

## LECTURE 11

### OPERATING BUDGET AND THE BREAKEVEN ANALYSIS

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#### Operating Budget

A **budget** is an official declaration of all financial resources spared for distinct items within a specified timeframe. It is through budgets that various activities within the operation are coordinated. Thus, the operating budget is a projection of revenue and expenses over a specified period of time in future.

#### *Characteristics of a good budget*

- Accommodates changing times
- Takes on a holistic approach to organizational needs
- Accounts for employee participation
- Aligned to various standards of performance
- Applies in the analysis

Budgetary control pertains to the implementation of budgets that reflect the operation's goals through a comparative analysis of actual versus budgeted costs. The goals are specified based on different pre-existing policies. It is a means of managing costs by use of budgets.

Within budgetary control, the actual cost is compared to the budgeted equivalent. The outcome is assessed for any need to adjust the budget or take a control action. It presents the management team with a mode of monitoring and controlling the operation's undertakings (FAO, 2012).

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Budgetary control is denoted by;

- Budgetary reviews with changing times
- Preparation of specific budgets for different business functions
- Consistent performance analysis and interpretation of results
- Taking remedial action when needed

For budgeting to be effective, certain conditions are necessary. These include:

- Endorsement by top management
- Employee participation
- Should be realistic
- Centered on feedback
- Team work and open communication
- Clear policies
- Aligned to cost control

Depending on the nature, budgets may be largely categorized into three groups: Function, flexibility and time. On the basis of function, budgets may be prepared for the following specific reasons:- capital expenditure, administration, distribution, materials, production, sales, purchasing, labour etc. on the other hand, budgets may either be fixed or flexible and long-term, short-term, current or rolling on premise of time.

## **Objectives of budgeting**

Budgeting aims to:

- Realize the operations policies and objectives
- Determine a plan of action
- Set performance standards
- Act as a basis for control
- Provide data for forecasts
- Ensure efficient utilization of resources
- Enhance departmental and functional coordination

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While preparing budgets, it is essential to consider:- competition, pricing policy, external business environment, evolving customer preferences, marketing policy and competition among other factors.

*The budgeting process could be faced by a couple of challenges that include:*

- a. The perception of budgets could be distorted resulting to strained working relationships and inaccurate records. It is essential that the essence of budgets is communicated as much as employee participation in the budgeting process is encouraged.
- b. The allocation of resources could be perceived as being skewed causing inter-departmental conflict. Distributive justice should be accorded alongside participation.
- c. Blame game could be the norm where ineffective compensation strategies are in place particularly when targets are unmet.
- d. It is particularly challenging to align meet both business and individual goals.
- e. Inadequacy of information may lead to misuse of resources where the function of the budget is unclear.
- f. Inflexibility may contribute to an overestimation of budgets to avoid blame.

## **Benefits of budgeting**

- a. Encourages the management to make plans for the future.
- b. Fosters communication and cooperation within the workforce.
- c. Guides the allocation of resources during scarcity.
- d. Promotes productivity.
- e. Contributes to organizational efficiency and effectiveness.
- f. Forms a basis of evaluation of performance.
- g. Supports employee participation efforts.
- h. Ensures a maximization of profits

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## Analysis of Financial Statements

Financial statement analysis entails an evaluation of financial statements either in part or whole; with an aim to establish the financial position of the operation. The analysis gives insight to:

- Business efficiency
- The degree to which goals are being met
- Profitability of the operation
- Forecasted revenue
- Credit worthiness based on net income

Financial statement analysis could be performed in two methods:

1. **Horizontal analysis** – a horizontal analysis is a comparative form for analysis that utilizes financial data from two or more consecutive periods. The changes in monetary value and percentage of the same for the financial statements are compared.
2. **Vertical analysis** – also the common size analysis, vertical analysis uses the percentage rate of the items in the financial statement to infer judgment.
3. **Trend analysis** – establishes a degree of change by finding the difference between two financial periods and turns it into a percentage having divided it by the amount of the first period as a base year.

**Average Check, Cost and Net Income per Guest Figures** - These are methods used in the analysis of the income statement. Average based calculations call for one to establish the figure for each guest. This figure could represent total sales revenue, total sales, revenue, cost etc.

$$\text{Individual Guest Revenue} = \frac{\text{Sales Revenue}}{\text{Number of Guests}} \quad \text{or} \quad \frac{\text{Cost}}{\text{Number of Guests}} \quad \text{or} \quad \frac{\text{Income}}{\text{Number of Guests}}$$

Revenue	Year 1	Year 2
Room Service	120,000	126,000
Food	615,000	590,000
Beverages	155,000	170,000
Banquets	<u>210,000</u>	<u>145,000</u>
<b>Total Sales Revenue</b>	<b><u>\$1,100,000</u></b>	<b><u>\$1,031,000</u></b>

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Assuming that an operation presenting the sales revenues above had a total of 59,000 guests consuming their food in year 1 and 52,000 in year 2, the average guest check for year 1 will be:

$$\text{Year 1: } 615,000 \div 59,000 = \$10.42$$

$$\text{Year 2: } 590,000 \div 52,000 = \$11.34$$

From the figures above, one might argue that the guests paid or spent more on food in year 2 than the previous year. In order to establish a trend index for year 2 using year 1 as the base year, the following workout will apply.

$$\frac{590,000}{615,000} \times 100$$

$$615,000$$

$$\text{Trend index} = 95.93$$

This is because, in the trend index analysis, the index is computed by assuming that it is equal to 100% in the first period being used to calculate. However, in order to establish the trend for a number of years or periods, the base year is equated to 0. The difference is first obtained then the percentage is calculated. In our example above, this would represent:

$$590,000 - 615,000 = -25,000$$

$$\frac{-25,000}{615,000} \times 100 = -4.07\%$$

$$615,000$$

The solution indicates that there was a decline in sales by 4.07%. This is done for every other year, thereof, providing information on the financial trend of the operation over time.

### **The Breakeven Analysis**

The break even analysis is important as it evaluates the financial condition of the business in terms of profitability and establishes the break-even point. Similarly, it determines the relationship between the fixed, variable and semi-variable cost through the cost-volume-profit analysis (Uttarakhand Open University, 2019).

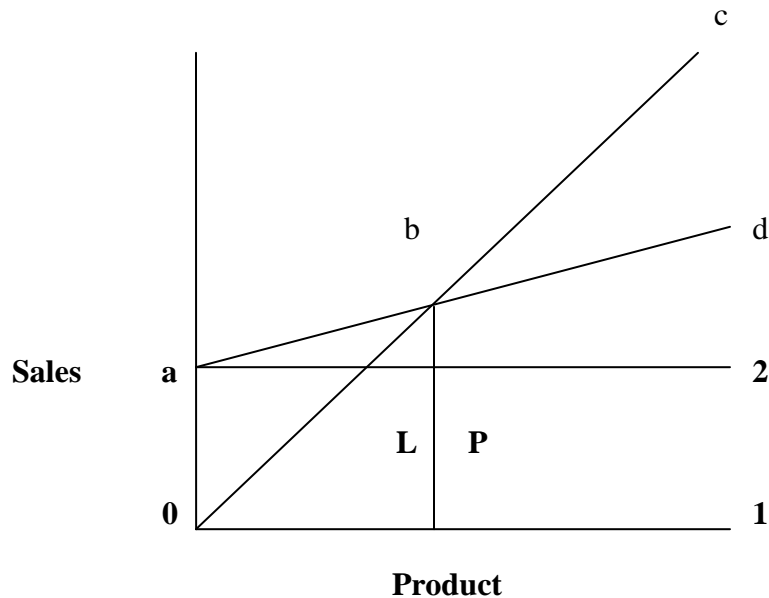
#### Benefits

- Determines the ideal volume of products to be produced
- Establishes the safety margins
- Guides pricing decisions
- Directs policy formulation

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The breakeven point is the level at which business volume meets various costs; meaning that neither profits nor losses are made. It determines the volume of business in terms of sales required to make ideal profit. The concept is illustrated in the figure below.



**KEY:**

**oc** – income varied based on production level

**ad**- variable costs

**oa/ a2** – fixed costs incurred

**b**- the breakeven point. Costs are equivalent to the profit level

**L**- Loss

**P**- Profit

The breakeven point is determined in two methods:

1. Equation method –  $B = \frac{C}{S-V}$

Where; C – total fixed cost

S – Selling price per product

V – Variable cost per product

The solution represents the number of units that ought to be produced for the operation to breakeven. The equation method is used to analyze these costs in the chart above.

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2. Contribution margin method – this can be based on the number of units or total sales. It is argued that every product sold caters to some margin of the fixed cost. Therefore, to establish the number of units needed to break even:

a) B in units sold =  $\frac{\text{Fixed Cost}}{\text{CM per Unit}}$

b) B in total sales =  $\frac{\text{Fixed Cost}}{\text{CM Ratio}}$

The Contribution Margin Ratio is denoted by:  $\frac{\text{Contribution Margin}}{\text{Sales}}$

Contribution Margin = Sales Revenue – Variable Costs

**Example:** A restaurant producing 300 servings per day at the average selling price of \$15 dollars per serving incurs a fixed cost of \$1800 and variable costs of \$860. Calculate:

- a) Contribution Margin
- b) Contribution Margin Ratio
- c) Profit
- d) Breakeven Point (Using the total sales method)

### **Solution:**

a) Contribution Margin =  $300 \times \$15$  (Sales)  
= \$4,500 - \$860  
= **\$3,640**

b) Contribution Margin Ratio =  $3,640 \div 4,500$   
=  $0.81 \times 100$   
= **81%**

c) Profit = Revenue - Expenses  
Expenses = \$1,800 + \$860  
= \$4,500 - 2,660  
= **\$1,840**

d) Breakeven Point =  $\$1,800 \div 81$   
= **22 units**

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## Quiz

1. Mention various attributes of an effective budget.
2. Within budgetary control, the actual cost is compared to the budgeted equivalent. Discuss this statement and mention why it is important.
3. Suggest ways of dealing with the challenges faced in the budgeting process
4. Explain why budgeting is important
5. Describe the essence of financial statement analysis.

## REFERENCE

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