

# Budgeting

## AAT Level III Management Accounting and Finance (MAF)

Kosala Jayaweera  
BB. Mgt. (Accountancy) Sp. Second Upper, ACMA, CA Finalist

## Budgeting

Budgeting is a quantitative statement for defined period of time which may include planned revenues, expenses, assets, liabilities and cash flows.

Department managers in a business are responsible for making decisions on daily basis that affect the profitability of the business. In order to make effective decisions and coordinate the decisions and actions of the various departments, a business needs to have a plan for its operations. Planning the financial operations of a business is called budgeting.

### **The main aims of preparing budgets include:**

- To ensure the fulfillment of organization's objectives.
- A framework for responsibility accounting.
- Planning for the future.
- Best utilization of resources.
- Cost controlling.
- To ensure proper co-ordination.
- To motivate employees.
- Performance appraisals.
- Defining authorities.

### **Administration of Budget:**

1. **Budget manual:** It is a collection of instructions governing the responsibilities of persons. It is usually prepared by management accountant.  
It includes:
  - Object of budgets
  - Organization structure
  - Guide line regarding making budgets
  - Formats and layouts of budgets
  - Interdependence of budgets
  - Budget Deadlines
2. **Budget period:** Budget period is a time period to which budget relates.
3. **Responsibilities of preparing budgets:** Managers responsible for preparing budgets ideally be the managers who are responsible for carrying out the budget.
4. **Budget committee:** Budget committee is usually responsible for coordination and administration of budgets. Members of budget committee are:
  - Managing directors as chairman
  - Accountant as budget officer (for assistance)
  - Representatives from each department (sales, production, marketing).

### **Functions of budget committee:**

- Coordination for budget preparation
- Issue timetables for functional budgets
- Assign responsibilities of budget preparation
- Provide information which is required for budget
- Communicate final budget to appropriate managers
- Variance calculation and investigation
- Continuous assessment of budgetary process.

**Example 01**

The following information is related to 03 products namely **x, y, z**

**i. Budgeted Sales**

	Product
X	1895 units @ Rs. 100 per unit
Y	3790 units @ Rs. 130 per unit
Z	2845 units @ Rs. 150 per unit

**ii. Budgeted usage of material**

Product	Material	M1 (kg)	M2 (kg)	M3 (kg)
X		5	2	-
Y		3	2	2
Z		2	1	3
	Material Price Per kg	Rs. 5	Rs. 3	Rs. 4

**iii. Budgeted finished good inventory**

Details	X	Y	Z
Opening	500	800	700
Closing	600	1,000	800

**iv. Budgeted raw material inventory**

Details	M1	M2	M3
Opening	21,000	10,000	16,000
Closing	18,000	9,000	12,000

**v. Budgeted direct labour**

X = 4 hrs @ Rs. 9 per labour hour  
 Y = 6 hrs @ Rs. 9 per labour hour  
 Z = 8 hrs @ Rs. 9 per labour hour

**You are required to prepare**

1. Sales Budget
2. Production Budget
3. Material Usage and Purchase Budget
4. Direct Labour Budget

**Example 02**

The following information is related to 3 types of products namely **A, B, C**

**I. Budgeted sales**

A	3130 units @ Rs. 138 per unit
B	3560 units @ Rs. 250 per unit
C	2550 units @ Rs. 155 per unit

**II. Budgeted usage of material**

Product	Material	Z1	Z2	Z3
A		8	5	6
B		1	4	8
C		2	3	9
	Material Price Per kg	Rs. 3	Rs. 4	Rs. 5

**III. Budgeted finished good inventory**

Details	A	B	C
Opening	500	400	900
Closing	700	800	600

**IV. Budgeted raw material inventory**

Details	Z1	Z2	Z3
Opening	12,000	4,000	14,000
Closing	8,000	6,000	9,000

**V. Budgeted direct labour**

A = 3 hrs @ Rs. 8 per labour hour

B = 2 hrs @ Rs. 8 per labour hour

C = 4 hrs @ Rs. 8 per labour hour

**You are required to Prepare**

1. Sales Budget
2. Production Budget
3. Material Usage and Purchase Budget
4. Direct Labour Budget

**Cash budget:** 'A cash budget is a detailed budget of cash inflows and outflows incorporating both revenue and capital items.'

Consider only cash items

Ignore non-cash items like depreciation, provisions

Take cash flows at the time of receipt and payment not at transaction time

Cash budget is an important part of the budgeting process and an important working capital management tool. These, produced on a monthly basis, will allow a firm to identify when cash surpluses or deficits are likely to arise so that suitable steps (investing or borrowing) can be planned.

**Appropriate control actions for cash:**

1. **Short term surplus:** Pay payables early to obtain discount or make short term investments
2. **Short term deficit:** Increase payables, reduce receivables, and arrange an overdraft
3. **Long term surplus:** Expand, diversify, replace /update fix assets

**Example 03**

The following information are given for the AB PLC.

Month	Sales	Material	Wages	Overhead
February	14,000	9,600	8,000	1,000
March	15,000	9,000	3,000	1,900
April	16,000	9,200	3,200	2,000
May	17,000	10,000	3,600	2,200
June	18,000	10,400	4,000	2,300

- On sales 10% is on cash basis and 50% of credit sales are to be collected next month and the balance in the following month.
- Creditors are settled as following (credit period)
  - Materials 2 month
  - Wages 1 month
  - Overheads 1 month
- Plant and machinery will be installed in February 2023 at the cost of Rs. 96,000 and the monthly installment of Rs. 2,000 is payable April onward.

- Dividend at 5% of preference shares of Rs. 200,000 will be paid in June month.
- Advance to be received for the sale of vehicle of Rs. 9000 in the month of June.
- Dividend from investment amounting to Rs. 1,000 is expected to be received in June.
- Income tax advance is to be paid in the month of June of Rs. 2,000 Cash and bank balances in April 2023 is expected to be Rs. 6,000

**You are required to**

1. Prepare a cash budget for 3 months ending from June 2023

**BEHAVIOURAL ASPECTS OF BUDGETING**

It is very easy for the budgetary process to cause dysfunctional activity. For example, if junior management believe that a budget imposed upon them is not attainable, their aim may well be to ensure that the budget is not achieved, thereby proving themselves to be correct.

This needs to be avoided, and therefore an understanding of the behavioral aspects is necessary. Managers may be involved in setting budget targets or these may be imposed by senior management without consultation.

**Top-down approach / Imposed style of budgeting:**

It is a budget, which is set without allowing the ultimate budget holders to have the opportunity to participate in the budgeting process. It is also called 'imposed' budget, or non-participative.

**Advantages**

- Strategic plans are incorporated in budgets
- Increased coordination between plans and long-term objectives of the division
- Involvement of senior management in operational decisions
- Decreased input from inexperienced employees
- Time saving

**Disadvantages**

- low employees morale (hard for people to be motivated to achieve targets set by someone)
- acceptance of organizational goals & objectives could be limited
- operational managers are likely to have a better understanding of day by day operations
- unachievable budgets (may be for local operations)
- The feeling of team spirit may disappear.
- Lower-level management initiative may be stifled.

**Bottom-up approach / Participative style of budgeting:**

Bottom-up budgeting system of budgeting in which budget holders have the opportunity to participate in setting their own budgets.

**Advantages**

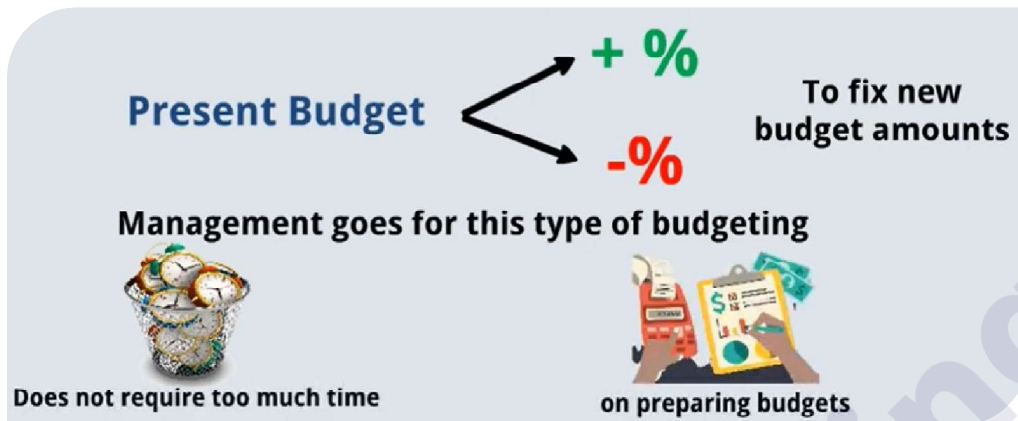
- Increased morale and motivation
- Should contain better information, especially in a fast-moving or diverse business
- Increases managers' understanding and commitment
- Better communication
- Senior managers can concentrate on strategy.
- In general they are more realistic.
- Individual managers' aspiration levels are more likely to be taken into account.

**Disadvantages**

- Senior managers may resent loss of control
- Bad decisions from inexperienced managers
- Budgets may not be in line with corporate objectives
- Budget preparation is slower and disputes can arise
- They may cause managers to introduce budgetary slack and budget bias.

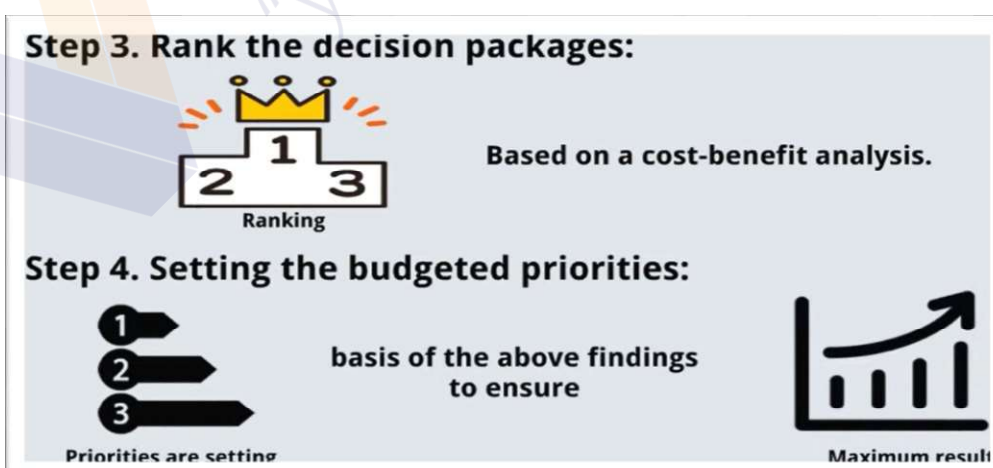
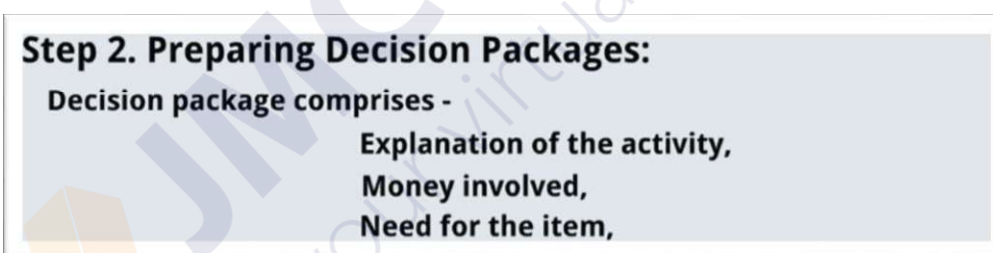
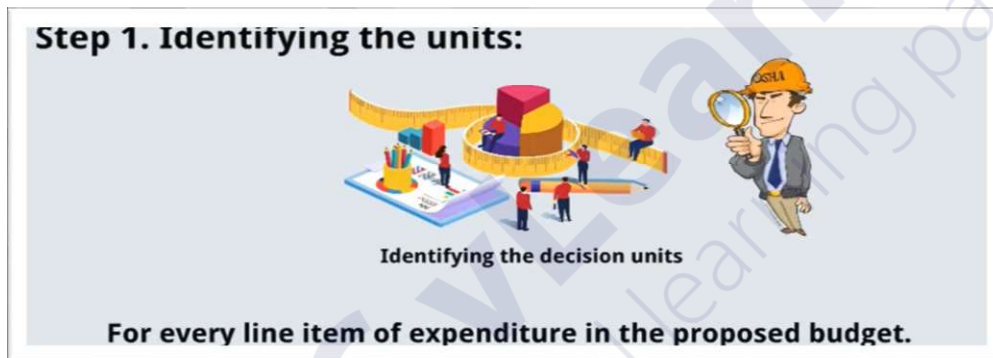
## Incremental Budget

It means that existing operations and the current budgeted figures for existing budgeting (activities) are taken as the starting point or base for preparing next annual budget.



## Zero Based Budget

This approach involves starting each budget from zero rather than basing it on past year results.



## Rolling Budget

This is the budget which is continuously updated by adding a further accounting period that can be the month or quarter when the earliest accounting period has expired.

## Activity Based budgeting

Under activity base budgeting the budgeted output determines the necessary activities which are then use to estimate the resources that are required for the budgeted period.

CIMA Official Terminology describes activity-based budgeting (ABB) as a method of budgeting based on an activity framework, using cost driver data in the budget setting and variance feedback processes. The most basic form of ABB uses cost drivers (identified through activity-based costing, ABC) to help derive budgets. As its name suggests, ABB focuses on activities rather than functions.

In simple terms, ABB follows three stages:

1. Identify activities and their cost drivers
2. Forecast the number of units of cost driver for the required activity level
3. Calculate the cost driver rate (cost per unit of activity).

## What If Analysis

What if analysis is a form of sensitivity analysis which allows the effects of changing one or more data values to be quickly recalculated? It enables each of the input values to be changed both individually and in combination to see the effect on the final results.

### Steps To Conducting A What If Analysis

01. Developing the What if questions

The questions could address any of the following situations

- a) Failure to follow the procedures
- b) Equipment failure
- c) Utility failure
- d) External influence

02. Determining the answers

03. Assessing the risks and making recommendation

### Advantages

1. It reduces the risk.
2. It reduces decision time.
3. It improves decision making knowledge
4. Easy to use

### Usage of Spread sheets

It is a type of general purpose software package with many business applications, not just accounting ones. It can be used to build a model in which data is presented in rows & columns. The mostly, widely used spreadsheet packages are lotus & excel.

### Advantages

1. Ability to edit
2. Ability to use formulas
3. Ability to graphical display of data

### Disadvantages

1. A minor error in the design of the model of any point can affect the validity of data.
2. Spreadsheets cannot take accounts of qualitative factors, since they are.
3. Difficult to quantify.



## FIXED AND FLEXIBLE BUDGETS

**Fixed budget:** A budget which remains unchanged regardless of activity level is called fixed budget.

- A fixed budget is prepared based on an estimated production plan at the start of a period.
- It does not give like with like comparison.
- Commonly used in service industries where most costs is fixed.
- It does not give fair performance evaluation.
- Fixed budget is normally prepared for planning purpose.

**Flexible or flex Budgets:** A budget that flexes the budgeted level of costs and revenues according to the level of activity actually achieved.

- Budget is initially prepared at the anticipated level of activity.
- The budgeted production level and the actual production level may not be the same.
- Budgets may need to be adjusted to reflect the actual production level
- The new budget, flexed to the actual production level is called the flexed budget.
- The budget prepared on different activity levels is called flexible budget.

Variance can be either favorable (F) or adverse (A) . Appropriate control action is then taken to control Variances.

### Example 04

A company manufactures and sells the product 'B'. The budgeted sales for the year are 5Mn at the selling price of Rs. 50/= each. Budgeted unit variable cost is Rs. 30/=. Fixed cost are budgeted as Rs. 25Mn for the year. The sales for the year ended on December are 6Mn. However the actual unit selling price and actual unit variable cost are Rs 48 and Rs. 32 respectively. The actual fixed cost for the year Rs. 20Mn.

### You are required to

Calculate flexible budget while analyzing with variances.

### Feed Forward Control

Feed forward control is defined as the forecasting of differences between the actual & planned outcomes and the implementation of actions before the event to prevent such differences.

### Feed Back Control

It is defined as the measurement of differences between planned outputs and actual output achieved and the modification of subsequent actions and plans to achieve future required results.

### Budget Center

Each budget center will have its own budget and a manager will be responsible for managing the budget center and ensuring that the budget is met.

### Responsibility Accounting

It is a system of accounting that segregates revenue & costs into areas of personal responsibilities in order to monitor and assess the performance of each part of an entity.

### Performance Measurement

Performance measurement aims to establish how well something or somebody is doing in relation to a plan. The thing may be a machine, a factory, a subsidiary company or an organization as a whole. The body may be an individual employee, a manager or a group of people. Performance measures can be divided into 2 groups.

1. Financial performance indicators.
2. Non-financial performance indicates.



### Factors need to be considered

1. Measurement need resources.
2. Measures must be relevant.
3. Measures should be fair.
4. Measurement need responses.

### Balance Scorecard (BSC)

The balance scorecard approach to performance measurement focus on 4 perspectives & uses financial & non-financial indicators. Although segment of a business may be measured by a single performance indicator such as ROI, PROFIT OR COST VARIANCES.

It might be more suitable to use multiple measures of performance where each measure reflects a different aspects of achievement.

### Balance scorecard 4 different perspectives are as follows.

Perspectives	Method of Measurement
Customer	Overall customer satisfaction Repeat business from customer No. of complains
Internal Process	Unit cost Productivity No. of projects completed on time No. of warranty claims
Innovation and Learning	No. of new product Vs existing products No. of employees received training time to market New product
Financial Profitability	Sales growth ROI Cash flow Debtors & creditors

### Benchmarking

Bench marking is simply about making comparison with others and then learning lessons that those comparison through up.

**Benchmarking is the process of comparing your own organization, its operations or processes against the best in the industry.**

- Improving Process**
- Reduce Cost and Increase Profit**
- Customer loyalty and satisfaction**



**Benchmarking is a process for obtaining a measure – a Benchmark.**

### Why Benchmark

1. To show that performance targets can be achieved
2. To enable process improvement
3. To manage change
4. To maintain focus on the external environment

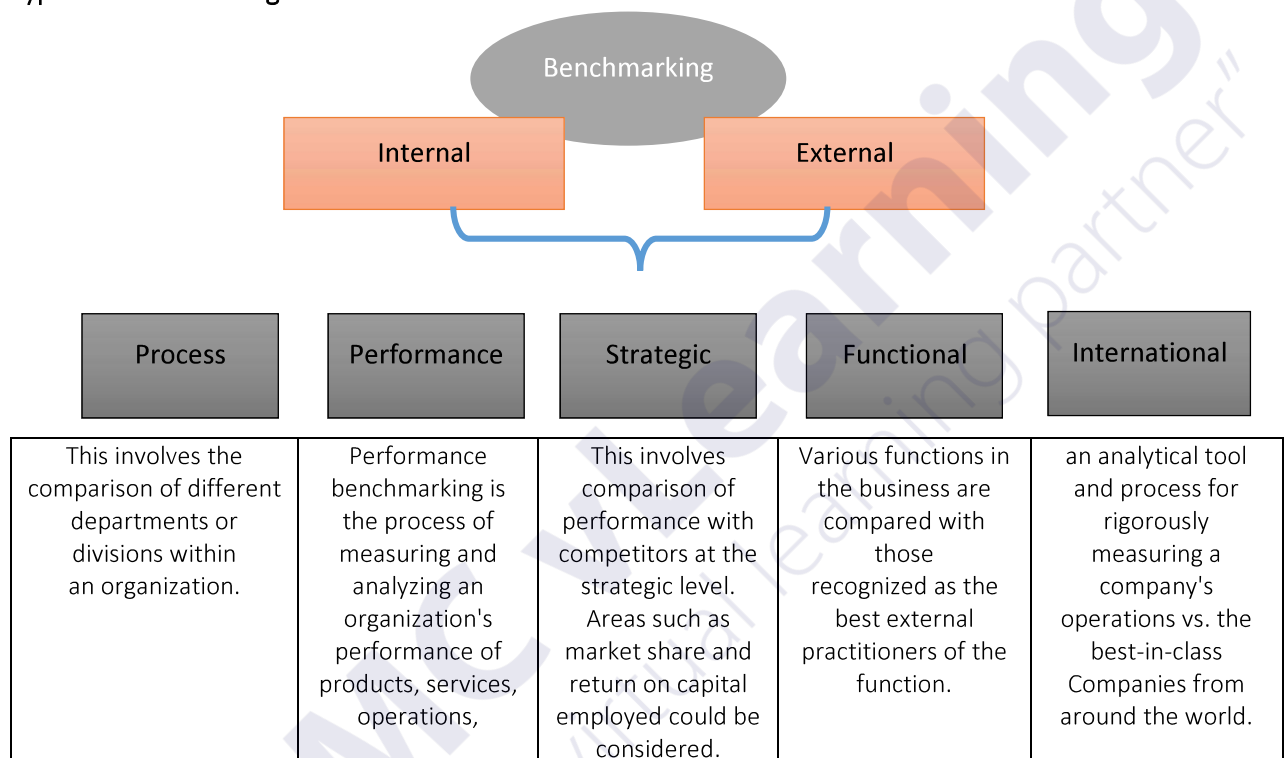
## Steps in Bench Marking

1. Identification of performance gap
2. Clarification of strategic impact of bench mark process
3. Identification and implementation of process improvement
4. Maintain regular focus to continuous improvement

## Tools of Benchmarking

1. Process mapping
2. Process performance measurement
3. Project management
4. Questionnaire design
5. Interview skill
6. Observation skill

## Types of Benchmarking



## Traditional Ratio Based Measurement

ROI or ROCE (Return on Investment / Return on Capital Employed)

ROCE is probably the most popular ratio for measuring general management performance in relation to the capital invested in the business. Also known as Return on investment (ROI). ROI is normally used for divisional or investment center performance appraisal

$$\text{ROCE / ROI} = \frac{\text{PBIT / EBIT}}{\text{Capital Employed}^*} \times 100$$

\* Capital Employed = (Equity + Non-Current Liabilities) or (Total Asset – Current Liabilities)

### Example 05

'M' company has earnings before interest & tax of Rs. 500,000 for the last year. Total Assets and Current Liabilities as of last balance sheet date were Rs. 4,500,000 & Rs. 200,000 respectively.

### You are require to

1. Calculate ROCE

### Example 06

R is a division of JK group. It's manager has the authority to invest in new capital expenditure within the limit said by the head office. The senior management team of the division is considering an investment of Rs.4.5 Mn.

This would have a residual value of Rs. 0.5 Mn after 4 years. Net cash flow from the investment would be Rs. 1.5 Mn for each of the next 4 years. It is the group policy to use straight line depreciation method when measuring divisional profit. Calculate ROCE for each year.

#### SECONDARY RATIO

Profit Margin	Asset Turnover
$\frac{PBIT}{Sales} * 100$	$\frac{Sales}{Capital Employed} * 100$
	<p>This ratio indicates the efficiency with which company is able to use all its (net) assets to gearing Rs 1 sales.</p> <p>Generally, the higher a company's total net asset turnover, the more efficiently its assets have been used.</p>

### Example 07

You are given the following information for the last year.

Capital employed	500,000
Sales revenue	400,000
PBIT	50,000

You are require to

1. Calculate Profit Margin
2. Calculate Asset turnover
3. Calculate ROCE



**Resource Person**  
**Kosala Madhusanka Jayaweera**  
**B.B.Mgt (Accountancy) Sp: Hons UoK**  
**ACMA, CA (Finalists)**