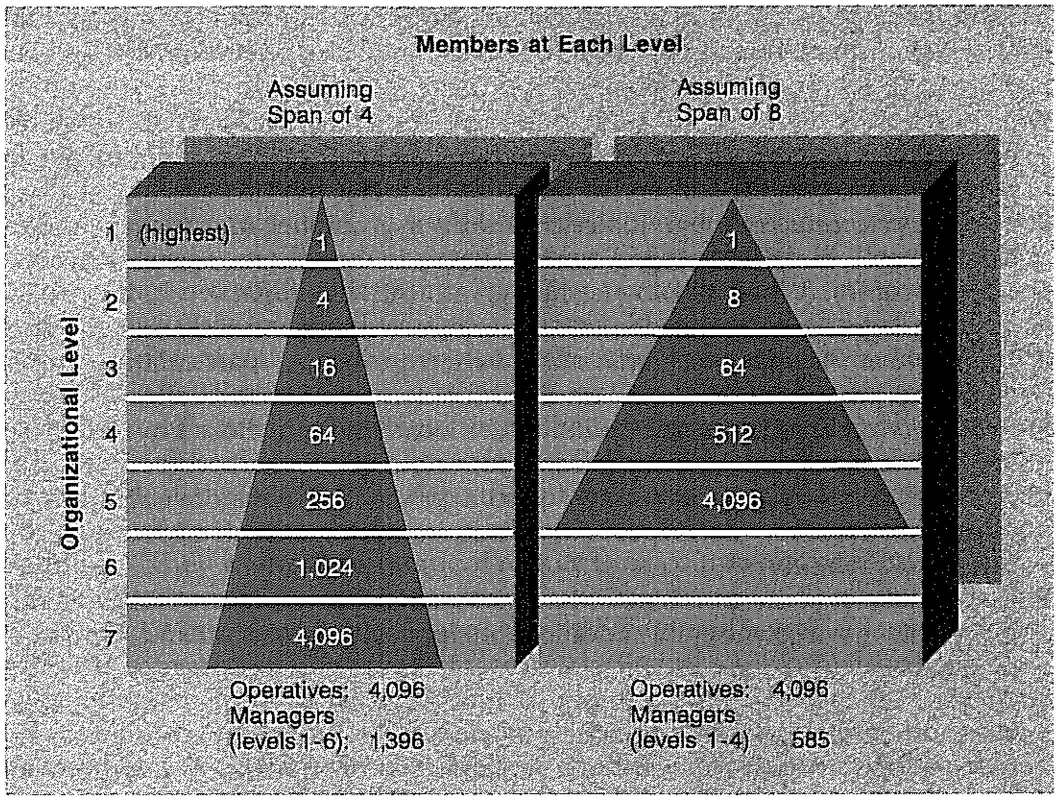


Figure 10-4 Contrasting spans of control. (Reprinted from Stephen P. Robbins, *Organization Theory: The Structure and Design of Organizations*, 3d ed., Prentice-Hall, Englewood Cliffs, N.J., 1990, p. 88.)

Restructuring The process of making a major change in organization structure that often involves reducing management levels and also possibly changing components of the organization through divestiture and/or acquisition, as well as shrinking the size of the work force

the size of the work force.[40] The purpose is to increase organizational efficiency and effectiveness. A closely related term that is often used synonymously with "downsizing" is "restructuring." **Restructuring** is the process of making a major change in organization structure that often involves reducing management levels and also possibly changing some major components of the organization through divestiture and/or acquisition.[41] Again, the purpose is to boost efficiency and effectiveness. Restructuring frequently, but not always, involves reducing the size of an organization's work force.

In one example of downsizing, the Ford Motor Company recently reduced its number of management levels after finding that it was laboring under 12 layers of management, compared with 7 layers at Toyota.[42] The additional levels at Ford represented expensive overhead not borne by a significant competitor, causing a competitive disadvantage for Ford. In addition, having many levels made it more difficult for the company to move quickly in its increasingly competitive situation. Soon after Ford made its reductions, Toyota was back cutting management levels of its own (see the following Case in Point discussion).

CASE IN POINT: Toyota Sheds Management Levels

Faced with increasing global competition, management at the Toyota Motor Corporation recently undertook a restructuring aimed at eliminating two management levels. In keeping with the common Japanese tradition of attempting to avoid laying off workers, the company shifted a number of middle managers to "hands-on work," rather than cutting their jobs.

The primary reason that Toyota gave for the restructuring was the desire to streamline decision making by reducing the number of layers through which decisions must travel. The changes affected about 25,000 of the approximately 65,000 Toyota employees, including about 1000 managers. Cost cutting did not seem to be the main reason for the Toyota move because the company has been making admirable profits in recent years. In fact, the company has so much cash that it is often referred to as "the Bank of Toyota."

Despite booming profits and production, Toyota underwent a major restructuring in its management, shedding two levels. The aim was to expedite decision making, make the organization less hierarchical, and involve middle level managers in more "hands-on" work. Such changes aid the flow of innovative ideas that improve Toyota's competitive position. For example, at this Takoaka Plant in Japan more than 2000 robots build Corollas by performing some of the heavier and more delicate assembly tasks, thus reducing the number of human workers ultimately needed on the assembly line.

Instead, the restructuring appeared to stem from the fact that the company often is slower to take competitive action than are its smaller Japanese rivals. For instance, Toyota opened its own U.S. assembly plant only after Honda, Nissan, and Mazda already were manufacturing in the United States. The company also trailed behind Honda in making its entry in the luxury-car market.

At Toyota, there are "so many, many steps to reach top management that it takes time to make a decision," noted a Toyota spokesperson. Furthermore, there were significant numbers of middle managers whose main activities could be summarized as "sit quietly without doing anything," the spokesperson added. Now the displaced managers will need to "become involved in the process of creating and doing hands-on work."

As part of the change, the company is dropping the use of the term *kacho*, meaning "manager." Instead, all employees will use the suffix *-san* in referring to one another—the Japanese equivalent of "Mr.," "Mrs.," or "Ms." In changing the way that employees address one another, Toyota was following the lead of Nissan. Nissan made the change in an effort to reduce employee perceptions of working in a bureaucracy. In an even more radical change, Toyota also said that performance evaluations will weigh performance more heavily than seniority. The company had traditionally considered seniority ahead of performance in evaluating individuals.

At the same time, Toyota announced a plan to spend 100 billion yen (about $730 million) on new housing, recreation facilities, and other comforts for employees. Wall Street analysts interpreted that move, coupled with the restructuring, as an effort to be more competitive in attracting new college graduates, who are in short supply in Japan's labor market. The restructuring allows the new graduates more involvement in decision making because of the reduced number of hierarchical levels.[43]

Still, downsizing must be planned and implemented carefully. Done well, it can significantly reduce costs, speed up decision making, energize employees through more challenging jobs, reduce redundancies, and increase innovation. Done poorly, it can lose valuable employees (either because they are laid off or because they decide to leave), demoralize survivors, and result in short-run productivity declines as employees attempt to pick up additional responsibilities.[44] For example, Ireland's Waterford Glass Group PLC, the venerable maker of lead crystal goblets and related items, ran into difficulty in the mid-1980s when it attempted to downsize in part by reducing the size of its highly paid labor force through an early retirement offer. A related step was the purchase of new glass furnaces and diamond-cutting wheels that could speed production. Unfortunately, too many of the most experienced glassblowers chose early retirement. The remaining, less experienced work force could not achieve the same productivity levels, even with the new equipment.[45] While the downsizing trend may reduce the overall number of managerial positions in organizations, it also is likely to provide more challenging and interesting jobs at the middle and lower levels.

Centralization versus Decentralization

Centralization The extent to which power and authority are retained at the top organizational levels

Decentralization The extent to which power and authority are delegated to lower levels

To foster vertical coordination, managers also need to consider the appropriate level of **centralization,** the extent to which power and authority are retained at the top organizational levels. The opposite of centralization is **decentralization,** the extent to which power and authority are delegated to lower levels. Centralization and decentralization form a continuum with many possible degrees of delegation of power and authority in between. The degree of centralization impacts vertical coordination by influencing the amount of decision making that will be done at the upper and lower levels.

One way of judging the degree of centralization in an organization is to study the types of decisions that can be made by managers at lower levels. An organization is relatively centralized if decisions made at lower levels are governed by a *restrictive* set of policies, procedures, and rules, with situations that are not explicitly covered referred to higher levels for resolution. By comparison, an organization is relatively decentralized if decisions made at lower levels are made within a *general* set of policies, procedures, and rules, with situations not covered left to the discretion of lower-level managers.[46] For example, as a result of efforts at the Dana Corporation to decentralize, headquarters gave almost 90 factory managers authority over such decisions as hiring, firing, cost accounting, and purchasing.[47]

Centralization has several positive aspects.[48] If all major decisions are made at the top levels, it can be easier to keep the activities of various units and individuals coordinated. In addition, top managers usually have the most experience and may make better decisions than individuals at lower levels. Also, top-level managers usually have a broader perspective and can better balance the needs of various parts of the organization in making decisions. Another plus is that coordination from the top can help reduce duplication of effort and resources by ensuring that similar activities are not carried on by different organizational units. Finally, centralization promotes strong leadership in an organization because much of the power remains at the top.

Decentralization also has a number of major advantages.[49] Encouraging decision making at lower levels tends to ease the heavy work loads of executives, leaving them more time for major issues. Decentralization also enriches lower-level employees' jobs by offering workers the challenge associated with being able to make significant decisions affecting their work. In addition, it leads to faster decision making at the lower levels, because most decisions do not have to be referred up the hierarchy. Individuals at lower levels may be closer to the problem and, therefore, in a better position to make good decisions. Finally, decentralization often leads to the establishment of relatively independent units, such as divisions, whose output is easier to measure than that of units in a functional design. In assessing this final advantage, though, it is worth noting that a divisional structure is not synonymous with decentralization. It is possible to have a divisional structure in which much of the power and authority is still held at the top and most decisions of significance must be referred to the executive levels.

Given that both approaches have advantages, how does top management decide on the degree of centralization versus decentralization? There are four main factors that begin to tilt the scale from the centralization side of the continuum toward the decentralization side.[50]

Large size tends to require more decentralization simply because it becomes more difficult for top-level managers to have either the time or the knowledge to make all the major decisions. As organizations grow, such decisions become more complex and demanding because there are more factors to consider, such as more products, customers, and markets.

Geographic dispersion of operations makes decentralization more necessary because top executives frequently find it impossible to keep abreast of the details of what is going on at various locations. Moreover, managers on site may be in a better position to assess local situations and make appropriate decisions.

Technological complexity creates pressure for greater decentralization. In situations involving complex technology, it typically is difficult for upper management to keep up technologically. At the same time, there are usually a number of experts who are more capable of making at least the major decisions involving technology. For example, the Digital Equipment Corporation has a reputation for encouraging decision making at the lowest possible levels, partially because of the complex technology involved. Olsen also encourages new ideas and has personally responded to lengthy memos written by newcomers with suggestions.[51]

Environmental uncertainty tends to produce a need for more decentralization. In this case, the fast pace of change interferes with top management's ability to assess situations with the speed necessary to make timely decisions.

The increasing availability of computer networks, which allow information to be shared throughout the organization, has vastly increased the prospects for both centralization and decentralization. Computer networks can facilitate centralization by providing upper-level managers with easy access to information about ongoing operations at the middle and lower levels. With such information, top managers can involve themselves in day-to-day operations. On the other hand, computer networks also can provide upper-level managers with summary information that can enable top managers to obtain timely information regarding how various units are progressing, without having to make so many operating decisions themselves.[52] We discuss the issue of computer-based information systems and management in greater detail in Chapter 20.

Delegation

Another means of vertical coordination that is closely related to the centralization-decentralization issue is delegation. Suppose that you become the manager of a restaurant that is part of a chain. Let's assume that you are one of ten restaurant managers who report to a district manager. When you take over as restaurant manager, you probably expect to be assigned **responsibility**, the obligation to carry out duties and achieve goals related to a position. For example, you might have the responsibility of keeping the restaurant open during certain hours, seeing that food is served, making sure the customers are satisfied, and achieving a certain profit margin. You probably also expect to be given **authority**, the right to make decisions, carry out actions, and direct others in matters related to the duties and goals of a position. For example, as the restaurant manager, you might expect to have the authority to do such things as hire employees, assign work, and order the food and supplies necessary to keep things running smoothly. You would also expect the position to involve **accountability**, the requirement to provide satisfactory reasons for significant deviations from duties or expected results.

Responsibility The obligation to carry out duties and achieve goals related to a position

Authority The right to make decisions, carry out actions, and direct others in matters related to the duties and goals of a position

Accountability The requirement to provide satisfactory reasons for significant deviations from duties or expected results

Carrying our story a step further, suppose that you soon found that when you attempted to make decisions, such as hiring a new worker, the district manager tended to interfere and even frequently reversed your decisions. Yet, when the end of the month came and you had not achieved your expected profit margin (largely because of interference from the district manager), the district manager still held you accountable for the shortfall in results. Under this set of circumstances, you might correctly conclude that you had been given the responsibility but not the authority needed to do your job.

Delegation The assignment of part of a manager's work to others along with both the responsibility and the authority necessary to achieve expected results

In this situation, the district manager failed to engage in adequate **delegation,** the assignment of part of a manager's work to others along with both the responsibility and the authority necessary to achieve expected results. Delegation involves moving decision-making authority and responsibility from one level of the organization to the next lower level. With delegation, though, delegating managers are still ultimately responsible for achieving the results and will be held accountable by their own bosses. Delegation is important to vertical integration because it allows the hierarchy to be both more efficient and more effective by enabling work to be done at the lowest level possible.[53] More delegating is done with a decentralized structure than with a centralized one. Even within a centralized structure, top managers must do some delegating. They cannot do everything themselves.

Although even classical theorists placed considerable emphasis on the need to delegate, managers still frequently find delegation difficult. Some of the main reasons why managers are reluctant to delegate are that they may fear blame if subordinates fail, believe they lack the time to train subordinates, wish to hold on to their authority and power, enjoy doing tasks that subordinates could perform, feel threatened that competent subordinates may perform too well and possibly make the manager look poor by comparison, or simply feel that they do not know how to delegate effectively.[54]

At the same time, subordinates may resist delegation by managers, further inhibiting the delegation process. One major reason why resistance sometimes occurs is that subordinates fear that they will fail. Another is that subordinates may believe that the delegation increases the risk of making mistakes but does not provide adequate rewards for taking on the increased responsibility.

The common reluctance of managers to delegate has serious implications for organizing efforts. If managers do not delegate when possible, they can become overloaded. Overloading, in turn, causes vertical coordination to break down because the manager becomes a bottleneck rather than a facilitator. At the same time, subordinates may not be developed to fill future managerial positions, thus weakening prospects for adequate vertical coordination in the future. In addition, recent research shows that subordinates with high job competence perform better in situations in which their bosses engage in high levels of delegation because the subordinates' significant job competence is utilized.[55] Failure to delegate also tends to adversely affect innovation because the ideas of others in the chain of command are underutilized and managers have little time to innovate if they are bogged down in work.[56] Finally, the failure to delegate can hurt managerial careers. A study by the Center for Creative Leadership showed that overmanaging, or the inability to delegate and build a team, was one of the "fatal flaws" that caused executives on the fast track to become derailed for the reasons just described.[57] For some guidelines on how to delegate, see the Practically Speaking discussion, "Guidelines for Effective Delegating."

Line position A position that has authority and responsibility for achieving the major goals of the organization

Staff position A position whose primary purpose is providing specialized expertise and assistance to line positions

Line and Staff Positions

Another issue related to vertical coordination is the configuration of line and staff positions. A **line position** is a position that has authority and responsibility for achieving the major goals of the organization. A **staff position** is a position

PRACTICALLY SPEAKING

GUIDELINES FOR EFFECTIVE DELEGATING

These guidelines will help you be an effective delegator:

- The secret of delegating is determining what each member of a work unit can do. Carefully choose the subordinate who should take on the project; usually it is someone immediately below you in the corporate hierarchy. If you want to skip down two ranks, work through that person's supervisor.
- Next, decide whether you want the subordinate to pinpoint the problem or propose a solution. If the latter, should he or she take action or just present you with alternatives? And do you choose the solution jointly or by yourself?
- Once you define your goals, consider whether the person you have chosen can handle the responsibility. Will the task be a challenge, but not so difficult that the subordinate gets frustrated? "The art of managing is to figure out what each person is capable of, and create assignments that are within their reach, or slightly above, so they can learn," according to one expert.
- Do not make the mistake of spelling out in detail how the subordinate should approach the task. Be clear in your objectives, though, because some people fear that they will appear ignorant if they ask questions. Encourage questions. To give a sense of purpose, explain why the task is important. If it is something that seems menial or insignificant, note that it is a prelude to more meaningful assignments later on.
- Make sure that the subordinate has the time, budget, and data or equipment needed to get the job done—on a deadline. If someone needs training to accomplish the task, be prepared to make the investment. Yes, you could do the job yourself in the time it takes to train someone else, but the hours spent training the individual will be recouped many times over in the future.
- Unless the project is relatively simple, set up specific checkpoints to review progress so that both you and your subordinate can be sure that work is progressing as planned. That way you can provide additional help, if needed, before the project is in serious trouble. If things are going well, you can let the subordinate know that the good work is appreciated.
- Be prepared, too, to live with a less than perfect result. Let subordinates know you will support the outcome of their efforts, good or bad. Take responsibility for an occasional blooper, says another expert, and you will have loyal followers for life.[58]

whose primary purpose is providing specialized expertise and assistance to line positions. Sometimes the term "staff" also is used to refer to personal staff, individuals who provide assistance to a particular position as required (e.g., an administrative assistant to a division head).

The positions and related departments that are considered either line or staff vary with the type of organization. For example, in a grocery chain, line departments might be store operations, pharmacy operations, and food operations (directly related to major organizational goals), while staff departments might be human resources and consumer affairs (more indirectly related to major goals). In a manufacturing organization, production and sales are typically considered line departments, while purchasing and accounting are normally staff departments. Among the departments that are often considered staff in many organizations are human resources, legal, research and development, and purchasing. However, each organization must be evaluated in terms of its own major goals in designating line and staff.[59] For instance, in a major law firm, the legal function would be a line department, despite the fact that it often is a staff department in other types of organizations.

The usefulness of the distinction between line and staff departments becomes more clear when one considers the differences between line authority and staff authority. Line departments have **line authority,** which is authority that follows the chain of command established by the formal hierarchy. On the other

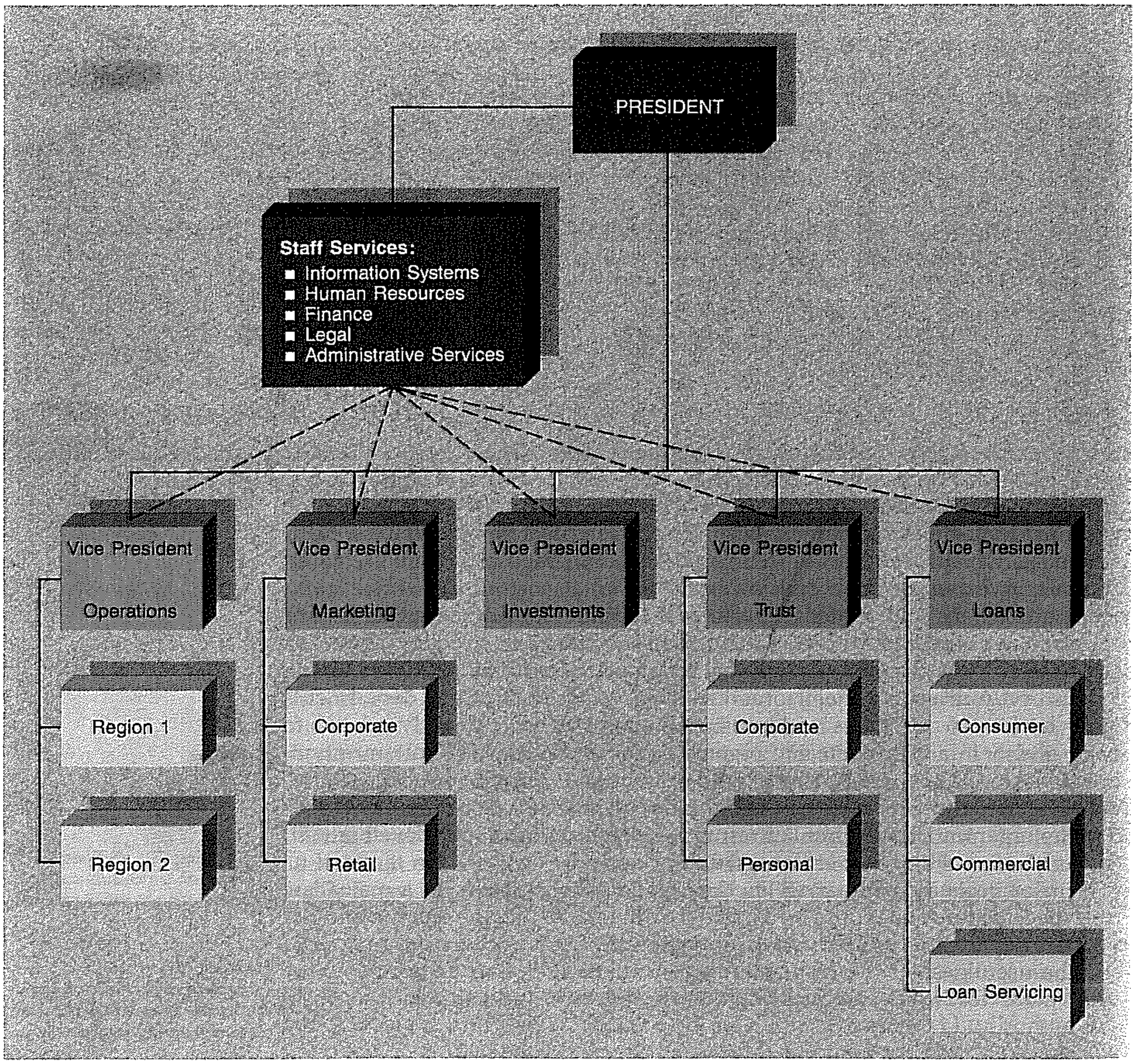
Line authority The authority that follows the chain of command established by the formal hierarchy

Functional authority The authority of staff departments over others in the organization in matters related directly to their respective functions

hand, staff departments have **functional authority**, which is authority over others in the organization in matters related directly to their respective functions. For example, in the structure for a bank, shown in Figure 10-5, the line departments receive their authority through the chain of command connected to the president. On the other hand, the staff departments have functional authority in relation to other departments, that is, authority only in their area of staff expertise. Staff departments facilitate vertical coordination by making their considerable expertise available where it is needed, rather than having to follow the strict chain of command.

Still, conflicts frequently arise. For example, staff departments sometimes grow very large and begin to oversee the departments that they are supposed to assist. Before they were cut back, burgeoning staffs at Xerox second-guessed

Figure 10-5 Line and staff departments of a bank.



managers to such a point that the ability to adapt existing products to local markets or develop technological breakthroughs was seriously impaired. One former manager explained that moving from the conceptual to the detailed engineering phase of a product, a step that should have taken 2 to 4 weeks, took 2 years because of continual reviews by staff units.[60] On the other hand, line managers sometimes abdicate responsibility in areas in which staff have functional authority. For example, line managers may expect a staff planning department to do all the planning, not just provide support.[61] Nevertheless, such conflicts are not inevitable, particularly if areas of responsibility are clarified and line and staff personnel are encouraged to operate as a team with joint accountability for final results.[62]

Recently, there has been a trend toward reducing the number of corporate-level staff personnel, as companies attempt to cut costs and speed up decision making. For example, Nucor, a North Carolina-based company that runs steel minimills, has annual revenues that exceed $800 million; yet the company operates with a corporate staff of less than 20. Ken Iverson, Nucor's chief executive, has decentralized his 14 divisions, with each operating as an autonomous company in a regional market. The small central office mainly monitors budgets, cash flow, and overall operations.[63] Enhancing vertical coordination is one structural issue in organizations; promoting horizontal coordination is another.

PROMOTING INNOVATION: METHODS OF HORIZONTAL COORDINATION

Suppose that you purchased a television set at a large local department store with the understanding that the TV would be delivered within 3 days but the set failed to arrive on time. Imagine that when you called to inquire about the delay, your call was passed up the hierarchy until you were talking with a vice president of the department store. You would probably begin to wonder about an organization in which a vice president is drawn into what should have been a routine transaction between sales and shipping. If all such problems had to be handled vertically, organizations would quickly become paralyzed.

Horizontal coordination The linking of activities across departments at similar levels

Instead, most organizations take steps to facilitate **horizontal coordination,** the linking of activities across departments at similar levels. One way to think of horizontal coordination is as an additional means of processing information in organizations. Organization structure specialist Jay R. Galbraith argues that the more organizations need to process information in the course of producing their product or service, the more methods of horizontal coordination they will need to use.[64] Organizations typically need to process more information when they face complex and/or changing technology, environmental uncertainty, and growing size. (We discuss these issues further in Chapter 11.) For example, when William H. Wilson founded the Pioneer/Eclipse Corporation, a small company that specializes in a floor-cleaning system, he was able to provide most of the necessary coordination himself within a traditional functional structure. As the company grew larger and more complex, it began to lose money because of insufficient horizontal coordination. In one situation, the sales department launched a promotion only to find that manufacturing and purchasing knew nothing about it and had insufficient materials and stock on hand to fill orders. In another instance, the credit department denied credit to a major account before the sales department could resolve the conflict more amicably. "The left hand," says one observer, "did not know what the right hand was doing."[65]

Because horizontal coordination facilitates processing information across

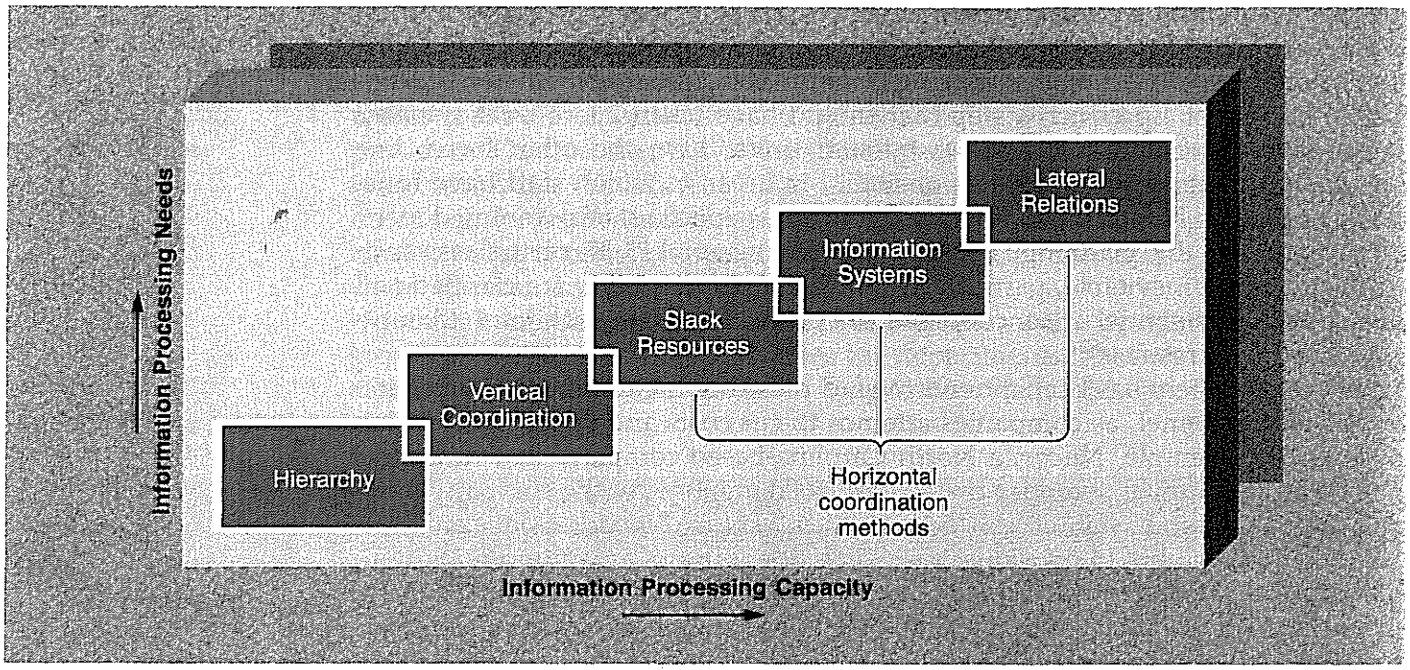


Figure 10-6 Horizontal coordination methods for increasing information-processing capacity as needed.

the organization, it also helps promote innovation.[66] One reason is that new ideas are more likely to emerge when a diversity of views are shared. Another reason is that awareness of problems and opportunities across areas can spark creative ideas. For example, Raytheon's New Products Center, which helps develop and launch new products in conjunction with several of the company's consumer-products divisions, not only keeps in contact with consumers and trade associations but also maintains close ties with units within the various consumer-products divisions. These close internal horizontal linkages have helped the center develop a number of the product ideas that underlie its reputation for successful innovation.[67] Yet another reason why horizontal coordination promotes innovation is that involving others in the development of ideas often positively influences their willingness to help implement the ideas (see Chapter 7).

By facilitating the exchange of information among individuals across units at similar levels, horizontal coordination mechanisms, in essence, supplement the basic hierarchy and related methods of vertical coordination. Three major means that are particularly useful in facilitating horizontal coordination are slack resources, information systems, and lateral relations (see Figure 10-6).[68]

Slack Resources

Slack resources A cushion of resources that facilitates adaptation to internal and external pressures, as well as initiation of changes

One interesting means of supporting horizontal coordination is the use of **slack resources,** a cushion of resources that facilitates adaptation to internal and external pressures, as well as initiation of changes.[69] You have probably benefited from the availability of slack resources in your personal life. For example, in your family, a slack resource might be an extra car, an extra television set, or your own telephone line. Through coordination and tighter programming of mutual schedules, you might be able to get by with less, but doing so would take more effort and you might find it difficult to make quick changes in your plans. Because organizations face similar choices, they, too, often use slack resources, such as extra people, time, equipment, and inventory, to reduce the need for constant coordination among units and to provide some latitude in how resources are used.

A particularly important function of slack resources is that they can help foster creativity and innovation.[70] For example, at 3M, the practice of having researchers spend 15 percent of their time on projects of their own choice that have prospects for long-term payoff (a practice the company calls "bootlegging") is an example of the use of slack resources (time, equipment, and materials) to enhance the prospects for innovation. The latitude in resource use makes it possible for individuals to collaborate on projects in which they have a high interest, thus increasing the likelihood of creative breakthroughs (see Chapter 8).[71]

Information Systems

Another important and growing means of horizontal coordination is the use of information systems, particularly computerized ones, to coordinate various parts of organizations. For example, because of its far-flung international operations and its use of divisional structures, Citicorp found itself with horizontal coordination difficulties. The company frequently was embarrassed when a client of one Citicorp unit would also use the services of other units, perhaps even in other parts of the world, and receive conflicting advice. Even when the advice did not actually conflict, the fragmented guidance offered to clients did not maximize Citicorp's capacity to provide good service. The solution? Citicorp greatly enhanced the ability of various departments to exchange information by instituting a new computerized conferencing system called PARTICIPATE, which allows offices around the world to communicate and coordinate their efforts quickly.[72] (We consider computerized information systems further in Chapter 20.) Such systems also offer means of promoting innovation, not only because they facilitate the exchange of information throughout the organization but also because the new technology itself provides the means of developing innovative methods of operating (like Citicorp's PARTICIPATE system).

Lateral Relations

Another approach to horizontal coordination that is increasingly being used is lateral relations. **Lateral relations** is the coordination of efforts through communicating and problem solving with peers in other departments or units, rather than referring most issues up the hierarchy for consideration. Such collaboration also promotes innovative solutions to difficulties and fosters creative responses to opportunities. Major means of lateral relations are direct contact, liaison roles, task forces, teams, and managerial integrators.[73]

Lateral relations The coordination of efforts through communicating and problem solving with peers in other departments or units, rather than referring most issues up the hierarchy for resolution

Direct Contact. One means of lateral relations is **direct contact,** communication between two or more persons at similar levels in different work units for purposes of coordinating work and solving problems. The use of direct contact allows many issues to be resolved at middle and lower levels in the hierarchy without having to involve upper-level managers. In fact, problems frequently can be better handled by individuals at middle and lower levels because they may be more familiar with the issues involved.

Direct contact Communication between two or more persons at similar levels in different work units for purposes of coordinating work and solving problems

Liaison Roles. A **liaison role,** another means of lateral relations, is a role to which a specific individual is appointed to facilitate communication and resolu-

Liaison role A role to which a specific individual is appointed to facilitate communication and resolution of issues between two or more departments tion of issues between two or more departments. Liaison roles are typically reserved for situations in which there is a need for almost continuous coordination between two or more different departments in order to function effectively. A common example of a liaison role is an engineer who is appointed to maintain contact between the engineering and manufacturing departments. Under such circumstances, the liaison engineer may even have office space in the manufacturing department. Similarly, the U.S. Department of Defense sometimes uses liaison persons to facilitate communication between the department and major contractors. Liaison persons help solve problems and promote horizontal coordination at lower levels. In this way, they increase the probability that diverse groups can effectively coordinate efforts toward common goals.[74]

Liaison roles also are becoming more common between private businesses and major customers. In this type of situation, the liaison person enhances horizontal coordination by working with various internal departments, as well as the customer, in order to facilitate meeting a customer's needs. The potential advantage of liaison roles in dealing with customers is illustrated by the comments of one steel company executive (who wished to remain anonymous because he was concerned that his comments might create a bad impression of his company). The executive was explaining why he maintains a full-time liaison person on site at Honda's plant in Marysville, Ohio. He noted that if there is a problem with stamping steel to make fenders and other car-body parts and if there were no liaison person, the scenario would go like this: The Honda people affected by the problem would go to their purchasing department. The purchasing department would contact the steel company salesperson. The salesperson would complain to the steel company product office. The product office would pass the issue on to the steel company department that made the steel for Honda. At that point, says the executive, the offending department is likely to deny that the problem is theirs and argue that "it's a Honda stamping problem" (i.e., the problem is not caused by the way in which the steel is made but, rather, by the way in which the steel is being stamped at the Honda plant).[75] A liaison person helps cut through such red tape by dealing directly with the departments in which the problems are occurring. To work effectively, however, the individual in the liaison role must be able to recognize important issues that should have higher-level involvement and must have good interpersonal skills in order to be able to facilitate cooperation across units and companies.

Task Forces and Teams. A *task force* is a temporary interdepartmental group usually formed to make recommendations on a specific issue. Task-force recommendations typically constitute advice. The person or group that appointed the task force can then decide whether or not to implement the recommendations. Task forces promote horizontal coordination by providing a vehicle through which individuals from different organizational units can share their ideas on specific issues and plan viable courses of action.

Teams, on the other hand, are either temporary or ongoing groups that are expected to solve problems and implement solutions related to a particular issue or area. Teams often are composed of individuals from different departments, but they also may be made up of members from the same organizational unit. At its nylon fiber plant in Pensacola, Florida, Monsanto uses an interesting combination of liaison roles and teams in its new Adopt A Customer program, aimed at offering outstanding customer service. Under the program, Monsanto matches top customers with key employees who act as liaison persons. When problems arise, the liaison employees then become "resource team leaders" who help bring about quick resolution of problems. For example, if a customer noti-

A team of Monsanto employees in the Adopt a Customer program consult with the director of quality assurance (second from left) at Shaw Industries, a customer in Georgia. This close attention to customer service generates a great deal of good will. As a Shaw VP notes: "Any time you listen to your customer, you have an edge."

fies the liaison employee that the yarn is breaking during processing, the liaison person then becomes an internal resource team leader who notifies the technical salespeople and quickly puts together a team with the necessary expertise and resources to resolve the difficulty promptly and offer innovative solutions if necessary. "The whole idea of Adopt A Customer is to give top priority to that problem not in three days, but on day one, with the first phone call from our customer," says Monsanto's manager of technical sales for carpet fibers.[76] We discuss teams and task forces further in Chapter 16.

Managerial Integrators. A **managerial integrator,** another means of lateral relations, is a separate manager who is given the task of coordinating related work that involves several functional departments. Such managers typically have titles such as "project manager," "product manager," or "brand manager" and are not members of any of the departments whose activities they help coordinate. *Project managers* usually are responsible for coordinating the work associated with a particular project until its completion. They are used extensively in the aerospace, defense, and construction industries, in which large, technically complex projects must be completed within specified time limits and at contracted costs. *Product managers* orchestrate the launching of new products and services and may then continue coordinating interdepartmental work related to the new products and services. For example, the Buick-Oldsmobile-Cadillac group of General Motors has a functional structure but uses product managers to facilitate horizontal coordination across functional lines.[77] *Brand managers* coordinate organizational efforts involving particular name-brand products, most often within the soap, food, and toiletries industries. Brand managers help devise and implement brand strategies and plans, monitor results, and correct problems as they occur. In essence, managerial integrators act as horizontal coordinating agents. The use of managerial integrators allows fast reaction to environmental change and also efficient use of resources because functional re-

Managerial integrator A separate manager who is given the task of coordinating related work that involves several functional departments sources can be switched among various projects relatively easily. Managerial integrators also are in a good position to act as sponsors of innovative ideas.

Managerial integrators typically do not have line authority over the individuals and functional departments that they are attempting to coordinate. Rather, they must obtain the cooperation of the functional managers who control the major resources. In doing so, they must compete with others (e.g., managerial integrators for other projects) who also want the help of various functional departments in making their project, product, or brand a success. As a result, managerial integrators must use their knowledge, competence, personality, group management skills, and persuasion abilities in working with functional managers and individuals within the functional departments who are assigned to their project.[78] One recent study suggests that project management using managerial integrators is likely to be more effective when functional managers have influence over technical matters and project managers have influence over organizational issues. The same study also suggests that project performance is likely to be higher when influence over salaries and promotions is perceived by functional specialists working on projects as being balanced between project and functional managers.[79]

Yet, sometimes, forms of lateral relations, such as tasks forces, teams, and managerial integrators, do not provide sufficient horizontal coordination. Under such conditions, matrix departmentalization (discussed further in Chapter 11) may be appropriate.

In this chapter, we have considered several of the major elements of organization structure, including methods of vertical and horizontal coordination. In the next chapter, we explore the link between strategy and organization structure in enhancing organizational effectiveness.

CHAPTER SUMMARY

Organizing is the process of arranging work and resources so that planned goals can be achieved. One important part of the organizing function is determining organization structure. Organization structure consists of four main elements: job design, departmentalization of positions and units methods of vertical coordination, and methods of horizontal coordination. Organization charts provide a graphic depiction of the broad outlines of an organization's structure and help employees trace the chain of command, the line of authority that ultimately connects every position with the top of the organization.

There are four main approaches to job design: job simplification, job rotation, job enlargement, and job enrichment. The job characteristics model helps guide job enrichment efforts by explaining the importance of core job characteristics, critical psychological states, and high growth-need strength to job outcomes. A related aspect of designing jobs involves the possibility of providing alternative work schedules. Major types of alternative work schedules include flextime, the compressed workweek, and job sharing.

Four of the most commonly used forms of departmentalization are functional, divisional, hybrid, and matrix. There are five major means of achieving vertical coordination, which is the linking of activities at the top of the organization with those at the middle and lower levels: formalization, span of management, centralization versus decentralization, delegation, and line and staff positions.

Three major means that are particularly useful in facilitating horizontal coordination are slack resources, information systems, and lateral relations. Slack resources provide a cushion of resources that allows adaptation to change, while information systems enhance information exchange. Lateral relations, which involves coordinating efforts with peers in other departments and units, has several major forms: direct contact, liaison roles, task forces, teams, and managerial integrations. Methods of horizontal coordination are particularly useful in promoting innovation because they facilitate the exchange of ideas across organizational units.

MANAGERIAL TERMINOLOGY

accountability (353)
alternative work schedules (343)
authority (353)
autonomy (341)
centralization (352)
chain of command (337)
compressed workweek (344)
decentralization (352)
delegation (354)
departmentalization (345)
direct contact (359)
downsizing (349)
feedback (341)
flat structure (349)
flextime (344)
formalization (346)
functional authority (356)
growth-need strength (342)
horizontal coordination (357)
job characteristics model (341)
job depth (341)
job design (339)
job enlargement (340)
job enrichment (341)
job rotation (339)
job scope (341)
job sharing (344)
job simplification (339)
lateral relations (359)
liaison role (359)
line authority (355)
line position (354)
managerial integrator (361)
organization chart (336)
organization design (336)
organization structure (336)
responsibility (353)
restructuring (350)
skill variety (341)
slack resources (358)
social information-processing approach (343)
span of management, or span of control (348)
staff position (354)
tall structure (349)
task identity (341)
task significance (341)
vertical coordination (345)
work specialization (338)

QUESTIONS FOR DISCUSSION AND REVIEW

1. Explain the four elements that make up organization structure. What evidence can you see of these four elements at your college or university?
2. Describe the relationship between an organization chart and an organization's chain of command. If you were new to an organization, how might an organization chart help you get oriented?
3. Contrast the various major approaches to job design. Use the job characteristics model to explain how you might go about enriching a particular job.
4. Distinguish among the three major types of alternative work schedules. What adjustments might be required to accommodate nontraditional work schedules?
5. Explain the role that formalization plays in vertical coordination. Give an example of a policy or rule that is likely to have a dysfunctional impact on organizational effectiveness. In what way should the policy or rule be changed to have a positive influence?
6. Explain the relationship between span of management and the extent to which an organization is flat or tall. Why are a number of major organizations attempting to make their structures more flat? What might be some potential pitfalls associated with the process of making an organization structure flatter?
7. Contrast the advantages of centralization and those of decentralization, and explain when each approach is likely to be most appropriate. Why is delegation important to both?
8. Explain the differences between a line position and a staff position. Which type of position would you prefer to hold? Why?
9. Explain the concepts of slack resources and computer-based information systems as they apply to horizontal coordination. What examples can you cite of the use of slack resources and information systems to facilitate horizontal coordination in organizations?
10. Distinguish among the various types of lateral relations. How could they be used effectively in your college or university?

DISCUSSION QUESTIONS FOR CHAPTER OPENING CASE

1. How would you characterize DEC's organization structure before and after the reorganization by Ken Olsen?
2. What methods of vertical coordination are likely to be useful in making the reorganization successful?
3. What methods of horizontal coordination would you recommend? What other changes might be necessary?

MANAGEMENT EXERCISE: DESIGNING AN INNOVATING ORGANIZATION

You have just landed a job as the administrative assistant to the CEO of Chameleon Technology, a fast-growing high-technology firm. You took the job because you want to learn more about how to manage high-technology firms. Also, you figure that because the company is growing rapidly, some very good career opportunities will open up quickly.

Chameleon has had tremendous success with its initial product, a small hard-disk drive for personal computers that holds considerably more data and costs less than offerings from competitors. Recently, the company has also introduced a new high-resolution video screen for use with personal computers that also is selling better than anticipated. Because the company is growing so quickly, the CEO is experiencing acute difficulties trying to handle long-range planning as well as the day-to-day developments in what is a rapidly changing competitive environment. For example, in a number of recent instances, sales were made but products were not shipped in a timely manner. In another case, although production was expanded to meet the rising demand, the human resources area was not notified of the need for additional workers. In both situations, the bottleneck occurred when the CEO's office did not coordinate these activities as well as it had in the past.

In addition, the CEO is concerned with fostering the kind of innovative thinking that will lead not only to improvements in existing products but also to new offerings. The CEO is becoming concerned that Chameleon is too dependent on its two products and that the company may not be moving fast enough in improving the disk drive or developing new products.

Because of your recent management studies, the CEO asks you to develop some ideas about how to achieve better coordination of the company's various activities and also foster innovation. The company is currently organized into a functional structure, with major departments in the following areas: manufacturing, sales, human resources, finance and accounting, and engineering. The company currently has about 600 employees.

Prepare a proposal to present to the CEO outlining the steps that could be taken to achieve better vertical and horizontal coordination, as well as to encourage more innovation.

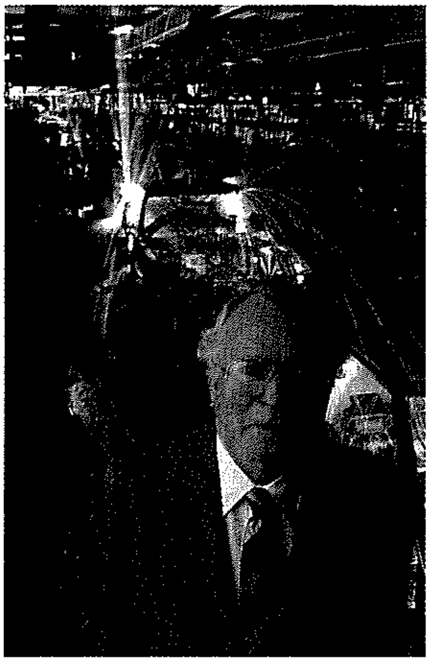
TEACHING AN ELEPHANT TO DANCE—GM REORGANIZES

When Roger B. Smith became chairman of General Motors in 1981, the automobile giant's share of the U.S. car market was crumbling and the company had just reported its first loss since 1921. One of Smith's first moves was to appoint a task force of 10 select executives to consider a massive reorganization of a structure that had been in existence for decades. At that point, the major skeleton of the company consisted of two huge fiefdoms, Fisher Body and the General Motors Assembly Division (GMAD), as well as the five famous car divisions: Chevrolet, Pontiac, Oldsmobile, Buick, and Cadillac. With centralized design, engineering, and manufacturing, all GM's cars had begun to look remarkably similar, regardless of the nameplate and price tag. The situation had gotten so bad that Ford's Lincoln-Mercury division scored big with ads that poked fun at owners of GM luxury cars trying to pick theirs out from a sea of moderately priced, moderately altered clones. At the same time, GM was criticized because its response to the popular smaller cars manufactured by the Japanese was merely to make shrunken versions of its larger cars, a strategy that was essentially a failure. In addition, the company's structure made responsibility difficult to pinpoint, even though most decisions required multiple organizational units to sign their agreement. Smith wanted a structure that would make it possible for GM to respond more quickly to the market and to measure more easily the performance of major organizational units.

After 15 months of planning, the world's largest corporation (the first to top $100 billion in sales) began a major structural overhaul in 1984 that was destined to take several years because of the monstrous size of the organization. The main reorganization created two new car groups: Buick, Oldsmobile, Cadillac (BOC) and Chevrolet, Pontiac, GM of Canada (CPC). The BOC group was to concentrate on large cars, while CPC was in charge of smaller cars. The Saturn project, a separate corporation created earlier to design a unique smaller car, would also report to CPC. Each group would have its own design, engineering, and manufacturing resources, while Fisher Body and GMAD were to be dissolved. Spans of control were increased at the top, while a number of management layers in the middle were eliminated.

As might be expected with 800,000 employees, implementation of the logistics of the change has been a horrendous experience for those involved. Even though GM wanted to move as few people as possible, the number still amounted to 10,000. Some managers had to live out of their briefcases and were lucky to have a telephone. Executives in the two new car groups found it difficult to coordinate their scattered forces and found themselves spending large amounts of time on the telephone and traveling among units in their automobiles.

After the reorganization was under way, GM purchased Electronic Data Systems (EDS) from H. Ross Perot in a move to acquire greater expertise in computer software. The software expertise was important to GM's plans to build highly automated factories that would be heavily computerized. As part of the deal, Perot was placed on the GM board of directors,



The pyrotechnics of the robotic welding at this GM plant could symbolize the fireworks that former Chairman Roger B. Smith tried to set off at General Motors. Smith shook up the company with a major reorganization and acquisitions, but he found that change does not come easily in an organization of 800,000 employees. He took rueful note of this: "Everybody says, 'Oh boy, the chairman of GM—what a pot of power.' But you'd better have people going with you instead of trying to drag them along."

where he took the view that "revitalizing GM is like teaching an elephant to tap dance; you find the sensitive spots and start poking." With his "poking," Perot became such a consistent and vocal critic that his substantial number of shares were ultimately purchased for a premium $700 million and he left the board. Meanwhile, the 10,000 GM data-processing employees who had been transferred to EDS became extremely upset with the lower benefits it offered in comparison to GM and with the EDS stringent regulations against such things as beards and tasseled shoes. (Even though EDS was purchased by GM, the software company was to operate as a separate entity with its own policies regarding such matters as compensation, benefits, and dress.) These issues required Smith's intervention to help with the integration of the two groups. Smith then orchestrated the purchase of the Hughes Aircraft Company, thus positioning GM as one of the largest U.S. defense contractors and giving the automaker access to the substantial technical expertise at Hughes. Hughes Aircraft also was to remain a separate entity within the GM structure.

Smith's bold moves were aimed at giving GM "the key to the twenty-first century." Unfortunately, the reorganization took longer than planned, and critics argue that he did not move quickly enough to cut costs. Meanwhile, GM's long-time competitor, the Ford Motor Company, began to outearn GM for the first time in several decades, even though Ford is only about two-thirds the size of GM. GM's share of the U.S. auto market, which was about 45 percent when Smith took over, dropped to around 36 percent. Things began to brighten somewhat when Smith was able to announce record earnings for 1988 that were largely due to cost reduction efforts, truck sales, and brisk auto sales abroad, but, unfortunately, market share continued to slide.

In looking back, Smith says that he would make the same decisions again but wishes that he had done a much better job of communicating his vision of the company to employees. "Then they would have known why I was tearing the place up, taking out whole divisions, changing our whole production structure," says Smith. "If people understand the *why*, they'll work at it." Smith also says that the company operated too autocratically and had to get people to participate more. As a result, he found that he had to spend a great deal of time getting people to support his vision of GM as a twenty-first-century corporation before things began to improve. As Smith retired, his successor, Robert C. Stempel, faced a formidable competitive situation.[80]

QUESTIONS FOR CHAPTER CONCLUDING CASE

1. How would you characterize the changes in organization structure at GM?
2. What could Smith have done to enhance vertical coordination?
3. What could Smith have done to boost horizontal coordination?

CHAPTER ELEVEN

STRATEGIC ORGANIZATION DESIGN

CHAPTER OUTLINE

Designing Organization Structures: An Overview
Which Comes First—Strategy or Structure?
Factors Influencing Organization Design

Assessing Structural Alternatives
Functional Structure
Divisional Structure
Hybrid Structure
Matrix Structure

Weighing Contingency Factors
Technology
Size
Environment
Mintzberg's Five Structural Configurations

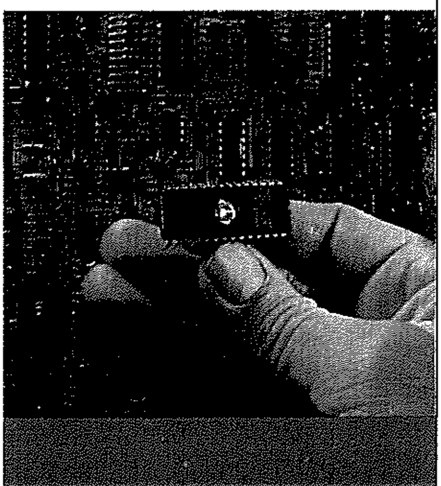
Matching Strategy and Structure

Promoting Innovation: Using Structural Means to Enhance Prospects
Vital Roles
Differentiation Paradox
Reservations
Transfer Process

LEARNING OBJECTIVES

After studying this chapter, you should be able to:

- Summarize current views about the link between strategy and organization structure.
- Explain the functional, divisional hybrid, and matrix types of departmentalization.
- Map the major advantages and disadvantages of each type of departmentalization, as well as discuss the basic circumstances under which each is likely to be effective.
- Explain the major stages of matrix departmentalization and the circumstances under which a matrix design is likely to be appropriate.
- Assess how major contingency factors, including technology, size, and environment, impact organization structure.
- Outline Mintzberg's five structural configurations and indicate their relationship to major contingency factors.
- Delineate how strategy and structure can be matched.
- Indicate how structure can be used to enhance prospects for innovation.



GAINING THE EDGE

POST-IT NOTES WIN OUT AT 3M

One company that has earned a solid reputation for innovation is 3M. A look at the development of the famous Post-it note pads illustrates the challenge of the innovation process.

When the four-city marketing tests of Post-it note pads indicated that the product was a dismal failure, it seemed that the matter of the funny little note pads could finally be laid to rest. After all, manufacturing had said all along that they couldn't be mass-produced. And marketing kept asking, "Who would pay a dollar for a scratch pad?"

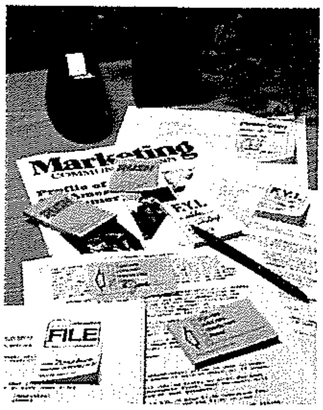
But two senior executives at 3M decided to give it one last try. Geoffrey Nicholson and Joseph Ramey flew to Richmond, Virginia, one of the test cities. The tests had relied heavily on advertising, but Nicholson and Ramey thought about one factor that had built support at 3M for bringing the product this far. They had given out free pads at 3M, and when people had actually begun to *use* them, they had asked for more. With this experience in mind, the two executives went from door to door in the Richmond business district, giving away packages of the pads. The ploy worked, and sales of the note pads began to take off. Another test blitz in Boise confirmed the popularity of the item, and 3M was in the final stages of launching one of the most successful products in its history.

The path to success had been long and arduous, beginning with the accidental discovery by chemist Spence Silver of an adhesive with odd properties: it was not "aggressively" adhesive. In other words, although it would stick to something, it would not bond tightly; you could pull it off without damaging the item to which it had been attached. Silver was fascinated with the substance, but he couldn't think of a practical application. During the next 5 years, Silver told everyone he could at 3M about his oddball adhesive, but to little avail. Only after a ferocious battle with management was Silver able to get the $10,000 necessary to have the substance patented. Except for Silver's presentations whenever he could find a forum, interest at 3M in the adhesive had long waned. Then, when Silver was transferred to a new research unit in the early 1970s, he met Robert Oliveira, a biochemist, who took an interest in the unique adhesive.

Silver had been to the commercial tape division twice before with his discovery, but it had been rejected both times. When Geoffrey Nicholson took over as head of a new venture team, a group formed to explore innovative product ideas, he was looking for some new products just as Silver and Oliveira were trying once more with the strange adhesive. Recognizing that it was at least different, Nicholson persuaded the new venture team to explore the idea. Still, the substance seemed to be a solution without a problem. Fortunately, one of the people on the team was Arthur Fry, a chemical engineer, who also happened to sing in his church choir. He would use little slips of paper to mark the hymns that were to be sung, but the slips had a habit of falling out of the hymn book, leaving him fumbling furiously in church. He considered putting a little bit of adhesive on the paper, using Silver's adhesive. From that original insight, he envisioned the possibility of creating note pads with many uses and took over the spearheading of the project.

There were further obstacles ahead. Two other members of the new venture team found it necessary to develop a special coating for paper in order to make the product work properly. Then engineering told Fry that there was no reasonable way to manufacture the pads. As a result, Fry constructed a prototype of a machine that is now a closely guarded secret.

Even with its bumpy history, the Post-it note pad story probably would never have occurred without 3M's well-known efforts at fostering innovation. The 3M company has more than 90 product divisions. Each division has its own R&D group that concentrates on projects that can be brought to market in the near future. At 3M, each division is expected to generate at least 25 percent of its revenue each year from products that were not in existence 5 years earlier. In pursuing that aim, there are also multiple places from which one can obtain funding, such as one's own division, other divisions, and new venture teams. In addition, scientists are expected to use up to 15 percent of their time pursuing avenues of discovery of their own choosing. The company makes ample use of teams to explore new product ideas, holds special technical symposia at which researchers present the results of current projects and marketers discuss present strategies and marketplace needs, and is lenient about mistakes on the premise that if individuals are venturing into new areas, mistakes are inevitable. Research and development groups that report to upper-level management concentrate on long-term projects and leading-edge technology.[1]



Post-it note pads are one of 3M's most successful products, but they might never have made it to the production line without 3M's strong emphasis on encouraging innovation and supporting research and development. 3M makes strategic use of organization design to promote the development of unique products that give the company an edge on the market.

3M has become famous for its ability to foster innovation and produce a steady stream of successful new products. Because so many of 3M's businesses pursue a differentiation strategy based on unique products, innovation is critical to the company's strategic effectiveness. Thus part of the reason for 3M's success is the ability of its managers to use structural means to support differentiation strategies and encourage innovation.

In the previous chapter, we considered a number of basic organizing elements, such as job design, type of departmentalization, and methods of vertical and horizontal coordination, that can be used to design organization structures. In this chapter, we examine how organizations, like 3M, use various structural tools to design organizations that support critical strategic directions. Accordingly, we begin by presenting a brief overview of the strategy-structure relationship, before outlining the major factors that influence organization design. We next assess the advantages and disadvantages of major structural alternatives. We also examine important contingency factors that are likely to influence the success of different organization structures. We then probe the issue of matching strategy with structure. Finally, we investigate structural devices that help boost the likelihood of significant innovations.

DESIGNING ORGANIZATION STRUCTURES: AN OVERVIEW

As mentioned in Chapter 10, the process of developing an organization structure is sometimes referred to as organization design. In designing organization structures, what factors do managers need to consider? According to a famous study, one important issue is an organization's strategy.

Which Comes First—Strategy or Structure?

In a landmark book called *Strategy and Structure*, noted business historian Alfred D. Chandler studied the origins of the largest U.S. firms.[2] He was particularly interested in whether strategy development preceded or followed the design of organization structures. On the basis of his studies, Chandler concluded that major companies (such as Du Pont; General Motors; Sears, Roebuck; and Standard Oil) generally follow a similar pattern of strategy development and then structural change, rather than the reverse.

In Chandler's view, organizations often change their strategies in order to better utilize their resources to fuel growth. The changes in strategy then lead to management difficulties because the current structures do not fit the new strategies. Unless organizations subsequently make adjustments in structure, the new strategies cannot realize their potential and serious inefficiencies will result.

Recently, other researchers have questioned the structure-follows-strategy thesis on the basis that it is too simplistic. Instead, the researchers argue that particular structures are also likely to influence the strategies that organizations are apt to adopt.[3] For example, former Eastman Kodak CEO Colby Chandler (no relation to Alfred Chandler) estimates that his company lost about $3.5 billion in sales between 1981 and 1985 to competitors such as Fuji Photo film. Kodak's functional structure did not allow for the kinds of specific strategies needed in Kodak's multiple businesses. Accordingly, Colby Chandler reorganized the $17-billion-per-year company into 34 divisions, ranging from color film to copiers, so that they could operate as strategic business units. Within 2 years, almost every unit had gained market share, and Kodak's exports increased by 23 percent.[4] In the Kodak case, changes in strategy followed changes in structure. Thus it is possible that there are causal linkages each way. Structure may follow strategy at one point; then the new structures may influence the development of new strategies. In any event, Alfred Chandler's work suggests that a mismatch between strategy and structure could lead to organizational difficulties.

Factors Influencing Organization Design

Chandler's research has helped establish the fact that there is an important connection between strategy and the type of organization structure that is needed to reach organizational goals effectively and efficiently.[5] At the same time, the effectiveness of a particular type of organization structure also is influenced by certain major contingency factors, such as the dominant type of technology used or the organization's size. In addition, structural methods for promoting innovation have a bearing on the effectiveness of particular structures in facilitating strategic implementation and the attainment of organizational goals. These components and their relationship to organization structure are shown in Figure 11-1. We explore these various relationships in the remainder of this chapter. We begin by examining in greater detail the major types of organization structure, or departmentalization, that were introduced in Chapter 10, since they represent the principal structural alternatives available to managers.

ASSESSING STRUCTURAL ALTERNATIVES

As discussed briefly in the previous chapter, the four most common types of departmentalization are functional, divisional, hybrid, and matrix. They are often referred to as organization structures or organization designs. Each type has major advantages and disadvantages.[6]

Functional Structure

Functional structure A structure in which positions are grouped according to their main functional (or specialized) area

Functional structure is a type of departmentalization in which positions are grouped according to their main functional (or specialized) area. In other words, positions are combined into units on the basis of similarity of expertise, skills, and work activities.

Common Functions. Several specialties are commonly associated with functional structures in business organizations.[7] For example, the *production*, or *operations*, function combines activities directly related to manufacturing a product or delivering a service. *Marketing* focuses on the promotion and sale of products and services. *Human resources* is responsible for attracting, retaining, and enhancing the effectiveness of organization members. *Finance* is concerned with

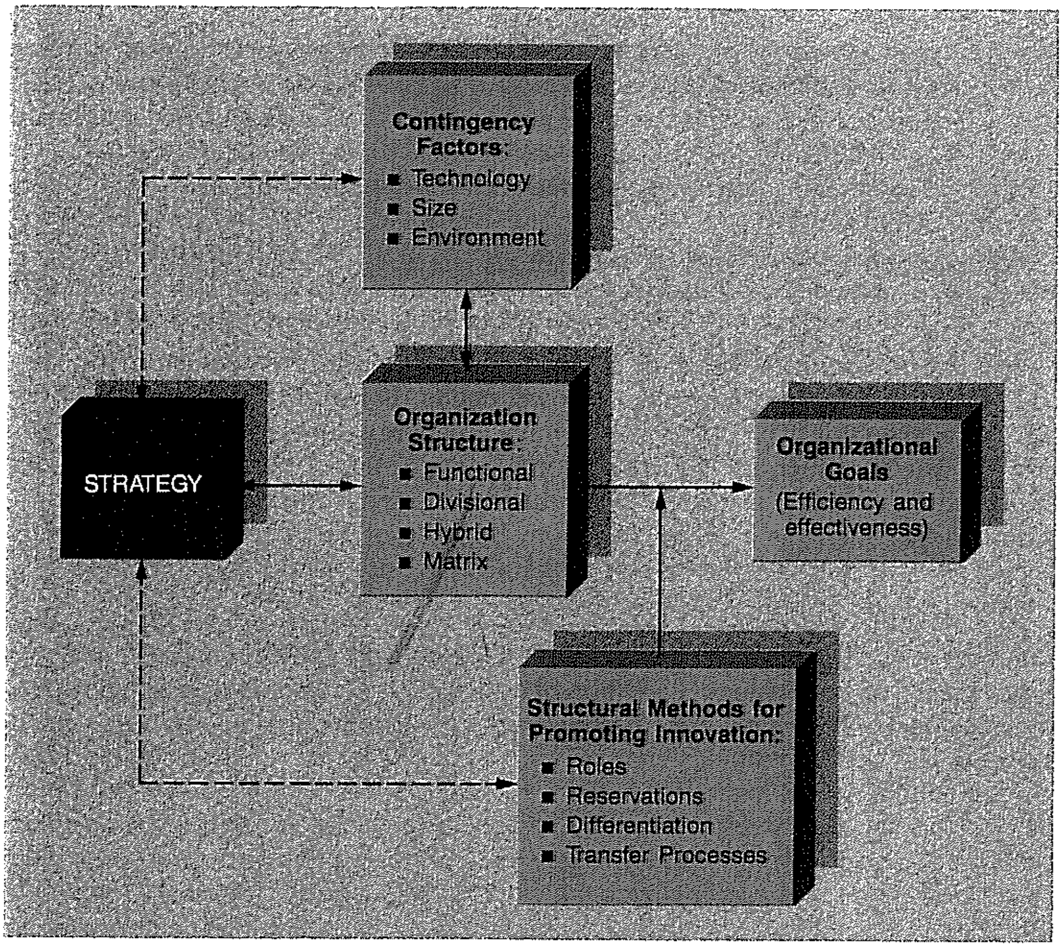


Figure 11-1 Major components influencing the design of effective organization structures.

obtaining and managing financial resources. *Research and development* is responsible for producing unique ideas and methods that will lead to new and/or improved products and services. *Accounting* deals with financial reporting to meet the needs of both internal and external sources. Finally, the *legal* function handles legal matters affecting the organization. Notice that when we are speaking of organization structure, the term "function" (or specialized area of expertise) has a different meaning than it does when we are discussing the major functions of management, that is, planning, organizing, leading, and controlling. The functional organization structure for Celestial Seasonings, the Denver-based herbal tea company, is shown in Figure 11-2. The structure includes many of the common functional areas discussed above.

Figure 11-2 Celestial Seasonings' functional structure.

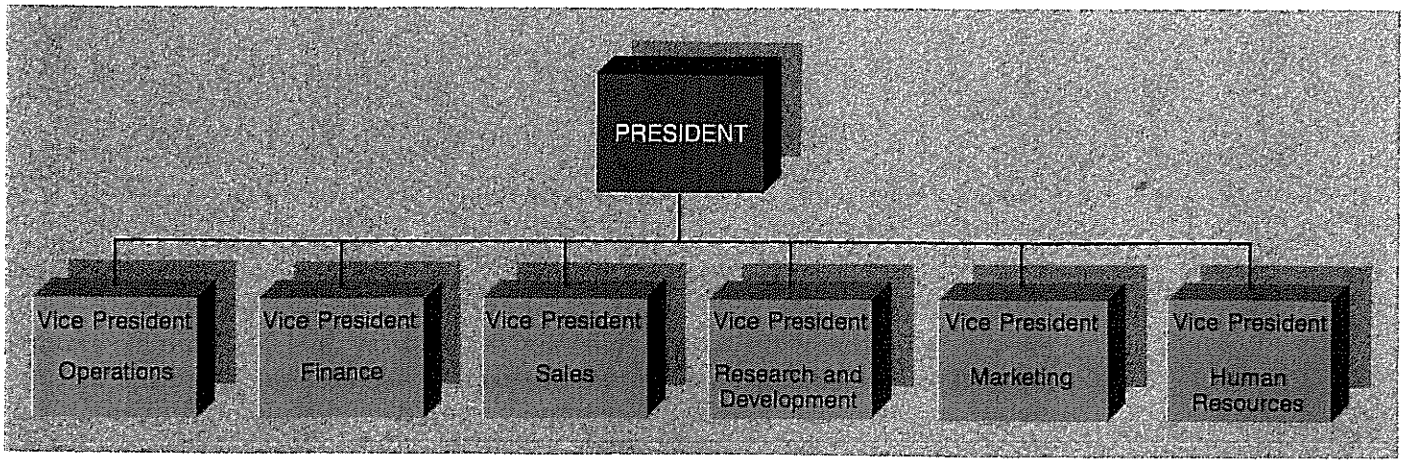


Table 11-1 Major Advantages and Disadvantages of a Functional Structure

Advantages	Disadvantages
In-depth development of expertise	Slow response time on multifunctional problems
Clear career path within function	Backlog of decisions at top of hierarchy
Efficient use of resources	Bottlenecks due to sequential tasks
Possible economies of scale	Restricted view of organization among employees
Ease of coordination within function	Inexact measurement of performance
Potential technical advantage over competitors	Narrow training for potential managers

An organization developing a functional structure must consider the specialized areas that are relevant to its own needs. For example, a functional design for a large utility company might have an energy department that is equivalent to the production, or operations, department often found in other organizations, since it is geared to producing energy. It might also have a distribution department as a major function, because of the importance of energy distribution to a utility. However, a major bank with a functional organization structure might have a functional department for investments and another for loans.

Advantages of Functional Structure. The functional form of organization has several major advantages, which are summarized in Table 11-1. First, it encourages the development of expertise because employees can concentrate on fostering specialties within a single function. For example, if you were the vice president for human resources in a functional structure, you might be able to develop specialists in such areas as recruiting, compensation, and training. Another helpful aspect is that employees have clear career paths within their particular function, giving them further encouragement to develop their expertise. In addition, a functional structure usually facilitates more efficient use of resources because it is fairly easy to shift individuals from one project to another as needed when they work in the same department. Economies of scale also may be possible, either because large amounts of work often can be handled efficiently when individuals specialize or because major equipment can be justified by work volume. An additional advantage is that a functional structure may facilitate ease of coordination within departments, since the activities are all related in one way or another to the same specialized area. Finally, grouping by functions increases the potential for developing specialized technical competencies that can constitute an advantage over competitors.

Disadvantages of Functional Structure. Functional designs also have several disadvantages, as summarized in Table 11-1. For one thing, the coordination across functions that is necessary in handling complex problems may seriously delay responses, because major issues and conflicts must be passed up the chain for resolution. In addition, specialists sometimes become so narrow in orientation that they cannot relate to the needs of the other functions or to the overall goals of the organization. At the same time, performance of the unit may be difficult to measure, because the various functions all have a hand in the organizational results. Finally, a functional structure provides a fairly narrow training ground for managers, because they tend to move up within one function and, hence, have only limited knowledge of the other functions.

Uses of Functional Structure. The functional form of departmentalization is most often used in small and medium-size organizations that are too large to coordinate their activities without some type of formal structure but are not so large as to make coordination across functions difficult. Such organizations frequently have a limited number of related products or services or deal with a relatively homogeneous set of customers or clients. For example, Domino's Pizza, Inc., which deals mainly in pizza and related items, has a functional structure, with operations, distribution, and finance and administration as the major functional departments. A functional design also may be useful in large or more diverse organizations, such as insurance companies, that operate in relatively stable environments in which change occurs at a slow enough rate for the various functions to coordinate their efforts. Another reason why a functional organization structure may be chosen by a large organization is that considerable coordination may be required among products.[8]

Divisional Structure

Divisional structure A structure in which positions are grouped according to similarity of products, services, or markets

Divisional structure is a type of departmentalization in which positions are grouped according to similarity of products, services, or markets. Figure 11-3

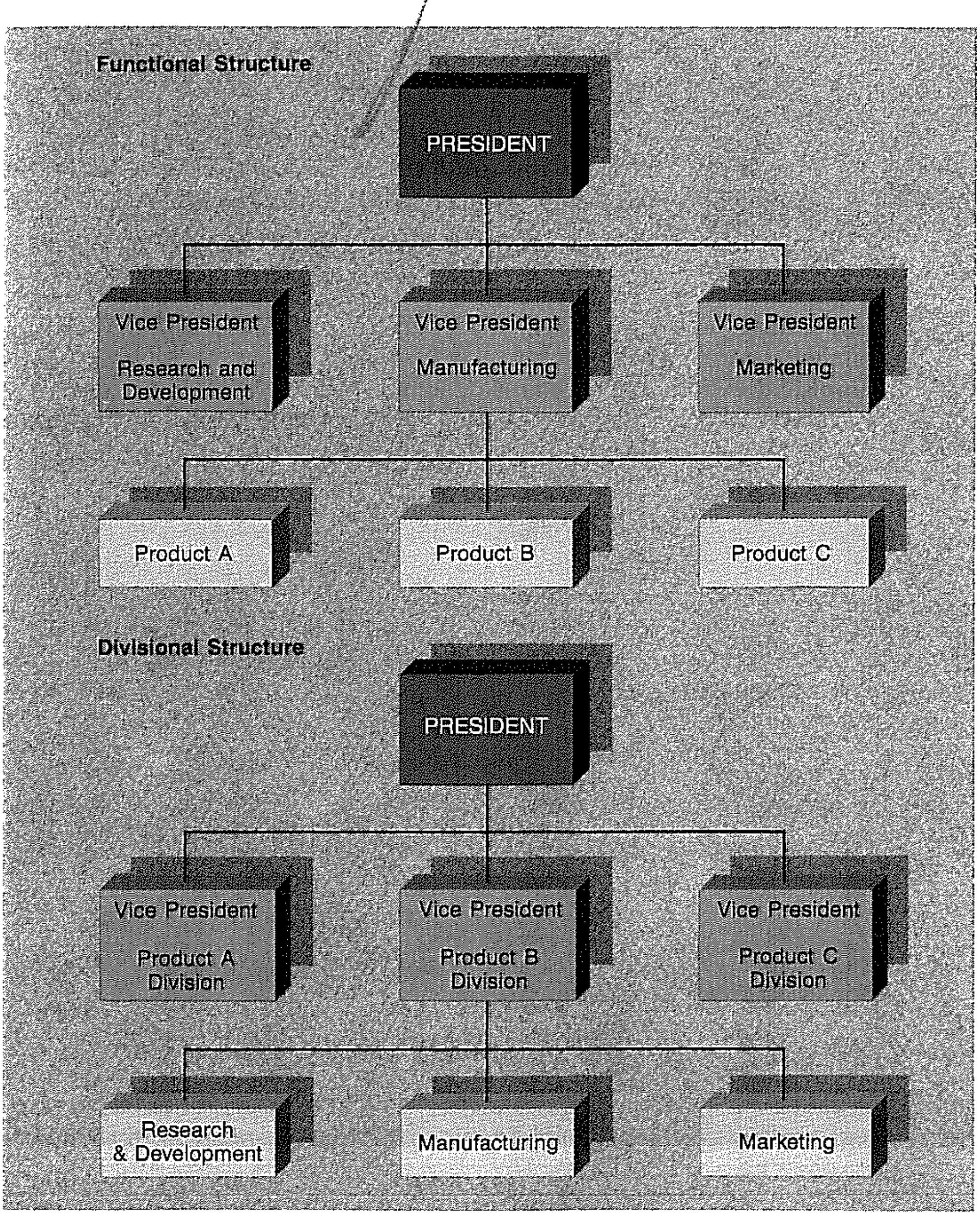


Figure 11-3 Functional versus divisional structure.

shows the difference between a functional and a divisional structure. With a divisional structure, each division contains the major functional resources it needs to pursue its own goals with little or no reliance on other divisions. For example, Figure 11-4 shows a divisional structure for the seven divisions of the Bell Atlantic Corporation that provide local telephone service to customers in different geographic areas. If the seven divisions were organized in a functional structure, then all the telephone operators would be grouped in a central operations department and all the field repair personnel would be grouped in a central repair services department. Instead, with the divisional structure shown, telephone operators and repair personnel are allocated to the various divisions so that each division can operate fairly independently. In this case, the divisions are operated as separate companies. Divisional structures are sometimes referred to as *self-contained structures* because the major functions are generally contained within each division.

Forms of Divisional Structure. There are three major forms of divisional structure, depending on the rationale for forming the divisions. Simplified examples of the three major forms—product, geographic, and customer—are shown in Figure 11-5.

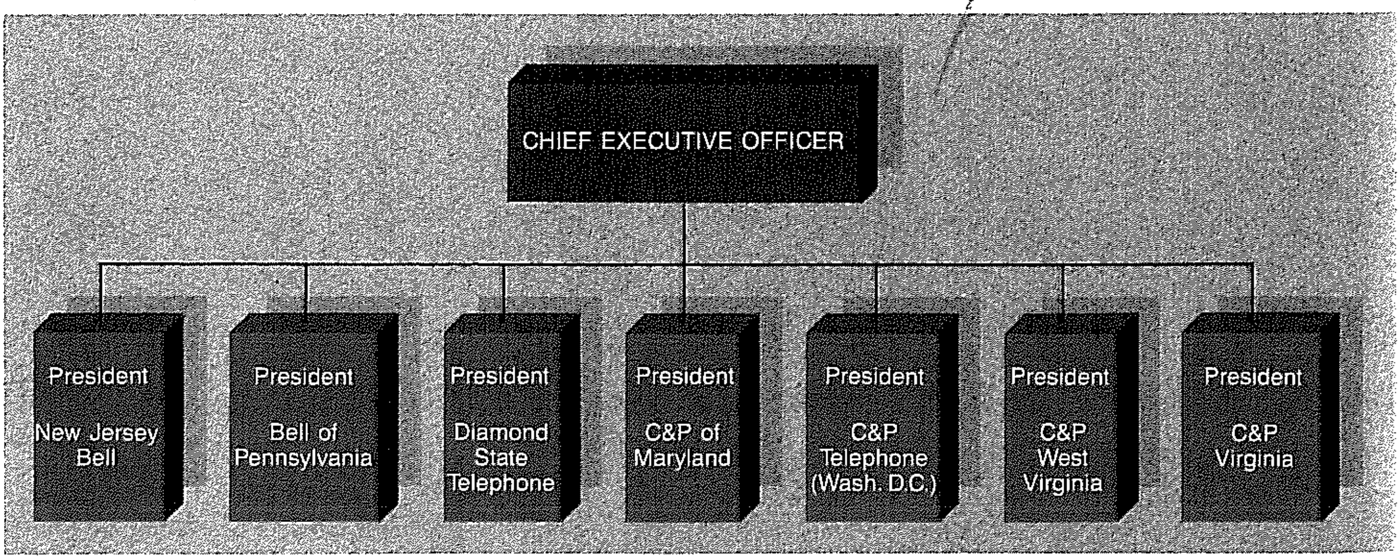
Product divisions Divisions created to concentrate on a single product or service or at least a relatively homogeneous set of products or services

Product divisions are divisions created to concentrate on a single product or service or at least a relatively homogeneous set of products or services. When this type of organization structure is chosen, there usually are large differences in the product or service lines that would make coordination within a functional design extremely slow and inefficient. Instead, with a divisional structure, each product department has its own functional specialists, in areas such as marketing, manufacturing, and personnel, who perform work associated with the product of their specific division only.

Geographic divisions Divisions designed to serve different geographic areas

Geographic divisions are divisions designed to serve different geographic areas. For example, the U.S. Agency for International Development is structured by geography because of the differing needs it serves in various parts of the world. Similarly, The Gap clothing stores in the United States are run by an organization divided into eastern, central, and western zones. Geographic de-

Figure 11-4 Seven divisions of the Bell Atlantic Corporation.



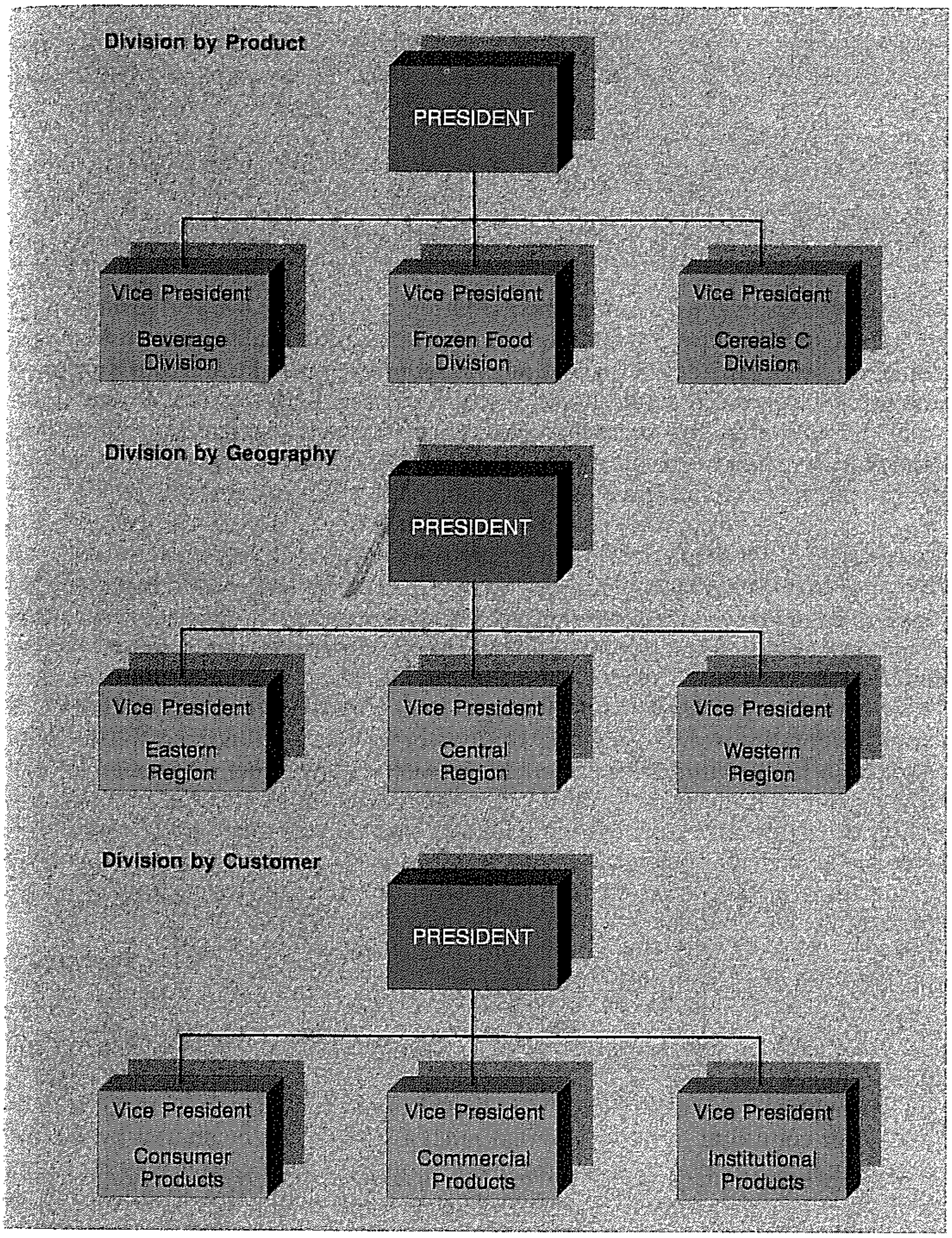


Figure 11-5 Major forms of divisional structure.

partmentalization often is adopted when it is important to provide products and services that are tailored to the needs of different geographic areas.

Customer divisions are divisions set up to service particular types of clients or customers. This type of organization design is used mainly when there are major differences among types of customers that preclude adequate coordination of the customers' various needs within a standard functional structure. As a result, each department contains individuals who perform the necessary func-

Customer divisions
Divisions set up to service particular types of clients or customers

Table 11-2 Major Advantages and Disadvantages of a Divisional Structure

Advantages	Disadvantages
Fast response to environmental change	Duplication of resources in each division
Simplified coordination across functions	Reduction of in-depth expertise
Strong orientation to customer requirements	Heightened competition among divisions
Simultaneous emphasis on division goals	Limited sharing of expertise across divisions
Accurate measurement of division performance	Restriction of innovation to divisions
Broad training in general management skills	Neglect of overall goals

tions for a specific type of customer. For example, Citicorp Investment Management, Inc., reorganized its institutional-asset management unit from a product structure, the industry's traditional method of organizing, to a customer structure. The new structure included four major divisions: national corporate and public funds group, regional companies group, specialized domestic institutions group, and international institutions group.[9]

Advantages of Divisional Structure. Divisional structure has several major advantages (see Table 11-2). One advantage is that divisions can react quickly when necessary because they normally do not need to coordinate with other divisions before taking actions. Furthermore, necessary coordination across functions is greatly simplified because the various functions are contained within the division itself. The divisional structure also tends to encourage a strong orientation toward serving the customer. This is because the focus is either on a limited number of products or services (product divisions) or on a more limited audience (geographic or customer divisions). In addition, accountability for performance is possible with a divisional structure, since results can be tied to a particular product, service, geographic area, or customer, depending on the form of divisional structure. Finally, the divisional structure provides opportunities for managers to develop more general management skills because, unlike their counterparts in a functional structure, they are likely to deal with multiple functions within their divisions.

Disadvantages of Divisional Structure. Divisional structure also has several disadvantages (see Table 11-2). Organizing by divisions often leads to a duplication of resources. For example, it may be necessary for each division to have its own major computer system (whereas such a system can be shared by the departments in a functional structure), even though in each case it may be somewhat underutilized. Moreover, individuals in a divisional structure will not be able to develop the in-depth areas of specialization to the degree that they could in a functional structure. For example, when an organization changes from a functional to a product design, management may allocate the various specialists in the human resources department to the different product groups. Consequently, an individual who specialized in recruiting may also need to handle compensation and other issues in a product department, since each product department cannot afford to duplicate the entire human resources department that existed under the functional arrangement. Another disadvantage is that divisions may become preoccupied with their own concerns and engage in destructive rivalries for resources.[10] Finally, with a divisional structure, employees sometimes focus on immediate divisional goals to the detriment of longer-term organizational goals.

Uses of Divisional Structure. A divisional structure is likely to be used in fairly large organizations in which there are substantial differences among either the products or services, geographic areas, or customers served. It sometimes is not feasible to organize into self-contained units if the nature of the organization makes it necessary to share common resources, such as expensive manufacturing equipment.

Hybrid Structure

Hybrid structure is a form of departmentalization that adopts parts of both functional and divisional structures at the same level of management.[11] It attempts to incorporate many of the major advantages of functional as well as divisional departmentalization. Many organizations, especially large ones, have some combination of functional and divisional departments. Functional departments are usually created to take advantage of resource utilization efficiencies, economies of scale, or in-depth expertise. At the same time, divisional departments are used when there are potential benefits from a stronger focus on products, services, or markets. IBM's hybrid structure is shown in Figure 11-6. In this case, functional departments handle such areas as law and external relations, science and technology, and personnel—areas in which in-depth expertise is important and resources can be utilized more effectively through a functional arrangement. The rest of the company is divided into four major geographic divisions to better serve differing customer needs throughout the world. The functional departments within a hybrid design are sometimes referred to as corporate departments because they typically have staff authority relative to the divisional departments and their staff authority emanates from the top, or corporate, level of the organization.

Hybrid structure A structure that adopts parts of both functional and divisional structures at the same level of management

Advantages of Hybrid Structure. In general, hybrid structure has several advantages (see Table 11-3). With a hybrid design, an organization can often achieve specialized expertise and economies of scale in major functional areas. At the same time, adaptability and flexibility in handling diverse product or service lines, geographic areas, or customers are possible through a partial divisional structure. Finally, the mix of functional and divisional departmentalization helps align divisional and corporate goals.

Disadvantages of Hybrid Structure. On the other hand, managers need to be alert to the disadvantages of the hybrid structure in order to minimize potential weaknesses (see Table 11-3). For example, hybrid organizations gradually tend to develop excessively large staffs in the corporate-level functional departments. As the corporate departments grow larger, they may also attempt to exercise

Table 11-3 Major Advantages and Disadvantages of a Hybrid Structure

Advantages	Disadvantages
Alignment of corporate and divisional goals	Conflicts between corporate departments and divisions
Functional expertise and/or efficiency	Excessive administrative overhead
Adaptability and flexibility in divisions	Slow response to exceptional situations

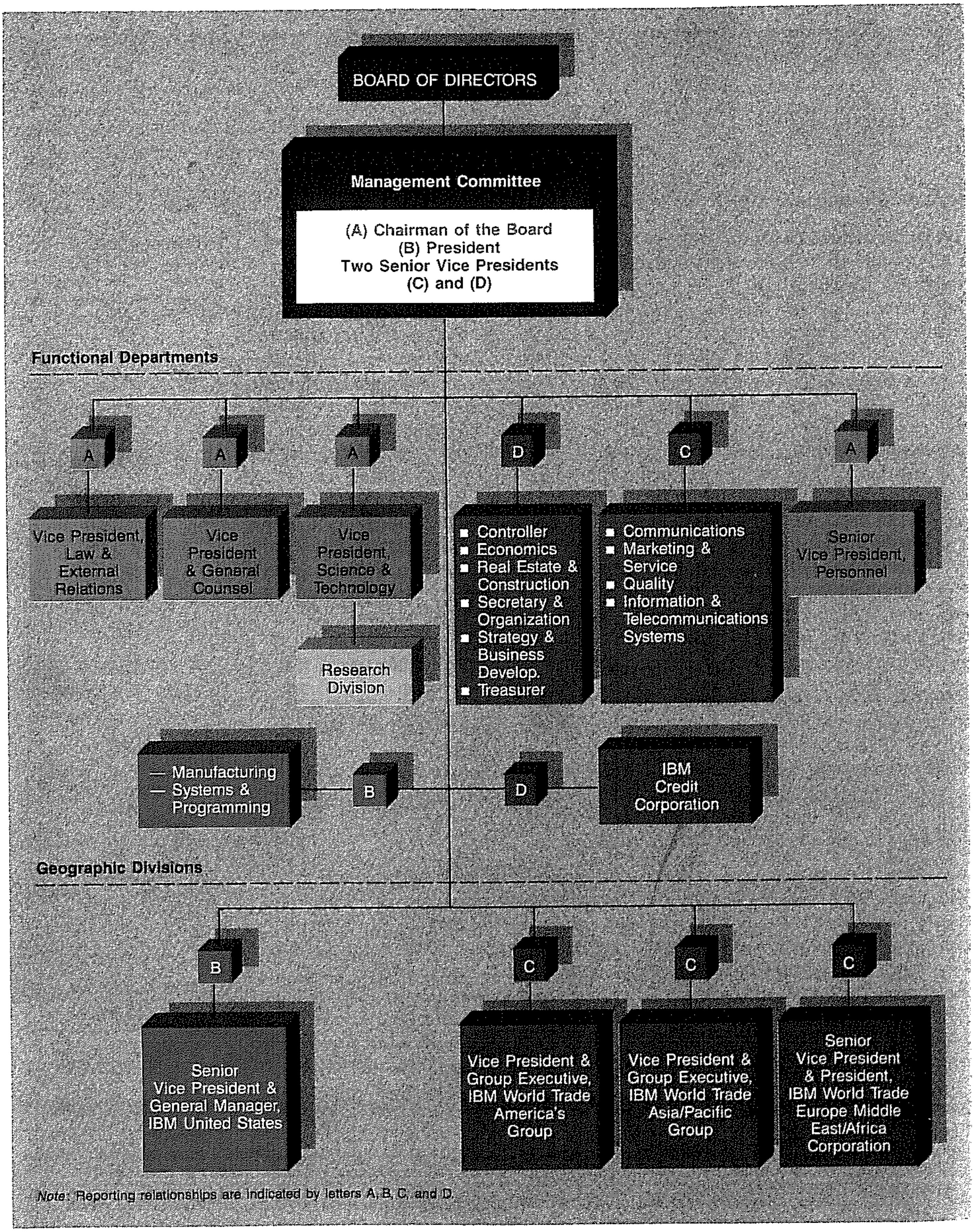


Figure 11-6 IBM's hybrid structure.

increasing amounts of control over the various divisions, causing considerable conflict. Finally, hybrid structures can be slow to respond to exceptional situations that require coordination between a division and a corporate functional department. For example, a personnel matter that requires an exception to policy may take longer to resolve with a hybrid structure than with either functional or divisional departmentalization.

Uses of Hybrid Structure. A hybrid structure tends to be used in organizations that not only face considerable environmental uncertainty that can best be met through a divisional structure but also require functional expertise and/or efficiency. Typically, the hybrid approach is reserved for medium-size or large organizations that have sufficient resources to justify divisions as well as some functional departmentalization.

Matrix Structure

Matrix structure A structure that superimposes a horizontal set of divisional reporting relationships onto a hierarchical functional structure

A **matrix structure** is a type of departmentalization that superimposes a horizontal set of divisional reporting relationships onto a hierarchical functional structure. The result is a structure that is both a functional and a divisional organization at the same time. There are two chains of command, one vertical and one horizontal. A basic matrix structure is shown in Figure 11-7. In this case, the vice presidents of operations, marketing, finance, and engineering represent the functional departments that make up the vertical hierarchy. Simultaneously, the managers of businesses A, B, and C represent the divisional units that operate horizontally across the structure. The heads of the major functional and divisional departments that make up the matrix (e.g., the vice presidents and business managers in Figure 11-7) are sometimes referred to as *matrix bosses.*

One major characteristic of a matrix structure is that employees who work within the matrix report to two matrix bosses. For example, as Figure 11-7 shows, a marketing researcher might report up the vertical chain to the vice president of marketing and across the horizontal chain to the manager of business A. Thus there is a system of dual authority that violates the classical principle of unity of command (an individual should have only one boss at any given point in time), making a matrix structure somewhat complex to operate.

Matrix Stages. Matrix experts Stanley M. Davis and Paul R. Lawrence suggest that organizations ultimately adopting a matrix structure usually go through several identifiable structural stages:[12]

Stage 1 is a *traditional structure,* usually a functional structure, which follows the unity-of-command principle.

Stage 2 is a *temporary overlay,* in which managerial integrator positions are created to take charge of particular projects (e.g., project managers), oversee product launches (e.g., product managers), or handle some other issue of finite duration that involves coordinating across functional departments.

Stage 3 is a *permanent overlay,* in which the managerial integrator positions operate on a permanent basis (e.g., a brand manager coordinates issues related to a brand on an ongoing basis).

Stage 4 is a *mature matrix,* in which matrix bosses have *equal* power.

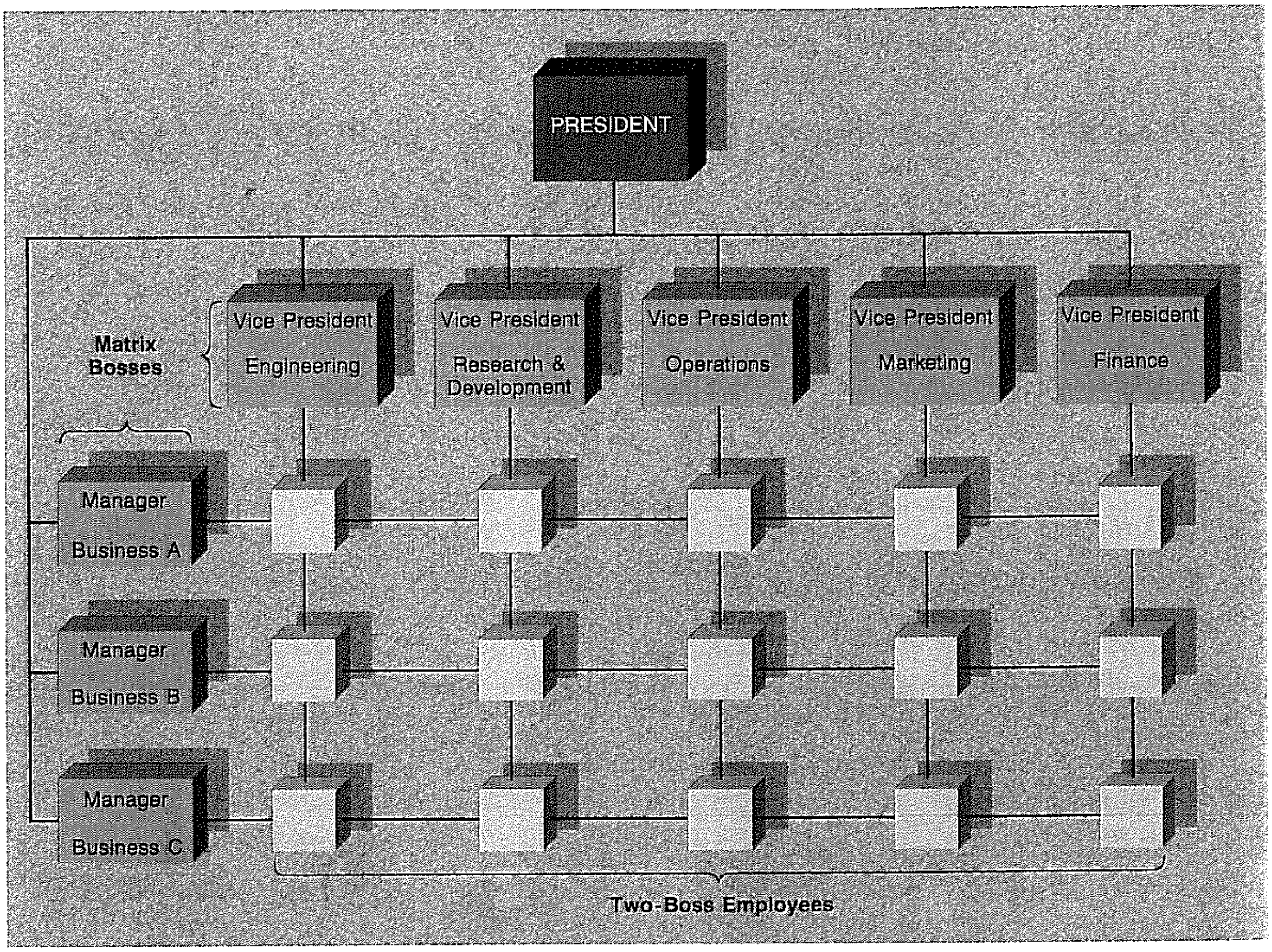


Figure 11-7 Matrix organization structure.

Even though a true matrix incorporates equal power for functional and divisional managers, stages 2 and 3, which involve managerial integrators (see Chapter 10), are often referred to as matrix structures.

Each of the matrix stages offers increasing amounts of horizontal integration, but at the cost of greater administrative complexity.[13] Even with managerial integrators, there is dual authority to some extent because the integrators frequently work directly with various members of functional departments (e.g., engineers or marketing specialists) assigned to help with their project. In their capacity as coordinators, managerial integrators usually informally supervise the work of individuals assigned to their projects, even though they typically do not have direct line authority over these individuals.

With the mature matrix, there is true dual authority.[14] All major decisions must have the approval of both the functional manager and the divisional manager. The mature matrix is used when the functional and divisional dimensions of an organization are both of prime and equal importance. Dow-Corning has experimented with such a design, even adding a third dimension for a simultaneous international focus.[15]

Matrix structures, particularly in the forms of temporary and permanent overlays, operate successfully in a variety of organizations. However, the advantages and disadvantages must be carefully weighed before a matrix design is adopted.[16]

Table 11-4 Major Advantages and Disadvantages of a Matrix Structure

Advantages	Disadvantages
Decentralized decision making	High administrative costs
Strong project or product coordination	Potential confusion over authority and responsibility
Improved environmental monitoring	Heightened prospects for interpersonal conflicts
Fast response to change	Excessive focus on internal relations
Flexible use of human resources	Overemphasis on group decision making
Efficient use of support systems	Possible slow response to change

Advantages of Matrix Structure. The matrix form of organization structure has several major advantages (see Table 11-4). For one thing, decisions can be decentralized so that they are made at the level of the divisional project manager and the functional manager, thereby allowing upper-level management to concentrate on longer-term strategic issues. For another, use of the matrix adds strong horizontal coordination to projects (or products or brands) beyond what is normally possible in the functional design alone, increasing the probability of success. Yet another advantage is that the matrix arrangement facilitates monitoring environmental conditions with respect to both the projects and the various functional areas. The matrix structure can also often react quickly to change because many decisions are made at lower levels. Still another advantage is that functional specialists can be added to or reassigned from projects as needed, allowing effective use of human resources. Finally, support systems, such as computers, special equipment, and software, can be allocated among many projects on an as-needed basis, thereby reducing the costs of such systems.

Disadvantages of Matrix Structure. Matrix designs have several potential disadvantages that must be considered when an organization is thinking about adopting such a structure (see Table 11-4). For example, adding a layer of project managers and their immediate support staff to a functional hierarchy increases administrative costs. In addition, since there are two bosses, individuals working within the matrix may have difficulty determining who has authority and responsibility for various decisions. The increased communication required and the dual-authority arrangements also heighten possibilities of conflicts, particularly between project managers and functional managers. Another potential disadvantage of the matrix structure is that the individuals in the structure can become preoccupied with internal relations at the expense of clients and project goals. Another potential pitfall is that matrix designs can encourage group decision making to the point where even relatively minor decisions are made in groups, causing a serious erosion of productivity. Finally, while the matrix can be particularly adaptable to change, it also can become extremely slow if the interpersonal skills of matrix participants are poor or upper management attempts to retain centralized control. For a time, this latter problem began to cripple the brand management structure at Procter & Gamble (see the following Case in Point discussion).

CASE IN POINT: Brand Management at Procter & Gamble

Since Procter & Gamble (P&G) first used the concept way back in 1927 to manage Camay soap, brand management has been almost synonymous with the Cincinnati-based company. Because of its great success, Procter & Gamble has been viewed almost as a textbook case on how to run a consumer-oriented company—

so much so that major competitors, such as General Mills, began to adopt the brand management approach, often hiring talent from P&G. By the early 1980s, however, P&G's market share in a number of important markets had begun to slip as a result of competition and mature markets, causing P&G to be called a "wounded lion." The company announced its first drop in annual operating earnings in 33 years.

Despite its emphasis on brand management, P&G still had maintained a fairly centralized approach to decision making. In the beginning, the approach worked well; but over the years, excessive centralization began to bog down the company. Gradually, almost every decision was pushed to the top. A former P&G brand manager laughingly relates that the decision about whether the company's new decaffeinated instant Folgers coffee should have a green or a gold cap was elevated all the way to the CEO (he chose gold).

The chief medium in the decision-making process, and the symbol of the growing centralization, became the one-page memo. Managers had to carefully summarize any proposal into a single page, which was rewritten almost endless times as it made its way up the hierarchy.

Brand managers were particularly frustrated by their lack of authority and the fact that they had to answer to layers of management and staff areas such as the legal department. One of many jokes circulating in the company went as follows: "How many brand managers does it take to screw in a light bulb?" The answer: "None. They have to call legal." This lack of authority, together with the tendency of the vertical hierarchy to make most of the significant decisions, effectively canceled the horizontal coordination that the brand managers could provide.

Spurred by the company's difficulties, P&G executives have been taking steps to dismantle the overly bureaucratic practices that have become an anchor on the product management structure. For one thing, the introduction of the "talk sheet" has been welcomed by managers as a significant improvement over strict adherence to the one-page memo. The talk sheet is an informal outline that allows managers on several levels to develop and refine a proposal through discussions, rather than through paper only.

Management also is beginning to decentralize decision making. One method of achieving this objective is the increased use of business teams and task forces that can make decisions in such areas as product development and cost cutting, as well as encourage greater cooperation among functional divisions. In the past, a brand manager might have put together a proposal that would have been passed up the hierarchy for approval by the heads of the various functional units that were affected, as well as by top management. Now, teams are often put together that include representatives from functional areas who help to develop the proposal itself. As a result, brand management is becoming more team-oriented, with greater coordination across functions. The process has speeded product introductions, helping Ivory shampoo get to market in 4 months instead of the usual 18.[17]

When to Consider a Matrix Structure. Matrix designs are not necessary for many organizations. For example, Texas Instruments abandoned its much-touted matrix structure after directly blaming it for the company's failure to keep up with the competition.[18] The need for horizontal coordination must be sufficient to justify the additional administrative complexity at the lower levels. Matrix designs usually are appropriate when the following three conditions exist:[19]

1. There is considerable pressure from the environment that necessitates a simultaneous and strong focus on *both* functional and divisional dimensions. For example, the existence of diverse products may call for product orientation, but increasing sophistication in engineering technology may argue for a functional orientation.

2. The demands placed on the organization are changing and unpredictable, making it important to have a large capacity for processing information and coordinating activities quickly. For example, in the microchip industry, foreign competitors frequently make technological improvements and lower prices simultaneously.

3. There is pressure for shared resources. For example, if a company is dominant in its market, it may not feel much pressure to share resources, such as expensive technical specialists, across departments. Instead, the organization could adopt a divisional structure and give each department its own technical specialists. However, in more competitive markets, matrix organizations are one way to attain flexibility in the use of functional resources across projects or products.

There is growing evidence that matrix designs require a corresponding change in an organization's culture to support the increased need for collaborative decision making.[20] In addition, managers may require special training, particularly in interpersonal skills, in order to function effectively within the matrix structure.[21]

While managers need to weigh the advantages and disadvantages of the various structural alternatives in developing an appropriate organization design, they also must consider major contingency factors that can affect structural requirements. We review these factors next.

WEIGHING CONTINGENCY FACTORS

Early in the study of management, classical theorists (see Chapter 2) attempted to develop the ideal organization structure. For example, Henri Fayol offered his ideas about unity of command and the scalar chain. Max Weber, with his notions of the ideal bureaucracy, also provided some concepts (such as formalized rules and regulations) that are useful, particularly in fostering vertical coordination. Still, the one best way to organize proved elusive. A structural configuration that seemed to work for one organization was a deterrent to effectiveness in another. Gradually, contingency theory began to emerge, a management viewpoint arguing that appropriate managerial action depends on the particular parameters of the situation (see Chapter 2). Researchers came to recognize that the best structure for a given organization depends on such major contingency factors as technology, size, and environment.

Technology

One reason why different organizations require different structures can be traced to **technology**, the knowledge, tools, equipment, and work techniques used by an organization in delivering its product or service. Two critical aspects of technology are technological complexity and technological interdependence.[22]

Technology The knowledge, tools, equipment, and work techniques used by an organization in delivering its product or service