

CHAPTER ONE

The What and Why of Budgeting

An Introduction

A BUDGET IS DEFINED as the formal expression of plans, goals, and objectives of management that covers all aspects of operations for a designated time period. The budget is a tool providing targets and direction. Budgets provide control over the immediate environment, help to master the financial aspects of the job and department, and solve problems *before* they occur. Budgets focus on the importance of evaluating alternative actions before decisions actually are implemented.

A budget is a financial plan to control *future* operations and results. It is expressed in numbers, such as dollars, units, pounds, and hours. It is needed to operate effectively and efficiently. Budgeting, when used effectively, is a technique resulting in systematic, productive management. Budgeting facilitates control and communication and also provides motivation to employees.

Budgeting allocates funds to achieve desired outcomes. A budget may span any period of time. It may be short-term (one year or less, which is usually the case), intermediate (two to three years), or long-term (three years or more). Short-term budgets provide greater detail and specifics. Intermediate budgets examine the projects the company currently is undertaking and start the programs necessary to achieve long-term objectives. Long-term plans are very

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broad and may be translated into short-term plans. The budget period varies according to its objectives, use, and the dependability of the data used to prepare it. The budget period is contingent on business risk, sales and operating stability, production methods, and length of the processing cycle.

There is a definite relationship between long-range planning and short-term business plans. The ability to meet near-term budget goals will move the business in the direction of accomplishing long-term objectives. Budgeting is done for the company as a whole, as well as for its component segments, including divisions, departments, products, projects, services, and geographic areas. Budgets aid decision making, measurement, and coordination of the efforts of the various groups within the entity. Budgets highlight the interaction of each business segment with the whole organization. For example, budgets are prepared for units within a department, such as product lines; for the department itself; for the division, which consists of a number of departments; and for the company.

Master (comprehensive) budgeting is a complete expression of the planning operations of the company for a specific period. It is involved with both manufacturing and nonmanufacturing activities. Budgets should set priorities within the organization. They may be in the form of a plan, project, or strategy. Budgets consider external factors, such as market trends and economic conditions. The budget should list assumptions, targeted objectives, and agenda before number crunching begins.

The first step in creating a budget is to determine the overall goals and strategies of the business, which are then translated into specific long-term goals, annual budgets, and operating plans. Corporate goals include earnings growth, cost minimization, sales, production volume, return on investment, and product or service quality. The budget requires the analysis and study of historical information, current trends, and industry norms. Budgets may be prepared of expected revenue, costs, profits, cash flow, production purchases, net worth, and so on. Budgets should be prepared for all major areas of the business.

The techniques and details of preparing, reviewing, and approving budgets vary among companies. The process should be tailored to each entity's individual needs. Five important areas in budgeting are planning, coordinating, directing, analyzing, and controlling. The longer the budgeting period, the less reliable the estimates.

Budgets link the nonfinancial plans and controls that constitute daily managerial operations with the corresponding plans and controls designed to obtain satisfactory earnings and financial position.

Effective budgeting requires the existence of:

- Predictive ability
- Clear channels of communication, authority, and responsibility
- Accounting-generated accurate, reliable, and timely information
- Compatibility and understandability of information
- Support at all levels of the organization: upper, middle, and lower

The budget should be reviewed by a group so that there is a broad knowledge base. Budget figures should be honest to ensure trust between the parties. At the corporate level, the budget examines sales and production to estimate corporate earnings and cash flow. At the department level, the budget examines the effect of work output on costs. A departmental budget shows resources available, when and how they will be used, and expected accomplishments.

Budgets are useful tools in allocating resources (e.g., machinery, employees), making staff changes, scheduling production, and operating the business. Budgets help keep expenditures within defined limits. Consideration should be given to alternative methods of operations.

Budgets are by departments and responsibility centers. They should reflect the goals and objectives of each department through all levels of the organization. Budgeting aids all departmental areas, including management, marketing, human resources, engineering, production, distribution, and facilities.

In budgeting, consideration should be given to the company's labor and production scheduling, labor relations, pricing, resources, new product introduction and development, raw material cycles, technological trends, inventory levels, turnover rate, product or service obsolescence, reliability of input data, stability of market or industry, seasonality, financing needs, and marketing and advertising. Consideration should also be given to the economy, politics, competition, changing consumer base and taste, and market share.

Budgets should be understandable and attainable. Flexibility and innovation are needed to allow for unexpected contingencies. Flexibility is aided by variable budgets, supplemental budgets, authorized variances, and review and revision. Budgets should be computerized to aid what-if analysis. Budgeting enhances flexibility through the planning process because alternative courses of action are considered in advance rather than forcing less-informed decisions to be made on the spot. As one factor changes, other factors within the budget also change. Internal factors are controllable by the company, whereas external factors usually cannot be controlled. Internal factors include risk and product innovation.

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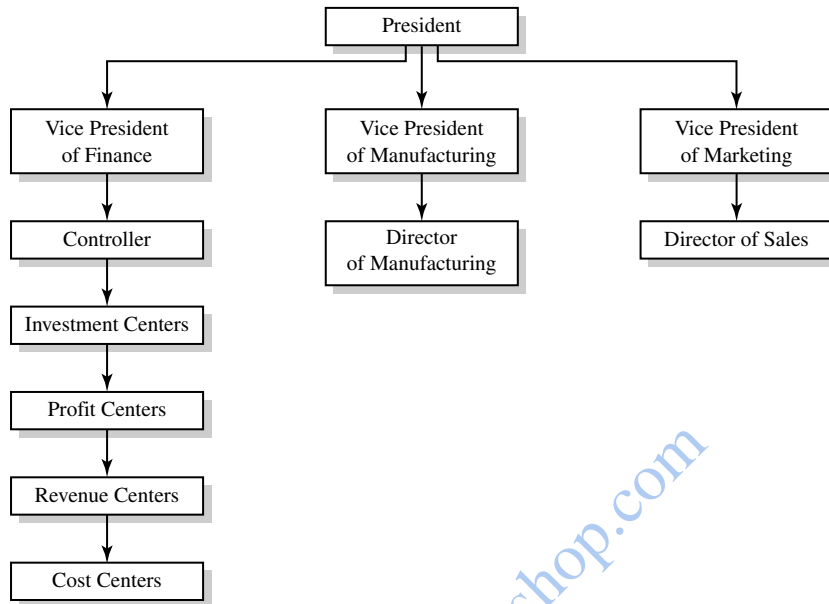


EXHIBIT 1.1 Budget Segments

Forecasting is *predicting* the outcome of events. It is an essential starting point for budgeting. Budgeting is *planning* for a result and controlling to accomplish that result. Budgeting is a tool, and its success depends on the effectiveness with which staff use it. In a recessionary environment, proper budgeting can increase the survival rate. A company may fail from sloppy or incomplete budgeting. Exhibit 1.1 shows a graphic depiction of budget segments.

We now consider planning, types of budgets, the budgetary process, budget coordination, departmental budgeting, comparing actual to budgeted figures, budget revision and weaknesses, control and audit, participative budgeting, and the pros and the cons of budgets.

PLANNING

Budgeting is a planning and control system. It communicates to all members of the organization what is expected of them. Planning is determining the activities to be accomplished to achieve objectives and goals. Planning is needed so that a company can operate its departments and segments successfully. It looks at what should be done, how it should be done, when it should be done, and by whom.

Planning involves the determination of objectives, evaluation of alternative courses of action, and authorization to select programs. There should be a good interface of segments within the organization.

Budgets are blueprints for projected action and a formalization of the planning process. Plans are expressed in quantitative and monetary terms. Planning is taking an action based on investigation, analysis, and research. Potential problems are searched out. Budgeting induces planning in each phase of the company's operation.

A profit plan is what a company expects to follow to attain a profit goal. Managers should be discouraged from spending their entire budget, and should be given credit for cost savings.

Budget planning meetings should be held routinely to discuss such topics as the number of staff needed, objectives, resources, and time schedules. There should be clear communication of how the numbers are established and why, what assumptions were made, and what the objectives are.

TYPES OF BUDGETS

It is necessary to be familiar with the various types of budgets to understand the whole picture and how these budgets interrelate. The types of budgets include:

- Master budget
- Operating and financial budgets
- Cash budget
- Static (fixed) budget
- Flexible (expense) budget
- Capital expenditure budget
- Program budget
- Incremental budget
- Add-on budget
- Supplemental budget
- Bracket budget
- Stretch budget
- Strategic budget
- Activity-based budget
- Target budget
- Rolling (continuous) budget
- Probabilistic budget

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These budgets are briefly explained next.

Master Budget

A master budget is an overall financial and operating plan for a forthcoming calendar or fiscal year. It is usually prepared annually or quarterly. The master budget is really a number of subbudgets tied together to summarize the planned activities of the business. The format of the master budget depends on the size and nature of the business.

Operating and Financial Budgets

The operating budget deals with the costs for merchandise or services produced. It covers income statement items comprised of revenues and expenses. In contrast, the financial budget examines the expected assets, liabilities, and stockholders' equity of the business. It encompasses balance sheet items. Both budgets are needed to see the company's financial health.

Cash Budget

The cash budget is for cash planning and control. It presents expected cash inflow and outflow for a designated time period. The cash budget helps management keep cash balances in reasonable relationship to its needs and aids in avoiding idle cash and possible cash shortages. The cash budget typically consists of four major sections:

1. Receipts section, which is the beginning cash balance, cash collections from customers, and other receipts
2. Disbursement section, comprised of all cash payments made by purpose
3. Cash surplus or deficit section, showing the difference between cash receipts and cash payments
4. Financing section, providing a detailed account of the borrowings and repayments expected during the period

Static (Fixed) Budget

The static (fixed) budget is budgeted figures at the expected capacity level. Allowances are set forth for specific purposes with monetary limitations. It is used when a company is relatively stable. Stability usually refers to sales. The problem with a static budget is that it lacks the flexibility to adjust to unpredictable changes.

In industry, fixed budgets are appropriate for those departments whose workload does not have a direct current relationship to sales, production, or some other volume determinant related to the department's operations. The work of the departments is determined by management decision rather than by sales volume. Most administrative, general marketing, and even manufacturing management departments are in this category. Fixed appropriations for specific projects or programs not necessarily completed in the fiscal period also become fixed budgets to the extent that they will be expended during the year. Examples include appropriations for capital expenditures, major repair projects, and specific advertising or promotional programs. The static budget will be illustrated in Chapter 6, "Master Budget."

Flexible (Expense) Budget

The flexible (expense) budget is most commonly used by companies. It allows for variability in the business and for unexpected changes. It is dynamic in nature rather than static. Flexible budgets adjust budget allowances to the actual activity. Flexible budgets are effective when volumes vary within a relatively narrow range. They are easy to prepare with computerized spreadsheets such as Excel.

The four basic steps in preparing a flexible (expense) budget are:

1. Determine the relevant range over which activity is expected to fluctuate during the coming period.
2. Analyze costs that will be incurred over the relevant range in terms of determining cost behavior patterns (variable, fixed, or mixed).
3. Separate costs by behavior, determining the formula for variable and mixed costs.
4. Using the formula for the variable portion of the costs, prepare a budget showing what costs will be incurred at various points throughout the relevant range.

Due to uncertainties inherent in planning, three forecasts may be projected: one at an optimistic level, one at a pessimistic or extremely conservative level, and one at a balanced, in-between level. Flexible budgets are illustrated in Chapter 7, "Cost Behavior."

Capital Expenditure Budget

The capital expenditure budget is a listing of important long-term projects to be undertaken and capital (fixed assets such as plant and equipment) to be

BUDGETING IN ACTION

Need for Flexible Budgets

The difficulty of accurately predicting future financial performance can be readily understood by reading the annual report of any publicly traded company. For example, Nucor Corporation, a steel manufacturer headquartered in Charlotte, North Carolina, cites numerous reasons why its actual results may differ from expectations, including: (1) the supply and cost of raw materials, electricity, and natural gas may change unexpectedly; (2) the market demand for steel products may change; (3) competitive pressures from imports and substitute materials may intensify; (4) uncertainties regarding the global economy may affect customer demand; (5) changes to U.S. and foreign trade policy may alter current importing and exporting practices; and (6) new government regulations could significantly increase environmental compliance costs. Each of these factors could cause static budget revenues and/or costs to differ from actual results.

Source: Nucor Corporation 2010 annual report.

acquired. The estimated cost of the project and the timing of the capital expenditures are enumerated, along with how the capital assets are to be financed. The budgeting period is typically 3 to 10 years. A capital projects committee, which is typically separate from the budget committee, may be created solely for capital budgeting purposes.

The capital expenditures budget often classifies individual projects by objective, as for:

- Expansion and enhancement of existing product lines
- Cost reduction and replacement
- Development of new products
- Health and safety expenditures

The lack of funds may prevent attractive potential projects from being approved.

An approval of a capital project typically means approval of the project in principle. However, final approval is not automatic. To obtain final approval, a special authorization request is prepared for the project, spelling out the proposal in more detail. The authorization requests may be approved at various managerial levels, depending on their nature and dollar magnitude.

Program Budget

Programming is deciding which programs should be funded and by how much. A common application of program budgets is to product lines. Resources are allocated to accomplish a specific objective with a review of existing and new programs. Some suitable program activities include research and development, marketing, training, preventive maintenance, engineering, and public relations. Funds usually are allocated based on cost-effectiveness. In budget negotiations, proposed budgetary figures should be explained and justified. The program budget typically cannot be used for control purposes because the costs shown cannot ordinarily be related to the responsibilities of specific individuals.

Incremental Budget

Incremental budgeting looks at the increase in the budget in terms of dollars or percentages without considering the whole accumulated body of the budget.

There are also self-contained, self-justified increments of projects. Each one specifies resource utilization and expected benefits. A project may be segregated into one or more increments. Additional increments are required to complete the project. Labor and resources are assigned to each increment.

Add-On Budget

An add-on budget is one in which previous years' budgets are examined and adjusted for current information, such as inflation and employee raises. Money is added to the budget to satisfy the new requirements. With add-on, there is no incentive for efficiency, but competition forces one to look for new, better ways of doing things. For example, Konica Imaging U.S.A. has combined add-on with zero-based review.

Supplemental Budget

Supplemental budgets provide additional funding for an area not included in the regular budget.

Bracket Budget

A bracket budget is a contingency plan with costs projected at higher and lower levels than the base amount. Sales are then forecasted for these levels. The purpose of this method is to provide management with a sense of earnings impact and a contingency expense plan if the base budget and the resulting sales forecast are not achieved. A contingency budget may be appropriate

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when there are downside risks that should be planned for, such as a sharp drop in revenue.

Stretch Budget

A stretch budget may be considered a contingency budget on the optimistic side. Typically, it is confined to sales and marketing projections that are higher than estimates. It is rarely applied to expenses. *Stretch targets* may be held informally without making operating units accountable for them. Alternatively, stretch targets may be official estimates for sales and marketing personnel. Expenses may be estimated at the standard budget sales target. Many of the best-performing companies, such as GE and Microsoft, set stretch targets. Stretch targets are challenging but achievable levels of expected performance, intended to create a little discomfort and to motivate employees to exert extra effort and attain better performance. Firms such as Goldman Sachs also use “horizontal” stretch goal initiatives. The aim is to enhance professional development of employees by asking them to take on significantly different responsibilities or roles outside their comfort zone.

Strategic Budget

Strategic budgeting integrates strategic planning and budgeting control. It is effective under conditions of uncertainty and instability.

Activity-Based Budget

Activity-based budgeting (ABB) estimates costs for individual activities. Traditional budgeting is functional budgeting because the focus is on preparing budgets by function, such as production, selling, and administrative support. Organizations that have implemented activity-based cost (ABC) systems often use these systems as a vehicle to prepare activity-based budgets that focus on the budgeted cost of activities required to produce and sell products and services. Activity-based budgeting is discussed at great length in Chapter 21, “Budgeting for Cost Management.”

Target Budget

A target budget is a plan in which categories of *major expenditures* are matched to *company goals*. The emphasis is on formulating methods of project funding to move the company forward. There must be strict justification for large dollars and special project requests.

Rolling (Continuous) Budget

A rolling budget, also called a *continuous* or *perpetual budget*, is revised on a regular (continuous) basis. Typically, a company extends such a budget for another month or quarter in accordance with new data as the current month or quarter ends. For example, if the budget is for 12 months, a budget for the next 12 months will be available continuously as each month ends. In other words, one month (or quarter) is added to the end of the budget as each month (or quarter) comes to a close. This approach keeps managers focused at least one year ahead so that they do not become too narrowly focused on short-term results. Static (fixed) budgets are criticized as being ineffective in a rapidly changing world. Companies report performance on a calendar basis, but events such as floods, earthquakes, tsunamis, stock market crashes, strikes, and competitors' new product announcements happen continuously. In consequence, some leading companies have abandoned fixed budgets and changed to rolling forecasts to inspire and lead their companies to better performance. Rolling forecasts direct management's attention toward the future and ensure that planning is ongoing, as opposed to an annual exercise. The rolling budget largely eliminates the *budget revision* problem. Frequent restudy of plans is required by this approach. The rolling budget is illustrated in Chapter 19, "Using Software Packages and E-Budgeting."

Probabilistic Budget

One way in which uncertainty can be explicitly introduced into the profit planning and control program is by the use of probabilistic profit budgets. Under this approach, several estimates are made for each of several key components in the budget, and probabilities are assigned to these estimates. One reasonable approach is to select an *optimistic*, a *pessimistic*, and a *most likely* estimate for each key number in the budget. This approach is illustrated in Chapter 19, "Using Software Packages and E-Budgeting."

BUDGETARY PROCESS

A sound budget process communicates organizational goals, allocates resources, provides feedback, and motivates employees. The budgetary process should be standardized by using budget manuals, budget forms, and formal procedures. Software, the Program Evaluation and Review Technique (PERT), and Gantt charts facilitate the budgeting process and preparation. The timetable for the budget must be kept. If the budget is a rush job, unrealistic targets may be set.

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The budget process used by a company should suit its needs, be consistent with its organizational structure, and take into account human resources. The budgetary process establishes goals and policies, formulates limits, enumerates resource needs, examines specific requirements, provides flexibility, incorporates assumptions, and considers constraints. It should take into account a careful analysis of the current status of the company. The process takes longer as the complexity of the operations increase. A budget is based on past experience plus changes in light of the current environment.

The six steps in the budgeting process are:

1. Setting objectives
2. Analyzing available resources
3. Negotiating to estimate budget components
4. Coordinating and reviewing components
5. Obtaining final approval
6. Distributing the approved budget

A budget committee should review budget estimates from each segment, make recommendations, revise budgeted figures as needed, and approve or disapprove of the budget. The committee should be available for advice if a problem arises in gathering financial data. The committee can also reconcile diverse interests of budget preparers and users.

The success of the budgeting process requires the cooperation of all levels within the organization. For example, without top management or operating management support, the budget will fail. Those involved in budgeting must be properly trained and guided in the objectives, benefits, steps, and procedures. There should be adequate supervision.

The preparation of a comprehensive budget usually begins with the anticipated volume of sales or services, which is a crucial factor that determines the level of activity for a period. In other cases, factory capacity, the supply of labor, or the availability of raw materials could be the limiting factor for sales. After sales are forecasted, production costs and operating expenses can be estimated. The budgeting period varies with the type of business, but it should be long enough to include complete cycles of season, production, inventory turnover, and financial activities. Other considerations are product or service to be rendered and regulatory requirements.

The budget guidelines prepared by top management are passed down through successive levels in the company. Managers at each level may make additions and provide greater detail for subordinates. The managers at each

level prepare the plans for items under their control. For example, Philip Morris formulates departmental budgets for each functional area.

The budgeting process will forewarn management of possible problems that may arise. By knowing the problems, solutions may be formulated. For example, at the valleys in cash flow, a shortage of cash may occur. By knowing this in advance, management may arrange for a short-term loan for the financing need rather than face a sudden financing crisis. In a similar vein, planning allows for a smooth manufacturing schedule to result in both lower production costs and lower inventory levels. It avoids a crisis situation requiring overtime or high transportation charges to receive supplies ordered on a rush basis. Without proper planning, cyclical product demand needs may arise, straining resources and capacity. Resources include material, labor, and storage.

Bottom-Up versus Top-Down

A budget plans for future business actions. Managers prefer a participative bottom-up approach to an authoritative top-down approach. The bottom-up method begins at the bottom or operating (departmental) level based on the objectives of the segment. However, operating levels must satisfy the overall company goals. Each department prepares its own budget (such as estimates of component activities and product lines by department) before it is integrated into the master budget.

Managers are more motivated to achieve budgeted goals when they are involved in budget preparation. A broad level of participation usually leads to greater support for the budget and the entity as a whole, as well as greater understanding of what is to be accomplished. Such participation can give employees the feeling that “this is our budget,” rather than the all-too-common feeling that “this is the budget you imposed on us.” Advantages of *participative budgeting* (or *self-imposed budgeting*) include greater accuracy of budget estimates. Managers with immediate operational responsibility for activities have a better understanding of what results can be achieved and at what costs. Also, managers cannot claim unrealistic goals as an excuse for not achieving budget expectations when they have helped to establish those goals. Despite the involvement of lower-level managers, top management still must participate in the budget process to ensure that the combined goals of the various departments are consistent with the profitability objectives of the company. The goals may include growth rates, labor needs, minimum return on investment, and pricing. In effect, departmental budgets are used to determine the organizational budget. The budget is reviewed, adjusted if necessary, and

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approved at each higher level. The bottom-up approach forecasts sales by product or other category, then by company sales, and then by market share. The bottom-up method may be used to increase the feeling of unit-level ownership in the budget. Disadvantages are the time-consuming process from participative input and the fact that operating units may neglect some company objectives. Bottom-up planning does not allow for control of the process, and the resulting budget is likely to be unbalanced with regard to the relationship of expenses to revenue. Typical questions to answer when preparing a bottom-up budget are: What are the expected promotional and travel expenses for the coming period? What staff requirements will be needed? What are the expected raises for the coming year? What quantity of supplies will be needed?

This approach is particularly necessary when responsibility center managers are expected to be very innovative. Responsibility center managers know what must be achieved, where the opportunities are, what problem areas must be resolved, and where resources must be allocated. One important limitation of participative budgeting is that lower-level managers may allow too much budgetary slack. Since the manager who creates the budget will be held accountable for actual results that deviate from the budget, the manager will have a natural tendency to submit a budget that is easy to attain (i.e., the manager will build slack into the budget). For this reason, budgets prepared by lower-level managers should be scrutinized by higher levels of management. Questionable items should be discussed and modified as appropriate. Without such a review, self-imposed budgets may be too slack, resulting in suboptimal performance.

In the top-down approach, a central corporate staff under the chief executive officer or president determines overall company objectives and strategies, enumerates resource constraints, considers competition, prepares the budget, and makes allocations. Management considers the competitive and economic environment. Top management knows the company's objectives, strategies, resources, strengths, and weaknesses. Departmental objectives follow from the action plans.

The top-down method is commonly used in long-range planning. A top-down approach is needed for a company having significant interdependence among operating units to enhance coordination. This approach first would forecast sales based on an examination of the economy, then the company's share of the market and the company's sales, and then sales by products or other category. A top-down approach may be needed when business unit managers must be given specific performance objectives due to a crisis situation and when close coordination is required between business units. It is possible

that the sum of the unit budgets would not meet corporate expectations. If unit managers develop budgets independently of other units, there are inconsistencies in the assumptions used by different units.

A disadvantage with this approach is that central staff may not have all the knowledge needed to prepare the budget within every segment of the organization. Managers at the operating levels are more knowledgeable and familiar with the segment's operations. Managers will not support or commit to a budget they were not involved in preparing, which will cause a motivational problem. Further, the top-down approach stifles creativity. A budget needs input from affected managers, but upper management knows the overall picture.

A combination of the bottom-up and top-down approaches may be appropriate in certain cases. Some large companies may integrate the methods. For example, Konica Imaging uses a blend. Direction is supplied from the top, and senior management develops action plans. Each department must then determine how it will actually implement the plan, specifically looking at the resources and expenditures required. This is the quantification of the action plans into dollars. It is then reviewed to see if it achieves the desired results. If it does not, it will be kicked back until it is brought in line with the desired outcomes. The what, why, and when are specified from the top, and the how and who are specified from the bottom.

BUDGET COORDINATION

There should be one person responsible for centralized control over the budget who must work closely with general management and department heads. A budget is a quantitative plan of action that aids in coordination and implementation. The budget communicates objectives to all the departments within the company. It presents upper management with coordinated and summarized data as to the financial ramifications of plans and actions of various departments and units within the company.

Budgets usually are established for all departments and major segments in the company. They must be comprehensive, including all interrelated departments. The budget process should receive input from all departments so there is coordination within the firm. For example, operations will improve when marketing, purchasing, personnel, and finance departments cooperate.

Coordination involves obtaining and organizing the needed personnel, equipment, and materials to carry out the business. A budget aids in

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coordination between separate activity units to ensure that all parts of the company are in balance with each other and know how they fit in. It discloses weaknesses in the organizational structure and communicates to staff what is expected of them. It allows for a consensus of ideas, strategies, and direction.

The interdependencies between departments and activities must be considered in a budget. For example, the sales manager depends on sufficient units produced in the production department. Production depends on how many units can be sold. Most budget components are affected by other components. For example, most components are impacted by expected sales volume and inventory levels, while purchases are based on expected production and raw material inventories.

A budget allows for directing and control. Directing means supervising the activities to ensure they are carried out in an effective and efficient manner within time and cost constraints. Controlling involves measuring the progress of resources and personnel to accomplish a desired objective. A comparison is made between actual results and budgeting estimates to identify problems needing attention.

In summation, the budget must consider the requirements of each department or function and the relationships that each has with other departments and functions. Activities and resources have to be coordinated.

DEPARTMENTAL BUDGETING

All department managers within a company must accurately determine their future costs and must plan activities to accomplish corporate objectives. Departmental supervisors must have significant input into budgeting costs and revenues because these people are directly involved with the activity and have the best knowledge of it. Managers must examine whether their budgetary assumptions and estimates are reasonable. Budget targets should match manager responsibilities. At the departmental level, the budget considers the expected work output and translates it into estimated future costs.

Budgets are needed for each department. The sales department must forecast future sales volume of each product or service, as well as the selling price. It probably will budget revenue by sales territory and customer. It will also budget costs such as wages, promotion and entertainment, and travel. The production department must estimate future costs to produce the product or service and the cost per unit. The production manager may have to budget work during the manufacturing activity so the work flow continues smoothly.

The purchasing department will budget units and dollar purchases. There may be a breakdown by supplier. There will be a cost budget for salaries, supplies, rent, and so on. The stores department will budget its costs for holding inventory. There may be a breakdown of products into categories. The finance department must estimate how much money will be received and where it will be spent to determine cash adequacy. An illustrative budget showing revenue and expense by product line appears in Exhibit 1.2.

ACTUAL COSTS VERSUS BUDGET COSTS

A budget provides an early warning of impending problems. The effectiveness of a budget depends on how sound and accurate the estimates are. The planning must take all factors into account in a realistic way. The budget figures may be inaccurate because of such factors as economic problems, political unrest, competitive shifts in the industry, introduction of new products, and regulatory changes.

At the beginning of the period, the budget is a plan. At the end of the period, the budget is a control instrument to assist management in measuring its performance against the plan so as to improve future performance. Budgeted revenue and costs are compared with actual revenue and costs to determine variances. A determination has to be made whether the variances are controllable or uncontrollable. If controllable, the parties responsible must be identified. Action must be taken to correct any problems.

A comparison should be made between actual costs at actual activity to budgeted costs at actual activity. In this way, there is a common base of comparison. The percentage and dollar difference between the budget and actual figures should be shown. A typical performance report for a division appears in Exhibit 1.3.

Authorized variances in cost budgets allow for an increase in the initial budget for unfavorable variances. This increase may result from unexpected wage increases, prices of raw materials, and so on. Allowance is given for cost excesses that a manager can justify.

BUDGET REVISION

A budget should be monitored regularly. It should be revised to make it accurate during the period in response to error, feedback, new data, changing conditions (e.g., economic, political, corporate), or modification of the

EXHIBIT 1.2 Statement of Revenue and Expense by Product for the Year Ended 2X12

Description	All Products			Product Line				
	Amount	Percentage of Net Sales	X Amount	Percentage of Net Sales	Y Amount	Percentage of Net Sales	Z Amount	Percentage of Net Sales
Gross revenue								
Less: Sales returns and allowances								
Net revenue								
Less: Variable cost of sales								
Manufacturing contribution margin								
Direct distribution costs								
Variable								
Fixed								
Semidirect distribution								
Variable costs								
Contribution margin								
Continuing costs								
Fixed overhead								
Other indirect costs								
Total								
Income before taxes								
Less: Taxes								
Net income								

EXHIBIT 1.3 XYZ Company Divisional Performance Evaluation
December 31, 2X12

Division	Net Income		Over (Under) Plan	Net Sales		Over (Under) Plan
	Actual	Expected		Actual	Expected	
A	\$ 2,000	\$ 4,000	(\$2,000)	\$1,000	\$ 800	\$200
B	3,000	5,000	(2,000)	700	600	100
C	<u>5,000</u>	<u>6,000</u>	<u>(1,000)</u>	<u>600</u>	<u>1,000</u>	<u>(400)</u>
Total	<u>\$10,000</u>	<u>\$15,000</u>	<u>(\$5,000)</u>	<u>\$2,300</u>	<u>\$2,400</u>	<u>(\$100)</u>

company's plan. Human error is more likely when the budget is large and complex. A change in conditions typically will affect the sales forecast and resulting cost estimates. Revisions are more common in volatile industries. The budget revision applies to the remainder of the accounting period.

A company may *roll* a budget, which means continuously budgeting for an additional incremental period at the end of the reporting period. The new period is added to the remaining periods to form the new budget. Continuous budgets reinforce constant planning, consider past information, and take into account emerging conditions.

BUDGET WEAKNESSES

The signs of budget weaknesses must be spotted so that corrective action may be taken. Such signs include:

- Managerial goals are off target or unrealistic.
- Management is indecisive.
- The budget takes too long to prepare.
- Budget preparers are unfamiliar with the operations being budgeted and do not seek such information. Budget preparers should visit the actual operations firsthand.
- Budget preparers do not keep current.
- The budget is prepared using different methods each year.
- There is a lack of raw information going into the budgeting process.

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- There is a lack of communication between those involved in budgeting and operating personnel.
- The budget is formulated without input from those affected by it. This will probably result in budgeting errors. Further, budget preparers do not go into the operations field.
- Managers do not know how their budget allowances have been assigned or what the components of their charges are. If managers do not understand the information, they will not perform their functions properly.
- The budget document is excessively long, confusing, or filled with unnecessary information. There may be inadequate narrative data to explain the numbers.
- Managers are ignoring their budgets because they appear unusable and unrealistic.
- Managers feel they are not getting anything out of the budget process. Changes are made to the budget too frequently.
- Significant unfavorable variances are not investigated and corrected. These variances also may not be considered in deriving budgeted figures for the next period. Further, a large variance between actual and budgeted figures, either positive or negative, that repeatedly occurs is an indicator of poor budgeting. Perhaps the budgeted figures were unrealistic. Another problem is that after variances are identified, it is too late to correct their causes.
- There is a mismatching of products or services.

BUDGETARY CONTROL AND AUDIT

As discussed previously, the budget is a major control device for revenue, costs, and operations. The purpose is to increase profitability and reduce costs or to meet other corporate objectives as quickly as possible. Budgetary control may also be related to nonfinancial activities, such as the life cycle of the product or seasonality. An illustrative budget control report is shown in Exhibit 1.4.

A budget audit should be undertaken to determine the correctness of the budgeted figures. Was there a proper evaluation of costs? Were all costs included that should have been? What are the cost trends? Are budgeted figures too tight or too loose? Are budgeted figures properly supported by documentation? A budget audit appraises budgeting techniques, procedures,

EXHIBIT 1.4 Budget Control Report

I. Budget Savings		
One-Year Savings Amount:		
Two- to Five-Year Savings Amount:		
More Than Five-Year Savings Amount:		
Savings Description:		
II. Budget Impact		
Reduction in Current Year Budget		
Budget Account		
Budget Amount		
Budget Adjustment Not Needed		
III. Budget Participants		
Management:	Names:	Job Description:
Employees:	Names:	Job Description:
IV. Management Incentives:		
V. Employee Awards		
Prepared by:		
Reviewed by:		
Approved by:		

manager attitudes, and effectiveness. The major aspects of the budgeting process have to be examined.

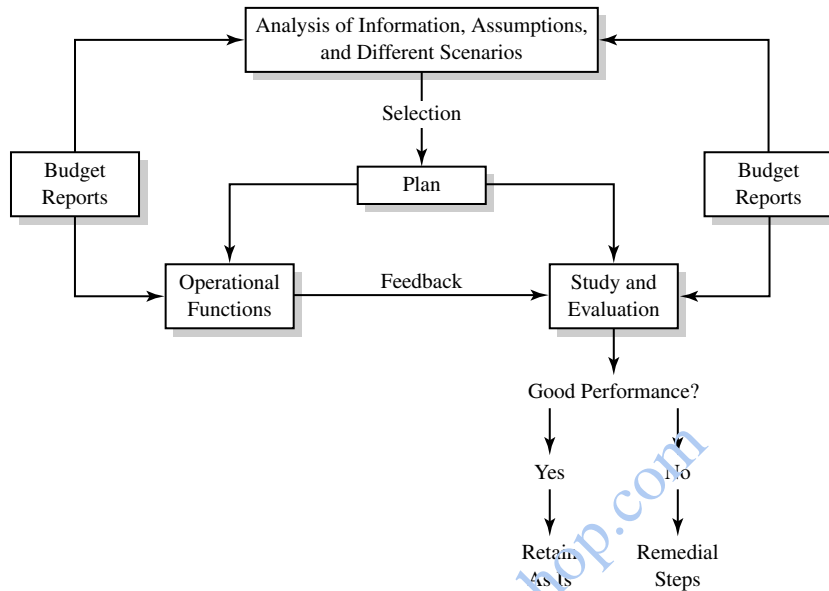
Exhibit 1.5 depicts the control process in budgeting.

COMPUTER APPLICATIONS

A computer should be used to make quick and accurate calculations, keep track of projects instantly, and make proper comparisons.

With the use of a spreadsheet program, budgeting can be an effective tool to perform *sensitivity analysis* that is designed to evaluate what-if scenarios. This way the manager should be able to move toward finding the best course of action among various alternatives through simulation. If the manager does not like the result, he or she may alter the contemplated decision and planning set. Specialized software that is solely devoted to budget preparation

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**EXHIBIT 1.5** Budgeting Control Process

and analysis also exists. Currently, an increasing number of companies are using a Web-based (or Web-enabled) budgeting approach in a *cloud computing* environment. The new system enables firms and their management and support staff to directly input their business plan and budget requests, eliminating the need for central business planning and budgeting staff to upload the numerous budget requests and subsequent changes. This system is discussed in more detail in Chapter 19, "Using Software Packages and E-Budgeting."

MOTIVATION

Budgets can be used to affect employee attitudes and performance. Budgets should be participative, including participation by those to be affected by them. Further, lower-level employees are on the operating line every day so they are quite knowledgeable. Their input is needed. Budgets can be used to motivate because participants will internalize the budget goals as their own since they

participated in their development. Information should be interchanged among budget participants. An imposed budget will have a *negative* effect on motivation. Further, there is a correlation between task difficulty and loss of control to negative attitudes.

A budget is a motivational and challenging tool if it is tight but attainable. It has to be *realistic*. If the budget is too tight, it results in frustration because managers will give up and not try to achieve the unrealistic targets. If it is too loose, complacency will arise and workers may goof off.

The best way to set budget targets is with a probability of achievement by most managers 80 to 90 percent of the time. Performance above the target level should be supplemented with incentives, including bonuses, promotion, and additional responsibility.

■ ADVANTAGES AND DISADVANTAGES OF BUDGETS

Preparing a budget takes time and resources. The benefits of budgeting must outweigh the drawbacks. A budget can be advantageous because it:

- Links objectives and resources.
- Communicates to managers what is expected of them. Any problems in communication and working relationships are identified. Resources and requirements are identified.
- Establishes guidelines in the form of a road map to proceed in the right direction.
- Improves managerial decision making because emphasis is on future events and associated opportunities.
- Encourages delegation of responsibility and enables managers to focus more on the specifics of their plans, how realistic the plans are, and how such plans may be effectively achieved.
- Provides an accurate analytical technique.
- Provides better management of subordinates. For example, a manager can use the budget to encourage salespeople to consider their clientele in a long-term strategic perspective.
- Fosters careful study before making decisions.
- Helps management become aware of the problems faced by lower levels within the organization, which promotes labor relations.

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- Encourages employees to think about how to make operations and resources more productive, efficient, competitive, and profitable. It leads to cost reduction.
- Allows management to monitor, control, and direct activities within the company. Performance standards act as incentives to perform more effectively.
- Points out deviations between budget and actual, resulting in warning signals for changes or alterations.
- Helps identify, on a timely basis, weaknesses in the organizational structure. There is early notice of dangers or departures from forecasts. The formulation and administration of budgets pinpoints communication weaknesses, assigns responsibility, and improves working relationships.
- Provides management with foresight into potential crisis situations so alternative plans may be instituted.
- Provides early signals of upcoming threats and opportunities.
- Aids coordination between departments to attain efficiency and productivity. There is an interlocking within the business organization. For example, the production department will manufacture based on the sales department's anticipated sales volume. The purchasing department will buy raw materials based on the production department's expected production volume. The human resources department will hire or lay off workers based on anticipated production levels. Executives are forced to consider relationships among individual operations and the company as a whole.
- Provides a motivational device setting a standard for employees to achieve.
- Provides measures of self-evaluation.
- Allows management to make distasteful decisions and blame them on the budget.

A budget can be disadvantageous because:

- It promotes gamesmanship in that those managers who significantly inflate requests, knowing they will be reduced, are in effect rewarded by getting what they probably really wanted.
- It may reward managers who set modest goals and penalize those who set ambitious goals that are missed.
- There is judgment and subjectivity in the budgeting process.
- Managers may think that budgets restrict their flexibility to adjust to changing conditions.
- It does not consider quality and customer service.
- There is a risk it will be padded, thereby creating budgetary slack.

BUDGETARY SLACK: PADDING THE BUDGET

Budget padding means underestimating revenue or overestimating costs. The difference between the revenue or cost projection that a manager provides and a realistic estimate of the revenue or cost is called *budgetary slack*. For example, if a manager believes the annual utilities cost will be \$18,000 but gives a budgetary projection of \$20,000, the manager has built \$2,000 of slack into the budget. One reason for padding the budget is that people often perceive that their performance will look better in their superiors' eyes if they can beat the budget.

BUDGETING IN ACTION

Budgeting Tied to Compensation

1. A manager's compensation is often tied to the budget. Typically, no bonus is paid unless a minimum performance hurdle, such as 80 percent of the budget target, is attained. Once that hurdle is passed, the manager's bonus increases until a cap is reached. That cap is often set at 120 percent of the budget target. This common method of tying a manager's compensation to the budget has some serious negative side effects.

Example 1: A marketing manager for a big beverage company intentionally grossly understated demand for the company's products for an upcoming major holiday so that the budget target for revenues would be low and easy to beat. Unfortunately, the company tied its production to this biased forecast and ran out of products to sell during the height of the holiday selling season.

Example 2: Near the end of the year, another group of managers announced a price increase of 10 percent effective January 2 of the following year. Why would they do this? By announcing this price increase, managers hoped that customers would order before the end of the year, helping managers meet their sales targets for the current year. Sales in the following year would, of course, drop. What trick would managers pull to meet their sales targets next year in the face of this drop in demand?

Source: Michael C. Jensen, "Corporate Budgeting Is Broken—Let's Fix It," *Harvard Business Review* (November 2010).

(continued)

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2. Towers Perrin, a consulting firm, reports that the bonuses of more than two out of three corporate managers are based on meeting targets set in annual budgets. "Under this arrangement, managers at the beginning of a year all too often argue that their targets should be lowered because of tough business conditions, when in fact conditions are better than projected. If their arguments are successful, they can easily surpass the targets."

Source: Ronald Fink and Towers Perrin, "Riding the Bull: The 2000 Compensation Survey," *CFO* (June 2000): 45–60.

 **SUMMARY**

A budget should be based on norms and standards. The budget should be coordinated, integrated, organized, systematic, clear, and comprehensive to accomplish optimal results. The budget preparation, review, and evaluation process must be facilitated. An orderly budgeting process will result in less cost, fewer man-hours, and minimization of conflict and turmoil. It will require less revision at a later date. The budget process must consider input-output relationships. The budget aids in anticipating problems before they become critical. Short-term budgets should be used for businesses subject to rapid change. A budget is a tool for planning and for what-if analysis. It aids in identifying the best course of action.

As it is in the computer world—garbage in, garbage out—so it is with budgeting. If forecasts are inaccurate, so will be the projections, resulting in bad management decisions to the detriment of the firm. A manager must be cautious when analyzing past experience. Unforeseen circumstances, such as economic downturns and future innovations, have direct inputs on current operations. A manager deviating from a budget target must explain why and, of course, is on the defensive. Without proper justification for missing targets, the manager may be dismissed.

The failure to budget may result in conflicting and contradictory plans, as well as in wasting corporate resources. Budget slack, the underestimation of revenues and the overestimation of expenses, should be avoided or minimized. Budgets should be revised as circumstances materially change. A manager who has responsibility to meet a budget should also have the authorization to use corporate resources to accomplish that budget. Priorities

should be established for the allocation of scarce resources. Budgets may include supplementary information such as break-even analysis by department, by product, and for overall operations.

It is important to avoid a situation in which a manager feels he or she must spend the entire budget or else lose funding in the next period. Managers should not be motivated to spend the entire budget. Rather, cost savings should be realized, and those responsible should be recognized, such as through cash bonuses or nonmonetary awards (e.g., trophies, medals). Budget savers should be protected in the funding for future budgets.

Budgets should not be arbitrarily cut across the board. Doing so may result in disastrous consequences in certain programs. If budget reductions are necessary, determine exactly where and by how much.

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