

Budgeting and Manager ROI

Learning Objectives

After reading this chapter, you should be able to:

- understand both forecasting and budgeting in depth and utilize their techniques;
- apply the techniques used for budgeting operational expenses and capital expenditures;
- explain and utilize the terms *assets* and *liabilities*;
- apply current ratio and working capital tests to financial results;
- know how to measure how well the company is doing financially through return on investment (ROI).

In Practice

Myla Thomas received a note from the owner, Eric Breeze. Part of the note read, "I like what you and your team have accomplished so far. I would like to meet with you to discuss incentive packages and the challenges for next year's budget." Myla took this as an endorsement of what she was doing—and rightly so.

When they met later, Eric extended his hand for a handshake with Myla and said, "Please, have a seat. I will not take too much of your time."

"Thank you for the note," Myla remarked.

"That's quite all right. You've made some positive changes to this place, and it shows in the employees, the customers, and the bottom line. Now, do you have any thoughts on the incentive package I sent to you last month?" Eric asked.

"Well, to begin with, it's quite reasonable given the circumstances surrounding the business climate. I do have one exception to note: I don't believe Scott Vincent deserves an incentive at this time," Myla answered.

"Why?" asked Eric unemotionally.

"To put it simply, Scott failed on every benchmark we set for him to achieve the budgeted guidelines—both in purchasing and in labor cost control," replied Myla.

"Very well then," Eric replied, pensively. "There have to be consequences for not achieving departmental goals. Please work out budget numbers for next year that include sales and marketing, as well as your capital plan, for my review."

INTRODUCTION

Without a reasonably accurate sales forecast, which we covered in Chapter 1, planning and budgeting are questionable at best and harmful at worst. In the role of manager, you will use past performance data to lay groundwork for a forecast. A business's past performance is guided by two sets of effects on your operations: those due to external business conditions—such as levels of tourism, natural disasters, terrorism, and local events—and those caused by internal management policies and procedures, such as system and product changes. Compiling this information will reveal trends. In the case of uncontrollable events like natural disasters or economic downturns, you can only collect data to analyze how these events affected your business. But in the case of internal management policies and procedures, your data will tell you which of your own company policies are most helpful and harmful. All of this data is what you will be analyzing in order to create a forecast.

The analysis requires general data on economic conditions, along with detailed information about past menus, customers, employees, and salespeople. By analyzing past performance, the controller can identify weak areas. Analyses of purchasing, storage and movement of inventory, hiring and use of labor, and the purchase and use of facilities will help pinpoint the factors that can be improved in the next budget year. Outside consultants can also contribute somewhat less subjective perspectives to this analytical process.

THE FRAMEWORK FOR FORECASTING AND BUDGET PREPARATION

Detailing what the sales department does in forecasting is beyond the scope of this book; however, the order in which elements are brought together to produce the forecast is important. First, management must establish the basic assumptions to be used in developing the forecast. These include assumptions about overall economic trends, product and service changes, and contemplated marketing actions such as sales initiatives and promotional campaigns. For these changes, you can assist in your role as controller by providing market research studies. Individual guest and group needs must be surveyed, and the data must be collected and analyzed. The basic assumptions may then be refined, and statistical projections can be made. These steps must precede creating the budget, since the sales forecast and sales plan usually serve as the basis for other budget computations. This illustrates how forecasting differs from budgeting: The forecasting process includes studies to determine which budgeting course of action will ultimately be taken.

The sales plan should then be compared to prior years' figures. Remember to consider the costs that are necessary to carry out this plan, including the costs of marketing, depreciation from capital improvements, and training. Other sales-related costs must be estimated. These are the costs of finding and bringing in both old and new business to the company. These costs should be factored into the budget. Each company will have different methods and costs, but the budget needs to include funds for your marketing, whatever form it takes. Some food-service operations use a factored sales value plan to control sales-force costs. This plan recognizes that different factors affect field sales performance—for example, customer density and quantity, product popularity and profitability, and economic conditions. Once the sales numbers are finalized into a budget and approved, management can evaluate sales costs and predict their usefulness for the future.

The Difference Between Forecasts and Budgets

The meanings of the terms *forecast* and *budget* should not be confused. They differ both in content and in intent. A food and beverage forecast is a quantitative report that attempts to predict the outcome of a series of events, with little or no effort made to control the results of those events. Forecasts are often produced on a “what-if” basis in order to determine what would happen to guest count, income, and/or expenses if various conditions occur. A food and beverage budget, on the other hand, is a strategic plan that calls for a series of actions to produce certain outcomes, with effective controls incorporated into these actions. For example, management may include budget funds to invest in a POS system to increase employee productivity and facilitate guest service. These controls maximize the chances of achieving the desired income and expenses and ultimately return on investment—what is known in the business as ROI.

Nearly everyone budgets to some extent, even though many of the people who use budgets do not recognize what they are doing as budgeting. People spend and save according to what their income levels dictates; that in itself is budgeting. For example, most people make estimates of their income and plan expenditures for food and other necessities accordingly. As a result of this planning, people restrict their spending to some predetermined, allowable amount. These budgets may exist only in the mind of the individual, but they are budgets nevertheless.

The budgets of a restaurant serve much the same functions as the budget prepared informally by an individual, but they are more detailed and involve more work to prepare. Like a personal budget, they assist in planning and controlling expenditures; they also assist in predicting operating results and financial conditions in the future period. By definition, budgets are quantitative expressions of management’s short- and long-range strategic goals. They help management establish its most profitable course of action. In this way, budgets help to connect distinct departments into one entity, at least financially. For example, the maintenance department budgets expenditures for repairing items in the food and beverage department.

The controller and management must choose the budgetary policies to follow and the standards to use. They must ask the following questions:

- Which products and services should be offered?
- How shall marketing and sales be conducted?
- What price levels should be set?
- What distribution methods should be used?
- At what payroll levels should employees be?
- How should reporting be managed from each department?

If this planning process is conceived intelligently and administered effectively, the budget will likely be a creative and indispensable tool for accomplishing management goals.

The controller is responsible for establishing control mechanisms used by management to safeguard its resources and investments. Therefore, in that role you will also take the lead in developing the annual budget. The budget should include measuring and reporting techniques that act as an early warning system. This system alerts the people directly responsible for taking corrective action. You should also be alerted, because you must ultimately keep the entire department on the charted budgetary course.

A budget must deal with the following basic functions: planning, execution, and control. Successful budgeting benefits the company by doing the following:

- Forcing the formulation of goals, strategies, and tactics
- Encouraging management's participation and strengthening its commitment to proper implementation
- Developing coordination and cooperation between and among departments and programs
- Encouraging more effective and efficient use of material, labor, facilities, and capital
- Encouraging the development of a sound organizational structure with clear lines of authority and descriptions of positions
- Demanding the development of a valid accounting system that generates current, accurate data
- Forcing management to determine its capital requirements and to consider optimum means for obtaining the capital

Using Budgeting to Head Off a Potential Crisis

A government facility managed by a concessionaire in Ohio faced a potential financial crisis. The concessionaire paid the government a certain percentage of fees based on the gross income generated from the operation (food and beverage sales, hotel guest rooms, and other services). Financially, the resort appeared to be doing well. However, a five-year budget revealed that within a few years, expenses would exceed revenues and the resort would be facing a financial crisis. Realistically, cutting costs would not work because of the resort's already lean operations; cutting costs even more would jeopardize the quality of the resort's operations. Raising prices was ruled out due to competitive pressures and the belief that this would be unpopular with many guests. The government would not reduce its fees as stipulated in the contract for fear of a lawsuit charging preferential treatment in the prior year's bidding process.

Several solutions were considered, and forecasts were made based on the costs of the different options. The solution was to build more guest rooms and expand the existing restaurant space to capture the overflow during the busy summer season. By developing a long-range budget, the management of the resort was able to identify in advance a looming financial crisis and to develop a solution that would avert the crisis in time.

APPROACHES TO BUDGETING

There are several approaches to budgeting. At times, corporate headquarters may set all budgeting guidelines that the subsidiaries will follow. This is done in order to maintain consistency in projected revenue and profit expectations. In other cases, individual restaurants or branches can present their own plans. This approach tends to work well with branch managers; however, in practice, if the corporate office oversees expenditures in marketing, payroll, and advertising dollars, then corporate control is both more warranted and more likely. The drawback is that corporate managers often do not recognize the importance of the human aspect in budgeting. It is easy to become preoccupied with the technical aspects of the budget, excluding consideration of the various human aspects—managers must be included in the budgeting process.

Indeed, the use of budget data in a rigid and inflexible manner is often the greatest single complaint of people whose performance is judged based on how well they meet their budgets.

Management should remember that the purposes of the budget include motivating employees and coordinating their efforts. Preoccupation with the dollars and cents in the budget, or being rigid and inflexible, is usually counterproductive.

Corporate Management Defense?

Towers Perrin, a consulting firm, reports that the bonuses of more than two out of three 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 the 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.

In the case of independent operations, managers and controllers must devise their own strategies and budgets, and they will certainly find the methods used here instructive. You might even find it worthwhile to combine the corporate and local approaches to make the budget work best for you.

Capital Budget

capital budget A budget of capital expenditures, such as equipment, building and other fixed assets.

The next step is to review which capital expenditures you will undertake, such as the purchase of equipment, construction, and leasehold improvements. This is sometimes referred to as a **capital budget**. The economic approach to such an investment decision rests on a comparison of the marginal cost of an item and the possible rate of return from that investment. Marginal costing is defined as the amount of output, at any given volume, by which aggregate costs are changed if the volume of output is increased or decreased by one unit. This is, however, subject to the condition that fixed cost does not change with the increase in volume. Chapter 14 details marginal costing procedures, and you can use them in analyzing a variety of purchasing decisions.

When the rate of return exceeds the marginal cost, then it is in the restaurant's financial interest to invest the additional capital. A capital expenditure proposal should be classified by the type of project—whether it is an actual capital expenditure or an operational expense that could be charged to the budgets of one or more departments. Proposals should be recorded in the general ledger under these classifications. Whether or not management approves these requests will depend on their cost effectiveness, growth options, and affect on operations. You will learn how to assess these criteria in the section on return on investment, or ROI.

The Budget Period

fiscal year Any continuous 12-month period used by a company as its accounting period.

Budgets generally cover a one-year period corresponding to the restaurant's **fiscal year**. The planning phase includes preparatory work to provide the framework of the budget. The actual preparation of the budget typically starts four months before the next budgeted fiscal year. However, some food-service operations use a continuous or perpetual budget cycle. A continuous or perpetual budget is a twelve-month budget that rolls forward one month (or quarter) as the current month (or quarter) is completed. 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 on the future at least one year ahead. Advocates of continuous budgets

argue that with this approach there is less danger that managers will become too narrowly focused on the short-term results.

It is important to note that hotels use this method for forecasting but not for budgeting. In this chapter, we will look at a one-year operating budget. However, using the same techniques, operating budgets can be prepared for periods that extend over many years. Even though it may be difficult to forecast sales and required data accurately, rough estimates can be very valuable in uncovering potential problems and opportunities that would be overlooked otherwise. Whatever method your company adopts, you should be accumulating pertinent data about the current economy and predictions made about its direction in the following year. These predictions provide a basis for considering the company's objectives and its strategies for achieving them. You will want to undertake a reasoned critique of the current year's budgeting experience as well, to provide additional information for revising or reformulating budget process procedures.

Whatever budget you adopt should reflect the following planned positions:

Internal factors

- A particular budget method (zero-based, simple markup, or percentage)
- Anticipated growth of payroll percentages and fixed cost
- Staff training costs to be incurred
- Capital improvements
- Market conditions

External factors

- Anticipated percentage of inflation
- Old and new competition

After determining this outline, the plan must be translated into responsibility reports from each department. To do so, the food and beverage controller creates budget forms, which list expense categories such as labor, supplies, food cost, uniforms, and others. These categories will correspond to those of the *chart of accounts*, to which the department manager charges expenses for accounting purposes. Budget forms like the one in Figure 16-1 can help you determine the effect of each outlet's departmental budget.

Figure 16-1 Examples of Assets, Liabilities, and Owner's Equity

Assets	Liabilities	Owners equity
Investments	Current liabilities (account payable, accrued liabilities, salary and wages payable)	Retained earnings
Property, plants, and equipment	Long term liabilities	Capital stock
Current assets (cash, account receivable, inventory, prepaid expenses)		Paid in capital in excess of current or par value
Intangible assets such as patents and goodwill		

Next, the controller incorporates revenue and cost projections into the budgeted figures. The individual department budgets are then consolidated into a company-wide budget operating

statement or income statement, a position statement or balance sheet, and a cash flow projection. These reports are similar, except that the content and company reporting requirements may differ. They are usually presented in comparative form, including the current year's budget statement and statements of one or more preceding accounting years. Comparative statements are useful in evaluating and analyzing trends. They show the financial position of the company at a particular moment in time, including the company's economic resources (assets), economic obligations (liabilities), and the residual claims of owners (owner's equity). Assets are usually shown in the order of their liquidity (nearness to cash), and liabilities are usually in the order of their maturity date (payment date).

The budgeted balance sheet is usually presented in one of the following formats:

- Account format: assets = liabilities plus owner's equity
- Report format: assets less liability = owner's equity

current ratio The relationship between current assets and liabilities; measures the liquidity of a company.

The relationship between current assets and current liabilities is referred to as the **current ratio** and is a measure of the liquidity of the company. It is derived as follows:

$$\text{current ratio} = \text{current assets} / \text{current liabilities}$$

This ratio is used to determine the ability of the company to finance or pay for current operations and to meet obligations as they mature. Most companies use a ratio of 2:1 as a benchmark. This means the company should have \$2 of current assets or cash for every \$1 of current liabilities or short-term debt. Another indicator is the excess of current assets over current liabilities (current assets minus current liabilities). This is called **working capital**. A high balance of current assets over current liabilities may indicate that you are not investing your excess cash wisely. On the other hand, a low balance may reveal a potential problem with debt services or cash flow constraints. You will need to generate your own report to judge where you stand.

working capital Current assets less current liabilities. This measure serves as an indication of the amount of readily available funds that can be used in operation of the business. Also called *net current assets*.

Too Much Cash?

Microsoft has accumulated an unprecedented hoard of cash and cash equivalents—over \$49 billion at the end of fiscal year 2003—and this cash hoard is growing at the rate of about \$1 billion per month. This cash hoard is large enough to give every household in the United States a check for \$471. What does Microsoft need all this money for? Why doesn't it pay more dividends? Microsoft executives say the cash is needed for antitrust lawsuits. Critics of the company's power, including some of its competitors, claim that the cash gives the company a huge competitive advantage. Because of this huge reserve of cash, the company can afford to lose money by entering risky new markets like the Xbox game console.

Sources: Jay Greene, "Microsoft's \$49 Billion Problem," *BusinessWeek*, August 11, 2003, p. 36, and the Microsoft Annual Report for the year 2003.

All of these statements are then compiled in the same format as the historical financial statements. In the absence of historical data, compile these forms in a logical fashion so that they can be accessed by anyone who reads them. You need details in order to be effective; the degree of detail presented in each of these forms should be sufficient for good accountancy. These budget summaries and projected financial statements are presented to top management, together with comments and recommendations from the controller. If the budget is unsatisfactory because desired goals or returns on investments are not met, or because planning assumptions have changed, revisions can be made. Either management or the outlet managers who submit the original budgets can make these revisions. After revisions, the department budgets are resubmitted to management. The compilation and review process is then repeated until, ultimately, a satisfactory operating budget is approved.

In the role of controller, you are responsible for the following:

- Compiling the research on which budgetary planning assumptions are made, and submitting this research to the outlet manager
- Determining and monitoring the forms' design and paperwork flow (Figure 16-2)
- Issuing instructions to the various department heads, such as what tax and inflation rates to consider when calculating the budget numbers, including pay rate (wage) increases
- Specifying the type of budget to adopt (zero-based, fixed, or variable; described below)
- Assisting managers in preparing initial operating plans and budgets, or, in some cases, actually preparing the budgets after discussions with the managers
- Consolidating the operating budgets of the various departments and compiling them into management summaries and financial statements
- Revising unsatisfactory budgets and discussing them with the responsible managers
- Distributing the approved budgets to the department managers
- Monitoring each department's actual performance compared with the budgets
- Preparing periodic reports on variances, which are submitted to management

Suspicious Budgeting

Restaurant management compensation is often tied to the budget. Typically, no bonus is paid unless a minimum performance hurdle, such as 90 percent of the budget target, is attained. Once that hurdle is passed, the manager's bonus increases until a cap is reached. The cap varies with different levels of managers, but it could be up to 110 percent of the budget target. This common method of tying a manager's compensation to the budget has some serious negative side effects. For example, a general manager of a chain restaurant intentionally grossly understated demand of the restaurant's main beef entrée, so that the budget target for revenues would be low and easy to beat. Unfortunately, the corporate supply management team based "meat hedging" on this biased forecast and missed an opportunity to maximize purchasing power that could have resulted in \$150,000 savings for the corporation during the holidays when the price was high.

As another example, six months before the end of the fiscal calendar year, repair and maintenance's budgeted expenses were cut in half, and the preventive maintenance budget (that is, elevator and fire sprinkler systems) was frozen. The manager claimed that these expenses would be in next year's budget and that the current market conditions could not sustain these expenses. The manager was taking an unnecessary risk in this case. There are laws governing elevator inspections and permits. The manager might make such bad decisions simply in order to meet budget numbers and thus earn a bonus.

A resort in California suspended a marketing campaign three months before the end of the year so as to achieve current year budgeted goals. Sales in the following year dropped. This started a negative cycle: What trick might managers pull to meet their sales targets next year in the face of this decision to hold back on sales initiatives?

TWELVE MONTHS BUDGET FORM

	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	Total
	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget
FOOD SALES													
BEVERAGE SALES													
PUBLIC ROOM SALES													
COVER CHARGES													
GIFT SHOP													
OTHER													
TOTAL GROSS SALES													
COST OF FOOD SOLD													
COST OF BEVERAGE SOLD													
COST OF GIFT SHOP SALES													
OTHER DIRECT EXPENSE													
CHINA, GLASSWARE AND UTENSILS													
CLEANING AND CLEANING SUPPLIES													
DONATIONS													
FUEL AND ICE													
LAUNDRY AND DRY CLEANING													
LICENSES AND PERMITS													
LINENS													
MENUS AND BEVERAGE LISTS													
MUSIC AND ENTERTAINMENT													
PRINTING AND STATIONERY													
PROMOTION													
SILVERWARE AND HOLLOWARE													
SUPERVISION													
SUPPLIES AND OTHER													
TELEPHONE, TELEGRAMS & POSTAGE													
TRAVEL AND RELATED													
UNIFORMS													
MISCELLANEOUS													
TOTAL LABOR COST (FROM BELOW)													
TOTAL EXPENSES													
GROSS PROFIT													
% OF PROFIT TO GROSS SALES													
% OF COST OF FOOD TO FOOD SALES													
% OF COST OF BEVERAGE TO BEV. SALES													
% OF COST OF GIFT SHOP SALES													
LABOR COST													
GENERAL													
MANAGERS													
PREPARATION													
MAINTENANCE & CLEANING													
SERVICE													
STEWARDS													
MISCELLANEOUS													
SUB-TOTAL													
VACATIONS													
RECOVERED SALARIES													
TOTAL SALARIES AND WAGES													
PAYROLL TAXES AND EMPLOYEE RELATION													
EMPLOYEE MEALS													
CONTRACT LABOR SERVICES													
TOTAL LABOR COST													
% OF SALARIES AND WAGES TO GR. SALES													
% OF LABOR COST TO GROSS SALES													
TOTAL FOOD COVERS													
AVERAGE FOOD CHECK													
COMB. FOOD AND BEV. CHECK													

Figure 16-2 12-Month Budget

Note that the food and beverage controller does not have direct decision-making responsibilities in the budgeting process. The controller's position here is one of liaison and clarifier of issues such as inflation rate and cost of contract—not one of dictating revenue or expenditure amounts. The department heads are responsible for coming up with a budget. The idea underlying the notion of a department head is that this person is responsible for the items that that he or she can actually control. Each line item—revenue or cost in the budget—is made the responsibility of a manager, and that manager is held responsible for subsequent deviations between the budget and the actual results. Bonuses based on meeting and exceeding budgets are often a key element of compensation for the department head. Typically, no bonus is paid unless the budgeted goals are met.

Post-Completion Procedures

Periodic reports comparing actual performance with budgeted performance are essential for effective management control. The controller is responsible for designing these **variance reports** in order to provide timely danger signals. Analyses of variances should be more than just recitations of the quantities of dollar differences. The controller should talk to the outlet managers to determine the causes of any variances, and such causes should be verified with the company records and documented in the variance report for management's review. When variances occur, operating decisions must be made. A newly hired outlet manager may decide to change the operating plan to achieve the results anticipated in the budget, for example, or the budget may be modified to reflect changed conditions and more realistic objectives. In the latter case, operating deviations may be approved, and the resulting variance deemed acceptable if it falls within company standards.

Some operations and expenditures, such as dining room expansion, sales promotion, or benefit plans, are subject to precise control. On the other hand, some operations or expenditures may be affected by external factors, such as market conditions, guest demand, natural disasters, terrorism, or the level of economic activity affecting the restaurant's results. If changes occur in external conditions beyond management's control, the budget program must be revised promptly, or other corrective measures taken, before the impact is felt. This gives outlet managers the chance to change their predictions. The idea is to make the most of positive changes and to minimize the effect of negative changes.

variance report A report comparing actual performance with budgeted performance.

CHOOSING A BUDGET TYPE

Just as management determines the timing of its budget periods, it must also consider whether to prepare a fixed (static), variable, flexible, or zero-based budget.

Fixed-Cost Budgets

Fixed costs, by definition, do not vary proportionally with volume, but rarely are they completely fixed in a real sense. They might fluctuate for other reasons.

Food-service operations often start with a fixed-cost budget. It is the simplest to construct because it counts on one level of business activity. The company assumes a certain level of operations, measured as a certain level of cover units, sales, services, or other relevant volume measures. The percentage of revenues and costs that are expected at that volume then constitute the budget. A fixed-cost budget is an adequate tool if the food-service establishment can reasonably predict sales volume, if the actual sales approximate the budgeted level, and if the comparisons are meaningful. With fixed-cost budgets, variances are easily calculated and explained.

On the other hand, a fixed-cost budget is an ineffective planning and control tool if actual volume differs substantially from budgeted volume. The larger the variance, the less meaningful the budget is, and the budget becomes merely a benchmark for determining a difference.

How to Treat Labor in Fixed Budgets

Fixed or static labor budgeting means that you establish both a given level of operations and a corresponding amount of required labor. The number of covers required to reach the targeted sales can be multiplied by the labor cost per cover to find the expected labor rate. Then, as the year progresses, actual labor costs are compared to this expected labor cost. A simple example serves to demonstrate the process of analyzing variances:

$$\begin{aligned}\text{estimated labor rate} &= \$4.25 \text{ per hour} \\ \text{estimated labor usage} &= 1.5 \text{ hours per cover}\end{aligned}$$

Therefore, to produce 5,000 covers, the manager should plan for 7,500 labor hours with a total labor cost of \$31,875. Now, assume these are the actual labor costs from a restaurant:

$$\begin{aligned}\text{covers served} &= 5000 \\ \text{labor hours used} &= 7600 \\ \text{total labor cost} &= \$33,000\end{aligned}$$

Dividing the total labor cost by the number of hours, the rate implied in this data is \$4.34 per hour. An excess of actual cost over budget could be caused either by a wage rate that is higher than your estimate, or by using more hours of labor than you estimated. The amount attributed to each can be determined by computing the following variances:

$$\begin{aligned}(\text{actual rate} - \text{estimated rate}) \times \text{actual hours} &= \text{variance} \\ \$4.34 \text{ per hour} - \$4.25 \times 7,600 \text{ hours} &= \$684 \\ \text{labor efficiency} = (\text{actual hours} - \text{estimated hours}) \times \text{standard rate} &= \text{variance} \\ 7,600 \text{ hours} - 7,500 \text{ hours} = 100 \text{ hours} \times \$4.25 \text{ per hour} &= \$425\end{aligned}$$

With these calculations in hand, management can understand how the variance happened and work to avoid repeating mistakes, perhaps with extra coaching or training for staff members. Furthermore, a variance can be analyzed to determine whether it resulted from inefficiencies, an unusual occurrence, or inadequate estimates. In some instances, actual labor costs may be lower than the established standards. In this case, it is vital that management know if the service levels were adequate. The labor standards should be reviewed and, when appropriate, changed to reflect actual efficiency.

On the other hand, a variance may not require a change to your standards, but it definitely bears noting. The actual hours worked may, in fact, correctly reflect the most efficient possible labor under the given circumstances. Say, for example, that the mix of menu items ordered one night includes all of the most complicated meals to prepare. This certainly explains some variance. Or perhaps your restaurant caters to tourists who generally relax over their meals for a long while, but in a week filled with conventioners on tight schedules, you serve more covers in less time. That, too, would explain a variance. Whatever your unique circumstances, you will often see variances that are justifiable and explainable.

Variable Budgets

Variable budgets are also called flexible budgets as it relates to direct cost. Both methods treat indirect expenses differently. These are plans that are made to change with the actual level of business activity. They are based on the premise that a budget can be derived from whatever volume level is attained. In order to derive a budget based on volume level, you must first separate costs into fixed and variable categories. Figure 16-3 provides examples of fixed, variable, and semivariable costs.

Each variable cost can then be related to revenues as a percentage. This is a simple mathematical process: Divide the cost amount by the total revenue amount. Suppose we want to know the percentage of a \$327,000 labor cost in an operation with \$771,000 in gross sales. Dividing the former by the latter, we get 42.4 percent. This can be done for each cost category as well

Discussion Topic

Why is it important, and difficult, to differentiate fixed costs from variable costs?

Figure 16-3 Different Costs

Fixed Cost	Variable Cost	Semi or Mixed Cost
Definition: These costs do not vary with changes in the level of output or sales, over a relevant range of production or sales.	Definition: These are cost associated with the variable factors of production. They fluctuate in direct proportion to the fluctuation of the volume of production or sales.	Definition: These are costs that fluctuate with production or sales, but not in direct proportion. They contain elements of fixed and variable costs.
Example: rent	Example: direct hourly labor and food and beverage cost	Example: costs of supervision.

as for total costs. Fixed costs should not change with volume levels, so they are added in separately to determine total costs. A budget formula for a typical restaurant might be as follows:

$$\text{total costs} = (\text{variable cost percentage} \times \text{revenue level}) + \text{fixed costs}$$

Assume that the information in Figure 16-4 represents the Sea Breeze Hotel Restaurant with Myla Thomas as the controller. Applying the above equation, the budget total equals $(\$10.56 \times \text{anticipated guest covers}) + \$8,750$. If the anticipated guest cover volume is 9,000 for January and 10,000 for February, then using the formula above we find the following:

$$\text{January: } (\$10.56 \times 9000) + \$8,750 = \$103,790$$

$$\text{February: } (10.56 \times 10,000) + \$8,750 = \$114,350$$

The formula is valid as long as actual production volume is within the normal or relevant range. However, in some cases production levels outside this range may require different fixed costs, and variable costs will assume different levels as well.

The fixed and variable budgets costs are not merely cost forecasts. They reflect management's expected standards—that is, goals to be achieved. As the controller of Sea Breeze Hotel, Myla Thomas will measure actual results against these standards, and she will account for significant variances. She must then inform management why the company's expectations were not achieved.

Figure 16-4 Fixed and Variable Costs

Fixed and variable costs			
Fixed Costs Per Month		Variable Cost Per Cover	
		Assume Average Food Check = \$15 and Beverage Average Check = \$5	
	Cost		Cost
Licenses and Beverage Permit	\$500.00	Food Cost per cover	\$4.50
Management Salary	\$5,000.00	Beverage Cost per cover	\$1.10
Music And Entertainment\$	1,750.00	Employees Wages per hour	\$4.50
Depreciation - Equipment	\$500.00	Laundry And Dry Cleaning per 10 lb. Load	\$0.40
Property Tax	\$500.00	Utilities such as water and electricity	\$0.01
Education And Training	\$500.00	Other Supplies	\$0.05
Total fixed cost	\$8,750.00	Total variable cost	\$10.56

The information in Figure 16-5 is an example of a comparative 12-month food and beverage budget statement form that Myla will use to review actual performance against budgeted numbers. This form is just an extension of Figure 16-4. It enables the managers and Myla to identify, correct, and reevaluate problem areas.

How to Treat Labor in Variable Budgets

Variable budgeting relates actual costs to expense budgets at a given activity level. Such a relative system works well for labor that is directly involved in production, such as in the kitchen, but does not work as well for labor employed in support activities. For instance, how can expenditures for the kitchen cleaning crew be controlled? It is unlikely that usage and costs of these services will vary in direct proportion to output.

A simple solution is to set a target level of output and determine the amount of indirect labor, like that of the kitchen cleaning crew, that will be needed to produce that output. After the budget period has ended, you can compare actual expenditures to budgeted expenditures. This technique is the same as for fixed budgeting, but in this case, you use it only for the indirect labor. But suppose that the target output is not reached, or is exceeded. Can we compare expenditures that should have been made at one level of output with those that actually were made at a different level of output? Imagine the situation in Figure 16–6.

Figure 16-6 Return on Investment to cover

	Actual	Budgeted	Variance
Covers Produced	5500	6000	500
Indirect Labor Costs	\$1250	\$1300	\$50
Percentage of Cost / Covers	22.7%	21.7%	

Take a look at the first two lines. Even though production goals were not met, there appears to be a favorable variance for indirect labor, without computing the percentage difference. But when you calculate the percentages in the third line, you can see that indirect labor makes up a larger percentage of cost; less indirect labor should have been necessary to produce that smaller number of covers. You need a method to determine how much less labor should be necessary in order to evaluate the efficiency of indirect labor personnel.

Flexible Budgeting

Flexible budgeting provides a solution to the problems found in both fixed and variable budgets. With flexible budgeting, a formula is developed for the target amount of indirect labor that should be used for a given range of outputs. For instance, the target may be \$1 of indirect labor for each 1.5 hours of direct labor.

An obvious problem with flexible budgeting is that indirect labor costs, such as cleaning, may not vary directly with activity measures. Frequently in the food-service industry direct labor hours can double without a commensurate increase in indirect labor costs. As a result, to make flexible budgeting work precisely, you will develop a variance factor that expresses the response of semivariable costs, such as indirect labor, to changes in activity.

This technique requires that a budget be prepared for a target level of output and indirect costs be budgeted for that level. Then, for each different indirect expense, measure and record how closely the expense fluctuates compared to the direct labor costs. If the expense varies with the direct labor costs, you can plot that variance factor. This factor sets the variance at a percentage that you can apply to that cost any time. If sales and direct labor change, use the variance factor to determine how much additional money you will have to spend on that indirect labor expense. Here is an example to show how the process works:

1. Determine the indirect labor cost at the target volume. (For this example, we're assuming that these costs are \$1,000 for a direct labor expenditure of \$5,000.)
2. For the variance at another business level, determine how much the direct labor activity differs from the targeted level. (Now assume that an additional \$2,000 of direct labor will be necessary.)

3. Identify the variance as a function of change in indirect labor cost for every \$1 change in direct labor costs. That is, if you historically must spend \$40 more in indirect cost to accommodate \$100 more in direct labor, the variance factor per direct labor dollar is \$0.40. The \$0.40 was derived by dividing indirect labor cost (\$40) by direct labor cost (\$100).
4. Compute the budgeted amount of indirect labor using this formula:

$$\frac{\text{targeted indirect labor}}{\text{targeted direct labor}} \times (\text{actual sales} - \text{targeted sales}) \times \text{variance factor}$$

$$\text{or, in our example, } \frac{1000}{5000} \times 2000 \times \$0.40 = \$160$$

\$160 is the additional amount of indirect labor cost that should be budgeted as a result of the increased direct labor cost. The indirect labor budget should be \$1,160 when the direct labor budget is \$7,000.

Zero-Based Budgeting

zero-based budgeting A budget which starts at zero in preparation and in which the writer must justify every expense line.

Another approach to budgeting is **zero-based budgeting**. Zero-based budgeting is a very different approach from other methods, and starts with determining which functions are necessary to achieve your goals. The controller and manager divide expenses based on their functions, similar to an organizational chart that divides hierarchy based on job descriptions. Then they examine the goals of each function to determine what specific programs are necessary to accomplish them. The programs are further subdivided into specific activities; the costs for these are justified by matching their identified benefits with the costs necessary to achieve them.

In preparing a budget for the coming year using standard budget approaches (fixed, variable, or flexible), the current year's budget is taken as the starting point. Management determines a percentage increase or decrease from the current year's sales and expenses to be used in preparing next year's budget. In the case of zero-based budgeting, the process comes from the idea of "building up from zero" the benefits and expenses associated with each proposed program in the budget. The manager's decision to fund each activity is based on how it is expected to contribute to achieving the outlet's goals. Each item in the budget is not based on the current year's revenue or expenses, but must be justified for the coming year; thus, the department head starts each year from zero. Once an item is in the budget, the controller does not question its presence and magnitude; only variances from the budgeted numbers are questioned.

The final step in the zero-based budget process is allocating available resources to each activity based on that activity's contribution to revenue. For operations that must work with a budget mandated by headquarters, zero-based budgeting will be appealing as a tool for effective and efficient trade-offs with corporate management. Zero-based budgeting allows and even requires that the manager preplan revised budgeted numbers. As a matter of company policy, the food and beverage controller should encourage the use of zero-based budgeting while noting the benefits to both outlet managers and the operation. In other words, this type of budgeting must be sold to managers as both an operational concept and an effective tool for meeting their responsibilities.

The following are definitive strengths of zero-based budgeting that can help to encourage its use:

- Good planning and the establishment of goals are required to approve or deny costs or to pay for new or old items or programs.
- Management must systematically review and evaluate activities and rank them in order of importance.

- Follow-up evaluation of approved expenses or activities is heavily encouraged.
- The controller and management have more control over the operation because they must monitor more closely the ongoing expense activities and their results.
- There is improved communication among managers within the functions and throughout the organization's management levels.

One disadvantage of zero-based budgeting is that it requires a commitment of time to plan, coordinate, communicate, delegate, and execute the strategies that will make it successful. If this time is deemed cost-effective, zero-based budgeting can have extraordinary effects on budgetary goal setting and achievement.

When Improvement Is Not Better

A good friend of mine, Vieden Zahariev with Delaware North Companies, once said, "Whatever you manage, you measure." He advised managers to focus on the right metrics when measuring performance. He relates the following story: "A fast-food chain gave lip service to many objectives, but what senior managers watched most rigorously is how much chicken the chef had to throw away. What happened? As one restaurant operator explained, it was easy to hit your . . . targets: the chef would simply not cook any chicken until the customer ordered it. Customers might have to wait twenty minutes for their meal, and would probably never come back—but you'd sure make your numbers. The Moral is: a measurement may look good on paper, but you need to ask what behavior it will drive."

Source: "Using Measurement to Boost Your Unit's Performance," by John Case, Harvard Management Update, October 1998.

How to Treat Labor in Zero-Based Budgets

Zero-based budgeting techniques define expenses as discretionary or nondiscretionary. Such costs as direct labor are considered nondiscretionary because they are determined largely by the type of POS system, restaurant, and menu you have. Management cannot significantly alter the amount of labor required to produce a given amount of output without first making changes in the recipes, POS system, or service level required. The primary impact of zero-based budgeting, on the other hand, is on discretionary costs, such as wages for maintenance personnel and supervisory staff.

For indirect labor, management must first define alternative ways to perform the necessary functions, and then select the most cost-effective method. Next, the outlet manager defines various levels of business activity for performing the function and the cost of each successive level. These levels will include a minimal level of activity below which it is no longer wise to operate the restaurant, and any number of additional levels up to and exceeding the current level of activity and the forecast. This leveling technique resembles the approach used to develop the restaurant staffing guide, and it is called a **decision package**. A decision package is a document that describes the level of effort required to meet outlet objectives.

In preparing a decision package, rank the various activities by priority. Then define a cutoff point on this listing, and all activity packages deemed vital (above the cutoff) receive a budget allotment. You may see that you need an additional person to avoid poor service, or that your staff should be able to handle a higher sales volume. This technique allows the manager to evaluate discretionary costs, such as indirect labor, as packages of activities instead of as dollar value allotments.

decision package A document that describes the level of effort required to meet objectives.

MANAGEMENT PERFORMANCE REVIEW USING ROI

Thus far, this chapter has focused on how to prepare a company budget. This section presents methods for evaluating management performance on key decisions needed for arriving at budget goals and actual results in dollars and cents. We said at the beginning of the chapter that a food and beverage budget is a strategic plan that calls for a series of actions to produce certain outcomes, with effective controls incorporated into these actions. For example, management may budget funds to invest in a POS system to increase employee productivity and facilitate guest service. This is a decision that could maximize the chances of achieving the desired income and expenses and, ultimately, the operation's **return on investment (ROI)**.

ROI is defined as net operating income divided by average operating assets:

$$\text{ROI} = \text{net operating income} / \text{average operating assets}$$

The higher the return on investment of a restaurant, the greater the profit earned per dollar invested in the restaurant's operating assets (i.e., POS systems).

Net operating income is income before interest and taxes. It is sometimes referred to as *earnings before interest and taxes* (EBIT). Net operating income is used in the formula because the base (that is, the denominator) consists of operating assets. Thus, to be consistent, we use net operating income in the numerator.

return on investment

(ROI) Net operating income divided by average operating assets. A measure of profitability of the business expressed in percentages.

Quiz

If you were measuring ROI on a new POS system, would the correct figure be the increase in net operating income divided by the cost of the POS system?

In the food-service industry, operating assets are assets you will use to run the day-to-day business of the restaurant (including cash, accounts receivable, physical plant and equipment, and inventory). Assets that would not be included in the average operating asset definition are buildings rented to someone else, investments in another company, and land held for future use. These are considered nonoperating assets because they are not held in order to operate the restaurant. The operating assets base used in the formula is typically computed as the average of the operating assets between the beginning and the end of the fiscal year.

Most restaurants use the net book value (the acquisition cost less accumulated depreciation) of depreciable assets to calculate average operating assets. This approach has drawbacks. An asset's net book value decreases over time as the accumulated depreciation increases. This decreases the denominator in the ROI calculation, thus increasing ROI. Consequently, ROI mechanically increases over time. Moreover, replacing old depreciated operating equipment with new equipment increases the book value of depreciable assets and decreases ROI. Hence it is argued that using net book value in the calculation of average operating assets results in a predictable pattern of increasing ROI over time as accumulated depreciation grows and discourages replacing old equipment with new, updated equipment. An alternative to the net book value is the gross cost of the asset, which ignores accumulated depreciation. Gross cost stays constant over time because depreciation is ignored; therefore, ROI does not grow automatically over time, and replacing a fully depreciated asset with a comparably-priced new asset will not adversely affect ROI. Others may argue that it does adversely affect ROI because of inflation, unless technology becomes cheaper, causing replacement to have the opposite effect. Nevertheless, in the restaurant industry, net book value is widely used to compute average operating assets because it is consistent with the format of financial reporting—recording the net book value of assets on the balance sheet and including depreciation as an operating expense on the profit and loss statement.

Application of ROI to Sea Breeze Hotel (SBH) Food and Beverage Operation

The equation for ROI—net operating income divided by average operating assets—does not provide much help to controller Myla Thomas at SBH, who is interested in taking actions to improve ROI. It only offers two options for improving performance: net operating income and average operating assets. Fortunately, ROI can also be expressed as follows:

$$\begin{aligned} \text{ROI} &= \text{margin} \times \text{turnover} \\ \text{margin} &= \text{net operating income} / \text{sales} \\ \text{turnover} &= \text{sales} / \text{average operating assets} \end{aligned}$$

This formula provides additional insights. Figure 16-7 provides a useful diagram from Myla's perspective, margin and turnover are very important concepts that she can use to measure how well SBH is doing financially. From Chapter 13, we know that increasing sales or reducing cost of sales improves margin. The lower the operating expenses (or cost of sales) per dollar of sales, the higher the margin earned. Some managers tend to focus too much on margin and ignore turnover, and it is this that has created the cash crunch at SBH discussed in Chapter 1.

Turnover incorporates a crucial area of a manager's responsibility—the investment in operating assets—and Myla Thomas understands that. Excessive funds tied up in operating assets (such as cash, inventory, accounts receivable, plant and equipment, and other assets) depresses turnover and lowers ROI. In fact, inefficient use of operating assets can be just as much of a drag on profitability as excessive operating expenses, which depress margin.

Delaware North Companies (known as DNC), a world-class food-service company, pioneered the use of ROI and recognized the importance of looking at both margin and turnover in assessing the performance of a manager. Figure 16-7 is a graphic interpretation of ROI, and it is communicated to all unit managers at DNC.

A memorandum by Chuck Moran, president and chief operating officer of DNC, to all subsidiary managers on April 10, 2006, said it in a nutshell in this extract, titled "The Power of Focus":

"We have invested significantly in new business, both in capital and human resources. Many of these investments have not met financial expectations. Needless to say, these trends are in conflict with our strategic imperative of financial growth. We need to invest our capital wisely in order to achieve sustainable growth in revenues and profitability."

So, just how do you measure revenue and profitability growth? You will find out from the exercises below. ROI is now widely used as the key measure of investment center performance, and it reflects in a single figure many aspects of the manager's responsibilities. Myla Thomas uses it to compare the returns of all restaurant investments at SBH, past, present, and future.

Any increase in ROI must involve at least one of the following:

- Increased sales
- Reduced operating expenses
- Reduced operating assets

Many actions involve combinations of changes in sales, expenses, and operating assets. For example, a manager may make an investment in (that is, increase) operating assets in order

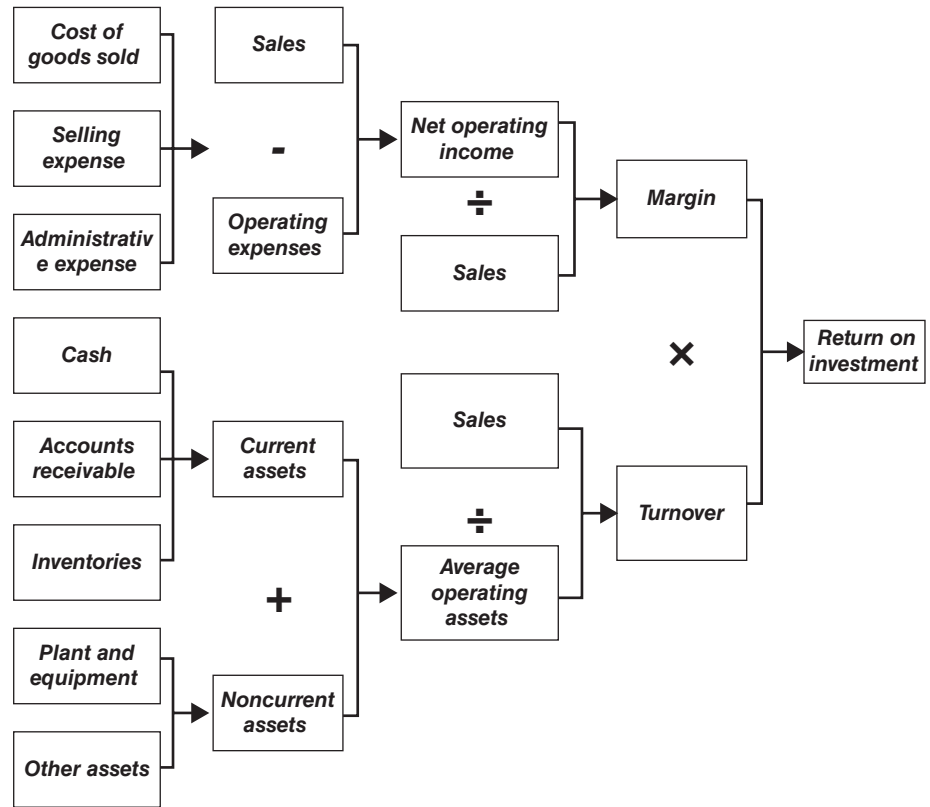


Figure 16-7 Return on Investment. Courtesy of Ray Garrison, Eric Noreen and Peter Brewer, *Managerial Accounting* (11th edition), © 2006. Published by McGraw-Hill/Irwin. Reproduced with permission of The McGraw-Hill Companies.

to reduce operating expenses or to increase sales. Whether the net effect is favorable or not is judged in terms of its general impact on ROI, and that is the general theme of Chuck Moran’s message to the DNC management team.

To illustrate how ROI is affected by various actions, we will go back to our Sea Breeze Hotel Restaurant example. The Sea Breeze operates a full-service restaurant in its Monterey hotel. Myla Thomas’s evaluation is largely based on the ROI of the food and beverage division’s performance.

The following 12 months’ data represent the results of operations before Myla joined the management team of SBH:

Sales	500,000
Operating expenses	450,000
Net operating income	50,000
Average operating assets	300,000

The ROI is computed as follows:

$$\begin{aligned}
 \text{ROI} &= \frac{\text{net operating income}}{\text{sales}} \times \frac{\text{sales}}{\text{net operating assets}} \\
 \text{ROI} &= \frac{50,000}{500,000} \times \frac{500,000}{300,000} \\
 &= 10.00\% \times 1.67 \\
 &= 16.67\%
 \end{aligned}$$

First Scenario

One year after Myla Thomas joined SBH, sales increase by 10 percent without any increase in operating assets, due to using the menu engineering techniques covered in Chapter 13. The increase in sales requires additional operating expenses such as cleaning cost and food cost, but as long as fixed costs are not affected by the increase in sales and Myla exercises effective control over costs, operating expenses will increase by less than 10 percent, and therefore the increase in net operating income will be greater than 10 percent. If we assume that the increase in operating expenses is 8 percent of the prior year's \$450,000, rather than 10 percent, the new net operating income would therefore be \$64,000.

$$\begin{aligned} \text{Sales } (1.10 \times 500,000) &= 550,000 \\ \text{Operating expenses } (1.08 \times 450,000) &= \underline{486,000} \\ &64,000 \end{aligned}$$

In this case, Myla's new ROI will be as follows:

$$\begin{aligned} \text{ROI} &= \frac{\text{net operating income}}{\text{sales}} \times \frac{\text{sales}}{\text{net operating assets}} \\ \text{ROI} &= \frac{64,000}{550,000} \times \frac{550,000}{300,000} \\ &= 11.64 \text{ percent} \times 1.83 \\ &= 21.33 \text{ percent (compared to 16.67 percent originally)} \end{aligned}$$

This is the type of result Myla should be proud of, and it should ideally be tied to some form of incentive payment.

Second Scenario: Decrease Operating Expenses with No Change in Sales or Operating Assets

For another example, suppose that Myla Thomas saves \$5,000 by applying effective purchasing techniques or cost control (See Chapter Three). When Myla saves on expenses by implementing cost control, she increases SBH's bottom-line profit by that entire dollar—that is, \$5,000 saved is equal to \$5,000 more in profit. When added to \$50,000, the new profit is now \$55,000. Therefore, Myla's new ROI calculation will be as follows:

$$\begin{aligned} \text{ROI} &= \frac{\text{net operating income}}{\text{sales}} \times \frac{\text{sales}}{\text{net operating assets}} \\ &= \frac{55,000}{550,000} \times \frac{550,000}{300,000} \\ &= 11.00 \text{ percent} \times 1.67 \\ &= 18.33 \text{ percent (compared to 16.67 percent originally)} \end{aligned}$$

From the onset, there was no effect on turnover, which remained at 1.67 (as is common), so there had to be an increase in margin in order to improve the ROI. It is important to note that when margins are being squeezed, cutting expenses is often the first line of attack by managers. In this case, Myla has done it wisely through effective cost control techniques in purchasing. However, in many instances discretionary fixed expenses (such as preventive maintenance) come under scrutiny first, and various programs are either curtailed or eliminated in an effort

to cut costs. Food and beverage managers must be careful not to cut too much or cut something in the wrong place. This may have the effect of decreasing sales or indirectly incurring costs elsewhere. Also, managers must remember that indiscriminate cost-cutting can destroy employee morale.

Third Scenario: Decrease Operating Assets with No Change in Sales or Operating Expenses

Assume that Myla Thomas is able to reduce inventories by \$25,000 using just-in-time or consignment purchasing and pricing techniques. This might actually have a positive effect on sales (through fresher ingredients) and on operating expenses (through reduced inventory spoilage), but for the sake of illustration, suppose the reduction in inventories has no effect on sales or operating expenses. The reduction in inventories will reduce average operating assets by \$25,000, from \$300,000 down to \$275,000. The new ROI will be as follows:

$$\begin{aligned} \text{ROI} &= \frac{\text{net operating income}}{\text{sales}} \times \frac{\text{sales}}{\text{net operating assets}} \\ &= \frac{50,000}{500,000} \times \frac{500,000}{275,000} \\ &= 10.00 \text{ percent} \times 1.81 \\ &= 18.18 \text{ percent (compared to 16.67 percent originally)} \end{aligned}$$

In this example, Myla used JIT or consignment and pricing techniques to reduce operating assets. Another common tactic for reducing operating assets is to speed up the collection of accounts receivable. For example, many hotels and food-service companies now encourage customers to pay electronically rather than using the much slower method of sending checks by mail.

Fourth Scenario: Invest in Operating Assets to Increase Sales

Assume that Myla Thomas is able to convince the owner of SBH to purchase a pizza oven for \$1,500, and the oven is capable of making a number-one seller: pizza. This new equipment results in additional sales of \$15,000 and additional product and labor costs of \$4,000. Thus, net operating income increase by \$11,000 to \$61,000 from the original \$50,000. The new ROI is as follows:

$$\begin{aligned} \text{ROI} &= \frac{\text{net operating income}}{\text{sales}} \times \frac{\text{sales}}{\text{net operating assets}} \\ &= \frac{61,000}{515,000} \times \frac{515,000}{275,000} \\ &= 11.84 \text{ percent} \times 1.71 \\ &= 20.23 \text{ percent (compared to 16.67 percent originally)} \end{aligned}$$

In this example, the investment has effects on both margin and turnover, which were originally 10 percent and 1.67, respectively. In some cases, the impact will only be noticeable in one factor or the other.

So what can you learn from the four scenarios above? Simply exhorting managers to increase ROI is insufficient. In the food-service industry, managers who are told to increase ROI will naturally wonder how this is to be accomplished. A clear directive must come from top management, as you have seen from Chuck Moran's statement and from Figure 16-6, to provide

manager with some guidance. Generally speaking, ROI can be increased by increasing sales, decreasing costs, and/or decreasing investments in operating assets. However, it may not be obvious to many managers in the food-service industry how they are supposed to increase sales, decrease costs, and decrease investments in a way that is consistent with the company's short- and long-term strategies. For example, a manager who is given inadequate guidance may cut back on investments that are critical to implementing the company's strategy. For that reason, a constant review of unit performance is recommended with participation from headquarters management. A well-constructed review, without corporate intimidation, should answer questions such as the following: What internal business processes should be improved? Which customers should be targeted, and how will they be attracted and retained at a profit? In short, a well-constructed review can provide managers with a road map that indicates how the company intends to increase its ROI. In the absence of such a road map of the company's strategy, managers may have difficulty understanding what they are supposed to do to increase ROI, and they may work at cross purposes rather than in harmony with the overall strategy of the company.

SUMMARY

For purposes of evaluating company performance and for future investment decisions, companies generally prepare annual budgets that represent the financial goals of the company. Several approaches to developing a budget are possible: fixed budgets, variable budgets, flexible budgets, and zero-based budgets. Only by setting clear financial goals and implementing controls to monitor performance is a company likely to achieve maximum profitability. Returns on investment (ROI) are widely used to evaluate the performance of investment decisions. ROI suffers from an underinvestment problem: Managers may be reluctant to invest in projects that would drag down their ROI but whose returns exceed that unit's specific required rate of return.

CHAPTER QUESTIONS

Critical Thinking Questions

1. Differentiate a forecast from a budget.
2. Why is zero-based budgeting used?
3. How does successful budgeting benefit the company?
4. Why is it important, especially in writing a variable budget, to differentiate fixed from variable costs?
5. What is the formula used to calculate gross profit?
6. When performing variable budgeting, if total fixed costs for the month are \$10,000, food cost per cover is \$2.35, beverage cost per cover is \$0.85, labor cost per cover is \$1.85, and other costs per cover are \$0.65, what is the total budgeted expense if 3,000 covers are forecast?
7. Given the data above, what is the total budgeted expense if 15,000 covers are forecast?
8. Describe the treatment of labor in fixed budgeting.
9. Describe the treatment of labor in variable budgeting.
10. Describe the treatment of labor in zero-based budgeting.

Objective Questions

1. One example of an internal factor affecting the budget is staff training costs. True or False?
2. A high balance of current assets over current liabilities may indicate that you are not investing excess cash wisely. True or False?
3. In a large operation, the food and beverage controller has direct responsibilities for operational decision making. True or False?
4. Fixed costs are fixed in dollars, and thus the fixed cost percentage decreases as sales increase. True or False?

Multiple Choice Questions

1. A plan that calls for a series of actions to produce certain outcomes, with effective controls incorporated into these actions, is a
 - A. budget.
 - B. forecast.
 - C. feasibility analysis.
 - D. corporate policy.
2. On a balance sheet, assets equal
 - A. owner's equity minus liabilities.
 - B. liabilities plus owner's equity.
 - C. liabilities.
 - D. owners' equity.
3. The type of budget that is simplest to construct and refers to a single level of business activity is the
 - A. variable budget.
 - B. zero-based budget.
 - C. fixed budget.
 - D. cash-flow budget.

CASE STUDIES

Case Study 1: Budgeting or Planning

One element necessary to the success of an organization is strategic planning. Strategic planning establishes an organization's long-range goals or objectives and the means to achieve them. Even before a company can begin operations, decision-makers must answer the following questions: What products or services will the company provide? How will the company be financed and structured? Where will the company and its distributors be located? How will the company's products or services be marketed?

Line and staff management play specific roles in strategic planning. They have different responsibilities and functions in an organization. In addition, the activities of these two management groups must be coordinated.

Your task:

1. In the formulation of an organization's strategic plans, describe the contribution to be made by:
 - A. The line managers
 - B. The staff groups and departmentsIn your answer, identify the types of decisions that these two groups of managers would probably make as they participate in the formulation of strategic plans.
2. In the implementation of an organization's strategic plans:
 - A. State how the responsibilities of line management differ from those of staff management.
 - B. Describe how line and staff responsibilities interrelate in the implementation of strategic planning.

Case Study 2: Approach to Budgeting

An effective budget converts the objectives and goals of management into data. The budget can then serve as a blueprint that represents management's plan for operating the organization. Moreover, the budget is frequently a basis for controlling management performance, which can be evaluated by comparing actual results with the budget.

Creating an effective budget is essential for a successful operation. There are several ways in which budget data can be generated, and all involve extensive contacts with people at various operating levels. The manner in which the involved people perceive their roles in the budget process is important to the successful use of the budget as a management tool.

Your task:

1. Discuss the behavioral implications associated with preparing the budget and with using the budget as a method to control activities when a restaurant employs:
 - A. A budgetary approach in which budget data are imposed from above.
 - B. A budgetary approach in which budget data are prepared at various levels in a self-imposed, participatory manner.
2. Communication plays an important part in the budget process regardless of whether the budget is imposed from above or a participative budget approach is used. Describe the differences in communication flows between these two approaches to budget preparation.

Case Study 3: Approach to Budgeting

Fish King Restaurants, a well-known restaurant chain in the Midwest, is in the initial stages of preparing the annual budget for 2008. Kevin Vieden recently joined Fish King's accounting staff and wants to learn as much as possible about the company's budgeting process. During a recent lunch with Scott Bruce, restaurant manager, and Brenda Nolan, sales manager, Kevin initiated the following conversation:

Kevin: Since I'm new around here and am going to be involved with the preparation of the annual budget, I'd be interested to learn how the two of you estimate sales and production numbers.

- Brenda:** We start out very methodically by looking at recent history, discussing what we know about current accounts, potential customers, and the general state of consumer spending. Then, we add that usual dose of intuition to come up with the best forecast we can.
- Scott:** I usually take the sales projections as the basis for my projections. Of course, we have to make an estimate of what this year's closing inventories will be, which is sometimes difficult.
- Kevin:** Why does that present a problem? There must have been an estimate of closing inventories in the budget for the current year.
- Scott:** Those numbers aren't always reliable since Brenda makes some adjustments to the sales numbers before passing them on to me.
- Kevin:** What kinds of adjustments?
- Brenda:** Well, we don't want to fall short of the sales projections, so we generally give ourselves a little breathing room by lowering the initial sales projection anywhere from 2 to 5 percent.
- Scott:** So, you can see why this year's budget is not a very reliable starting point. We always have to adjust the projected production rates as the year progresses and, of course, this changes the ending inventory estimates. By the way, we make similar adjustments to expenses by adding at least 10 percent to the estimates; I think everyone around here does the same thing.

Your task:

1. Kevin, Brenda, and Scott have described the use of what is sometimes called budgetary slack.
 - A. Explain why Brenda and Scott behave in this manner, and describe the benefits they expect to realize from the use of budgetary slack.
 - B. Explain how the use of budgetary slack can adversely affect Brenda and Scott.
2. As a management accountant, Kevin Vieden believes that the behavior described by Brenda and Scott may be unethical. Explain why the use budgetary slack may be unethical.

Case Study 4: Evaluating a Company's Budget Procedures

Colin Patrick and Al Johnson strolled back to their offices from the company headquarters. Colin is the director of food and beverage; Al is the director of engineering. The men had just attended the monthly performance evaluation meeting for the Shoshone Hotel food and beverage division. These meetings had been held on the third Tuesday of each month since Carlton Drakes Jr., the chairman's son, had become the managing director a year earlier.

As they were walking, Colin spoke. "Boy, I hate those meetings! I never know whether my department's accounting reports will show good or bad performance. I'm beginning to expect the worst. If the accountants say I save the company a dollar, I'm called 'Sir,' but if I spend even a little too much—boy, do I get in trouble. I don't know if I can hold on until I retire."

Colin had just been given the worst evaluation he had ever received in his long career with Shoshone Hotel. He had been the most respected of the experienced food and beverage managers in the company. When Carlton Drake Jr. became the managing director, he directed that monthly performance comparisons be made between

actual and budgeted costs for each department. The departmental budgets were intended to encourage the supervisors to reduce inefficiencies and to seek cost reduction opportunities. The company controller was instructed to have his staff “tighten” the budget slightly whenever a department attained its budget in a given month; this was done to reinforce the hotel supervisor’s desire to reduce costs. The managing director often stressed the importance of continued progress toward attaining the budget; he also made it known that he kept a file of these performance reports for future reference when he succeeded his father.

Colin Patrick’s conversation with Al Johnson continued as follows:

Colin: I really don’t understand. We’ve worked hard to get up to budget, and the minute we make it they tighten the budget on us. We can’t work faster and still maintain quality. I think my staff is ready to quit trying. Besides, those reports don’t tell the whole story. We always seem to be interrupting the big job for all those small rush orders. All that setup and equipment breakdown time is killing us. And quite frankly, Al, you were no help. When our baking oven broke down last month, your people were nowhere to be found. We had to take it apart ourselves and got stuck with all that idle time.

Al: I’m sorry about that, Colin, but you know my department has had trouble making budget too. We were running well behind at the time of that problem, and if we’d spent a day on that old machine, we never would have made it up. Instead we made the scheduled inspections of the elevators because we knew we could do those in less than the budgeted time.

Colin: Well, Al, at least you have some options. I’m locked into what the catering department assigns to me, and you know they’re being harassed by sales for those special orders. Incidentally, why didn’t your report show all the supplies you guys wasted last month when you were working in Kevin’s department?

Al: We’re not out of the woods on that deal yet. We charged the maximum we could to our other work and haven’t even reported some of it yet.

Colin: Well, I’m glad you have a way of getting out of the pressure. The accountants seem to know everything that’s happening in my department, sometimes even before I do. I thought all that budget and accounting stuff was supposed to help, but it just gets me into trouble. It’s all a big pain. I’m trying to put out quality work; they’re trying to save pennies.

Your task:

1. Identify the problems that exist in the Shoshone Hotel’s budgetary control system, and explain how the problems are likely to reduce the effectiveness of the system.
2. Explain how Shoshone Hotel’s budgetary control system could be revised to improve its effectiveness.

Case Study 5: Behavioral Impact of Budget Costs and Variances

Alison Snyder is the restaurant and kitchen manager of Briscoe Gourmet Restaurant. Each month, Alison receives a performance report showing the budget for the month, the actual activity, and the variance between budgeted and actual costs. Part of Alison’s annual performance evaluation is based on her department’s performance against budget. Briscoe’s purchasing manager, Kevin Scott, also receives monthly performance reports, and he, too, is evaluated in part on the basis of these reports.

- Kevin:** I got the same treatment. All I ever hear about are the things I haven't done right. Now I have to spend a lot of time reviewing the report and preparing explanations. The worst part is that it's now the 16th of March, so the information is almost a month old, and we have to spend all this time on history.
- Alison:** My biggest gripe is that our production activity varies a lot from month to month, but we're given an annual budget that's written in stone. Last month we were shut down for three days when a strike delayed delivery of fish. You know about that problem, though, because we asked you to call all over the city to find an alternative source. When we got what we needed on a rush basis from the local supermarket, we had to pay more than we normally do.
- Kevin:** I expect problems like that to pop up from time to time—that's part of my job—but now we'll both have to take a careful look at our reports to see where the charges are reflected for that rush order. Every month I spend more time making sure I should be charged for each item reported than I do making plans for my department's daily work. It's really frustrating to see charges for things I have no control over.
- Alison:** The way we get information doesn't help, either. I don't get copies of the reports you get, yet your department affects a lot of what I do. Why do the budget and accounting people assume that I should only be told about my operations despite these effects? And the general manager regularly gives us pep talks about how we all need to work together as a team—how ironic.
- Kevin:** I seem to get more reports than I need, and I am never asked to comment on them until top management calls me on the carpet about my department's shortcomings. Do you ever hear comments when your department shines?
- Alison:** I guess they don't have time to review the good news. One of my problems is that all the reports are in dollars and cents. I work with people, machines, and material. I need information to help me this month to solve *this* month's problems—not another report of the dollars expended last month or the month before.

Your task:

1. Based on the conversation between Alison and Kevin, describe the likely motivation and behavior of these two employees resulting from Briscoe Gourmet's variances reporting.
2. When properly implemented, both employees and companies should benefit from a system involving timely actual costs versus potential cost reporting.
 - A. Describe the benefits that can be realized from a potential cost system.
 - B. Describe how the gripes above can be addressed.

FOR FURTHER READING

Michael C. Jensen, "Corporate Budgeting Is Broken—Let's Fix It," *Harvard Business Review*, November 2001; Michael Jensen, "Why Pay People to Lie?" *The Wall Street Journal*, January 8, 2001, p. A32.