CHAPTER FOUR

Planning Phase Functions

INTRODUCTION

What This Chapter Is About

The importance of planning processes has been emphasized in many management references. For example, according to Henry Mintzberg, Joseph Lampel, and Bruce Ahlstrand (1998), planning, strategic planning, and scenario planning have become necessary elements of successfully doing business.

As shown in Figure 2.1 on page 36, the planning phase of the managerial process consists of these four major managerial functions:

- Goal setting
- Planning (formulating strategies, tactics, programs, projects, and action plans)
- Budgeting
- Formulating policies, procedures, and rules

The first part of this chapter provides perspectives on the planning phase in general. The basics section describes goals, plans, and budgets and the purposes and benefits of planning. Going beyond the basics, the chapter discusses organizational approaches to planning and differentiates between methodological and organizational planning steps. It also outlines a generic strategic planning process.

The second part of the chapter covers goal setting. The basics section outlines definitions, purposes, and benefits and then provides guidelines for stating goals properly. Going beyond the basics, it discusses the main elements to consider when choosing (a) the parameters (performance yardsticks) around which to write goal statements and (b) standards of performance (benchmarks on the yardsticks). It also discusses other important considerations and issues.

The third part deals with planning functions that are often called "programming functions" in order to distinguish them from the more encompassing term, "planning." These functions include formulating strategies and tactics, programs and projects, and action plans. The basics section outlines definitions, purposes, and benefits. Next, it discusses the various planning products just mentioned. In going beyond the basics, it describes tools for visualizing and better handling the details involved in planning.

The fourth part deals with budgeting. The basics section provides definitions, discusses purposes and benefits, and then describes the basics of the budgeting process. In going beyond the basics, it describes the budgeting process and various types of budgets in greater detail. It also makes clear where budgeting should fit into a planning process.

The last function in the planning phase—formulating (or updating and modifying) policies, procedures, and rules—is not covered in this chapter. Organizations' manuals describe these planning products in much greater detail than is possible here, and organizations can differ significantly in regard to preferred practices. However, this chapter does provide generic definitions of policies, rules, and procedures in the section "The Planning Phase in General."

What Consultants, Trainers, and Facilitators Can Get Out of This Chapter

This chapter essentially focuses on how planning is applied in organizational settings. After studying this chapter, consultants, trainers, and facilitators should be able to

- · Help participants identify ways that strategic and annual planning should be carried out and how general concepts, principles, and practices can be applied within an organization's unique culture
- Guide participants' improvement of goal statements
- Apply such well-known visual tools or approaches as bar charts and Critical Path Method (CPM) networks to the needs of an organization

What Practicing Managers, Participants, or Students Can Get Out of This Chapter

After studying and discussing this chapter, the student or seminar participant should be able to

- Differentiate among statements of objectives, goals, strategies, tactics, programs, and projects
- Write more appropriate and understandable statements of goals, strategies, tactics, programs, and projects—statements that contain the most appropriate performance parameters and performance standards or benchmarks
- Better distinguish between methodological planning steps and organizational planning process steps, so that they know where they are in which process at any given time
- Participate more knowledgeably and effectively in (a) an organizational strategic planning process and (b) an annual planning process
- Better plan how to achieve objectives or goals through more effectively formulated means such as strategies and tactics, programs and projects, action plans, and program or project budgets

- Better handle planning details by using visualization tools such as bar charts and CPM or PERT networks
- Participate more knowledgeably and effectively in their organization's budgeting processes
- More effectively translate programs or projects into program or project budgets, and incorporate the latter into unit or organizational budgets

How Instructors and Participants Can Use the CD-ROM's Supplementary Materials

The accompanying CD-ROM contains the following materials for this chapter:

- Chapter Four Study Guide. This course or seminar session preparation guide should be completed by students and seminar participants. It asks them to think about (a) what they are reading; (b) how it applies to themselves, their unit, or their organization; and (c) how the task-related, organizational, individual, social, and external socio-technical factors being discussed may be influencing their motivation, attitudes, capabilities, practices, behavior, interpersonal interactions, and performance. Thinking about these phenomena and issues prepares participants for the superior-subordinates discussion, OD application, and team-building sessions that should be conducted once all participants in an organizational MD/OD program have completed the educational and developmental materials in Module 1 (which corresponds to Chapters One through Seven in Part One of this book).
- *Sample Program or Project Budget.* This spreadsheet template can be filled in to analyze numeric data relating to financial aspects of a program or project. A filled-in example is shown in Table 4.4, later in the chapter.
 - Sample Profit or Loss Statement (Operating Budget)
 - Sample Balance Sheet
 - Sample Cash Flow Statement (Cash Budget)

THE PLANNING PHASE IN GENERAL

The Basics

Definitions. *Planning* is an intellectual, future-oriented process that involves consciously formulating alternative objectives, goals, and courses of action based on preconsidered purposes, facts, and estimates of the future. Performing planning functions amounts to deciding in advance what is to be accomplished, what to do, who is to do what, when it is to be done, and how it is to be done. It is aimed at both *goal-* and *means-orienting* people's activities. When properly formulated, *goals* represent clear and specific targets toward which activities can be aimed and resources can be channeled. When properly formulated, *plans* (strategies and tactics; programs and projects; action plans; budgets; and policies, procedures, and rules) all constitute the *ways* and means for reaching goals both effectively and efficiently. (As we will discuss in the "Goal Setting" section, the words "goals" and "objectives" mean different things to different people. Here we use "objectives" to refer to broad, longer-range ends and "goals" to refer to specific, shorter-term desired results. We acknowledge that others do just the opposite—largely due to the once widespread use of management by objectives. Of course, readers can use the words as they wish.)

Again, as shown in Table 2.2 on page 38, the planning phase of the managerial process is equivalent to formulating alternative solutions during an analytic problem-solving process.

Goal setting involves formulating goals that state the specific aims or desired results to be achieved by the end of some specified time period.

The planning function involves several subfunctions: (1) formulating strategies and tactics for reaching goals or objectives, (2) formulating programs and projects for carrying out strategies and tactics, and (3) formulating plans of action for implementing programs and projects. While strategies and tactics deal with what to do, they are also relatively conceptual. Programs and projects, on the other hand, deal more specifically with how to do things and are more practical.

Budgeting involves translating plans into dollar terms and allocating financial, human, and other types of resources to organizational units.

Formulating policies, procedures, and rules involves creating, updating, or modifying these items as appropriate during a particular year's planning process. Policies are essentially guidelines for personnel to follow when making decisions or taking actions that might significantly affect any of an organization's operating or support areas. Procedures include (a) standardized steps for performing specified tasks and (b) standardized ways of performing certain administrative or systems-related activities throughout an organization (for example, how results are to be monitored, measured, and evaluated). Rules exist to govern behavior. They can state controlling regulations, or they can state expectations aimed at guiding behavior. All of these planning products are generally spelled out in considerable detail in organizational manuals.

Table 4.1 summarizes the definitions and shows examples of the various planning products or results. Managers should fully understand this table in order to avoid committing several common planning mistakes. For example, too many organizations' goal statements are not really statements of goals but are actually statements of strategies or tactics or programs or projects. Some statements of strategies or tactics are actually statements of programs or projects. And some statements of action plans are actually statements of programs or projects. Not using terms properly and not formulating appropriate statements can cause problems by confusing personnel and misdirecting their behavior.

The following sections of this chapter further define and describe each planning phase function.

Purposes and Benefits of Planning. The literature on planning describes a number of its purposes or benefits:

- 1. Planning develops guidelines that help the organization operate successfully over time by helping units and individuals perform in a coordinated, effective, and efficient manner.
- 2. It provides direction and a sense of purpose.
- 3. It helps managers anticipate, cope with, and plan for externally caused change.
- 4. Planning enables managers and organizations to better position themselves to take advantage of opportunities, deal with threats, and alleviate or preclude problems.
- 5. It helps managers change, improve, or positively influence the many internal and external factors or forces that affect groups' and individuals' performance.
- 6. It provides an opportunity for superiors to include their subordinates in the process of charting a unit's and organization's course. In fact, research conducted by T. D. Ludwig and E. S. Geller (1997) showed that planning provides better benefits when the process is participative.

Table 4.1. Definitions and Examples of Goals and Plans

	Definition	Example
Goals and Objectives		
Objective	A broad aim or desired end that continues year after year with little change. Objectives are often expressed in an organization's mission statement.	Achieve sufficient revenue to finance organizational growth and provide the resources to achieve other organizational objectives
Goal Operating or performance goals; Resource and structural goals inputs	A statement of a specific aim or desired end result. A goal statement includes a. a performance parameter (measurement yardstick) b. a desired performance level (benchmark on yardstick) c. a time frame (or deadline for desired results)	Decrease total operating costs [parameter] by \$100,000 (or by 5%) [desired level] for fiscal year 2007 [time frame]
Strategies and Tactics		
Grand strategy	A statement of the broad approach, the broad what to do in order to reach one or more goals—for example, stable growth; accelerated growth; rebuild and retrench; some combination of these.	Grow the organization (sales, revenues, assets or some other indicator) at an accelerated rate (by achieving significant results in various areas at an accelerated rate)
Substrategy	One of various ways to carry out a grand strategy.	Achieve accelerated growth via, for example, diversification; acquisition; merger; joint venture; massive sales effort
Tactic	A statement of the <i>specific what to do</i> in order to carry out a strategy. A more specific approach (within a strategic context). Can be offensive, defensive, or preemptive.	Attack market leader(s) Defend against upstart competitors Preemptively gain control of a niche market
Programs and Projects		
Program	Overall name given to a rather large or complex <i>group of projects</i> (grouping of activities) for carrying out strategies and tactics. A <i>broad how to</i> for carrying out strategies.	Marketing Program Human Resources Improvement Program
Project	A more specific, smaller, or narrower set of activities involving one or more groups of people (within the context of a larger or more encompassing program).	Warehousing and distribution expansion project Sales force expansion project HR recruitment project Training project
Action Plan	The most specific how to for carrying out a project or a step-by- step plan for implementing a project. Specifies what actions are to be taken by whom, when, and in what order so as to coordi- nate different individuals' or groups' tasks.	Sequences of activities by persons or groups are usually shown on Gantt charts, bar charts, critical path networks, or PERT networks.
Budgets		
Program or project budgets	Conversion of programs or projects into dollar terms (for example.	
Operating budgets Resources budgets	Conversion of programs or projects into dollar terms (for example, increasing revenues; increasing or decreasing costs) Sales budget, production budget Facilities and equipment budget, capital budget, human resources budget	

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- 7. Planning helps minimize surprises and reduce both uncertainties and risks associated with the future.
- 8. It helps crystallize and communicate management's thinking about where the organization is going and how it will get there.
- 9. It helps managers more effectively perform other managerial or integrative functions such as organizing, staffing, guiding activities, and keeping operations under control.
- 10. It saves time and effort during the implementation of plans. For years, time management experts such as Louis Allen (1982, 1983) have asserted that each hour of effective planning tends to save three hours of time and effort during the implementation of solutions or decisions.
- 11. Planning minimizes time-consuming problems. Goal-setting and planning processes are opportunities to anticipate problems, formulate preventive measures, and incorporate preventive measures into plans.

Beyond the Basics

A very common planning problem is that personnel are often confused about which steps are methodological steps and which are an organization's own procedural steps. As a result, they are not always certain where they are—and, thus, what they are supposed to be doing—during an organizational planning process. Methodological planning steps are basic planning steps, while organizational process steps involve which organizational levels and units do what at specified points in time.

Methodological Planning Steps. Figures 4.1a and 4.1b illustrate (a) the order in which planning functions should be performed (regardless of the organizational level at which they are performed), (b) the outputs generated as a result of performing each function, and (c) how the outputs of one function are inputs to (or are bases for formulating) the next. These two figures illustrate basic goal-setting and planning methodology and call attention to the main relationships among outputs, which are indicated by the bold vertical arrows. The figures may seem a bit complicated, because arrows with dotted lines illustrate how goals and plans being formulated for one area should also be influenced to some degree by the goals and plans being formulated in other areas. This helps ensure effective horizontal as well as vertical coordination of activities throughout an organization.

Figure 4.1a illustrates the phases involved in planning at the organizational or corporate level. Note that each phase must be accomplished before the next can be performed, because the outputs of each phase (indicated by bold arrows) are the inputs required for the next phase.

Goal setting (Phase I). The outputs of goal setting at the highest level are organizational goals or objectives, which state the major or key results desired in each of the main areas suggested by experts such as Peter F. Drucker (1964, 1976), and Robert S. Kaplan and David P. Norton (1996): (a) overall organizational performance areas such as profitability and return on investment (ROI); (b) operations-related areas such as market standing, innovation, and productivity; and (c) support or resource-related areas such as facilities, organizational structure and systems, human resources, and finances. In the past, marketing whatever products or services could be sold in the marketplace drove this phase. Today, however, different technologies are being integrated with each other in ways that cause not only an accelerating rate of technological change but also quantum leaps in technological innovation. So today, technology is influencing what consumers

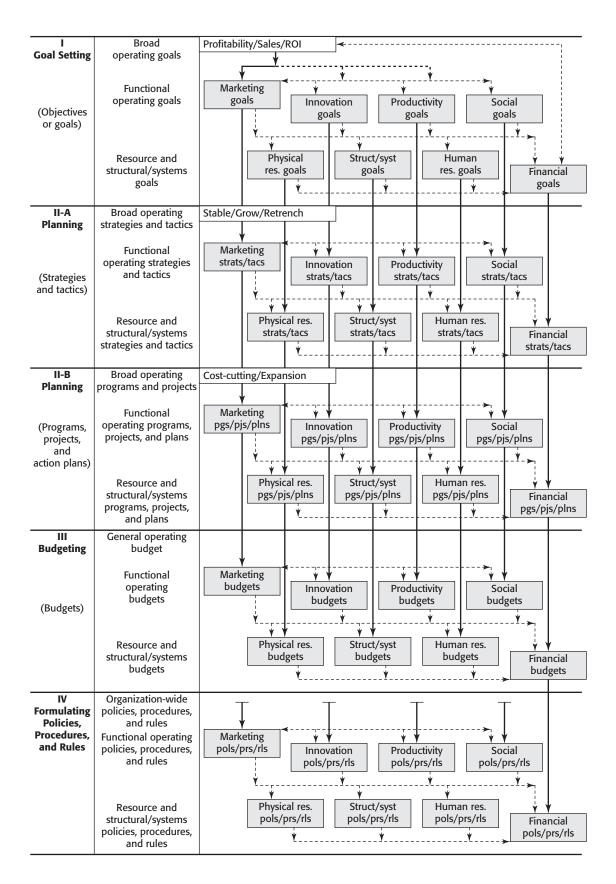


Figure 4.1a. Methodological Planning Steps and Resulting Outputs at the Organizational Level

Note: Arrows with dotted lines indicate that information relating to one area is or can be input to another.

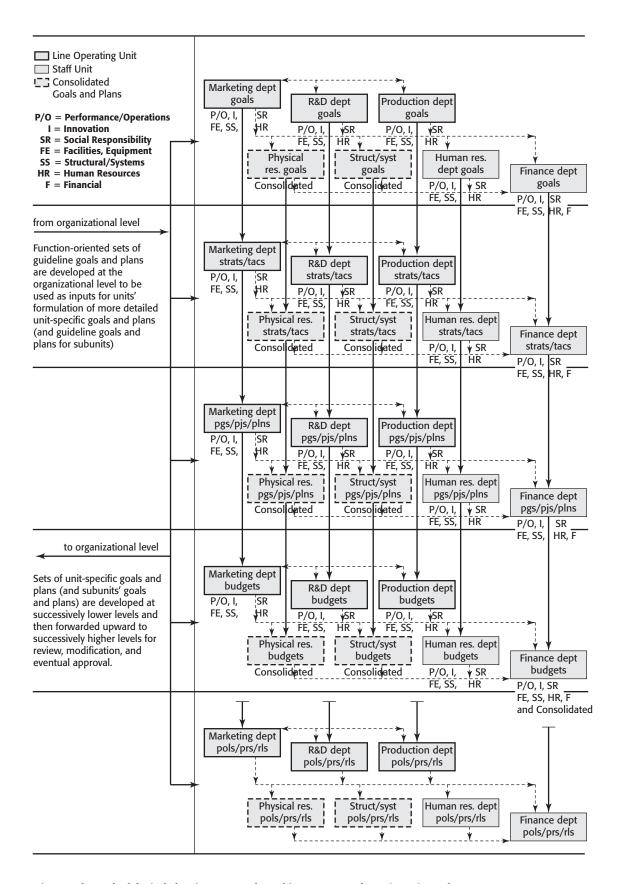


Figure 4.1b. Methodological Planning Steps and Resulting Outputs at the Major Unit Level

Note: Consolidated goals and plans combine all operating units' resource or system goals and plans.

desire—and thus product development and marketing approaches—to a much greater extent than ever before. In addition, technology is helping to improve equipment and processes and to lower operating costs. As a result, technology is not only influencing marketing goals as never before but also having a greater impact on goals in production, information systems, financial, and human resources.

Planning (Phase II-A). The outputs of this subphase are organizational strategies and tactics in the various areas. More conceptual than practical, these strategies and tactics state broad means or approaches for achieving the goals in each area and are primarily based on the organizational goals and objectives in those areas. However, as shown by the arrows with dotted lines, strategies and tactics in each area are also influenced to some extent by the strategies and tactics that are being formulated in other areas, because of interdependencies among units.

Planning (Phase II-B). The first outputs of this subphase are organizational programs and projects in the various areas. Much more practical than conceptual, programs and projects state specific means for carrying out the strategies and tactics and achieving the goals in each area and are primarily based on strategies and tactics for those areas. However, as shown by the arrows having dotted lines, programs and projects in each area can also be influenced by the programs and projects being formulated in the other areas. The second outputs of this subphase, which depend on the prior formulation of programs and projects, are plans of action (also called action plans). These state the very specific means, elements, and activities—the who, what, and when—that are necessary to implement the programs and projects. These outputs are not normally formulated at the highest levels. Coordination with other units is often necessary in order to ensure that all plans are compatible, complementary, and synchronized, so that they can be implemented successfully.

Budgeting (Phase III). The outputs of budgeting at the highest levels are organizational budgets in the various areas. Budgets first identify the resources required to carry out programs and projects and then translate those resources into dollar terms. Here, too, the budgets being formulated in the various areas affect each other to some extent, mostly because of unit interdependencies and competition among divisions or departments for organizational resources.

Formulating policies, procedures, and rules (Phase IV). The outputs that result from performing this function at the highest levels are organizational policies, procedures, and rules. In addition, units and individuals usually have policies and procedures outlined in some detail for their specific tasks.

Figure 4.1b illustrates that the same basic methodology is used to formulate more specific goals, plans, and budgets for major units and their subunits. (Policies, procedures, and rules were not mentioned—and will be mentioned only occasionally from now on—because they are generally formulated or modified during special projects that are not part of most organizations' formal planning processes.) These goals and plans are based on organizational goals, plans, and budgets and the guideline unit goals and plans passed down from each level to the next lower level.

Organizational Approaches to Planning. Organizations can apply the methodological steps outlined in the preceding section in different ways. Three common approaches to planning are top-down (authoritarian), bottom-up (permissive), or top-down/bottom-up (participative). An organization's approach to planning largely determines whether the methodology is applied by managers and personnel at lower levels as well as by top management.

Top-down or authoritarian approach. Top management—perhaps with the assistance of a planning staff—performs the entire planning process. It formulates organizational goals and plans, translates them into major units' goals and plans, and then promulgates these decisions to lower levels, making the respective units (and perhaps subunits) responsible for (a) implementing their assigned plans, (b) adhering to their allocated budgets, (c) following specified policies, procedures, or rules, and (d) achieving their assigned performance goals. Some organizations use a variation wherein top management passes goals and plans to major unit managers, who translate their units' goals and plans into goals and plans for each of their subunits. This process continues down the organization. The top-down approach is used by many organizations.

Bottom-up or permissive approach. Top management initially solicits goal-setting and planning inputs, starting at some lower level. Unit managers at each successively higher level review, modify, and approve their subordinates' packages of goals and plans and forward them to the next higher level. Finally, top management reviews the major units' proposals, revises them, approves them, and consolidates them into overall organizational goals and plans. Although this bottom-up approach involves lower-level personnel in the planning process, it does not always generate goals and plans that are both challenging and realistic. The bottom-up approach is used by some organizations.

Top-down/bottom-up, team, or participative approach. This is the one that many management experts recommend. It is essentially an integration of the management by objectives (MBO) process advocated by Peter Drucker (1954, 1976), George S. Odiorne (1965, 1979), and John W. Humble (1967) and the "linking pin" process advocated by Rensis Likert (1961, 1967). (In the linking pin process, superiors and their immediate subordinates work together—level by level, each in its turn, first downward, then upward—to perform goal-setting and planning functions.) Because this approach has been used successfully to generate goals and plans that are both challenging and achievable, it has been adopted by an increasing number of organizations. During the initial phase of the process, top management purposefully builds a certain degree of "reach" or "stretch" into organizational and unit goals in order to (a) set high performance standards and (b) challenge all personnel to perform up to their potentials in various areas.

In the top-down/bottom-up approach—just as in a problem-solving process, during which a number of alternative solutions should be formulated—organizations can formulate multiple or alternative sets of goals and plans for the sake of comparison. For example, an organization could formulate a set of goals and associated plans for taking it in one possible direction, but could also formulate alternative sets of goals and associated plans for taking it in other possible directions. This practice takes more time, but it can help an organization test several possible futures on paper.

Once guideline goals and associated plans have been formulated for major units, they are passed downward to be used as inputs for more detailed goal setting and planning at successively lower levels. As shown in Figure 4.1b, the methodology used at the unit, subunit, and lower levels is the same as that used at the top management level. After lower levels have reviewed their inputs, revised them to take account of actual capabilities, modified them in order to make them achievable, and refined them in order to make them more unit-, subunit-, and individual-specific, they forward their outputs back up the organization for further review, revision, and consolidation at successively higher levels until they reach the top and are finalized.

Organizational Process Steps. While Figures 4.1a and 4.1b illustrate the *methodological steps* involved in a top-down/bottom-up process, Figure 4.2 illustrates the internal organizational

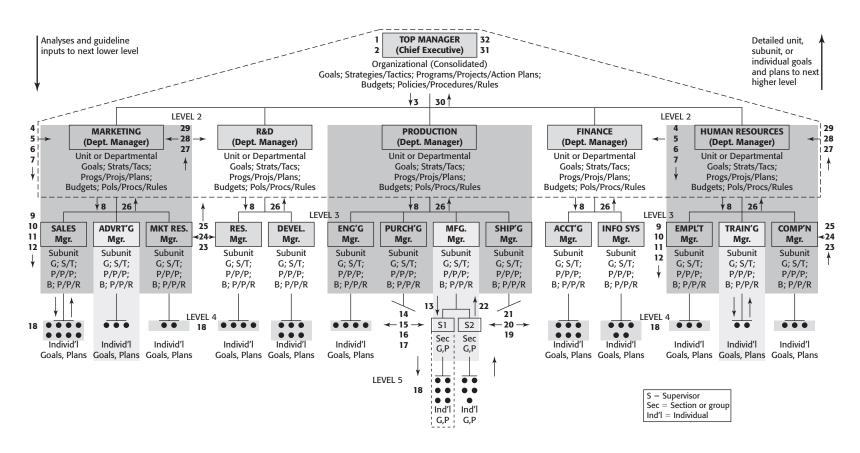


Figure 4.2. Top-Down/Bottom-Up Organizational Planning Process Steps

process steps involved. The steps in Figure 4.2 are described in the following list. Two points should be noted before proceeding: First, these are the basic steps. Organizations may design goalsetting and planning processes that include more specific steps and substeps. Second, although Figure 4.2 is based on an organizational structure typically found in small to medium-sized manufacturing companies, the same basic steps can be taken in any multilevel organization.

The steps of an organizational planning process are as follows:

- 1. The two upper levels of management—working together as the group bounded by the dashed line, and often using preliminary inputs provided by lower levels—analyze their organization's competitive situation, past performance, and recognized problems, and perform the process outlined in Figure 4.1a.
- 2. The top group translates a single set (or alternative sets) of organizational goals and plans into a single set (or alternative sets) of unit-specific guideline goals and plans for each major unit or department to use as suggested inputs for its own process.
- 3. The top management group passes its analyses and guideline outputs to the major units for further analysis and refinement.
- 4. As indicated by shaded groupings of people at levels 2 and 3 in Figure 4.2 (but in only three of the five cases so that the five departments are each clearly delineated), each major unit manager (at level 2) meets with immediate subordinates (subunit managers at level 3) to review, analyze, and modify the guideline goals and plans.
- 5. Each unit manager runs his or her unit's initial outputs by the other major units in order to (a) make sure that all units are formulating mutually compatible goals and plans and (b) obtain additional information and ideas that could lead to further revisions.
- 6. Based on inputs provided by other units, each unit manager and his or her immediate subordinates revise their unit's goals and plans.
- 7. The major unit managers and their immediate subordinates translate their outputs into subunit-specific guideline goals and plans that will be used as inputs for each of the unit's subunits (at level 3).
- 8. The unit managers pass their analyses and subunit-specific guideline goals and plans down to their subunits as suggested inputs for review and possible revision.

Note on the left side of Figure 4.2 that steps 9–13 are the same as steps 4–8 but are subsequently performed at the next lower level in its turn, and steps 14-17 (middle area of figure) are the same as steps 9-12 but are subsequently performed at the level below in its turn.

- 18. As indicated by the more lightly shaded examples of the groups involving levels 3 and 4 in Figure 4.2, subunit managers (at level 3) and subunit supervisors (at level 4) meet one-on-one with each of their immediate subordinates to formulate revised ("smooth") individual goals and plans based on the guideline inputs formulated in steps 12 through 17.
- 19. Each subunit supervisor (at level 4) meets with his or her immediate subordinates (at level 5, when there is a level 5) to revise subunit goals and plans (if any) based on individual goals and plans and on previously formulated subunit guidelines and revisions.

- 20. Each subunit supervisor runs his or her subunit's outputs by the other (lowest-level) subunits for final coordination and input (especially when there are interdependencies between particular subunits).
- 21. Based on inputs from other subunits, each subunit supervisor works with his or her immediate subordinates to revise and smooth the subunit's goals and plans. This is the point at which an organization's annual top-down/bottom-up goal-setting and planning process begins to turn around and head upward.
- 22. The subunit supervisors pass their refined sets of subunit outputs—complete with justification for any revisions to the initial guidelines—up to their superiors at the next higher level (level 3) for review, possible revision, and consolidation.

Note that steps 23–26 and steps 27–30 are basically the same as steps 19–22 but are performed at each higher level in its turn.

- 31. Together, the top executive and the major unit managers review, revise, and approve their units' goals and plans (which include and consolidate the inputs and revisions of those units' subunits).
 - It is important to note that making any significant revisions in units' or subunit's goals or plans at this point usually generates a ripple of changes in goals and plans both down and across an organization. To avoid having to make these time-consuming changes, organizations generally encourage *informal* vertical and horizontal communication, coordination, and negotiation before final inputs are submitted to top management.
- 32. Together, the chief executive and the major unit managers consolidate units' goals and plans into a finalized set of organizational goals and associated plans.

The following are several important perspectives on the top-down/bottom-up process just outlined:

Vertical and horizontal integration. Note that this process involves not only vertical integration of goals and planned activities (coordination of goals and planned activities both downward and upward within units) but also horizontal integration of goals and planned activities (coordination of goals and planned activities between or across subunits within a particular unit, subunits of different units, and major units).

Variations. In practice, organizations use innumerable variations on the basic steps mentioned here.

Decision-making aspects of a goal-setting and planning process. Since decision-making concepts, principles, methods, tools, and steps are not discussed until Chapter Five, references to decision making have been minimized in order to avoid complicating the description of organizational goal-setting and planning steps. However, since decision making does take place during many of the steps outlined earlier, it must be put into perspective at this point.

Figure 2.1 on page 36 illustrates the basic relationship between decision making and goal setting and planning. It shows that regardless of the organizational level at which goal-setting and planning functions are being performed, the people involved (a) initially make tentative decisions (choices) concerning any alternative goals and plans they have formulated and (b) later make final decisions.

A Strategic Planning Process. Our discussions concerning Figures 4.1a and 4.1b were mostly couched in terms of annual goal setting and planning. So was our discussion of Figure 4.2, which illustrated the organizational steps involved in the performance of methodological steps in Figures 4.1a and 4.1b during an annual MBO process. Because strategic planning generally involves analyses of longer-range, competitive considerations and establishes contexts for annual planning in various areas, Figure 4.3 is presented at this point to help managers better design and more effectively implement complex strategic planning processes.

Figure 4.3 illustrates the basic phases and steps of a business-oriented strategic or longerrange planning process. The figure is a generic synthesis of a number of rather elaborate processes that are suggested by planning gurus or performed at large companies. Although it illustrates methodological steps rather than organizational steps, the organizational steps are usually similar to those in Figure 4.2, except that they are generally performed only at the higher levels of an organization (usually with inputs from the lower levels).

In the model, the panels for the major phases are numbered at the top from 1 to 14. Solidline arrows point from one phase to the next. They also indicate that outputs of one phase are inputs to the next phase. Dashed-line arrows indicate that outputs of one phase are inputs to one or more other phases. Note the following relationships with Figure 2.1 on page 36:

- Phases 1 through 8, which involve analyzing the situation, correspond to the analysis phase of the managerial process. Phase 10 usually involves crystallizing and making decisions about insights derived during analysis phases 1 through 8.
- Phases 9 and 11, which deal with formulating broad objectives and more specific resultsoriented goals, correspond to the goal-setting phase of the managerial process.
- Phases 12 and 13, which involve the formulation of strategies and tactics, programs and projects, and action plans, correspond to the planning phase of the managerial process.
- Some activities performed during phase 14 correspond to the planning phase of the managerial process, and some correspond to the decision-making phase of that process.
- Phases 15 and 16 correspond to the decision-making phase of the managerial process.

The term strategic planning is somewhat redundant. Good planning should always involve strategizing. Nevertheless, the term survives and has actually replaced the term long-range planning, partly because putting the word strategic in front of the word planning makes it sound so much more important, proactive, and powerful. But long-range planning has also taken on a rather negative connotation. These are several of the possible reasons: First, most line managers were not comfortable with being held responsible for longer-term performance goals that could be so easily undermined by unpredictable external forces and frequent changes beyond their control. Second, many line managers did not like being held accountable for performance goals and associated plans that had been originated by a staff of corporate planners who were not going to be held responsible for operating results. As a result, many lobbied for the dissolution of their company's planning staff. Look around at companies today. How many planning departments have you seen lately, except perhaps in some of the very largest companies? Third, readily acknowledging the first point, many management experts have been exhorting managers to establish flexible plans and lean, agile operations. (Toyota began pioneering lean manufacturing practices around fifty years ago. They were introduced to American managers by James Womack, Daniel Jones, and Daniel Roos [1991].) These practices encompass

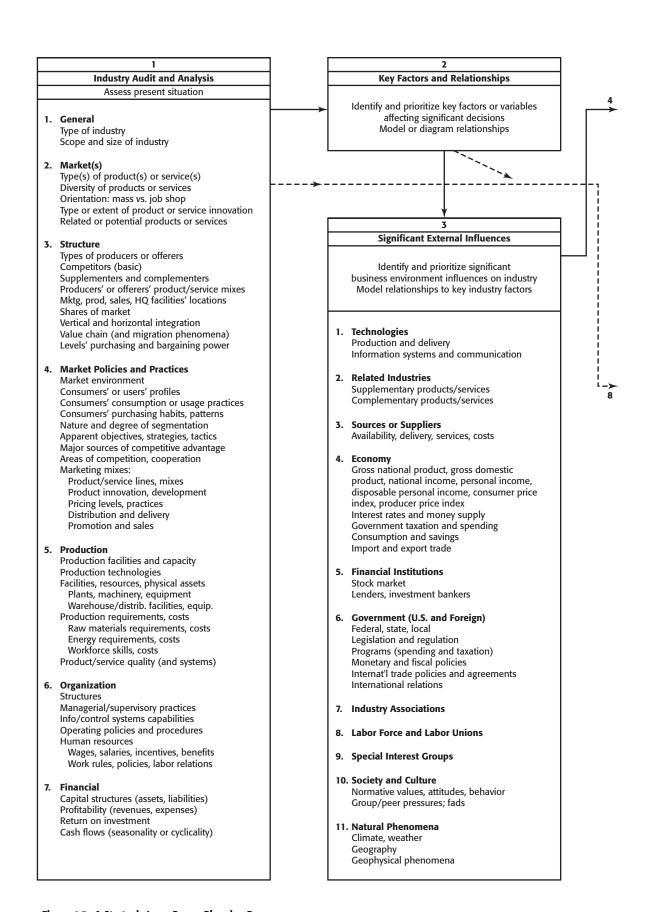


Figure 4.3. A Strategic Long-Range Planning Process

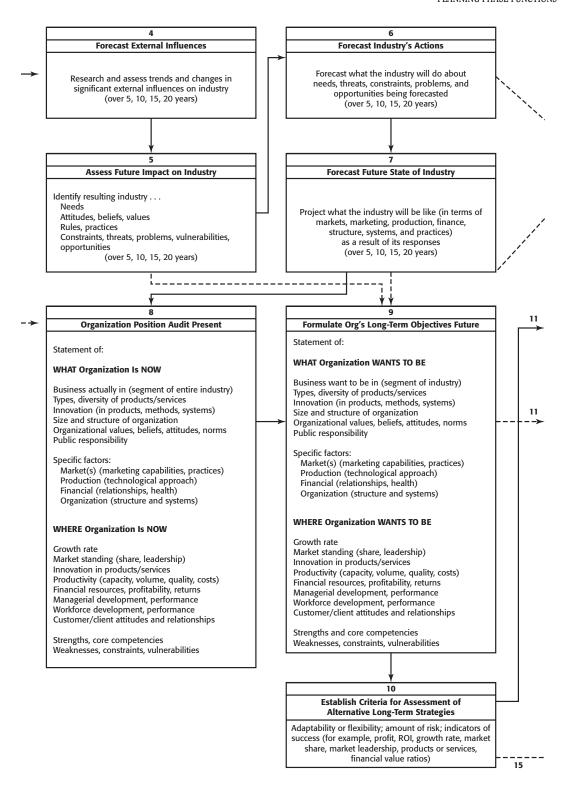


Figure 4.3 (Continued)

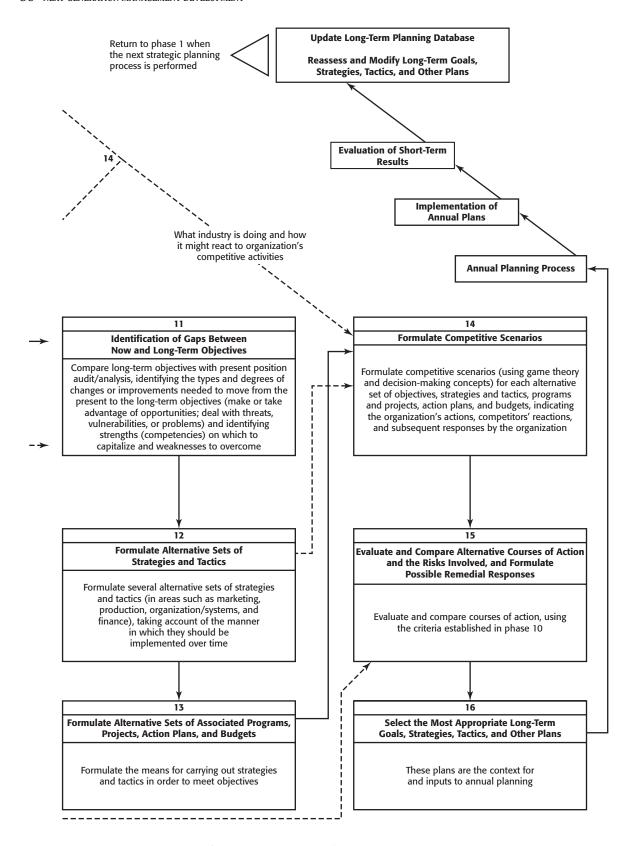


Figure 4.3. A Strategic Long-Range Planning Process (Continued)

just-in-time inventory and delivery, continuous improvement of operations, and demanddriven manufacturing scheduling. The concept of agile enterprises—which have the ability to act or react quickly in the face of accelerating technological change, more timely sales information, and more rapid responses to marketplace conditions by competitors—resulted from a study conducted by the Iacocca Institute at Lehigh University [Preiss and Goldman, 1991]. That institute is affiliated with the Agile Manufacturing Enterprise Forum, which now leads the movement.)

Nevertheless, when I (Cecil) hear managers speaking disdainfully about "long-range planning," I cannot help but play devil's advocate. I will say, "But isn't it still a good idea to scan the time horizon at least five to ten years out and try to anticipate what technological, economic, governmental, global, sociocultural, and natural trends might bring? Couldn't future events greatly affect what products or services you sell and what production costs you incur? By not looking further ahead, couldn't you possibly pass up marketplace opportunities, fail to see thorny problems shaping up, and let competitive threats sneak up on you?"

They reply, "Oh, we won't let anything like that happen. We can see things coming several years away, and that gives us plenty of time to take action."

To which I say, "But if you were to anticipate possible threats, problems, or opportunities even further out than just one or two years—perhaps even five years, wouldn't that give you more time to position yourselves even better to take advantage of opportunities, deal with problems, or combat competitive threats?"

To which they respond somewhat tentatively, "Probably."

"Well, then," I reply, "if you want to spot something far enough ahead to do a better job of dealing with it, what would you have to do to carry it off?"

Silence. They have walked right into it. If they accept that they should at least do "long-range scanning," they are going to find themselves doing at least some long-range planning—even if they must subsequently modify their plans to take account of more recently recognized developments or trends.

Once a planning process has begun with the analysis phase, it then proceeds to the formulation of goals, which are translated into strategies and tactics, which are translated into programs and component projects (with even more specific action plans), which are then translated into budgets. The following sections further describe each planning function in its turn.

GOAL SETTING

The Basics of Goal Setting

Definitions. The terms "goals" and "objectives" are often used interchangeably. Although other writers do the opposite, we prefer to use "objectives" to refer to broad aims or desired ends that continue year after year with little change—for example, "Achieve sufficient profit to finance company growth and to provide the resources needed to achieve other company objectives." We use "goals" to refer to statements of specific aims or desired ends. (People call the process of formulating these statements "goal setting" rather than "objectives setting.") A particular goal is very specific as to the following: (a) the type of result desired, (b) the magnitude of the result desired, and (c) the time frame in which the result is to be achieved. For example, "Decrease Total Operating Costs by \$100,000 (or by 5 percent) by the end of fiscal year 2008."

Purposes and Benefits of Goal Setting. Goal statements help integrate organizational activities, establish standards of performance, influence personnel's attitudes and motivation, and prescribe constraints concerning what to do and what not to do. They also provide targets or end points when planning how to get from "here to there." Remember what Yogi Berra once said: "If you don't know where you're going, when you get there you'll be lost." In addition, goals also (a) establish legitimacy (justify an organization's activities); (b) identify the end results at which organizing, staffing, and guiding activities will be aimed; (c) establish bases for measuring and evaluating results and controlling operations; and (d) establish contexts and criteria for solving problems and making decisions during the time frame(s) with which goals deal.

Properly Stated Goals Help Avoid Many Headaches. Even though goals are extremely important influences on people's motivation and behavior, managers often create additional problems for themselves because they do not (a) state goals properly and (b) state them in writing. As a result, the improperly stated goals send personnel in the wrong directions and influence them to behave in otherwise dysfunctional or undesirable ways. Unwritten goals are inherently vague and ambiguous and, therefore, leave personnel confused. It is necessary to write down goals in order to clarify them, state them properly, and make them understandable.

A well-written goal explicitly states the *specific results desired* in terms of three basic elements:

- A performance parameter is an end result, criterion, or measurement yardstick that involves some factor that is key to the organization's, unit's, or individual's success; in other words, a performance parameter measures a key element of success. Quantitative parameters involve numbers and are readily subject to measurement. Many are expressed in dollar terms, because dollars are a common, bottom-line denominator especially in business. Qualitative parameters do not involve numbers, cannot be easily measured, and usually require subjective evaluation. Therefore, quantitative parameters are generally used when possible. Examples of both types of parameters are listed in Table 4.2.
- A performance standard, level of results, or benchmark on the yardstick specifies the exact level of performance (number, dollar value, or percentage increase or decrease) desired.
- The *time frame* specifies the period of time (for example, the day, week, month, quarter, or year) by which or during which the desired results are to be achieved. See Table 4.3 for several ways to word a time frame.

A well-written goal statement also has a few other characteristics:

- It begins with an action verb—for example, increase, decrease, achieve, derive, develop, or modify.
- It states the desired end result, not simply that some activity is to be completed.
- Not only should a goal state a *time frame for completion*, but as pointed out by Santalainen and Spencer (1990) and by Winer (1983), it should also include (or have attached) a time line that indicates milestones at which progress toward end results can be measured and evaluated.
- It is specific, simply stated, and clear, and is therefore easily understood by the person or group to whom it applies.

Table 4.2. Examples of Organizational and Unit Performance Parameters

TYPES OF ORGANIZATIONS	QUANTITATIVE PARAMETERS	QUALITATIVE PARAMETERS	
All organizations	Total operating costs (or expenses) Assets and liabilities Growth rate (size, sales, output) Units' or personnel's quantifiable outputs	Organization's reputation Customer attitudes Employee attitudes	
Profit-making organizations	Total sales (\$ or #) Market share (%) Profit (before or after taxes) Net worth (retained earnings) Return on investment		
Product-oriented organizations	Production volume (#) Increase in units output (# or %)		
Service-oriented organizations	Amount of services sold (# or \$) Increase in service capacity (%)		
Nonprofit organizations TYPES OF UNITS	Value of services (\$) Amount of services delivered (# or \$) Total revenues (\$ of income, grants, or gifts)		
All types of units	Total operating costs (\$) Operating improvements recommended (#) Operating improvements approved (#) Recommendations approved (%) Personnel receiving training (#) Training hours (#) Personnel improving performance (# or %) Absenteeism, tardiness, or turnover rates Absenteeism, tardiness, or turnover costs Increase or decrease in the above parameters (%)	Attitudes of other units toward unit Personnel's attitudes	
Clerical or accounting	Reports or cases processed (#) Reports or cases in backlog (#) Processing time per report or case Reports completed on time (# or %) Errorless reports or cases completed (# or %) Filing or clerical errors (#) Increase or decrease in the above parameters (%)		
Sales	Total sales (\$ or units) Sales calls (#) Sales or orders per call (\$ or #) Cost of sales (total \$ or \$ per unit) Cost per sale, order, or call (\$) Orders filled correctly (# or %) Orders filled on time (# or %) Customer complaints (#) Increase or decrease in the above parameters (%)	Severity of customer complaints Customer attitudes	
Production (For service-providing units, one might replace "units of output" with "service calls")	Total units output Work hours per unit produced or sold Costs of payroll, materials, maintenance, or equipment replacement (\$) Costs per unit (total, payroll, materials) (\$) Units of backlog (#) Rejection rate Cost of materials waste (\$) Product life Units returned for exchange or repair (#) Customer complaints (#) Increase or decrease in the above parameters (%)	Severity of customer complaints	

- It does not explain why. (An explanation should not be necessary if the group or individual to whom the goal applies has participated in its formulation.)
- It does not specify how the goal is to be achieved. It leaves the "how" to the group or individual to whom it applies. This encourages and enables individuals to plan and be creative and resourceful.

Examples of properly written goals are provided in Table 4.3.

It should be noted, however, that, according to research by Rishell and Becker (2004) and St. John (1991), stating goals well is not enough. Goals must also be tied to performance appraisal, so that personnel understand that their performance will be partly evaluated on how well they help achieve individual, unit, and organizational objectives.

Although organizations provide training in goal setting, managers (and leaders) continue to make significant mistakes.

First, many lists of performance goals are essentially glorified job descriptions rather than statements of desired end results. For example, one organization had fifty "performance objectives" for each of its personnel. The first forty-five amounted to a detailed job description that specified what a worker was to *do*. Only the last five actually dealt with some end result that he or she was expected to *achieve*. If the first forty-five had been objectives, they would have been far, far too many. Personnel cannot possibly sort out all the conflicts and trade-offs among so many demands on their time and effort.

Second, many goal statements do not state goals. In many cases, they are actually statements of strategies, or tactics, or programs, or projects. For example, especially in bureaucratic organizations, people often write organizational, unit, and individual performance goals that could more accurately be called "administrative" or "housekeeping goals," which might say, for example, "Revise all job descriptions by [a specific date]"; "Restructure the [unit] by [a given date]"; or "Revise the Policies and Procedures Manual by [a particular date]." Such statements, while specifying some kind of result, do not specify the end results that the activities involved are meant to achieve. Put another way, they are not written around parameters that are key indicators of the unit's or organization's success. Therefore, these goals should be either (a) included among administrative goals or (b) treated as projects, which are normally outlined during a later stage of the planning process (that is, the planning stage, in which goals are translated into programs, projects, and plans of action for achieving end results).

As mentioned earlier, there are sequential, contributory, and supportive relationships among all these aspects of plans. Many goals and plans documents indicate that the managers who wrote them are unaware of the relationships. Goal setters and planners must understand the definitions, examples, and sequence of inputs and outputs provided in Table 4.1 and in Figures 4.1a and 4.1b.

Third, many managers use inappropriate performance parameters and establish unrealistic or unfair standards of performance.

Why do mistakes such as these occur so frequently? Inadequate education and skill development are the biggest reasons. For example, MBA programs thoroughly cover the following: (a) the purposes and benefits of goal setting; (b) types of goals or objectives; and (c) analytic considerations involving the parameters, or yardsticks, for measuring performance and the desired standards or levels of performance. However, they place little emphasis on developing the skills involved in writing statements of goals, strategies, tactics, programs, and projects. On the other hand, management seminars cover some of the whys and wherefores of goal setting, and they

Table 4.3. Examples of Properly Stated Annual Goals

For Whom	Goal
	PERFORMANCE GOALS
Organization Unit Unit manager Individual	Increase total annual sales [the parameter] by 10 percent (from 10,000 to 11,000 units) [the benchmark or performance standard] for the fiscal year ending on December 31, 20 [the time period].
Organization Unit Unit manager Individual	Increase the total annual number of units produced [the yardstick] by 10 percent (from 5,000 to 5,500 units) [the benchmark or performance standard] during the coming fiscal year, 20 [the time frame].
Organization Unit Unit manager	Reduce total annual operating expenses [the parameter] to \$95,000 (from \$100,000, or by 5 percent) [the benchmark or performance standard] for the year ending December 31, 20 [the time period].
Unit Unit manager Individual	Increase the average annual dollar amount of orders per sales call [the criterion] by 10 percent (from \$2,000 to \$2,200) [the benchmark or performance standard] for FY 20 [the time frame].
	FINANCIAL, FACILITIES, AND HUMAN RESOURCE GOALS
Organization Unit Unit manager	Increase working capital [the parameter] to \$96,000 (from \$80,000, or by 20 percent) [the benchmark or performance standard] by the fiscal year's end on December 31, 20 [the time period].
Organization Unit Unit manager	Increase annual plant/production capacity [the yardstick] to 88,000 units (from 80,000 units, or by 10 percent) [the benchmark or performance standard] by year's end on December 31, 20 [the time period].
Organization Unit Unit manager	Increase the total workforce [the parameter] by 10 percent (from 500 to 550) [the benchmark] by the end of fiscal 20 [the time period].
	DEVELOPMENT AND SATISFACTION GOALS ^a
Organization Unit Unit manager Individual	Increase formal training hours in management [the yardstick] to five per month (from two per month) [the benchmark or performance standard] during each of the next twelve months of fiscal 20 [the time frame].
Organization Unit Unit manager	Obtain professional certification [the criterion] for 50 percent of personnel (up by 100 percent from 25 percent) [the benchmark or performance standard] during fiscal 20 [the time frame].
Organization Unit Unit manager	Reduce the average monthly absenteeism rate [the yardstick] by 50 percent (from 10 per month to 5 per month) [the benchmark] during all twelve months of fiscal 20 [the time frame].

Notes: [] Bracketed phrases denote the three elements of a goal and are not actually included in goal statements; they are used here for instructional purposes.

^() Phrases in parentheses may be used to establish reference numbers for greater clarity—for example, this year's performance benchmark compared with last year's.

^aDevelopment and satisfaction goals are types of human resource goals.

train participants to write good goal statements. However, they do not always have participants practice formulating (writing statements of) strategies, tactics, programs, projects, and action plans. Furthermore, they do not always cover the analytic considerations discussed later in this chapter.

Granted, many of the mistakes and resulting problems mentioned earlier stem from poor or inadequate analysis of the organization's operations during the analysis phase. But this, too, can be attributed to inadequate training.

Beyond the Basics: Analytic Considerations in Formulating Effective Goals

Because goals exert significant influences on people's motivation and behavior, it is extremely important that they contain the right parameters, performance benchmarks, and time frames. If they do not, they may elicit attitudes and behavior that are actually dysfunctional for organizational, unit, or individual performance.

Goals poorly stated by inadequately trained managers may have been largely responsible for the fate of management by objectives. MBO seminars taught managers how to write goals, but they did not deal with the parameter and benchmark considerations. (Nor, as we mentioned, did they always distinguish between writing goal statements, strategy statements, tactics statements, and program or project statements.) As a result, managers did not formulate goals and plans very well, and the results of their MBO processes suffered. MBO fell into disfavor and was replaced by "management of objectives" and "management by results" (partly because it was believed that results were what managers really wanted). Disgruntled managers have often said, "MBO just didn't work well for us, so it must not be a very good concept." They were assuming that they had implemented MBO well in the first place. Actually, they had not. And that was largely because they were not taught all they needed to know. It was also because managers simply did not give objectives enough thought. Peter Drucker once said, "Management by Objectives works if you first think through your objectives. Ninety percent of the time vou haven't."

As shown in Figure 2.1 on page 36, analysis is an extremely important step toward goal setting. In order to write effective goals, many factors and issues must be carefully analyzed during the analysis phase—before even beginning the goal-setting function.

Three major questions should be asked when thinking about the parameter (yardstick) considerations and the performance standard (benchmark) considerations discussed in the next two sections:

- 1. How will this goal—as currently formulated—cause the group or individual to behave?
- 2. Will that behavior be functional or dysfunctional for the organization's, unit's, or individual's success?
- 3. If it might be dysfunctional, what other parameter, performance level, or time frame would be better to use?

Once students or seminar participants become practiced in the why and how to, they are ready to learn some additional considerations for formulating goals.

Parameter (Yardstick) Considerations. In choosing the parameters by which success will be measured, it is important to consider the following elements:

Key elements of success. The parameters used should involve elements or factors that are key to the organization's, unit's, or individual's success.

Quantifiable versus subjective parameters. In general, quantitative (numerically expressed) parameters should be used whenever possible. However, a qualitative (subjective) parameter should be used if (a) it is more important to an organization's, unit's, or individual's success than some alternative quantitative parameter, and (b) there is no quantitative parameter that would be a good indicator of subjective results.

Quantity versus quality. Two points are important to note here. First, because both quality and quantity of performance are key to organizational, unit, and individual success, performance or productivity goals (particularly for units and individuals) should include one or two qualityrelated goals and one or two quantity-related goals. Without at least one quality-related goal, people tend to sacrifice quality for the quantity of output. On the other hand, without at least one quantity-related goal, people tend to sacrifice efficiency and cost minimization for quality. Second, because there are often trade-offs between the quality and the quantity of outputs or results (that is, one is often increased at some expense to the other), and because one is generally somewhat more important for success than the other, the trade-offs and relative importance of the two types of parameters should be considered very carefully before quality- and quantityrelated goals are finalized.

Short-term versus long-term implications. Given that short-term goals should contribute to long-range goals (and should therefore be formulated within the context of long-range goals and plans), the parameters chosen for annual goals should not elicit behavior that will significantly jeopardize performance and success over the longer term. Although this can apply to a single goal (parameter), it particularly applies to the whole group of short-term goals for an organization, a unit, or an individual.

Ability to control or influence the parameter (results). Neither a unit (a responsibility center) nor an individual should be held responsible or accountable for a performance parameter and end result that it, he, or she cannot control or at least influence. An inability to control or at least influence results usually leads to frustration, resentment, decreased motivation, and performance problems. Therefore, if it is determined that the parameter under consideration cannot at least be influenced, one should analyze the parameter and try to identify some aspect of that parameter (or some related parameter) that can be controlled or influenced. If this effort is unsuccessful, one should select a more appropriate parameter.

Responsibility centers. Although the issue of responsibility centers is normally considered during the budgeting stage of the planning process, it should be given initial but careful consideration here. A responsibility center is an organizational unit with a well-defined mission or function, headed by a manager who is responsible for ensuring that the unit accomplishes its mission and goals in an efficient manner and who is accountable in some way for the unit's performance (usually monetary results). The following are four main types of responsibility centers:

- Expense centers. These centers, the largest group, can be held responsible only for managing the costs of their inputs (such as materials and labor). They cannot control or significantly influence the prices charged for their outputs. Thus, although expense centers contribute to profitability by keeping costs under control, they do not actually make a profit.
- *Revenue centers*. These units are held responsible for the sales revenue generated. (Revenue equals unit price times unit sales volume.) To be held responsible for revenue,

they must be able to control or at least significantly influence the prices that are being charged for the products or services being sold.

- Profit centers. In true profit centers, the managers are able to control or influence—and can therefore be held responsible for—both elements of profitability: input expenses and the revenues generated.
- Investment centers. In investment centers, the managers can control input expenses, output prices and revenues, and, thus, profits. They also have control over (that is, authority to make decisions about) the physical and financial assets being used to sustain operations. Therefore, they can be held responsible or accountable not only for profits but also for some specified relationship between profits and the assets being employed (for example, return on investment).

Number of goals. The number of goals written for an organization, unit, or individual should be neither too many nor too few. In effect, each performance parameter or criterion is meant to point or lead someone in a certain direction. Too many goals (parameters) lead people in too many directions at once, often creating confusion, frustration, and problems. Too few goals (parameters) lead people in too few of the right directions, which can also cause problems.

Organizations can have anywhere from one to eighteen goals, but the average business firm has about five or six. A better number is about nine or ten, so that an organization has at least one goal in each of the key areas identified by Peter Drucker and others (see page 69). Ten goals are not too many for an organization as a whole, because they will be divided up among major units (responsibility centers) as they are being translated into guideline goals for those units.

Units and subunits should have at least five or six goals in order to plan and monitor the major aspects of their operations. Three or four goals should deal with various quantitative and/or qualitative aspects of performance. Two should deal with increasing the development and job satisfaction of unit members.

Individuals, though they are often given anywhere from one to ten goals, should have five to seven goals. Three or four should deal with key performance parameters. Two should deal with job-related personal development and satisfaction.

Priorities among goals. Organizational, unit, and individual goals must be prioritized—that is, ranked in order of relative importance. Priorities are more often based on the importance of the performance parameters involved than on the performance standards and time frames involved. Prioritizing goals often necessitates adjustments in order to resolve the conflicts and trade-offs that can exist among parameters.

Performance Standard or Benchmark Considerations. A performance standard specifies the target, benchmark, or desired level of performance. The following are some matters to consider when setting the benchmark on a performance yardstick:

Job description. A performance standard should be based on an accurate and up-to-date description of a unit's mission or an individual's job. It should never be applied to a task that is not a current or planned part of a mission statement or job description.

Type of standard. The most appropriate of three types of performance standards should be used. Engineered standards (objective or quantitative standards) are usually established for jobs in which the work and outputs involved can be measured effectively (for example, by using time and motion studies to measure work or by using counting and quality assurance methods to measure outputs). Non-engineered standards are more subjective. They are usually established for jobs that are varied, diversified, and not subject to effective measurement. Such jobs are found in management, research and development, engineering, marketing, sales, customer service, professional occupations, and creative occupations. Although it is easy and often useful to consider historical standards (past levels of performance) when developing standards for the coming period, future standards should not be based solely on past performance. Past performance is not necessarily a good indicator of ideal future performance.

New parameters. If previously used performance parameters are determined to be inappropriate, and if goals are written around new or different parameters, it may be necessary to establish a new engineered standard (for a quantifiable parameter) or to develop a new non-engineered standard (for a subjective parameter).

Performance standards of other units or individuals. Because jobs are often interrelated and interdependent, the formulation of a performance standard for one unit or individual should take into consideration the standards (target levels of output or results) that are being formulated for other related or interacting units or individuals.

Effectiveness of measurement statements. Performance benchmarks should be stated in the most specific and effective terms possible. The following are several means for expressing standards (benchmarks) and subsequently measuring performance:

- Using raw numbers (such as dollars, number of units, or percentages) is generally considered to be the most effective means.
- Using ratios or indices is generally considered to be the next most effective means.
- Using scales (for example, from a high of 10 down to a low of 1, or "outstanding, excellent, average, poor") is generally considered to be the third most effective means.
- Using descriptions of results is generally considered to be the least effective means.

Challenge versus the probability or expectation of attainment. In order to maximize performance, managers should set high but reasonable standards. Standards should be high enough to challenge personnel. If they offer too little challenge, personnel may achieve them too easily. Consequently, any positive feedback they experience as a result of their easy success will not be especially gratifying and will do little to enhance their motivation and morale. On the other hand, standards should not be so high that personnel cannot expect to achieve them even if they put forth maximum effort and use their capabilities to the fullest. Personnel's motivation to do their best is undermined by having little expectation of achievement. Thus, high standards should reflect a rational balance between the degree of challenge and the probability of achievement, so that by doing their best, personnel have a reasonable chance to experience meaningful positive feedback that increases fulfillment, morale, and motivation.

Other Important Considerations or Issues. The following are several additional issues to consider when formulating goals:

Compatibility and synergy among goals. It is preferable that the goals written for a particular unit or individual be both compatible and synergistic. Goals are compatible when they do not work against or conflict with each other. Goals are synergistic when (a) the incompatibilities or conflicts among them are balanced through prioritization and (b) all the prioritized goals work together to maximize the overall performance of the unit or individual. In many cases, conflicts do exist, especially between quality-related and quantity-related goals. Therefore, it is important to ensure that the goals written for a unit or individual are at least synergistic. Equally important, the goals of one unit or individual should be compatible (coordinated and synergistic) with the goals of other units or individuals, especially when the units' missions or individuals' responsibilities are interrelated or interdependent. Compatibility and synergy among units' and individuals' goals are increased when personnel participate in the goal-setting and planning process.

Congruence with personal goals. The organizational, unit, or individual performance goals that apply to any particular individual should be more or less congruent with that individual's personal or life goals. In general, a person is more inclined to put forth maximum effort if he or she perceives that achieving various performance goals will help achieve his or her own personal goals. It is easier to create organizational, unit, and individual goals that are congruent with employees' personal or life goals when individuals take part in the goal-setting and planning process. This not only gives them an opportunity to contribute their knowledge and experience to the formulation of goals but also enables them to influence parameters and performance standards in ways that can enhance their personal goal fulfillment. Also, during participative goal-setting sessions, managers have an opportunity to help subordinates recognize how achieving organizational goals can contribute to achieving their own personal goals.

Incentives. Although incentives are often considered separately during the formulation of compensation systems, they should also be considered during the goal-setting phase of the planning process.

Incentives should motivate people to work harder in the right directions. Although the parameters around which goals are written are aimed at pointing people in the right directions, and although the incentives tied to the performance standards associated with those parameters are basically aimed at increasing people's motivation and effort, the incentives themselves may adversely influence direction. This can be the case when incentives are tied to the wrong parameters or when they muddle or even override priorities and, as a result, influence people to work harder in wrong or less appropriate directions.

Since an incentive is tied to a performance standard, the level of that standard largely determines the potential amount of reward. Consequently, if the standard is too low and too easy to achieve, the organization may pay more for performance than it should. On the other hand, if the standard is too high and is perceived as being too out of reach, it may actually act as a motivational disincentive. Thus, it is especially important that standards be reasonable as well as challenging when they are linked with incentives.

Although incentives can be designed for either individuals or groups, keep in mind that individual standards are usually most appropriate when the performance of one individual does not significantly affect and is not significantly affected by the performance of other individuals. Also remember that in general, the greater the rewards for individual performance, the more competitiveness is increased and cooperation and teamwork are decreased. Therefore, it is usually appropriate to establish at least some group performance goals (parameters) and incentives, especially when the jobs involved are highly interdependent. In fact, in order to achieve a desirable balance between individual and group performance, it is often advisable to base incentives on some combination of individual and group performance parameters and standards.

Before finalizing goals, remember to ask this most important question: How might this goal (or set of goals) influence the group or person to behave?

PLANNING

While the word "planning" can refer to the overall process involving goal setting and planning (and even making tentative decisions), it can also refer to formulating strategies and tactics, programs and component projects, and specific action plans.

The Basics of Formulating Plans

Definitions. In a problem-solving context, planning is equivalent to formulating alternative solutions (including action plans for their implementation). In a managerial context, planning basically means formulating alternative courses of action for reaching goals. More specifically, it means thinking about and outlining in advance what things should be done, who should do which things, and when and in what order things should be done.

Purposes of Planning. The foremost purpose of planning is to bridge the gap between the present situation (where things are now) and the desired situation (where things are intended to be once goals are achieved). Other purposes include the following: (a) to means-orient activities in order to reach goals successfully; (b) to crystallize and specify the means—for example, what specific tasks should be performed by whom and in what order; (c) to maximize the effectiveness and efficiency with which activities are performed, thereby helping to save time, effort, and money; (d) to outline activities for changing the organizational structure and staffing the organization so as to support the implementation of operating unit's programs, projects, and action plans; (e) to help communicate the what, who, when, and how throughout an organization; and (f) to establish bases for measuring and evaluating both progress toward end results and the end results themselves.

Management consultants and trainers often encounter problems when those doing the planning do not fully understand (a) the definitions of various types of plans, and (b) the supporting role that each type of plan plays. Not only must managers fully understand Table 4.1, which describes how each goal-setting and planning product is input for formulating the next product, but they must also keep in mind that for each type of organizational, unit, or subunit goal mentioned in Figures 4.1a and 4.1b, there is an associated, similarly named set of strategies, tactics, programs, and projects. For example, a corporate productivity goal would have an associated set of corporate productivity plans (corporate productivity strategies and tactics and corporate productivity programs and projects).

Strategies and Tactics. As described in Table 4.1, strategies are broad competitive approaches (large-scale means) for performing successfully in the marketplace and accomplishing one or more major goals. They constitute the broad "what to do" in order to achieve long- and shortterm goals. They primarily deal with competitive phenomena (market-related factors), but they also deal with technological forces, economic forces, productive capabilities, and financial considerations, all of which affect organizational performance and success in various ways. Strategies are usually oriented to the long term, but they can also involve the short and intermediate terms. As shown earlier in Figure 4.1a and Table 4.1, organizational strategies (a) are formulated based on organizational goals and (b) provide a context for formulating (and implementing) associated substrategies and tactics, programs and projects, and action plans.

Several major grand strategies have been identified by Arthur G. Bedeian (1993):

- Stable growth: steadily improving performance and slowly but steadily expanding market presence, territory, or share
- Significant or accelerated growth: increasing sales or market share significantly and/or more quickly, usually by focusing on major improvements in various performance areas (perhaps through diversification, acquisitions, or joint ventures)
- Retrenchment: focusing on improving performance and increasing cash flow (perhaps by reducing costs, pruning operations, or divesting)
- Combinations: (a) using two or more strategies at the same time (for example, accelerating growth while retrenching in certain areas), or (b) using two or more strategies in some sequence (for example, using stable growth in the short term to strengthen gains in the marketplace and then more aggressively accelerating growth)

Tactics are more specific or detailed means (smaller-scale maneuvers or actions) for accomplishing specific goals within the context of broader strategies. They constitute the specific "what to do" in order to meet long- and short-term goals. Like strategies, they are usually competitively oriented. As shown in Table 4.1, tactics (a) are formulated based on strategies; (b) are aimed at supporting strategies; and (c) provide a context for formulating (and implementing) programs and projects.

As an example, Philip Kotler and Ravi Singh (1981) once categorized market-oriented tactics in three major groups, each having a military connotation. An example of an offensive (or attack) tactic is to directly challenge the market leader with substantial price reductions. An example of a preemptive tactic is to aggressively become the first to gain a foothold in a new or more specialized market. An example of a defensive tactic is to improve competitive capabilities by, for example, lowering prices, increasing product line depth, or increasing product line breadth.

Programs, Projects, and Action Plans. *Programs* are large or broad, structured (coordinated) undertakings that constitute the broad "how to" for reaching goals. They involve groups of people and (a) are formulated based on goals, strategies, and tactics; (b) are aimed at implementing strategies and tactics so as to achieve goals; and (c) provide contexts and frameworks for formulating more detailed action plans (and budgets). For example, an organization might create a program to reduce organization-wide costs ("Cost Reduction Program"), a program to introduce a new product line ("New Product Program"), a program to expand its operating facilities ("Facilities Expansion Program"), or a program to generate more operating capital ("Capital Generation Program").

Projects are subsets or component parts of programs. For example, an organizational program to introduce a new product line might include the following: an R&D project to design the product line; an engineering project to design production facilities; and a marketing project to establish means for introducing the product line into the marketplace (perhaps through subprojects involving pricing, packaging, promotion, and distribution). Note that a program or project is established to accomplish something. Also, it has a name that broadly describes the nature, scope, and end result of some group effort.

Action plans are predetermined, crystallized, coordinated sequences of specific steps (tasks or activities) for carrying out and completing the programs or projects of which they are an integral part. Constituting the specific "how to" for implementing programs and projects and reaching goals, they outline the following in detail: (a) what specific activities are to be performed; (b) who is responsible for performing which activities; (c) the logical, effective, and efficient sequences of activities to be performed (for example, who must perform their task first so that one or more other people can perform theirs).

Beyond the Basics: Using Tools for Visualizing Planning Details

A planning problem often encountered by consultants and trainers is that many planners do not use visualization tools that would help them handle the ever-increasing amounts and complexity of information involved in planning.

Plans for implementing programs or projects can be extremely complicated. Even plans for implementing solutions to day-to-day problems can be complicated. As this book points out many times, the human mind is incapable of handling more than five to nine variables at one time without assistance. Therefore, in order to deal with details or complexities, we must use information visualization tools to help us outline, coordinate, perform, and keep track of activities and associated costs over time.

Visual tools break down a project into a number of simpler parts: (a) subprojects; (b) "work packages" (series of similar or directly related activities); or (c) more finite or specific activities. They indicate on a time line when each element is to begin, who is to perform it, how long it will take, and when it is to be completed. They show that many activities can be occurring at the same time, but some elements must be completed before others can begin. In Figure 4.4, for example, the house's siding cannot be installed until its foundation has been laid and its frame erected. (The scheduled time for an activity is initially indicated by a lightly shaded bar. Progress toward scheduled completion of that activity is indicated by darkening the appropriate portion of the shaded bar. Here the project is in the tenth week, which means that the installation of millwork is one week behind schedule.)

One major visual planning tool is a Gantt or bar chart, such as the example in Figure 4.4. Another tool is a Program Evaluation and Review Technique (PERT) network, such as the example in Figure 4.5. (The dashed lines in Figure 4.5 indicate that because a significant portion of an activity such as activity 5 has been completed, activity 6 can begin.) Still another visual planning tool is a Critical Path Method (CPM) network (AT&T Business Research Division, 1963; Dean, 1962), which is very similar to a PERT network. Diagrams such as those described in this

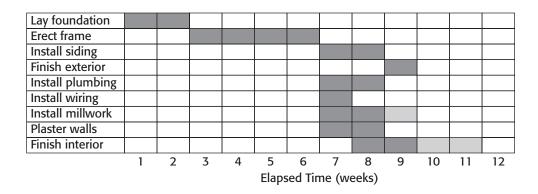
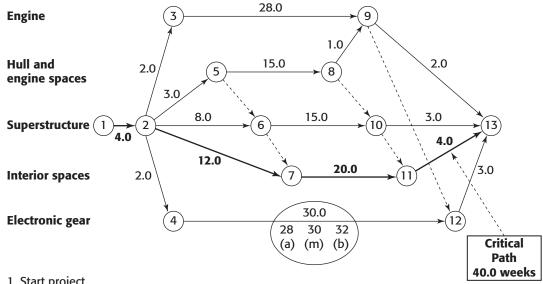


Figure 4.4. Simplified Bar Chart (Gantt Chart) for the Construction of a House



- 1. Start project
- 2. Complete plans and specifications
- 3. Order custom engine and controls package
- 4. Order custom electronic equipment
- 5. Begin hull construction
- 6. Begin superstructure construction
- 7. Begin interior spaces construction
- 8. Hull completed; complete engine space
- 9. Install engines
- 10. Complete superstructure
- 11. Complete interior spaces and appointments
- 12. Install engine controls and electronic gear
- 13. Yacht completed
- a = most optimistic time (least time) required for an activity
- m = most likely or realistic time required
- b = pessimistic (most) time required (considering adverse contingencies)

Estimated time required =
$$\frac{a + 4m + b}{6}$$

Figure 4.5. Simplified PERT Network for Building a Seagoing Luxury Yacht

Notes: Times on arrows are indicated in weeks. Time lines are not drawn to scale. Some lines include dead (waiting) time.

paragraph can also be used—and should be used more often—to plan and to manage the implementation of solutions to everyday problems.

BUDGETING

The Basics of Budgeting

For an organization to implement its programs and projects and continue its ongoing operations, it must use the financial and nonfinancial resources available to it. Examples of financial resources include cash and other assets that can readily be converted to cash (such as securities). Examples of nonfinancial resources include human resources (personnel) and physical resources such as plant and equipment. The procurement of nonfinancial resources generally requires the expenditure of financial resources. Usually, however, an organization does not have all the resources necessary to implement all the programs, projects, and ongoing operations that it would like to implement. Organizational resources are usually limited; in fact, they are often scarce. Therefore, an organization must budget its available resources.

Definitions. Budgets are the outputs of the budgeting process. While many people think of budgets as being financial in nature, a number of budgets also deal with nonfinancial aspects of operations.

Financial budgets, which have been called "the dollarization of plans," are statements of anticipated or planned results of operations in dollar terms: (a) anticipated or planned revenues (income) and (b) anticipated or planned costs (resource requirements). An example of a financial budget is the marketing department operating budget in Table 6.1. Examples of three other budgets are provided on the CD-ROM: A corporate profit or loss statement (operating statement) can show both budgeted (planned) and actual figures (at the end of an accounting period). A corporate balance sheet, which contains figures for assets and liabilities, can also show budgeted (planned) and actual figures (at the end of an accounting period). The same applies to a cash budget. When these and other budgets are used to plan, anticipate, or project financial results at the beginning of an accounting period, they are called *pro forma* operating, balance sheet, or cash budgets.

Nonfinancial budgets are statements of anticipated or planned results involving nonfinancial aspects of operations—for example, total unit sales volume, total units of production, total required number of direct labor hours, total required number of machine hours, or floor space utilization.

Purposes and Benefits of Budgeting. Budgeting helps means-orient activities toward achieving goals. It is the part of the planning process (and the management control process) that is aimed at planning the effective and efficient use of limited resources. It focuses personnel's attention on their use of scarce resources. It crystallizes and specifies who is to generate or use how much of which resources over a specific period of time. It helps ensure the most effective, efficient allocation of limited resources. And it establishes bases for controlling resources.

The budgetary process involves these basic phases and steps:

- 1. Determine resource requirements. Identify the resources (facilities, equipment, materials, and personnel) that will be needed in order to carry out planned programs and projects as well as ongoing operations.
 - Cost out resource requirements for which expenditures will be made—that is, translate these resource requirements into monetary (dollar) terms.
 - Translate nonfinancial resource requirements into nonmonetary terms.
- 2. Determine funding constraints. Determine the total internally generated and externally procurable financial resources that will be available to fund ongoing operations, existing programs and projects, and new programs and projects.
- 3. Allocate resources. Determine the amount of available resources that will be allocated to and used by each organizational unit during the long-term or short-term time period under consideration.

Beyond the Basics: Budgeting and Its Place in a Planning Process

Most general management seminars do not teach the budgeting process. This section offers insights that can help readers deal with several of the most common budgeting problems.

The first problem is that many organizations—especially smaller ones—still "plan" in the traditional manner. Instead of initially doing serious analysis, goal setting, and planning and then formulating budgets based on well thought-out goals, strategies and tactics, and programs and projects, they take a much quicker and less effective approach. For example, it is quite common to simply adjust the prior period's expense and revenue items to take account of factors such as inflation and anticipated or desired changes in levels of operations during the next period. Hopefully, earlier discussions and illustrations (such as Table 4.1 and Figure 4.1a) have shown the efficacy of performing the entire sequence of planning phases and how each step in the process provides inputs to the next.

The second budgeting problem, often lamented by corporate controllers, is that many managers do not really understand the budgeting process itself. Neither do they distinguish well between the methodological and organizational steps—that is, (a) where the budgetary process fits into the overall planning process or (b) where their goal-setting, planning, and budgeting efforts might fit into their organization's planning process. Figures 4.1a, 4.1b, and 4.2 were designed to help increase understanding of these issues.

To put these issues into a clearer perspective, look at Figure 4.6. This figure illustrates the budgeting process and how it fits within the context of an annual top-down/bottom-up goalsetting and planning process, which was described earlier in this chapter in the section "The Planning Phase in General." Figure 4.6 would also apply to a strategic or long-range goal-setting and planning process. Even though this approach is an ideal and is not always used in the real world, the figure is extremely useful because it illustrates so much about budgets, their interrelationships, and their relationships to the goal-setting, planning, and budgeting process. Figure 4.6 can be best explained by relating it to Figures 4.1a, 4.1b, and 4.2.

First, look at the three boxes on the left side of the figure (under the heading "Top Organizational Level"). Note that each box is labeled with the corresponding organizational process step (OPS) at the top of the box. (Remember that the organizational process steps are illustrated in Figure 4.2 (page 74) and are described earlier in this chapter in the section "The Planning Phase in General.")

Next, note that three wide boxes stretch from the left page across onto the right page. The top box is for marketing department budgets; the box across the middle of the two pages is for production department budgets; and the wide box at the bottom of the two pages is for the budgets of other departments or units (here lumped together simply to save space). These three boxes provide a much more detailed illustration of the unit or departmental budgets and budgeting process shown in the fourth panel of Figure 4.1b on page 71. Similarly, boxes in the figure's far right column [under OPS 32] provide a more detailed illustration of the organizational budgets and top management budgeting process shown in the fourth panel of Figure 4.1a on page 70.

Now note that, as shown by arrows in the figure, most of which point from left to right, the budgeting process generally involves preparing budgets in a sequence of inputs and outputs. On the left-hand page, the three types of departments' program and project budgets (listed in the middle column of the left page) are the inputs used to formulate their departmental accounting and resource management budgets (listed in the column to their right), which in turn are used to prepare their departmental operating budgets (listed in the middle column of the right-hand page), which are finally used to prepare the organizational or corporate budgets (listed right column of the right page).

The next section further describes the basic organizational process steps and the budgets that are formulated.

- OPS "X": Many organizations have their major units submit the following inputs to the top management level prior to OPS 1: (a) preliminary or proposed goals, plans, and budgets; and (b) the previous period's budgetary figures (budgeted, actual, and variance figures).
- OPS 1: Based on units' initial inputs, top management formulates broad, tentative goals, plans (programs and projects), and budgets for (a) the organization as a whole, (b) functional areas, and (c) resources and structural areas.
- OPS 2: Based on broad, tentative organizational goals, plans, and budgets, top management formulates guideline goals, plans (programs and projects), and budgets to be used as inputs by major units or departments.
- OPS 3: As shown just to the right of the first three boxes, top management passes the guideline inputs to the major unit level.

Next, note the long shaded bar that extends across the top of the figure. This represents the activities indicated in Figure 4.1b. It also represents organizational process steps 4-32, illustrated in Figure 4.2. Also note that budgets of the marketing, production, and other departments are shown in the three wide boxes beneath organizational process steps 4 through 31.

- OPS 4-28: The major units or departments (and their subunits) translate their unit or subunit guideline inputs into unit or subunit goals, plans, and budgets. Note the two sets of right-, left-, up-, and down-pointing arrows in the shaded rectangle. They are there to remind readers that because each unit's or subunit's goals, plans, and budgets can significantly influence other units' or subunits' goals, plans, and budgets, all units and subunits should coordinate their efforts as they formulate their goals, plans, and budgets.
- OPS 29: Major units or departments finalize their unit-specific goals, plans, and budgets pending top management's review, possible modification, and approval.
- OPS 30: Major units or departments pass their "finalized" outputs up to top management.
- OPS 31: Top management reviews, modifies (if necessary), finalizes, and approves units' or departments' respective sets of goals, plans, and accompanying budgets.
- OPS 32: Top management incorporates major units' or departments' goals and plans into organizational goals and plans. It summarizes and consolidates units' budgets in various organizational budgets.

At this point, we can address a third budgeting problem: many managers do not understand the roles that program and project budgets play in a planning process. Table 4.4 shows an example of a program or project budget.

Program and project budgets are important for two reasons: First, they are the basic links or bridges between the earlier goal-setting and planning processes and the subsequent budgeting process. Second, they are the bridges between departmental plans (programs and projects) and virtually all the other departmental budgets shown in Figure 4.6. They translate departmental programs and projects (and associated action plans) into financial terms. (Note in Figure 4.6 that P/P in, for example, the marketing department's "Operating P&P budgets" stands for "program and project." These and other abbreviations have been used to save space.)

At the beginning of a departmental budgeting process, it is important that the department prepare a specific program or project budget for each program and project it is seriously considering. Note that these budgets have been placed in four main categories that correspond to the types

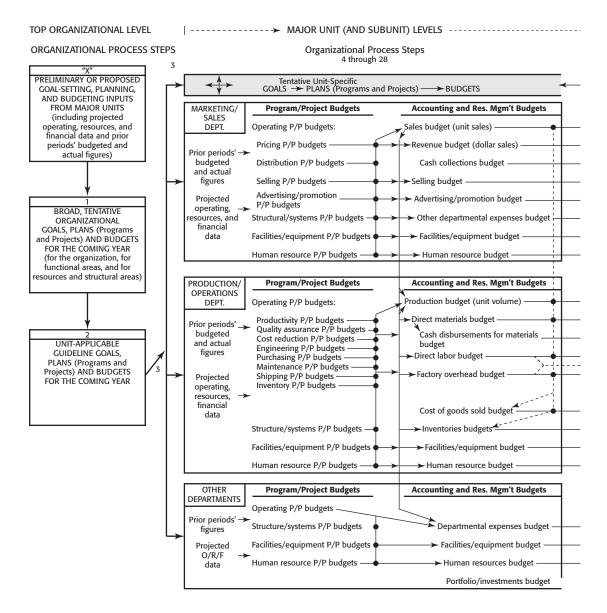


Figure 4.6. Basic Types of Budgets Prepared During the Annual Planning Process in a Manufacturing Enterprise Source: Copyright © 1989, 2006 by R. D. Cecil and Company.

of programs and projects: operating; structure and systems; facilities and equipment; and human resources. Because a department can have more than one program or project in each of these four areas, it can have more than one program or project budget in each area.

Although the example in Table 4.4 does not show any nonfinancial items, another program or project budget could. While different types of program or project budgets have different formats, many contain items such as these:

Capital expenditures: net cash outflows for any capital facilities or equipment required (see the "Investment Cost" section of Table 4.4)

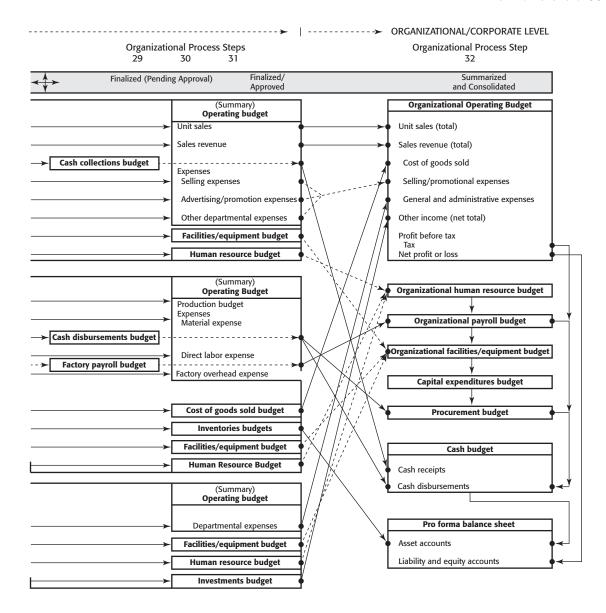


Figure 4.6 (Continued)

Nonfinancial benefits of the program or project (in monthly or yearly columns): increase in units of output, increase in sales volume, any other type of increase in productivity or performance, or any other type of nonfinancial benefit

Financial benefits of the program or project (in monthly or yearly columns) (see Table 4.4, lines 11–12)

New or additional costs incurred (in monthly or yearly columns): (a) any significant installation or implementation costs; (b) any significant start-up costs; and (c) any new or additional operating or usage costs incurred for (i) personnel, (ii) materials or supplies, (iii) depreciation on new facilities or equipment, or (iv) other expense items (see Table 4.4, lines 13-15, and the note on line 15)

Table 4.4. Example of Capital Program or Project Budget

	2007	2008	2009	2010	2011	2012	2013
Investment Cost							
1 Cost of machinery/equipment	268,000						
2 + Cost to install machinery/equipment	12,000						
3 = Total (depreciable) m/e cost	280,000						
4 + Cost of plant/office facilities							
5 + Cost of land							
6 (–) Proceeds from sale of replaced assets							
7 (-) Trade-in allowance on replaced assets							
8 (–) Debt incurred to finance purchases ^a							
9 + Recaptured depreciation on replaced assets							
10 = Net cash outflow on investment	280,000						
Investment Benefits							
Annual Income/Earnings							
11 New/additional sales revenue generated	20,000	25,000	30,000	35,000	40,000	45,000	50,000
12 + Cost reductions/savings realized	65,000	80,000	95,000	110,000	125,000	140,000	155,000
13 (-) New/additional operating costs incurred	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
14 (-) Depreciation expense	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)
15 (–) Interest expense ^a							
16 = Income/earnings before tax	40,000	60,000	80,000	100,000	120,000	140,000	160,000
17 (–) Income tax ^b	(20,000)	(30,000)	(40,000)	(50,000)	(60,000)	(70,000)	(80,000)
18 = Net (after-tax) income/earnings	20,000	30,000	40,000	50,000	60,000	70,000	80,000
Annual Cash Flow							
19 Net (after-tax) earnings (line 18)	20,000	30,000	40,000	50,000	60,000	70,000	80,000
20 + Depreciation expense	40,000	40,000	40,000	40,000	40,000	40,000	40,000
21 + Net proceeds from disposal of assets							20,000
22 (–) Debt repayment ^c							
23 (–) Net increase in working capital ^d							
24 = Net beneficial cash flow	60,000	70,000	80,000	90,000	100,000	110,000	140,000

Notes: In this example, there are no further investments after 2007.

^a Many practitioners do not enter figures on this line because they do not include financing costs when calculating certain financial criteria.

^b We have assumed a combined federal and state tax rate of 50 percent, for the sake of simplicity.

^c Debt repayments are often entered on this line in order to calculate net cash flow for cash budgeting purposes, but they are not included when calculating net beneficial cash flow.

^d There are often figures on this line, because a sales increase usually requires an increase in working capital.

Related cash flows (in monthly or yearly columns) (see Table 4.4, lines 6-9 and lines 20-23) Financial results such as (a) net (discounted) present value, (b) benefit-cost ratio, (c) payback period, or (d) return on investment

Inputs to the preparation of departmental program or project budgets include the following:

- Guideline unit program or project budgets formulated by top management
- Unit programs or projects that have been formulated, modified, and refined at the unit or departmental level
- · Program or project budget figures from previous periods
- Ratios or percentages among figures contained in budgets from previous periods
- · Forecasts of results
- Marginal analyses of incremental costs or revenues
- Other financial analyses

Accounting and resource management budgets contain figures that represent the projected results of implementing one or more programs and projects. These budgets are listed in the right column on the left page of Figure 4.6.

Arrows pointing from program and project budgets to the right indicate that the figures they contain are inputs to the development of departmental accounting and resource management budgets. Together, the arrows and large dots indicate which program and project budgets provide figures to particular accounting and resource management budgets. Although not all of the possible relationships can be shown or explained here, we now provide several examples using marketing department budgets. Expenses from the advertising and promotion program or project budgets go directly to the advertising and promotion budget. A similar flow of figures occurs wherever arrows point directly to the right. However, as shown by the arrow going upward through the dots to the right of all the marketing department's program or project budgets, those budgets also influence the projected sales budget to which the arrow points (because what is done and how much is spent in these areas will greatly affect the number and dollar amount of sales).

Now note the dashed-line arrow pointing downward from the sales budget's dot to several of the production department's dots (budgets). It indicates the production department budgets that will be affected by estimates of sales volume.

Departmental operating budgets are derived when figures associated with revenue and expense items are taken from accounting and resource management budgets and rearranged to calculate the financial or bottom-line results stemming from the department's operations. Production and "other departments" do not ordinarily generate revenues, so the bottom lines of their operating budgets typically show total expenses. On the other hand, because a marketing department usually generates both revenues and expenses, it generally has a profit or loss on its bottom line.

Departments' (or units') operating budgets contain figures that are inputs to or are consolidated in organizational or corporate budgets.

Organizational or corporate budgets are formulated primarily by taking figures from the departments' operating budgets and combining them. Some figures, however, are usually taken directly from departmental accounting and resource management budgets (for example, figures for a cash collections budget, cash disbursements budget, factory payroll budget, or cost of goods

sold budget). Solid-line arrows indicate direct input of figures from departmental operating budgets to organizational budgets. Dashed-line arrows that point from departments' budgets to a similarly named organizational budget indicate a consolidation of the departments' budget figures (for example, figures for human resource or facilities and equipment budgets). Again, not all the possible input relationships are illustrated in Figure 4.6.

The three major organizational budgets are the operating (profit or loss) budget, cash (cash flow) budget, and balance sheet (assets and liabilities) budget. Examples of these three are on the CD-ROM. These and all other organizational or corporate budgets are finalized when the sets of goals, strategies and tactics, and programs and projects with which they are associated have been finalized.

CONCLUDING REMARKS

Planning activities are not necessarily complete once budgets have been formulated. Formulating possible statements of goals, possible strategies and tactics, possible programs and projects, and possible budgets involves alternatives. Choosing among alternative sets of goals and associated strategies and tactics, programs and projects, and budgets requires making decisions. Chapter Five deals with decision-making concepts, principles, practices, and tools.