



Budgeting Process

A. A budget is a realistic plan for the future expressed in quantitative terms (Dollars or Units).

- B. Purposes of Budgeting:**
1. **Planning Operations (Short - term and Long - term)**
 2. **Controlling Operations**
 3. **Motivating Employees**
 4. **Communicating Goals to Employees**
 5. **Evaluating Employee Performance**

The budgeting process:

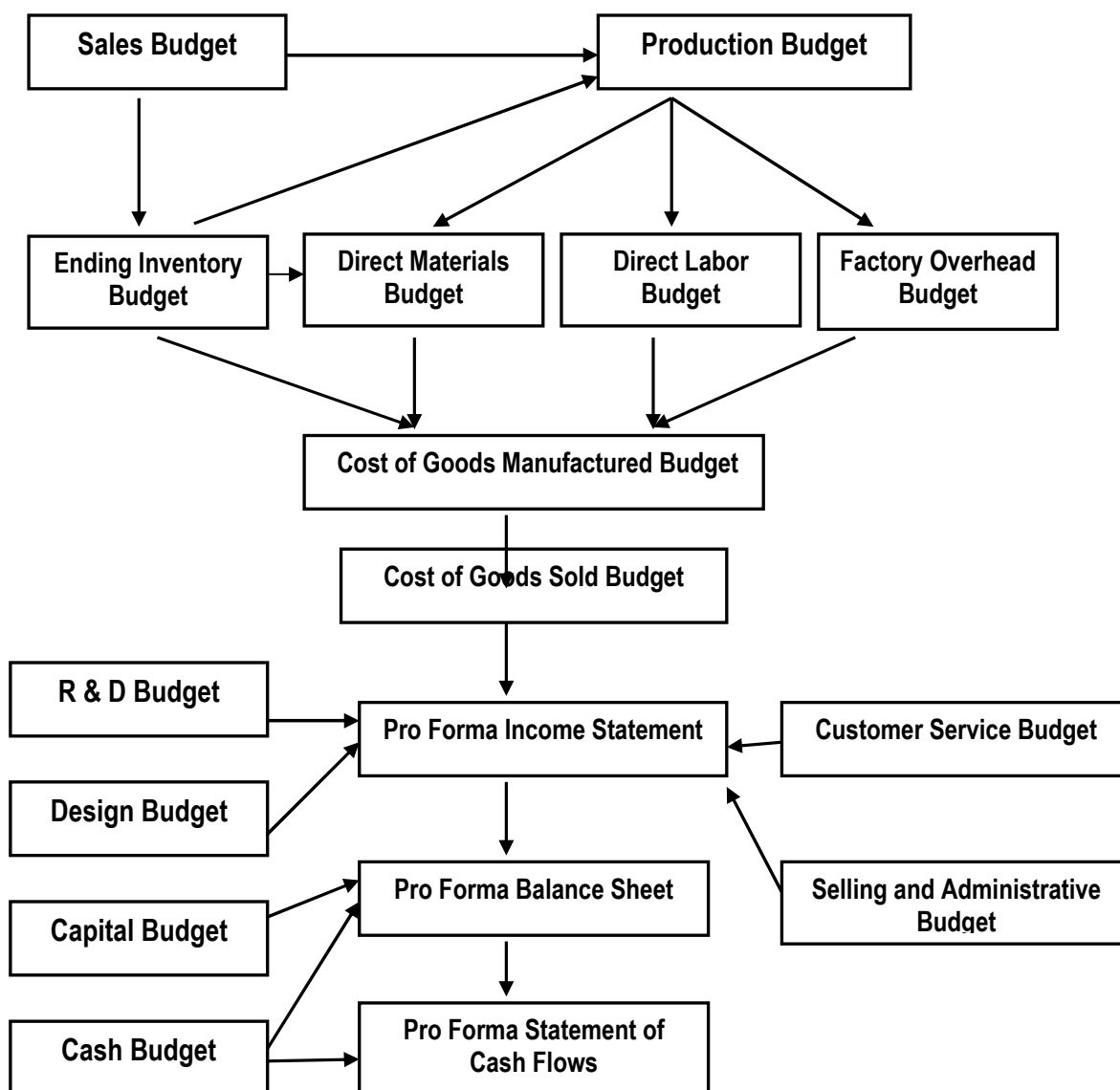
- Budgeting is an important part of an organization's entire planning process.
- Budgeting helps provide a focused direction or a path chosen from many alternatives.
- Budgets are the financial cumulation of predictions and assumptions about achieving Not only financial but also non financial goals and objectives.

How strategic planning is related to budgeting?

**The budgeting and planning processes are concerned with all organizational resources Such as (Raw material, inventory, supplies, personnel and facilities)
Managers engaging in strategic planning should identify key variables believed to be The direct causes of the achievement or non achievement of organizational goals and objectives.**



The Budgeting Process for a manufacturing Company is as follows:





Types of budgets:

Operating budget:

It is pro forma income statement and related budgets

It is expressed in both units and dollars.

1- When an operating budget relates to revenues, the units are presented.

2-when an operating budget relates to cost, the input units presented are transformed into output units or consumed.

Sales budget:

Presents sales in units at their projected selling price and is usually the first budget prepared

it establish targets for sales personnel

Sales volume affects production and purchasing levels, operating expenses ,and cash flow

Production budget is based on sales

$$\text{Unit of sales} \times \text{selling price per unit} = \text{dollars of sell}$$

Production budget :

Is based on the sales forecast in units plus or minus the desired inventory change

Stated in units instead of dollars

$$\text{Unit of sales} + \text{desired ending inventory} - \text{beginning inventory} = \text{units to be produced}$$

Direct labor budget:

Depends on wages rate amounts and types of production

The factory over head budget

Is a function of how factory overhead varies with particular cost driver

$$\begin{aligned} &\text{Units of production} \times \text{standard time allowed per unit} \\ &= \text{standard labor time allowed} \\ &\times \text{per hour direct labor cost} \\ &= \text{total direct labor cost} \end{aligned}$$



Cost of good sold budget:

Reflect direct material usage, direct labor, factory overhead, and change in ending finished good inventory

Financial budget:

It indicates the funds to be generated or consumed during the budget period
Financial budgets include cash and capital budgets as well as projected or proforma financial statements.

Capital budget:

Is not apart of operating budget because it is not apart of normal operation

Cash budget:

Projects cash receipt and disbursements for planning a control purposes. Hence it helps prevent not only cash emergencies but also excessive idle cash
it cannot be prepared until the other budget have been prepared

Beginning cash balance
+receipt (collection from customers etc.)
Cash available
-payments (materials, expenses, payroll,etc)
Estimated cash balance before financing
+/-financing (planned borrowing or short –term investing to bring cash to desired balance
=ending cash balance

V. Flexible Budgeting:

- A. Used to estimate revenue, costs, a group of costs, or profits at various levels of activity
- B. Applies when operating within a relevant range.
- C. Total fixed costs remain the same at all levels within range.

$$\text{Total MOH} = \text{Fixed MOH} + \text{Variable MOH (Activity Level} \times \text{Variable Rate)}$$

Fixed vs. variable budget

Fixed budget

is based no only one level of sales or production

It is not very useful if the expected level is not reached or is exceeded

Flexible budget

Is a series of budgets prepared for many levels of activity.



- At the end of the period management can compare actual performance with the appropriate budgeted level in the flexible budget.

Developing an Operating Budget-An Example

This example is designed to provide an overview of the process of developing an operating budget. In our example, Snyder Corporation is developing a financial plan for the year ending Dec.31. 2004. The company has two primary products. Product A and Product B. Based on an assessment of the projected economic conditions. Management has developed forecasted sales of product A of 25,000 units at a sales price of \$100. and forecasted sales of product B of 30,000 units at a sales price of \$120. Therefore, Total forecasted sales is \$6,100,000.

Assume that management wants an inventory of 1,200 units of product A and 1,000 units of product B at year-end. The beginning inventory is shown in the following schedule.

Schedule 1-Beginning Finished Goods Inventory

	Product A	Product B	Total
Units	1,200	1,200	
Cost per unit	\$ 70	\$ 80	
Total cost	\$84,000	\$96,000	\$180,000

There was no work-in-process beginning inventory and none is anticipated at the end of year. This information can then be used to prepare the production schedule shown below.

Schedule 2-Production Schedule

	Product A	Product b
Projected unit sales	25,000	30,000
Desired ending inventory	1,200	1,000
Beginning inventory	(1,200)	(1,200)
Units to be produced	25,000	29,000

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Once the production schedule is developed, management can develop raw materials usage budgets for labor and overhead. Information to develop these schedules can be obtained from the following product specifications schedule.

Schedule 3-Product Specifications

	Product A	Product B	Estimated Cost
Materials			
Silver	7 oz.	6 oz.	\$5.15 per oz.
Red Oak	1 b.f.		\$3.95 per b.f.
Teak		1 b.f.	\$6.10 per b.f.
Direct Labor	1/2 hour	3/4 hour	\$40 per hour

Schedule 4-Direct Materials Usage Budget

Physical Units	Silver	Red Oak b.f.	Teak b.f.	Total
Product A				
Silver	175,000			
Red Oak		25,000		
Product B				
Silver	178,800			
Teak			29,800	
To be used in production	353,800	25,000	29,800	

Cost Budget

Available from beginning inventory

Silver 4, 00 oz. @ \$5.00 per oz.	\$ 20,000		
Red Oak 1,000 b.f. @ \$4.00 per b.f.		\$ 4,000	
Teak 1,000 b.f. @ \$6.00 per b.f.			\$ 6,000



From purchases

Silver \$5.15 * (353,800 - 4,000)	1,801,470			
Red Oak \$3.95 * (25,000 - 1,000)		94,800		
Teak \$6.10 * (29,800 - 1,000)			175,680	
Cost of Direct materials to be used	\$ 1,821,470	\$98,800	\$181,680	\$2,101,950

Schedule 5-Direct Manufacturing Labor Budget

Product A	
(25,000 * 1/2 hour * \$40 per hour)	\$ 500,000
Product B	
(29,800 * 3/4 hour * \$40 per hour)	894,000
	\$ 1,394,000

Schedule 6-Manufacturing Overhead Budget (at 34,850 budgeted direct labor hour)

Variable overhead costs :

Supplies	\$ 60,000
Indirect labor	135,000
Maintenance	50,000
Electricity	100,000
Miscellaneous	30,000

Fixed overhead costs :

Depreciation	\$306,000
Insurance	40,000
Plant supervisor	90,000
Miscellaneous	25,000

Total manufacturing overhead \$836,400

Overhead application rate :

Direct labor hours

Product A (25,000 * 1/2hour)	12,500
Product B (29,800 * 3/4hour)	<u>22,350</u>

Total direct labor hours 34,850

Application rate (\$836,400 / 34,850) \$ 24 per hour

Based on the budget amounts of materials, labor, and overhead. Management can now determine the unit production cost, and the ending inventories and costs of goods sold budget as shown below.

MODULE 45 PLANNING, CONTROL, AND ANALYSIS

Schedule 7-Unit Production costs:

	Product A	Product B
Materials	\$40	\$37
Direct labor	20	30
Manufacturing over head	<u>12</u>	<u>18</u>
	\$72	\$85

Schedule 8-Cost of Goods Sold Budget



	Schedule		
Beginning finished goods inventory	1		\$ 180,000
Direct materials used	4	\$ 2,101,950	
Direct labor	5	1,394,000	
Manufacturing overhead	6	836,400	
Cost of goods manufactured			<u>4,332,350</u>
Cost of goods available for sale			4,512,350
Deduct ending finished goods inventory			<u>171,400</u>
Cost of goods sold			\$4,340,950

With estimates of sales and general and administrative expenses and the tax rate, management can now prepare the pro forma income statement for next period as shown below.

Snyder Corporation
PRO FORMA INCOME STATEMENT
For the Ending December 31, 2004

Sales	\$6,100,000
Cost of goods sold	<u>4,340,950</u>
Gross profit	1,759,050
General & administrative expenses	<u>1,020,000</u>
Operating income (EBIT)	739,050
Interest expense	<u>260,000</u>
Earnings before taxes	479,050
Taxes (30%)	<u>143,715</u>
Net income	\$ 335,335

1. For example, assume that accompany had budgeted sales of \$9,000 for January, \$9,700 for February, and \$13,500 for March. Its monthly cash budgets might appear as follows (payment of principal and interest are assumed not to be due during the quarter) :



Sample company
CASH BUDGET
For Quarter Ending March 31

	January	February	March
Beginning cash balance	\$ 80	\$ 20	\$ 1,975
Receipts :			
Collection from sales*	6,800	9,350	11,825
Total cash available	\$ 6,880	\$9,370	\$13,782
Payments:			
Purchases**	\$3,150	\$2,750	\$3,960
Sales salaries	1,350	1,455	2,093
Supplies	360	388	588
Utilities	120	110	100
Administrative salaries	1,800	1,800	1,800
Advertising	80	80	80
Equipment purchases	0	820	3,000
Total payments	\$ 6,860	\$ 7,413	\$ 11,591
Desired ending balance	5,000	5,000	5,000
Total required	\$ 11,860	\$ 12,413	\$ 16,591
Cash available	6,880	9,370	13,782
Financing required	\$ 4,980	\$ 3,043	\$ 2,809

* Sales are 50% cash and 50% on credit (net 30). Thus, 50% of each month's sales are collected in the month of the sale, and 50% are collection in the following month.

For example the February collections equaled \$9,350 [(50% * \$9,000) + (50% * \$9,700)].

** Purchase terms are net 30. thus, purchases are paid for in the month following the purchase. The amount paid in February (\$2,760) equaled the total purchases for January.