CHAPTER 7:
PLANNING FOR PROFIT AND COST CONTROL
Learning Objectives

1. Three Levels of Planning
2. Describe the master budget and explain its benefits
3. Describe the advantages of budgets
4. Prepare the operating budget and its supporting schedules
5. Use computer-based financial planning models for sensitivity analysis
6. Recognize the Human Aspects of Budgeting
Three Levels of Planning

Learning Objective 1
Three Levels of Planning

1. **Strategic planning** involves making **long-term** decisions such as defining the scope of the business, determining which products to develop or discontinue and identifying the most profitable markets.

2. **Capital budgeting** focuses on **intermediate-range** planning and involves decisions such as whether to buy or lease equipment, whether to stimulate sales, or whether to increase company assets.

3. **The Operations budget** describes **short-term** objectives in specific amounts of sales targets, production goals, and financing plans.
Describe the Master Budget and Explain Its Benefits

Learning Objective 2
Budget Defined

- The quantitative expression of a proposed plan of action by management for a specified period, and
- An aid to coordinating what needs to be done to implement that plan
- May include both financial and nonfinancial data
Financial Budget

- It quantifies management’s expectations regarding income, cash flows, and financial position
- Managers derive financial budgets using supporting information from nonfinancial budgets
Budget Integrated with Strategy

- Strategy specifies how an organization matches its own capabilities with the opportunities in the marketplace to accomplish its objectives.
- Strategic plans are expressed through long-run budgets, and operating plans are expressed through short-run budgets.
- Budgets help managers assess strategic risks and opportunities by providing them with feedback about the likely effects of their strategies and plans.
Strategy, Planning, and Budgets

- Strategy
- Long-Run Planning (Strategic Plans)
  - Long-Run Budgets
- Short-Run Planning (Operating Plans)
  - Short-Run Budgets
Budgeting Cycle

- Before the start of the fiscal year, managers at all levels take into account past performance, market feedback, and anticipated future changes to initiate plans for the next period.

- At the beginning of the year, senior managers give subordinate managers a frame of reference, a set of specific financial or nonfinancial expectations against which they will compare actual results.
During the course of the year, management accountants help managers investigate variations from plans, such as an unexpected decline in sales. If necessary, corrective action follows.
Master Budget

- It expresses management’s operating and financial plans for a specified period, usually a fiscal year.
- It includes a set of budgeted financial statements.
- Under a master budget,
  - Operating decisions deal with how to best use the limited resources of an organization.
  - Financing decisions deal with how to obtain the funds to acquire those resources.
- Also known as pro forma statements.
Describe the Advantages of Budgets

Learning Objective 3
Advantages of Budgeting

- Promotes Planning
- Promotes Coordination
- Enhances Performance Measurement
- Enhances Corrective Actions
Advantages of Budgets

- Promotes coordination and communication among subunits within the company
- Provides a framework for judging performance
- Motivates managers and other employees

**Coordination** is meshing and balancing all aspects of production or service and all departments in a company in the best way for the company to meet its goals.

- Communication is making sure all employees understand those goals
Budgets enable a company’s managers to measure actual performance against predicted performance.

Budgets can overcome two limitations of using past performance as a basis for judging actual results:

- Past miscues and substandard performance
- Future conditions can be expected to differ from the past
Motivate Managers and Other Employees

- Employee performance improves when they receive a challenging budget because employees view falling short of budgeted numbers as a failure.

- Many executives like to set demanding but achievable goals for their subordinate managers and employees.
Challenges in Administering Budgets

- The budgeting process should involve all levels of management.
- The budgeting process is time-consuming.
- To gain the benefits of budgeting, management at all levels of a company should understand and support the budget and all aspects of the management control system.
- Budgets should not be administered rigidly.
Prepare the Operating Budget and Its Supporting Schedules

Learning Objective 4
Budgets are typically developed for a set period, such as a month, quarter, or year, which can be then broken into sub-periods.

The budgeted data for a year are frequently revised as the year goes on.
Rolling Budget

- Also called a continuous budget or rolling forecast
- Is a budget that is always available for a specified future period
Overview of the Master Budget

- **Revenues Budget** (Schedule 1)
  - **Ending Inventory Budget** (Schedules 2 & 6)
  - **Production Budget** (Schedule 2)
    - **Direct Material Costs Budget** (Schedule 3)
    - **Direct Manufacturing Labor Costs Budget** (Schedule 4)
    - **Manufacturing Overhead Costs Budget** (Schedule 5)

- **Cost of Goods Sold Budget** (Schedule 7)
- **R&D/Design Costs Budget** (Schedule 8)

OPERATING BUDGET
Overview of the Master Budget (Continued)

- Marketing Costs Budget (Schedule 8)
- Distribution Costs Budget (Schedule 8)
- Budgeted Income Statement (Exhibits 12-3 & 12-7)

| Financial Budget | Capital Expenditures Budget (Exhibit 12-5) | Cash Budget (Exhibit 12-5) | Budgeted Balance Sheet | Budgeted Statement of Cash Flows |

Continued....
Basic Steps Common for Developing the Operating Budget

1. Prepare the revenues budget
2. Prepare the production budget
3. Prepare the direct material usage budget and direct material purchases budget
4. Prepare the direct manufacturing labor costs budget
5. Prepare the manufacturing overhead costs budget
Basic Steps Common for Developing the Operating Budget

- Prepare the ending inventories budget
- Prepare the cost of goods sold budget
- Prepare the nonmanufacturing costs budget
- Prepare the budgeted income statement
Operating Budget

- Sales budget
- Production budget
  - Direct materials budget
  - Direct labor budget
  - Manufacturing overhead budget
- Operating expense budget
- Budgeted income statement
Financial Budgets

Budgeted income statement

Capital expenditures budget
Cash budget
Budgeted balance sheet

Financial budgets
Sales Budget

- Plan for sales revenues in future periods

- Number of units to be sold $\times$ Sales price per unit $=$ Total sales revenue
Production Budget

+ Units needed for sales
+ Desired ending inventory
= Total units needed
- Units in beginning inventory
= Units to produce
Direct Materials Budget

+ Quantity of DM needed for production
+ Desired DM ending inventory
= Total quantity of DM needed
- DM beginning inventory
= Quantity of DM to purchase
Direct Labor Budget

Units to be produced
\[ \times \text{DLH per unit} \]
= Total DLH needed
\[ \times \text{Cost per DLH} \]
= Total Direct Labor Cost
Use Computer-Based Financial Planning Models for Sensitivity Analysis

Learning Objective 5
Financial Planning Models

- They are mathematical representations of the relationships among operating activities, financing activities, and other factors that affect the master budget.

- Managers can use computer-based systems, such as enterprise resource planning (ERP) systems, to perform calculations for these planning models.
Sensitivity analysis is used to assist managers in planning and budgeting.

Sensitivity analysis is a “what if” technique that examines how a result will change if an underlying assumption changes.
Controllability

- It is the degree of influence that a specific manager has over costs, revenues, or related items for which he or she is responsible.

- A controllable cost is any cost that is primarily subject to the influence of a given responsibility center manager for a given period.
Recognize the Human Aspects of Budgeting

Learning Objective 6
Human Aspects of Budgeting

- Human factors are crucial in budgeting
- Budgeting is thought of as a mechanical tool
- However, the administration of budgeting requires education, persuasion, and intelligent interpretation
Budgetary Slack

- The practice of underestimating budgeted revenues, or overestimating budgeted expenses, in an effort to make the resulting budgeted goals (profits) more easily attainable
Avoiding Budgetary Slack

- Companies use budgets primarily for planning and not performance evaluation
- Obtain good benchmark data when setting the budget
- Practicing rolling budgets
- Managers involve themselves regularly in understanding what their subordinates are doing
Stretch Targets

- Challenging but achievable levels of expected performance
- Intended to create a little discomfort
- The more a company tries to push performance, the greater the emphasis it must place on following the ethics of the company
Kaizen Budgeting

- It explicitly incorporates continuous improvement anticipated during the budget period into the budget numbers
Exercise 7-2A  Preparing a sales budget

Welch Company, which expects to start operations on January 1, 2011, will sell digital cameras in shopping malls. Welch has budgeted sales as indicated in the following table. The company expects a 10 percent increase in sales per month for February and March. The ratio of cash sales to sales on account will remain stable from January through March.

<table>
<thead>
<tr>
<th>Sales</th>
<th>January</th>
<th>February</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash sales</td>
<td>$40,000</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Sales on account</td>
<td>100,000</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Total budgeted sales</td>
<td>$140,000</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

Required

a. Complete the sales budget by filling in the missing amounts.
b. Determine the amount of sales revenue Welch will report on its first quarter pro forma income statement.
Exercise 7-3A  Preparing a schedule of cash receipts

The budget director of Ginger’s Florist has prepared the following sales budget. The company had $300,000 in accounts receivable on July 1. Ginger’s Florist normally collects 100 percent of accounts receivable in the month following the month of sale.

<table>
<thead>
<tr>
<th>Sales Budget</th>
<th>July</th>
<th>August</th>
<th>September</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash sales</td>
<td>$ 70,000</td>
<td>$ 75,000</td>
<td>$ 80,000</td>
</tr>
<tr>
<td>Sales on account</td>
<td>90,000</td>
<td>108,000</td>
<td>129,600</td>
</tr>
<tr>
<td>Total budgeted sales</td>
<td>$160,000</td>
<td>$183,000</td>
<td>$209,600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schedule of Cash Receipts</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current cash sales</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Plus: Collections from accounts receivable</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Total budgeted collections</td>
<td>$370,000</td>
<td>$165,000</td>
<td>$188,000</td>
</tr>
</tbody>
</table>

Required

a. Complete the schedule of cash receipts by filling in the missing amounts.
b. Determine the amount of accounts receivable the company will report on its third quarter pro forma balance sheet.
### Exercise 7-4A  Preparing sales budgets with different assumptions

Applebaum Corporation, which has three divisions, is preparing its sales budget. Each division expects a different growth rate because economic conditions vary in different regions of the country. The growth expectations per quarter are 4 percent for East Division, 2 percent for West Division, and 6 percent for South Division.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Quarter</th>
<th>Second Quarter</th>
<th>Third Quarter</th>
<th>Fourth Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Division</td>
<td>$100,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Division</td>
<td>300,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Division</td>
<td>200,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Required**

a. Complete the sales budget by filling in the missing amounts. (Round figures to the nearest dollar.)

b. Determine the amount of sales revenue that the company will report on its quarterly pro forma income statements.
Exercise 7-7A  Preparing an inventory purchases budget

Naf nel Company sells lamps and other lighting fixtures. The purchasing department manager prepared the following inventory purchases budget. Naf nel’s policy is to maintain an ending inventory balance equal to 10 percent of the following month’s cost of goods sold. April’s budgeted cost of goods sold is $75,000.

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgeted cost of goods sold</td>
<td>$50,000</td>
<td>$54,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Plus: Desired ending inventory</td>
<td>5,400</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Inventory needed</td>
<td>55,400</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Less: Beginning inventory</td>
<td>5,000</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Required purchases (on account)</td>
<td>$50,400</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

Required

a. Complete the inventory purchases budget by filling in the missing amounts.

b. Determine the amount of cost of goods sold the company will report on its first quarter pro forma income statement.

c. Determine the amount of ending inventory the company will report on its pro forma balance sheet at the end of the first quarter.
Exercise 7-8A  Preparing a schedule of cash payments for inventory purchases

Sciara Books buys books and magazines directly from publishers and distributes them to grocery stores. The wholesaler expects to purchase the following inventory.

<table>
<thead>
<tr>
<th>Required purchases (on account)</th>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$100,000</td>
<td>$120,000</td>
<td>$132,000</td>
</tr>
</tbody>
</table>

Sciara Books’ accountant prepared the following schedule of cash payments for inventory purchases. Sciara Books’ suppliers require that 90 percent of purchases on account be paid in the month of purchase; the remaining 10 percent are paid in the month following the month of purchase.

<table>
<thead>
<tr>
<th>Schedule of Cash Payments for Inventory Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment for current accounts payable</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Payment for previous accounts payable</td>
</tr>
<tr>
<td>Total budgeted payments for inventory</td>
</tr>
</tbody>
</table>

Required

a. Complete the schedule of cash payments for inventory purchases by filling in the missing amounts.

b. Determine the amount of accounts payable the company will report on its pro forma balance sheet at the end of the second quarter.