## **Management Control Systems**

## Block

# 2

### SELECTED TECHNIQUES FOR MANAGEMENT CONTROL

UNIT 6	
Budget as an Instrument of Control	1-23
UNIT 7	
Business Performance: Targets, Reporting, and Analysis	24-55
UNIT 8	
Auditing	56-90
UNIT 9	
Transfer Pricing	91-113

# Prof. K. Seethapathi IFHE (Deemed-to-be-University), Hyderabad Dr. Ranajee Dr. C. Vijaya Chandra Kumar IFHE (Deemed-to-be-University), Hyderabad Content Development Team

Prof. U. L. Sunitha Prof. Ramesh Krishnan

Prof. Shankar Anappindi Prof. M. Aparna

Prof. GSBS Chowdary Prof. SV Subramanyam

IFHE (Deemed-to-be-University), Hyderabad IFHE (Deemed-to-be-University), Hyderabad

Prof. Rajendra Tolety

IFHE (Deemed-to-be-University), Hyderabad

#### Proofreading, Language Editing and Layout Team

Ms. M. Manorama Mr. K. Venkateswarlu

Ms. C. Sridevi

IFHE (Deemed-to-be-University), Hyderabad

© The ICFAI Foundation for Higher Education (IFHE), Hyderabad. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means – electronic, mechanical, photocopying or otherwise – without prior permission in writing from The ICFAI Foundation for Higher Education (IFHE), Hyderabad.

#### Ref. No. MCS-SLM-IFHE-112022B2

For any clarification regarding this book, the students may please write to The ICFAI Foundation for Higher Education (IFHE), Hyderabad specifying the unit and page number.

While every possible care has been taken in type-setting and printing this book, The ICFAI Foundation for Higher Education (IFHE), Hyderabad welcomes suggestions from students for improvement in future editions.

Our E-mail id: cwfeedback@icfaiuniversity.in

# Centre for Distance and Online Education (CDOE) The ICFAI Foundation for Higher Education

(Deemed-to-be-University Under Section 3 of UGC Act, 1956) Donthanapally, Shankarapalli Road, Hyderabad- 501203

# BLOCK 2: SELECTED TECHNIQUES FOR MANAGEMENT CONTROL

In Block 1 we dealt with basic aspects in Management Control, what is the existing framework in organization structure and its culture and strategic issues related to business ethics for performance and management control, what are the steps organizations follow to implement management control? To understand these we need to know the techniques used to introduce management control systems in the organizations. The second block of the course on Management Control Systems deals with the selected techniques for management control. These concepts are covered in this block in four units.

Unit 6, *Budget as an Instrument of Control:* Budget actually provides a business plan expressed in quantitative terms and based on estimations. Budget is an important tool for the management to assess the actual performance of the organization vs its goals. This unit "Budget as an Instrument of Control" examines the formulation and administration of budgets. It discusses the human dimension in budgeting. The unit also discusses the different types of budgets. Finally, it introduces the concept of zero-based budgeting.

Unit 7, Business Performance: Targets, Reporting, and Analysis: Setting of business targets, reporting and analysis help employees understand what, when and why they need to perform to attain targets. This technique drives to improve the organizational performance as a whole. How do we evaluate the performance of the organization? The unit "Business Performance: Targets, Reporting, and Analysis" explains the methodology to evaluate the performance of the organization. It explains the need for targets and performance tracking. The unit discusses the various factors affecting the performance of a business. It also explains how to recognize the format to be followed for preparation of internal performance reports and the corporate annual report. The unit ends with a discussion on the significance and means of performance analysis.

Unit 8, *Auditing:* Auditing deals with the health of organization from various perspectives. Auditing facilitates the organization to assess how far the management controlling processes are in place. Auditing can be used as a tool in all areas like stock audit, human resources audit or financial accounts or any other identified function from the controlling aspect. The unit "Auditing" explains the different categories of audit, and discusses financial statement audit. The unit also explains internal audit, fraud auditing, forensic accounting, management audit, social audit, and environmental audit. It then discusses the auditing process. The unit ends with a discussion on the benefits and limitations of auditing.

Unit 9, *Transfer Pricing:* Within the organization, there will always be exchange of services and products. Any service or product will have a value. Organization has to value these products and services by various methods. Hence understanding which type of valuation is to be taken when goods or services are transferred within organization is an important aspect. This unit "Transfer Pricing" deals with methods of computing value of products or services within the organization. The unit discusses the various factors influencing transfer pricing. It then discusses the different methods used for calculating the transfer prices. Finally, the unit ends with a discussion on the administration of transfer pricing, and the concept of transfer pricing from the Indian perspective.

#### Unit 6

#### **Budget as an Instrument of Control**

#### **Structure**

- 6.1 Introduction
- 6.2 Objectives
- 6.3 Formulation and Administration of Budgets
- 6.4 Budgeting The Human Dimension
- 6.5 Types of Budgets
- 6.6 Zero-based Budgeting
- 6.7 Summary
- 6.8 Glossary
- 6.9 Self-Assessment Test
- 6.10 Suggested Reading/Reference Material
- 6.11 Answers to Check Your Progress Questions

"A budget is telling your money where to go instead of wondering where it went."

- Dave Ramsey, American personal finance personality, author and businessman

#### 6.1 Introduction

The given quote showcases that budget means a plan of control on how to spend money and this unit showcases the same.

In the last unit of the previous block, we discussed about Business Ethics and Management Control. In this unit, we shall discuss the concept of budget as an instrument of control.

A budget can be defined as a quantitative statement, for a defined period of time, which may include planned revenues, expenses, assets, liabilities, and cash flows. Budgeting refers to the process of designing, implementing, and operating budgets. It provides an action plan for an organization and serves as a control tool.

Budgets are business plans that are stated in quantitative terms and are usually based on estimations.

This unit will first discuss the formulation and administration of budgets. We shall then move on to discuss the human dimension in budgeting. We shall also discuss the different types of budgets. Finally, we shall discuss the concept of zero-based budgeting.

#### 6.2 Objectives

After studying this unit, you should be able to:

- Explain the importance of budget and how it can be formulated and administered, through visualizing an organization's goals and operations.
- Discuss various aspects of the 'budget' relevant to meet the objectives of the organization
- Illustrate the different types of budget and how one type of budget differs from others.
- Describe the concept of zero-based budgeting in terms of its meaning, process and benefits.
- Acknowledge the various issues that are involved in implementing the ZBB.

#### 6.3 Formulation and Administration of Budgets

Budget is an estimate of income and expenditure (revenue and expenditure) for a defined event (monthly budget of a family, annual budget of central government, advertisement budget of a MNC FMCG Company) during a specific period. Budgets are based on estimates, hence, there is always some element of uncertainty in the proposed revenues and expenditures .To overcome such uncertainties, formulation and administration of budgets in letter and spirit becomes a prerequisite. Budgeting process gains importance because, budgets are used to give an overview of the organization's performance and its operations. Budgets are also used as forecast tools and make the organization better prepared to adapt to changes in the environment.

#### **6.3.1** The Importance of Budgets

Budget preparation helps in integrating the tactical and operational strategies of the departments with the corporate strategy of the organization. Budgets are useful in resource allocation whereby processes which are expected to give the highest returns are given priority. They act as a means to verify the progress of the various activities undertaken to achieve planned objectives. They help in the evaluation of performance of operations as well as the performance of employees against standards set in an organization. Budgets promote division of labor and specialization in an organization through delegation of authority and allocation responsibility and accountability to more people.

#### Managers' Guide to a Practical Budget

Budgets help employees know the extent of possible expenditure and the extent of savings needed. Some of the common ways by which managers can make the most out of the set budgets are given here.

Be prepared to learn: Budgeting involves activities like controlling expenses, checking revenues, knowing about the cash reserves, etc. It takes some time and

practice to gain proficiency in these activities. Hence, it is better that managers spend time in learning the budgeting process to the smallest detail. This will help them create budgets which have a better utility.

Learn from the errors: The budgets that are prepared are not real figures but estimates. A manager must be prepared to make the necessary changes to the budgets if the actuals overshoot or are below estimates.

Establish a flexible budget: It is better that managers have provisions for changing the budgets mid-way if the need arises. That is, if revenues are higher than expected, the expenditure can be revised upward and the organization can go in for additional investments. If the revenues are lower, further control on expenses would be necessary.

Keep track of the cash flow: If a manager wants to adhere to the budget expectations, it is necessary to ensure that the revenues more than offset the expenses. Keeping track of income helps ensure that there is sufficient cash flow. Budgets should be verified every month. This will help the manager keep track of the funds and cash flows.

*Be conservative:* It is better for the manager to err on the high side in estimating expenses, and on the low side when estimating revenues. This is a conservative approach to budgeting for expenses and revenues, and provides a greater margin for dealing with the unpredictability of the revenues and costs.

*Provide a buffer:* The manager must be prudent and set aside a part of the income to tide over lean times in the future. This can be used to cover unexpected expenses, and will stand the organization in good stead during difficult times.

*Use budgets as controls:* The manager should ensure that the budgets are flexible enough to accommodate expenses that will benefit the business. The budgets should not be so rigid that they do not enable the manager to take last minute decisions to spend on something that could be a potential revenue earner.

#### **Example: Importance of Budget**

Economic Times dated  $25^{th}$  February, 2022 had reported, that the Government of India budget for the year 2022 focused on the growth of business sector and infrastructure development. The budget focused on the development of India within the next 25 years. The proposed expenditure by the government was to spend  $\stackrel{?}{_{\sim}}$  39,44,909 crore in the year 2022-23, which was 4.6% higher than the previous year estimation. The receipts for the year 2022-23 was expected to be  $\stackrel{?}{_{\sim}}$  22,83,713 crore, which was 4.8% higher than the previous year 2021-22. The budgeted tax collection was also higher than the previous year.

Source: https://economictimes.indiatimes.com/news/economy/finance/budget-2022-big-on-growth-and-good-for-business-etilc/articleshow/89817543.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst 22nd February, 2022 (Accessed on 13th August, 2022)

#### 6.3.2 Budget and Strategy

Budgets should be developed in such a way that they take into account the strategic requirements of each of the functions in an organization. Budgets, by involving managers in the budgeting process, help in integrating the tactical and operational strategies of individual departments with the corporate strategy of the organization.

#### **6.3.3** Steps in Budget Formulation and Administration

The information that goes into making budgets is processed by the budget department. Information from all the other functions comes to the budget department where it is compiled and the overall organizational budget is formulated. The major sources of data needed for the budget are the forecasts and accounting reports that managers of each functional area prepare. Managerial forecasts provide data on the expected level of activity while accounting reports provide data on the financial achievements of past and current operations. The different steps in budgeting are:

- Creating a budget department or appointing a budget controller
- Developing guidelines for budget preparation
- Developing budget proposals at the department/business unit level
- Developing the budget for the entire organization
- Determining the budget period and key budget factors
- Benchmarking the budget
- Reviewing and approving the budget
- Monitoring progress and revising the budget

#### 6.3.4 Creating a budget department or appointing a budget controller

Large firms generally have a budget department, while small firms may have just an individual budget controller. The budget department/controller is responsible for issuing the guidelines for budget preparation and for ensuring that this information is properly communicated throughout the organization. It is the responsibility of the budget department/controller to analyze and suggest changes to projected budgets in proposals received from the departments/business units. Other responsibilities include co-coordination of budget related work with the departments/business units and periodical revision of budgets.

#### 6.3.5 Developing guidelines for budget preparation

The budget department/controller in consultation with all levels of management, including the lower level managers, prepares the guidelines for budget preparation. These guidelines are then, approved by the top management. Once approved, the budget department or the controller sets a timeframe for the budget preparation process for the entire organization.

#### 6.3.6 Developing budget proposals at the department/business unit level

The heads of different departments/business units propose their budgets taking into consideration the existing facilities, employees, objectives, etc. Generally, the revenue centers first formulate their budgets as the other business units are dependent on the revenues generated in these business units for their resource requirements.

#### 6.3.7 Developing the budget for the entire organization

After the individual heads set the budgets for their respective departments/business units, these departmental budgets are combined to generate a budget for the entire organization. The budget should be complete with a pro forma income statement, budget for projected cash, capital investments, etc., in addition to the functional budgets like the human resource budget. The combined budget should conform to the organization's strategic plan. The budget department or controller has to communicate the final approved budget and the performance measures that will be used for the current year to the respective departments/business units.

#### 6.3.8 Determining the budget period and key budget factors

The budget period is the time for which a budget is set. The period of the budget varies based on the type of industry, the production cycle of the organization, etc. Usually, organizations operating in dynamic, fast-changing markets will have shorter budget periods than those operating in slow growth or saturated markets. Key budget factors like materials, working capital, labor, plant capacity, and the top management approach should be assessed in order to ensure that the budgets achieve their targets.

#### 6.3.9 Benchmarking the budget

A benchmarking exercise helps an organization to be up-to-date with the standard budgeting practices followed by other companies in the industry. Benchmarking also helps an organization identify the weaknesses that need to be addressed or the strengths which can be enhanced in its budgeting approach.

#### 6.3.10 Reviewing and approving the budget

The budgets prepared by each department go through a series of reviews by different levels of management. If a budget is found inadequate at any of these levels, it is sent back for rework. Once a budget is found satisfactory at the budget committee level, it is forwarded to the CEO for approval. On being approved by the CEO, the budget is presented to the Board of Directors.

#### 6.3.11 Monitoring progress and revising the budget

The budget controller is responsible for checking the progress of the planned activities against the budgets. He/she should communicate the progress to

employees and suggest ways to improve financial control. Internal factors (like changes in internal policies and practices regarding market share and/or product mix and production costs) and external factors (like changes in economic activity, labor rates, and raw material prices) can lead to changes in budgets. Budgets need to be revised only when there are discrepancies in them. It is necessary to keep revisions to the minimum as frequent revisions would mean that the budget is inconsistent with organizational objectives.

#### **6.3.12 Rolling Budgets/Forecasts**

Rolling budgets/forecasts are developed at regular intervals, say after every three months, and forecast performance for a specified time period, say the next 12 to 18 months. As these forecasts are developed at regular intervals, they are frequently updated with the latest changes that occur in the environment. Rolling budgets help organizations to control inaccuracies regarding projections and to minimize the discrepancies between the standards and the actuals. Rolling forecasts consider key factors like orders, sales, costs, and capital expenditures, which can be collected and collated easily. Rolling forecasts help the top management in predicting the changes in performance and thus help them in influencing the expectations of the stakeholders.

#### 6.4. Budgeting - The Human Dimension

Budgeting is not a process that takes place by itself. It requires the involvement of managers and other people; hence, it is not possible to ignore the effects of budgets on the employee behavior. The major behavioral dimension of budgeting is that it is used as an instrument to motivate the managers to achieve the goals of the organization.

#### **Example: Budget: Negative Connotations**

According to the authors, Anderson and Sollenberger, the management could use budgets as threatening mechanism to make the poor performer to work better or whenever there was a negative variance that can be taken against the employee. The employees look at budget variance as bad news to them. If only the top management was going to be little flexible, realistic and understanding the lower management efforts while comparing the actual performance with the budgeted, the employees attitude towards budgeting will turn positive.

Source: https://www.yourarticlelibrary.com/accounting/budgeting-accounting/behavioural-implications-of-budgeting-6-implications/52800 13th August, 2022 (accessed on 13th August, 2022)

#### **6.4.1 Participative Budgeting**

Budgets can be devised by the top management (top down approach) or by the lower levels (bottom up approach) of management. Generally, the budgeting process is a combination of both the top-down and bottom-up approaches - and is

referred to as participative budgeting. Lower level of management sets the budget and presents it to the top management. The top management reviews it and suggests changes if necessary, before its implementation.

Participative budgeting encourages communication between the top management and the employees. Further involvement of the top management in participative budgeting helps control malpractices in the budgeting process and also helps in motivating the employees. When the top management decides the budgets, the employees in the lower levels of the hierarchy will tend to accept the budget if they feel that it is attainable. On the other hand, bottom-up budgets tend to be accepted by the top managers only if they are on the higher side.

#### **6.4.2 Degree of Budget Goal Difficulty**

Difficult budget goals tend to influence the behavior of the employees. Easily attainable budget goals will not trigger enough effort from the employees and managers toward performance. High budget goals may prompt managers to resort to unethical means to achieve these goals.

A winning atmosphere and a positive attitude spread within the organization when the managers are able to meet and exceed their targets. Ideally, budgets should be challenging but attainable.

#### 6.4.3 Budgetary Slack

Budgetary slack is the amount that is budgeted in excess of the actual requirement. According to J. G. March, "Resources and effort toward activities that cannot be justified easily in terms of their immediate contribution to organizational objectives are termed as slack." Slack, in a way, is considered beneficial as it improves creativity, helps solve goal conflicts, and also helps the management in retaining people. Slack, as it represents managerial inefficiency and self-interest, is also considered detrimental to an organization's well-being. The top management is responsible for identifying and minimizing budgetary slack. Tight budgetary controls and incentives that have a higher variable component help reduce budgetary slack.

The degree of corporate diversification has an effect on the design of the incentive system whereas the business unit strategy influences the design of the budgetary control system. Organizations that follow an unrelated diversification strategy tend to rely less on variable pay-based incentives that are based on a fixed formula and the bonuses linked to the performance of business units. This happens because corporate managers feel that their lack of knowledge about business unit operations tend to restrict them from offering incentives that have a higher variable component. Managers also feel that such incentives may shift the behavior of business unit managers to tasks that are easily measured rather than tasks that are more difficult to measure. It may also lead to a greater focus of managers on the short-term measurable goals.

#### **Activity 6.1**

RR Textiles International has a tall hierarchical structure and follows a rigid traditional budgeting process. The top management sets a budget and passes on the targets to the lower levels of employees for implementation. Over the last couple of years, the company has been facing problems in achieving its targets. A major reason for the problem has been found to be the growing dissent among employees in being forced to accept targets imposed on them. Suggest ways in which the company can modify its budgeting process so as to improve the company's performance.

Answer:		

#### 6.4.4 Culture and Budgeting

The budgeting process is affected by the national culture(s) in the locations in which an organization operates. According to Geert Hofstede, the dimensions of national culture are -- power distance, uncertainty avoidance, masculinity/femininity, and individualism/collectivism.

An organization that follows strict hierarchical structures or has many levels in the hierarchy (tall structure), that is, which rates high on power distance does not employ participative budgeting. An organization which scores high on uncertainty avoidance, will have budgets decided by people who have enough expertise in the field. Such organizations will not employ participative budgeting as all the employees may not have the same level of expertise and the level of risks may be high. An organization with a flat structure and with a culture which allows freedom to employees to decide their own targets, employs participative budgeting. Budgeting is an internal process and hence, lack of cultural similarities poses a problem in the budget being communicated across subsidiaries of a multinational corporation.

#### 6.4.5 Budgets and Compensation

The budgeting process, if linked to compensation in an organization, leads to unethical behavior on the part of employees. Apart from being time consuming and expensive, it also tends to foster rivalry and distrust. When compensation and the budgets are linked, there is a general tendency for functional units to set lower than expected budgetary goals and targets for themselves. The incentives should be directly linked not only to the set targets but also to the means used to achieve the targets. In order to prevent employees from indulging in unethical means of

achieving targets, compensation levels should have a lower and higher limit. Even if the set objectives are not achieved, the employees should be assured of receiving a certain sum. If the achievement is higher than the set targets, the rewards should not exceed a certain upper limit.

#### **Check Your Progress - 1**

- 1. The following statements are related to the definition of budgets and budgeting. Identify the statement which is incorrect.
  - a. A budget is a quantitative statement, for a defined period of time.
  - b. Budgets may include planned revenues, expenses, and cash flows.
  - c. Budgeting refers to the process of designing, implementing, and operating budgets.
  - d. Budgets may not include assets or liabilities.
  - e. Budgets may include fund flows
- 2. The heads of different departments/business units propose their budgets taking into consideration the existing facilities, employees, objectives, etc. Which of the following is the first among the responsibility centers to develop its budget?
  - a. Revenue center
  - b. Profit center
  - c. Standard cost center
  - d. Investment center
  - e. Cost center
- - a. Dynamic markets; saturated markets
  - b. Slow-growth markets; fast-changing markets
  - c. Services sector; manufacturing sector
  - d. Manufacturing sector; services sector
  - e. Stock markets and commodity markets
- 4. Identify the forecasts that are developed at regular intervals to forecast performance for a specified time period, and continuous updations are done according to the latest changes that occur in the environment.
  - a. Master budgets
  - b. Rolling budgets
  - c. Zero-based budgets

- d. Flexible budgets
- e. Cash budgets
- 5. Identify the budgeting process which is a combination of the top-down and bottom-up approaches, helps in increasing the communication between the top management and the employees.
  - a. Participative budgeting
  - b. Rolling budgeting
  - c. Zero-based budgeting
  - d. Flexible budgeting
  - e. Cash budgeting

#### 6.5 Types of Budgets

Budget is a financial plan for a specific period, say a year, quarter or half yearly. Many a times it also includes planned sales volumes and revenues, resource requirements, costs and expenses, building the assets, applying the liabilities and estimating cash flows. These are used to express strategic plans of activities or events in measurable terms. To simplify, budgets are prepared in different types that help the business to optimize its assets and revenue.

Table 6.1 outlines the different types of budgets.

Table 6.1: Types of Budgets

Type of Budget	Characteristics	Type of Cost	Examples
Flexible Budget	A static amount is established for fixed costs and a variable rate is determined per activity measure for variable costs.	The static amount includes both discretionary and committed costs while the flexible part includes engineered costs per X value.	The static part: salaries, depreciation, property taxes, and planned maintenance. The flexible part: direct material, direct labor, and variable overhead. Also, some costs related to sales representatives such as sales commissions and travel.

Contd.....

Unit 6: Budget as an Instrument of Control

Capital Budget	Decisions regarding potential investments are made using discounted cash flow techniques.	Committed costs.	New plant and equipment.
Master Budget	A comprehensive plan is developed for all revenues and expenditures.	Discretionary, engineered and committed costs.	All revenues and expenditures for any organization.

#### **Example: Budgets for Different Causes and Reasons**

Businesstoday.in dated 1st February, 2021 had explained that the budget is the official document of the government. It covers the revenue and expenditure of the government for a year. Government budget was classified into three categories, namely balanced budget, surplus budget and deficit budget. In the budget presentation that was made by the Union Finance Minister Mrs Nirmala Sitharaman for the year 2021-22, she explained that hospitality industries, aviation sector, real estate companies and automobile industries had been affected badly due to the ongoing Covid 19 crisis in the country. The tax cuts were also high so that these companies and the economy will overcome the Covid 19 induced downward spiral. Using flexible budget with varying capacity and master budget would simplify the budgeting process for the nation.

Source: https://www.businesstoday.in/news/story/budget-2021-what-are-the-three-kinds-of-budget-286192-2021-02-01 1st February, 2021 (accessed on 13<sup>th</sup> August, 2022)

#### 6.5.1 Master Budget

The master budget, also known as the financial plan, forms the basis of control systems in organizations. The master budget has two components - operating budget and financial budget. Refer to Figure 6.1 for the components of the mater budget.

Operating budget: It includes the sales budget, cash collections from customers, purchases budget, disbursements for purchases, operating expense budgets, and disbursements for operating expenses.

Financial budget: It includes capital budget, cash budget, and the budgeted balance sheet.

The following Figure 6.1 exhibits a chart presenting different components of a Master Budget.

Master Budget Capital Budgets Cash **Financial Budgets Operating Budgets** Budgets Budgeted Direct Direct Ending Cost of Income balance Sales Materials Labor Inventory Goods Sold Statement Sheet Selling and Production Factory Overhead Administrative Budget

Figure 6.1: Components of the Master Budget

Source: ICFAI Research Center

#### 6.5.2 Steps in the preparation of a master budget

The principal steps in the preparation of the master budget are preparation of the operating budget and preparation of the financial budget. The master budget should be subjected to a follow-up to ensure performance in terms of planned goals and objectives. The follow-up process is done by preparing performance analysis statements on a periodic basis, indicating the budgeted versus actual performance.

#### Preparation of operating budget

The preparation of the operating budget entails preparation of:

#### Sales Budget

The sales budget starts with the sales planning exercise. This exercise is done to develop projections of the expected sales volume in physical and monetary terms. The key factors that are considered during sales planning are the size of the sales force, selling expenses, promotion and advertising expenses, and so on.

#### Production budget

Budgeted units of production = (Number of units sold) + (Desired ending finished goods inventory) - (Beginning finished goods inventory).

In production planning, some factors to be considered are the production capacity, availability of raw materials, etc.

#### • Direct materials budget

The direct materials budget constitutes calculation of five different heads:

- i. Quantity of material needed for production
- ii. Quantity of material to be purchased
- iii. Budgeted cost of material purchased
- iv. Cost of material used
- v. Cash payments for direct material purchased

#### • Direct labor budget

The direct labor budget involves two calculations:

Direct labor hours needed for production = Units to be produced x Direct labor hours budgeted per unit

Budgeted direct labor cost = Direct labor hours needed for production x Budgeted rates per hour.

#### Factory overhead budget

Factory overhead =

[Budgeted Fixed Overhead + (Budgeted Variable Overhead Rate x Direct Labor Hours Needed for Production)]

#### • Ending inventory budget

Ending inventory is calculated as:

Ending Finished Goods = Desired Ending Finished Goods x Budgeted Unit Cost

#### • Cost of goods sold budget

Cost of Goods Sold (COGS) involves two calculations:

- i. Budgeted total manufacturing cost
  - = (Cost of direct material used) + (Cost of direct labor used) + (Total factory overhead costs)
- ii. Budgeted cost of goods sold
  - = (Budgeted total manufacturing cost + Beginning finished goods Ending finished goods).

#### • Selling & administrative budget

Selling and administrative costs consist of variable and fixed components. The bottom line of the selling and administrative budget is the planned level of expenditures.

#### Budgeted Income statement

Preparing the budgeted income statement involves combining the relevant amounts from the sales, cost of goods sold, and selling & administrative expense budgets and then subtracting interest, bad debts, and income taxes to obtain budgeted net income.

#### Preparation of financial budget

The preparation of the financial budget involves preparation of:

#### • Capital budget

The capital budget deals with the organization's long-term investments. It helps the organization decide what kind of investments should be made in terms of facilities, new machinery, etc. It also includes human resources required in the organization.

#### Cash budget

The cash budget is concerned with making estimates of cash inflows, outflows, and the expected surplus or deficit of cash. Cash budgets are developed for short- term as well as long-term projections.

#### Budgeted balance sheet

The budgeted balance sheet projects each balance sheet item in accordance with the business plan. The balance sheet indicates the financial status as envisaged at the end of the budget year. It also projects the sources and uses of financial resources.

#### 6.5.3 Benefits of master budgets

Some of the benefits of master budgets are:

It guides performance: A master budget helps the employees track how each of their business unit's objectives when achieved contribute to the objectives of the organization. It is used as the base for acquiring and using the resources that are needed to achieve the objectives of the organization.

*It integrates and organizes:* The master budget, a compilation of budgets from different departments, helps in better integration of all organizational functions. Master budgets serve as planning tools as well as control tools.

*It effects continuous improvement*: The planning activity in the master budget helps organizations to look for alternative ways in which they can enhance value to customers and also minimize costs thus, helping in continuous improvement.

#### **Activity 6.2**

Given below are the production details pertaining to three products -- A, B, and C for the month of December 20xx. From the details, calculate the budgeted units of production of each product.

Product	Finished goods inventory as on December 01, 20xx (Units)	Units sold during December	Desired finished goods inventory as on December 31, 20xx (Units)
A	500	3500	1000
В	1000	4000	1500
С	1500	6000	2500

#### 6.6 Zero-Based Budgeting

Zero-Based Budgeting (ZBB) was put into use formally by Peter Phyrr at Texas Instruments, a world leader in digital signal processing and analog technologies based in the US, in 1969. He applied this concept to revive a leading, sagging electronic company 'Texas'.

#### **Example: Zero-Based Budgeting for Planning**

Economic Times dated 10<sup>th</sup> June, 2022, had reported that Dr. Tanuja Sharma and Roopal Gupta preferred using Zero Based Budgeting (ZBB). Many chief financial officers felt that there is a need for special budget for special needs. As the companies are struggling huge loss and delay in sales, it is preferable to use ZBB as it will help companies in reporting minimum loss and minimum wastage by not bringing forward the previous year's loss and wastage unlike the traditional budgeting. It will highlight on the current efficiency towards efforts, use of resources and revenue generation of the companies. The traditional budgets always have added weightage of 1% to 10% from the previous years, with an incremental percentage or decrease in the goal.

Source: https://hr.economictimes.indiatimes.com/news/trends/zero-based-budgeting-for-managing-performance-in-covid-times/80916866. 10th June, 2022 (accessed on 13<sup>th</sup> August, 2022)

The budgeting process takes place annually. A general/traditional method of preparing the budget involves taking previous year's budget as the base for the formulation of the following year's budget. This method is not always rational and may result in discrepancies. Unlike the traditional budgeting, the zero based budgeting approach aims at asking the manager of his center to re-evaluate the activities and then formulate the entire budget for his/her responsibility center. Thus, ZBB is a technique that is designed to evaluate the whole spectrum of functional activity so that areas that are inefficient and of little value are identified. The ZBB process steps are discussed below.

In ZBB, the responsibility centers are called decision units. The processes and activities involved in each decision unit are called decision packages.

#### 6.6.1 The ZBB Process

The ZBB process involves the following steps:

- Decision unit identification: Identification of the decision units (responsibility centers) is the first step in the ZBB process. Decision units are departments which contribute to the organizational goals.
- Decision package development: The activities in the decision unit are then, grouped into decision packages. A decision package describes the objectives of the activities and also gives details about the performance measures and the estimated costs of the activities.
  - Evaluation and grading of decision packages: Next, the decision packages are ranked taking into consideration the contribution they make to the organization's well-being. Ranking is done on the basis of a cost benefit analysis, and helps in deciding the amount of resources to be allocated to each decision package.
- Resource allocation: Finally, the top management decides on the amount of resources to be allocated to each decision package. The decision package with the highest rank will receive the maximum resources.

#### 6.6.2 Benefits of ZBB

Following are the benefits of ZBB:

- ZBB assumes the next year's budget to be zero, helping managers to carry out
  the cost benefit analysis of individual activities of their respective decision
  units.
- ZBB helps in devising a realistic budget compared to the traditional budgeting process as resources are allotted based on ranking of decision packages. It also helps in curbing redundant expenditure.
- It helps in integrating the planning and budgeting control processes.
- ZBB fosters better communication and participation between the different functions of the organization.

- It helps in managing activities and operations well, and aids in creating a flexible budget.
- It helps in performance evaluation of subordinates and aids the top management in advanced planning and goal setting for the budget period.

#### 6.6.3 Issues in Implementing ZBB

Certain issues are involved while implementing ZBB such as:

- ZBB can result in the creation of budgetary slack by encouraging managers
  of all decision units to portray his/her unit as the best contributor to the
  organization's profitability.
- It involves evaluation and ranking of contributions of decision units, but these contributions are often intangible, hence, rendering ZBB ineffective.
- It involves a lot of documentation, making it a slow and expensive process.

#### **Check Your Progress - 2**

- 6. Master budgets comprise operating budgets and financial budgets. The operating budget, in turn, consists of various components.. Which of the following is not one of these?
  - a. Sales budget
  - b. Purchases budget
  - c. Cash budget
  - d. Operating expense budget
  - e. Cash collections from customers
- 7. For a manufacturing organization, the budgeted sales for the financial year 20xx-20x1 are 75,000 units at ₹ 100 each. Some of the other estimates for the year are: the cost of goods to be sold ₹ 3,500,000, fixed selling and administration expenses ₹ 35,000, variable selling and administration expense ₹ 2 per unit sold. Interest payments are budgeted to be ₹ 20,000 while estimated bad debts are 2% of the total sales (assuming all sales will be in credit). Income tax is payable at 50%. Calculate the budgeted net income for the year.
  - a. ₹3,645,000
  - b. ₹3,600,000
  - c. ₹1,824,500
  - d. ₹1,822,500
  - e. ₹ 2,566,700

- 8. Which of the given statements is/are correct with respect to the financial budget component of the master budget?
  - i. The financial budget comprises the capital budget, the cash budget, and the budgeted balance sheet.
  - ii. The capital budget helps the organization decide what kind of investments should be made in terms of facilities, new machinery, etc. including human resources required in the organization.
  - iii. The cash budget indicates the financial status as envisaged at the end of the budget year. It also projects the sources and uses of financial resources.
  - iv. The budgeted balance sheet is developed for short-term as well as long-term projections. If the balance sheet indicates a deficit, then financing is needed.
  - a. Only i
  - b. Only i and ii
  - c. Only ii and iii
  - d. Only iii and iv
  - e. Only i and iv
- 9. A master budget has different purposes. Which statement with regard to the master budget is not true?
  - a. It is used to guide performance.
  - b. It helps to effect continuous improvement.
  - c. It serves as a control tool but not as a planning tool.
  - d. It acts as a base for acquiring and using the resources that are needed to achieve the objectives of the organization.
  - e. It looks for alternative ways to enhance the value of the customers.
- 10. Arrange the steps in zero-based budgeting in their order of occurrence.
  - i. Evaluation and grading of decision packages
  - ii. Development of decision package
  - iii. Allocation of resources
  - iv. Identification of decision units
  - a. i-ii-iii-iv
  - b. iv-ii-i-iii
  - c. ii-i-iii-iv
  - d. iii-iv-ii-i
  - e. i-iv-iii-ii

#### 6.7 Summary

- A budget can be defined as a quantitative statement, for a defined period of time, which may include planned revenues, expenses, assets, liabilities, and cash flows. Budgeting refers to the process of designing, implementing, and operating budgets. It provides an action plan for an organization and serves as a control tool.
- Budget formulation consists of a series of activities: creating a budget department or appointing a budget controller, developing guidelines for budget preparation, developing budget proposals at the department/ business unit level, developing the budget for the entire organization, determining the budget period and key budget factors, benchmarking the budget, reviewing and approving the budget, monitoring progress, and revising the budget.
- The budgeting process is referred to as participative budgeting when it is a combination of both top-down and bottom-up approaches.
- Rolling budgets/forecasts are developed at regular intervals, say after every
  three months, and forecast performance for a specified time period, say the
  next 12 to 18 months. As these forecasts are developed at regular intervals,
  they are frequently updated with the latest changes that occur in the
  environment.
- The attainability of budget goals has a significant impact on the behavior of the employees.
- Budgetary slack may help in improving creativity, resolving goal conflicts, and retaining people but may also represent managerial inefficiency and selfinterest.
- The relation between national culture and budgeting may be examined using Geert Hofstede's dimensions of culture: power distance, uncertainty avoidance, masculinity/femininity, and individualism/ collectivism.
- Budgeting is an internal process and hence, lack of cultural similarities will
  pose a problem in the budget being communicated across subsidiaries of an
  organization. This problem becomes more pronounced in the case of
  multinational corporations.
- The budgeting process in an organization tends to lead to unethical behavior on the part of employees, if linked to compensation.
- The different types of budgets used by organizations are appropriation budget, flexible budget, capital budget, and the master budget.
- The master budget forms the basis of control systems in organizations.
- The principal steps in the preparation of the master budget are preparation of the operating budget and preparation of the financial budget.

- The operating budget consists of the following budgets: sales, production, direct materials, direct labor, factory overhead, ending inventory, cost of goods sold, selling & administrative, and income statement. The financial budget comprises the capital budget, the cash budget, and the budgeted balance sheet.
- In Zero-Based Budgeting (ZBB), the base is taken as zero and the budget is devised as if it is for a new venture.
- The ZBB process involves the following steps: decision unit identification; decision package development; evaluation and grading of decision packages; and resource allocation.
- Some of the limitations of ZBB are that it provides for creation of budgetary slack; it involves a lot of documentation and hence is a slow process; and it is expensive to implement.

#### 6.8 Glossary

**Budget period:** Budget period is the time for which a budget is set. The period of the budget varies based on the type of industry, the production cycle of the organization, etc.

**Budgetary slack:** Organizational slack, when created as a part of the budgeting activity, is called budgetary slack. It is the amount that is budgeted in excess of the actual requirement. It is a deliberate understatement of revenues and/or overstatement of expenses in the budget.

**Budgets/budgeting:** Budgets can be defined as a quantitative statement, for a defined period of time, which may include planned revenues, expenses, assets, liabilities, and cash flows. Budgeting refers to the process of designing, implementing, and operating budgets.

**Master budget:** Master budget, also known as the financial plan, forms the basis of the control systems in organizations. The master budget has two components the operating budget and the financial budget. The operating budget includes the sales budget, cash collections from customers, purchases budget, disbursements for purchases, operating expense budgets, disbursements for operating expenses, etc. The financial budget includes capital budget, cash budget, and the budgeted balance sheet.

**Participative budgeting:** Participative budgeting is a budgeting process wherein the lower level of management sets the budget and presents it to the top management who review it and suggest changes if necessary before implementation. Participative budgeting helps in increasing the communication between the top management and the employees.

**Rolling budget/forecast:** Rolling budget provides for an additional time period apart from the actual budget period. Flexible budgets allow managers to revise and update the targets set at the beginning of the budget period.

**Zero-Based Budgeting (ZBB):** ZBB assumes the next year's budget to be zero. In ZBB, the responsibility centers are called decision units, and the process and activities involved in each decision unit are called decision packages.

#### **6.9** Self-Assessment Test

- 1. What is the importance of budgeting?
- 2. Enumerate the different steps in formulating the budgets. Explain the role of the budget department/ budget controller.
- 3. Explain the effect that national culture has on budgeting.
- 4. "The budgeting process in an organization tends to lead to unethical behavior on the part of employees, if linked to compensation." Why?
- 5. Distinguish between traditional budgets and rolling budgets.
- 6. What are the four types of budgets? Explain with examples.
- 7. What are the components of master budgets? What are the different heads under operating budgets?
- 8. Master budgets have many benefits. Explain.
- 9. Describe the steps in the Zero-based budgeting process. What are the benefits of and issues in implementing Zero-based budgeting in an organization?

#### 6.10 Suggested Readings / Reference Material

- 1. Stephen P Robbins, David A. De Cenzo and Mary Coulter (2022). Fundamentals of Management: Essential Concepts and Applications, Fifteenth Edition Pearson Paperback, 30 June 2022.
- 2. Subhash Chandra Das (2019). Management Control Systems Principles and Practices, PHI Learning Pvt. Limited, Paperback 15 July 2019.
- 3. Pravin Durai (2019). Principles of Management: Text and Cases, First edition, Pearson India Education Services Pvt. Ltd.; Second edition (31 August 2019).
- 4. Merchant, Kenneth A (2017). "Management Control System: Text and Cases", Pearson Education Asia.
- 5. Saravanavel, P (2022). Management Control Systems Principles and Practices. First edition, Himalaya Publishing House.

#### **6.11** Answers to Check Your Progress Questions

#### 1. (d) Budgets may not include assets or liabilities.

Budgets can be defined as a quantitative statement, for a defined period of time, which may include planned revenues, expenses, assets, liabilities, and cash flows. Budgeting refers to the process of designing, implementing, and operating budgets.

#### 2. (a) Revenue center

The revenue centers first formulate their budgets. This is because the other business units are dependent on the revenues generated in these business units for their resource requirements.

#### 3. (a) Dynamic markets; saturated markets

The budget period is the length of time for which a budget is set. Budgets are generally annual, although sometimes they can be for longer periods. The period of the budget varies based on the type of industry, the production cycle of the organization, etc. For instance, organizations operating in dynamic, fast-changing markets will have shorter budget periods than those operating in slow growth or saturated markets. The markets may be dynamic (or saturated) both in the manufacturing sector and in the services sector.

#### 4. (b) Rolling budgets

Rolling budgets/forecasts are developed at regular intervals, say after every three months, and forecast performance for a specified time period, say the next 12 to 18 months. Due to the fact that the forecasts are made frequently, they are continuously updated with the latest changes that occur in the environment. This helps the organization in adapting its strategies to the changing business environment.

#### 5. (a) Participative budgeting

The participative budgeting process is a combination of both the topdown and bottom-up approaches, wherein the lower level of management sets the budget and presents it to the top management who reviews it and suggests the required changes before it is implemented.

#### 6. (c) Cash budget

The master budget comprises two components: the operating budget and the financial budget. The operating budget includes: the sales budget, cash collections from customers, purchases budget, disbursements for purchases, operating expense budgets, disbursements for operating expenses etc. The financial budget includes: capital budget, cash budget, and the budgeted balance sheet.

#### 7. (d) ₹ 1,822,500

Preparing the budgeted income statement involves combining the relevant amounts from the sales, cost of goods sold, and selling & administrative expense budgets and then subtracting interest, bad debts, and income taxes to obtain budgeted net income.

Here, budgeted sales - ₹ 7,500,000 Budgeted COGS - ₹ 3,500,000

Budgeted selling and administration expense = Budgeted fixed selling and administration expense + Budgeted variable selling and administration expense = ₹ 35,000 + (`2 x 75,000) = ₹ (35,000 + 150,000) = ₹ 185,000.

Budgeted interest payments - ₹ 20,000

Budgeted bad debts = 2% of ₹7,500,000 = ₹150,000

Therefore, budgeted income = ₹ [7,500,000 - (3,500,000 + 185,000 + 20,000 + 150,000)] = ₹ (7,500,000 - 3,855,000) = ₹ 3,645,000.

Income tax payable is @ 50%, so budgeted net income is 50% of ₹ 3,645,000 = ₹ 1,822,500.

#### 8. (b) Only i and ii

The financial budget comprises the capital budget, the cash budget, and the budgeted balance sheet. The capital budget deals with the organization's long- term investments. It helps the organization decide what kind of investments should be made in terms of facilities, new machinery, etc. It also includes human resources required in the organization. The cash budget is concerned with making estimates of cash inflows, outflows, and the expected surplus or deficit of cash. Cash budgets are developed for short-term as well as long-term projections. If the cash budget indicates a deficit, then financing is needed. If there is a cash surplus, it can be put to profitable use. The budgeted balance sheet projects each balance sheet item in accordance with the business plan. It indicates the financial status as envisaged at the end of the budget year. It also projects the sources and uses of financial resources.

#### 9. (c) It serves as a control tool but not as a planning tool.

The master budget guides performance by helping employees track how each of their business unit objectives (when achieved) contributes to the objectives of the organization. It is used as the base for acquiring and using the resources that are needed to achieve the objectives of the organization. The planning activity in master budgets helps organizations to look for alternative ways in which they can enhance value to customers and also minimize costs. This helps in continuous improvement. Master budgets serve as planning tools as well as control tools. As the master budget is a compilation of the departmental budgets, it helps in better integration of all the organizational functions.

#### 10. (b) iv-ii-i-iii

The steps of zero-based budgeting in the order of their occurrence are: decision unit identification, decision package development, evaluation and grading of decision packages, and resource allocation.

#### Unit 7

# Business Performance: Targets, Reporting, and Analysis

#### **Structure**

- 7.1 Introduction
- 7.2 Objectives
- 7.3 Introduction to Targets and Performance Tracking
- 7.4 Factors Affecting Business Performance
- 7.5 Performance Reports
- 7.6 Performance Analysis
- 7.7 Summary
- 7.8 Glossary
- 7.9 Self-Assessment Test
- 7.10 Suggested Reading/Reference Material
- 7.11 Answers to Check Your Progress Questions

"It's important to leverage the data the same way, whether it's a strategic or tactical issue: Have a vision for what you are trying to do. Use data to validate and help you navigate that vision and map it down into small enough pieces where you can begin to execute in a data-informed way. Don't let the shallow analysis of data that happens to be cheap/easy/fast to collect nudge you off-course in your entrepreneurial pursuits."

- Andrew Chen, Head of Rider Growth, Uber

#### 7.1 Introduction

Let's study how data can be used to set targets, make reports and analyze the performance of various projects or business units of the corporate houses.

In the previous unit, we have discussed how budget can be used as an instrument of control. In this unit, we shall discuss how a business performance can be evaluated by setting targets and, reporting and analytical procedures.

Targets help employees understand what they need to achieve and when they need to achieve it. The management then evaluates the actual business performance compared to the planned or targeted performance. Reasons for variances (difference between actual and planned performance) are analyzed and corrective

measures are taken. The actual performance is documented as business reports for easy comprehension and future reference.

This unit will first explain the need for targets and performance tracking. We shall then move on to discuss the various factors affecting the performance of a business. We shall also discuss how to recognize the format to be followed for preparation of internal performance reports and the corporate annual report. Finally, we shall discuss the significance and means of performance analysis.

#### 7.2 Objectives

After studying this unit, you should be able to:

- Explain how business decides its targeted performance and the tracking of performance involved in it.
- Discuss how the internal and external factors determine the performance of a business.
- Illustrate how the top management and the organizational culture, service and quality management, and the market orientation affect the business performance and its targets attainment.
- Describe how a business performance report can be drafted, analyzed, and be a decisive factor.
- Understand the importance of an internal performance report and a corporate annual report.
- Enumerate the different performance dimensions can be accounted for while making performance analysis.
- Acknowledge the applicability of revenue variance and expenditure/cost variance in performance analysis.

#### 7.3 Introduction to Targets and Performance Tracking

Target setting gained importance because of its correlation with performance tracking in organizations. This helps in constant supervision of targets with that of the actual performance. In case of under-performance, the management can find a reason for it and do rectification at the appropriate time. For example, at the end of the year when the financial reports gets finalized, if it is found that business is under performing or the team had under-performed during the year then it becomes too late for taking remedial measures.

Both financial and non-financial targets can be framed by organizations to assess and enhance their business performance. Though targets are frequently used in sales, they are applicable to all organizational functions. Targets can be quality standards, service levels, benchmarks, service guarantees, numerical goals, budgets, and quotas.

#### 7.3.1 Role of Targets

Targets may be applied to the organization, or at different levels like the business unit level, the branch level, the project level, the team level, or even the individual level. Usually, most organizations set targets and make an employee accountable for achieving that target. Targets help in performance monitoring and improving. The actual performances are tracked on a periodic basis - weekly, monthly, quarterly, or yearly, and variances are identified and analyzed. If the current targets are achieved, the organization may decide to raise the targets, and from then on, strive to achieve the new targets, thus leading to an improvement in the performance. The management can set targets keeping in mind the targets of competitors, industry's best practices, and the resources of the organization.

#### 7.3.2 Tracking of Performance

Performance can be tracked and reported in two ways - year-to-date or period-to-period.

#### 7.3.3 Year-to-date Reporting

In year-to-date reporting, performance is tracked from the beginning of the financial year to the present date under review. This method is used when the weekly or monthly figures are not as important as the yearly figures if the yearly targets are met. To analyze year-to-date reporting against the established targets, summation of the monthly performance data for that year at a date of review is used.

Budgets and quotas are examples of year-to-date reporting, though they can also be used for period-to-period reporting. A budget refers to the amount of revenue or expense that should be realized over a specified period, say, yearly. This amount is broken down into monthly figures. Quotas relate to production volume or number of transactions for that period. Usually, the top management tries to ensure that the annual expenditure is within the budget than the monthly/weekly expenditure.

Year-to-date reporting gives an idea of the activity level within a period. Monitoring the activity level will enable managers to track resource utilization and plan for future resource requirements. The actual activity undertaken can be compared with the targeted activity on a periodic basis. This can be represented in a graphical format.

Refer to Figure 7.1 for a financial year. Year-to-Date graph for XYZ Polyesters Ltd, a medium sized company, monthly expenditure budget in the black stripes bar indicates the expenditure for the current year and the white bar is estimated revenue. Year-to-date graphs alert the management to situations where past performance rates were too fast or too slow, so that it can adjust future activity so that the yearly targets are met.

₹ 2M 

\$\times 1.5M 

\$\times 1.5M 

\$\times 1.5M 

\$\times 1.5M 

Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar

Figure 7.1: Year-to-Date Graph for XYZ Polyesters Ltd.

Source: ICFAI Research Center

#### 7.3.4 Period-to-period Reporting

In period-to-period reporting, performance is tracked and targets are set on a monthly or weekly or seasonal basis. There are four common types of targets in period-to-period reporting depending on the behavior of the performance parameters. These are - flat line, step, seasonal, and growth curve.

Figure 7.2 depicts and Table 7.1 gives the various types of targets and their features.

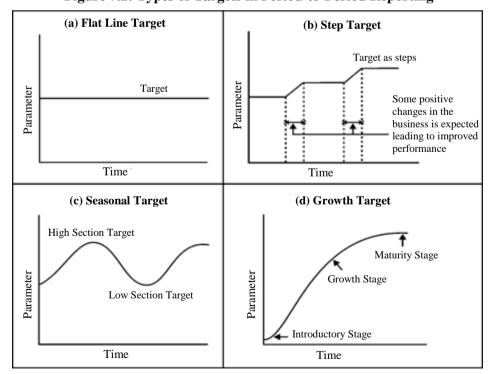


Figure 7.2: Types of Targets in Period-to-Period Reporting

Source: ICFAI Research Center

**Block 2: Selected Techniques for Management Control** 

<b>Type of Targets</b>	Features	
Flat line target	The performance parameter is expected to exhibit a linear pattern throughout the period during which the performance is analyzed.	
Step target	Targets are set in a staggered fashion if the management expects changes in the business or the environment in the planning horizon, which in turn, might lead to performance-related changes.	
Seasonal target	In certain industries like retail and insurance, the management generally sets targets that vary with the season (festivals, etc).	
Growth target	For all the products, the management sets targets based on its product life cycle (PLC) stage.	

Source: ICFAI Research Center

# **Example: Setting up of Performance Tracking Unit to Track Projects in Goa**

The state government of Goa to ease the burden on homemakers and for revitalizing the state economy, was aiming to implement high impact projects such as restarting mining activities, carbon neutral Goa, etc. The execution of such wide-ranging development goals would require efficient planning and execution, cooperation and coordination between the line departments, and timely attainment of targets. Hence the state cabinet on June 9, 2022, for tracking and measuring the implementation status of these projects, approved the setting up of a performance management unit by the Nation First Policy Research Centre (NFPRC).

Source: https://timesofindia.indiatimes.com/city/goa/state-to-set-up-performance-mgmt-unit-to-track-projects/articleshow/92114006.cms, 10th June, 2022. (Accessed on 18th August, 2022)

#### 7.4 Factors Affecting Business Performance

An organization depends upon both internal and external factors to function smoothly and competitively. While an organization may try its level-best to continuously improve its internal factors, it cannot possibly alter the course of events occurring outside its horizon. These are external factors that have a major bearing on the success or failure of an organization. Managing the strengths of the internal operations and recognizing potential opportunities and threats outside of the operations are keys to success of business performance.

External factors are those that are not under the direct control of the organization like government rules and regulations and natural calamities. Some factors like service orientation, product quality, purchasing, administration, partnership, employees, leadership, and strategy can be controlled by the organization.

The importance of these factors is different among organizations and across industry sectors. Some of the internal factors are explained here.

#### 7.4.1 Top Management and Organizational Culture

Organizational culture has been defined by Barney as a complex set of values, beliefs, assumptions, and symbols that define the way in which a firm carries out its business. The top management influences the organizational culture. The nature of interaction between the top management and the organizational culture may be in the form of three different kinds of strategic business profiles - rigid/efficient profile, flexible/inefficient profile, and flexible/cost conscious profile.

Refer Table 7.2 for a description of each of these profiles.

**Table 7.2: Business Profiles and their Descriptions** 

Profiles	Descriptions	
Rigid/efficient profile	<ul> <li>Management follows a conservative approach; can succeed in a stable industry</li> <li>Cost conscious; rigid culture; hesitant to execute changes</li> <li>Belief in maintaining a stable state than innovating and reacting to market changes</li> <li>Challenge is to maintain or enhance operational efficiencies that can be monitored by the top management due to its focus on cost efficiencies.</li> </ul>	
Flexible/inefficient profile	<ul> <li>Prefer to make changes even if the change comes at a cost</li> <li>Belief that businesses that innovate do not give importance to cost cutting</li> <li>Focus on achieving innovative breakthroughs rather than on day-to-day operations</li> <li>Performance dependent on external environment e.g.: a dynamic business environment will exert pressure on such organizations to emphasize innovation</li> <li>Flexible organizational culture and top management's approach would help the organization in achieving success.</li> <li>Conservative (cost conscious) and innovation-oriented</li> <li>Dual emphasis is on flexibility and efficiency</li> </ul>	

Contd.....

**Block 2: Selected Techniques for Management Control** 

Flexible/cost conscious profile
(Analyzing organizations)

• These managers accept new ideas less willingly than managers who focus on innovation

• Business strategy for such organizations is to adopt successful innovation in the most cost-efficient way

• These organizations strike a balance between the other two extreme profiles.

• They perform well in a moderately volatile and a moderately stable environment.

Source: ICFAI Research Center

#### 7.4.2 Product and Service Quality and Quality Management

Quality (features and performance) is the basic characteristic of any product/service that should meet/exceed customers' expectations. Service quality differs from product quality as the services are characterized by intangibility, inseparability of production and consumption, heterogeneity, and perishability. A focus on quality will provide organizations with several benefits irrespective of whether it is a product-centric or service-centric organization. An organization that offers a higher quality product or service than its competitors can charge a premium price, and thereby earn higher margins. Emphasis on quality helps enhance market share as customers today are more aware and give importance to quality. Quality management also helps in providing a competitive advantage and improve the organization's performance.

#### 7.4.3 Market Orientation

Market orientation makes an organization cautious about market conditions. It helps the organization to respond quickly to the changes in the customer needs and wants to compete effectively in the dynamic business environment.

Market orientation helps the organization in facing threats and to avail the market opportunities. It helps in quickly identifying and minimizing risks, thereby minimizing losses. It also helps in influencing the financial and non-financial organizational performance. Market orientation requires investment in time and money, and cannot be imitated easily as it is intangible and complex in nature. Market-oriented organizations are also known as learning-oriented organizations as they have an intrinsic focus on learning about market changes and customer behavior.

#### 7.4.4 Influence of Market Orientation on Financial Performance

Strong market orientation helps an organization take effective action in the first go rather than act and then modify it in response to the market conditions. This leads to cost savings, and enhancements in the profit margins and financial performance.

#### 7.4.5 Influence of market Orientation on Non-Financial Performance

Market orientation helps in enhancing employees' organizational commitment and team spirit. Frontline employees are the contact point between the customers and the organization. They get direct information about the changing customer needs and requirements, market trends, etc. They feel more attached to the organization when they see their experience and contribution as being factored into the organization's strategies. Market orientation ensures a greater chance of new product success and customer satisfaction if goods and services are provided according to customer preferences.

## Example: COVID-19 Pandemic, the most Influential Factor that Affected Business Performance

According to the report released by the World Bank on 17 Feb 2021, between Oct 2020 and Jan 2021, the sales of one fourth of the companies fell by 50 %. As the overall sales dropped by 27 %, 65% of businesses reduced their working hours, which resulted in limiting the layoffs to 11%. While 34% of the firms increased using the internet, 17% of companies invested in digital solutions.

McKinsey & Company had to publish 100 reports (notes) for 2 years providing insights into the effect of the COVID-19 Pandemic on Business. In its report numbered 100 released on April 13, 2022, McKinsey predicted that a once-in-a-lifetime wave of capital spending on physical assets between 2022 and 2027 will kickstart growth with roughly \$130 trillion in investment flooding into projects to decarbonize and renew critical infrastructure.

Sources: i) https://www.worldbank.org/en/news/infographic/2021/02/17/how-covid-19is-affecting-companies-around-the-world, 17th February 2021. (Accessed on 18th August, 2022) ii) https://www.mckinsey.com/business-functions/risk-and-resilience/our-insights/covid-19-implications-for-business, 13th April, 2022. (Accessed on 18th August, 2022)

#### 7.5 Performance Reports

A performance report is a report comprising of information that measures the performance of the organization and its activities. The information required to evaluate the actual performance against the planned performance should be collected, collated, analyzed, and documented as a performance report which can be easily understood. Some reports are meant for internal use - for decision making, for employees' performance evaluation, etc., while some reports like the corporate annual report are meant for external users. Let us go into details of the same.

#### 7.5.1 Report Format

Report format is the layout of the information (performance analysis) in the report. The way in which this information is presented is a function of three

factors - the information to be provided; the questions to be answered; and the form of presentation.

#### 7.5.2 The information to be provided

The information includes the title and it is described by the number and types of the variables. These variables can in turn be classified into three types categorical, ordinal, and quantitative.

#### 7.5.3 The questions to be answered

The information provided in the report should be relevant to the question to be answered or in other words, the decision-making problem to which it caters. The extent of information required depends on the complexity of the problem at hand - greater the complexity, more is the information required.

#### 7.5.4 The form of presentation

This refers to the visual representation of the information. Information should be presented in a way which will be easy for the user to interpret - in the form of text, table, graph (bar chart, pie chart, line graph, etc.), or a combination of two or more forms. The form of presentation also depends on the number of different variables in the information and the information type.

The data given below in the example shows the turnover details of ABC Limited and XYZ Limited for a 9 year period. (All figures are in millions of units).

**Example: Form of Presentation Turnover** 

Year	ABC Ltd	XYZ Ltd
1	12,000	11,000
2	15,000	12,000
3	9,000	11,000
4	9.500	10,500
5	10,500	12,000
6	11,000	13,000
7	12,000	13,500
8	12,500	14,000
9	13,000	16,000

The given data can be represented in the form of a column chart (Refer to Figure 7.3 below) which will help in easy comprehension and interpretation. The data is presented in years on X axis and on Y axis the number of units in millions.

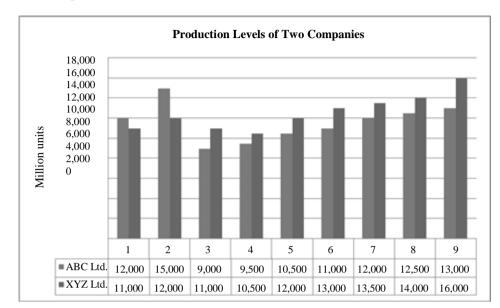


Figure 7.3: Turnover details of ABC Limited and XYZ Limited

Source: ICFAI Research Center

#### 7.5.5 Internal Performance Reports

Internal performance reports are used within an organization to measure organizational performance on a periodic basis. These reports are used to correct variances in the performance. They are not statutory in nature, and are prepared and used based on the necessity and choice of the organization. Internal performance reports are used by all the levels of the management and in all the departments of the organization. These reports help in controlling the organizational performance on a constant basis. Performance appraisal reports of employees, progress reports of the projects, trend charts of the sales, variance reports, etc., are the common types of internal performance reports.

#### 7.5.6 Corporate Annual Report (CAR)

A Corporate Annual Report (CAR) is a key public document prepared by organizations mainly to fulfill the mandatory corporate reporting requirements. It is a formal communication document that is used to inform the public about its financial performance in a year.

#### 7.5.7 Format of Corporate Annual Report

Annual reports comprise quantitative information (balance sheet, cash flow statement, and income statement), narratives (Chairman's report, the CEO's report, the Directors' report, the Auditor's report, management discussion and analysis, and mission statement), photographs, and graphs. The format of representation of these reports is specific for specific countries, depending on that country's statutory requirement.

Generally, the report is divided into two sections - one section consists of non-statutory matters and is represented using different types of colors and papers, while the other section consists of financial statements. The contents of the reports are partly voluntary and partly mandatory. The voluntary information provided in the report is generally related to the company's interaction with the environment, society, employees, etc. As the annual report is a communication statement to the public, organizations give special importance to the look and design of the report, to influence stakeholders.

Table 7.3: List of Information Items in an Annual Report and their Relative Importance

Information Item	Relative Importance
Information regarding assets, revenues, expenses, profit	Essential
Major elements of costs: marketing, salaries, restructuring, asset maintenance	Essential
Capitalized interest	Very important
Capital expenditure (actual vs. planned)	Very important
Major contractual relationships	Very important
Monetary and non-monetary risk disclosure	Very important
All performance measures: financial, pricing, efficiency, market	Very important
Discussion on major factors influencing next year	Intermediate

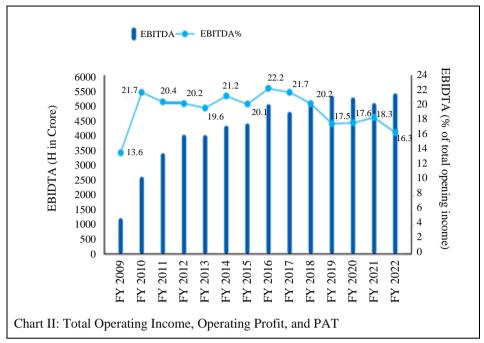
Source: ICFAI Research Center

## **Example: Financial Performance of Bajaj Auto for 2021-22**

In the chart, EBITDA (Earnings before interest, taxes, depreciation, and amortization) in absolute figures (₹ in crore) was represented as bars and EBITDA % (as a % of total income) as a line, connecting the dots. Presenting them together gives a better and deeper understanding of the financial performance. For instance, from FY 2020 to FY 2021, the EBIT (earnings before interest and tax) has fallen, but as a % of total income, it was still on the rise indicating a better internal performance against external constraints. The opposite could be seen from FY 2021 to 2022 i.e., a rise in EBIT but a fall in its % figures indicating some internal adjustments against better earnings.

Contd....

Unit 7: Business Performance: Targets, Reporting, and Analysis



Source: http://investors.bajajauto.com/wp-content/uploads/2022/07/BAL\_AR\_2022\_for-Web\_IndiDesign.pdf, April 2022, (accessed on 18th August, 2022)

## **Check Your Progress - 1**

- 1. Which of the given statements regarding targets is incorrect?
  - a. Targets can be applied at different levels of the organization.
  - b. The variance between the targeted performance and the actual performance should be analyzed.
  - c. Targets enable only monitoring of performance and not improvement in performance.
  - d. The management can set targets keeping in mind the targets of competitors, industry's best practices, and the resources of the organization.
  - e. If the preset targets are achieved, then the organization may enhance the target.
- 2. Reporting is a way of tracking and reporting performance for a period starting from the beginning of the financial year to the present date under review. It is done in two ways one is period to period reporting. Which of the following is the second one?
  - a. Year-to-year
  - b. Year-to-date
  - c. Half-yearly
  - d. Quarterly
  - e. Bi-annual

- 3. In period-to-period reporting, which of the following is is used when the management is expecting changes in business or the business environment in the planning horizon that might lead to changes in performance?
  - a. Seasonal target
  - b. Step target
  - c. Growth curve target
  - d. Flat line target
  - e. Monthly target
- 4. The information presented in a performance report is a function of three factors. Which of the following is not one of these factors?
  - a. The information to be provided
  - b. The questions to be answered
  - c. The form of presentation
  - d. The type of target
  - e. Growth curve target
- 5. The performance report of a retail organization for the year 2008 contains information on 'Market Share in %' and 'Brand-wise Revenue in ₹' of both the 'Garments Division' and the 'Toys Division' from '2003 to 2008'. Among the variables in the report, which of the following is the ordinal variable?
  - a. Brand-wise revenue in ₹
  - b. Market share in %
  - c. Year
  - d. Division
  - e. Bi-annual

### 7.6 Performance Analysis

The performance of any business depends on both internal and external factors. In a competitive business environment, it is necessary to evaluate performance based on multiple performance dimensions that will reflect the changes in the business environment as well as the achievement of targets set by the organization. Let us discuss on some of the factors that impact the performance of the organization.

Refer Table 7.4 for an analysis of the performance dimensions that may be used by organizations.

**Table 7.4: Performance Dimensions and their Analysis** 

Performance Dimensions	Analysis
Financial measures	Variance analysis (comparison of actual financial performance with a planned one) helps an organization to take corrective measures in the future.
Customers	Customer behavior and satisfaction analysis helps an organization find out the organization's image in comparison with its competitors: whether its branding activity has been successful or whether the perceived image in the customers' minds is in sync with the planned image etc.
Internal business processes	Evaluating internal business processes helps in ascertaining whether efficiency of the actual usage of resources in business processes is at par with the planned efficiency parameters or not.
Growth dimensions	Evaluation of growth dimensions helps compare actual training, technology adoption, and employee productivity with industry standards and the organization's own plans. Corrective actions are taken if there are any variances.

Source: ICFAI Research Center

One of the important approaches to performance analysis is the performance prism approach. This approach comprises stakeholder satisfaction, strategies, processes, capabilities, and the stakeholder contribution. DHL was the first company to implement the Performance Prism.

#### **Performance Prism**

The Performance Prism is a measurement framework designed to assist managers in the selection of appropriate measures for performance evaluation. It is a comprehensive measurement framework that addresses the key business issues. The Performance Prism consists of five interrelated facets: stakeholder satisfaction, strategies, processes, capabilities, and the stakeholder contribution.

**Stakeholder satisfaction:** This signifies identification of the stakeholders of the organization and understanding their wants and needs. Stakeholders include: customers, shareholders, employees, suppliers, alliance partners, intermediaries, regulators, the local community, pressure groups, and all such parties who can have a substantial impact on the performance and success of an organization.

**Strategies:** Once the stakeholders have been identified and their needs and wants understood, the next step is to think about strategies to satisfy their needs and wants...

**Processes:** After deciding upon the strategies, the management must decide upon the processes using which the strategies can be delivered. Here, processes mean the common generic business processes that form the foundation of the operations of most organizations. These processes include: development of new products and services, generation of demand, fulfilling of demand, planning, and management of the organization.

**Capabilities:** After deciding upon the processes, the management must identify the capabilities it has to have in order to operate the processes, both efficiently and effectively. Any organization can become competitive only if it has the requisite capabilities to execute the processes. And after identifying the required capabilities can the organization assess whether it has in them or not. If not, then it should take initiatives to gain those capabilities.

**Stakeholder Contribution:** In a successful business, not only does the organization contribute to its stakeholders, but the stakeholders also contribute to the business. For example, the suppliers should supply raw materials to the business and the employees should devote their knowledge, time, and energy for the organization for which they work. This mutual relationship between the organization and the stakeholders will enable the organization to succeed.

The management can use the Performance Prism (Figure 7.4) as a tool to influence their thinking about what key questions they want to address to manage their business.

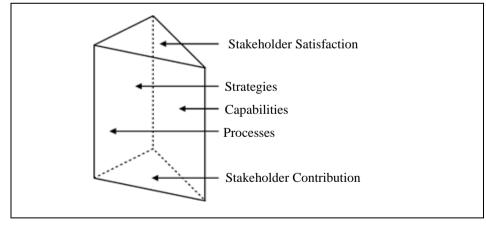


Figure 7.4: Performance Prism

Source: ICFAI Research Center

The difference between actual and planned financial performance could be due to revenue variance or expenditure variance or both. Revenue variance can be due to sales volume variance, sales mix variance, sales quantity variance, market share variance, and market size variance. Expenditure variance can be classified into fixed cost variance and variable cost variance.

Refer Figure 7.5 for types of Financial Performance Variance.

Financial Performance Variance Cost / Expenditure Revenue Variance Variance Fixed Cost Variable Cost Sales Price Sales Volume Variance Variance Variance Variance Sales Mix Sales Quantity Variance Variance Market Share Market Size Variance Variance

Figure 7.5: Types of Financial Performance Variance

Source: ICFAI Research Center

#### 7.6.1 Revenue Variance

Revenue variance is the difference between the actual and the planned revenue of an organization that can occur due to the difference between the actual and planned sales volume, due to the difference between the actual and planned selling price, or due to both. Thus, revenue variance has two components - sales volume variance and sales price variance; sales volume variance has two components - sales mix variance and sales quantity variance; and sales quantity variance is further subdivided into two components - market share variance and market size variance.

Revenue variance can be calculated either through the value method or through the profit method. In the value method, the sales value is used for calculating the components of the revenue variance. In the profit method, they are calculated in terms of the margin. The profit method is recommended for management control. We have used the following terms in our discussion on calculating the various components of revenue variance using the profit method:

- When we refer to the sales of one product, we will use the terms 'Planned sales' and 'Actual sales'.
- When we refer to the total sales of the set of products of an organization, we will use the terms 'Total planned sales' and 'Total actual sales'.
- When we refer to the market size with respect to one product, we will use the terms 'Estimated market size' and 'Actual market size'.

- When we refer to the total market size of the set of products of an organization, we will use the terms 'Total estimated market size' and 'Total actual market size'.
- When we refer to the organization's market share for its set of products, we will use the terms 'Planned market share' and 'Actual market share'.
- When we refer to the selling price per unit of a product, we will use the terms 'Standard selling price per unit' and 'Actual selling price per unit'.
- When we refer to the budgeted value of margin per unit of a product, we will use the term 'Standard margin per unit'.
- When we refer to the budgeted value of average margin per unit for the set of products of an organization, we will use the term 'Standard average margin per unit'.

## Sales volume variance (profit method)

Sales volume variance is the product of standard margin per unit and the difference between actual sales and planned sales. That is,

Sales Volume Variance =  $\sum$ [(Standard Margin Per Unit)x(Actual Sales - Planned Sales)]

#### Sales mix variance

Sales mix variance is the product of the difference between the standard margin per unit (of the item/product) and the standard average margin per unit, multiplied to the difference between actual sales and actual sales at standard sales mix. That is,

```
Sales Mix Variance = \sum [(Standard Margin Per Unit - Standard Average Margin Per Unit)
x (Actual Sales - Actual Sales at Standard Sales Mix)]
```

## Sales quantity variance

Sales quantity variance is the product of the standard average margin per unit and the difference between actual total sales and the planned total sales for a period. That is,

Sales Quantity Variance = [Standard Average Margin Per Unit x (Actual Total Sales - Planned Total Sales)]

#### Sales price variance

Sales price variance refers to the change in revenue caused by a difference between the actual selling price of the units sold during a period as compared to the standard selling price. It is defined as the difference between the product of

#### Unit 7: Business Performance: Targets, Reporting, and Analysis

the actual sales volume and the standard selling price per unit and the actual sales revenue. That is,

Sales Price Variance =

[Actual Sales Revenue- Actual Sales Volume x Standard Selling Price Per Unit)]

#### Market share variance

Market share variance is a comparison of actual market share achieved to the organization's planned market share. It is the product of standard average margin per unit, total actual market size, and difference between total actual market share percentage and total planned market share percentage. That is,

Market Share Variance =

[(Standard Average Margin per Unit) x (Total Actual Market Size)

x (Total Actual Market Share% - Total Planned Market Share %)]

#### Market size variance

Market size variance is a comparison between total actual market size and the total estimated market size. It is the product of standard average margin per unit, total planned market share percentage, and the difference between total actual market size and total estimated market size. That is,

Market Size Variance =

[(Standard Average Margin Per Unit) x (Total Planned Market Share %) x (Total Actual Market Size - Total Estimated Market Size)]

## **Illustration 7.1**

Given are the costing details of three products - Alpha, Beta, and Gamma of Ankit Manufacturing Limited (AML) for the year 20xx-x1. AML uses the profit method for calculation of the various components of revenue variance.

Details	Alpha	Beta	Gamma	Total
Planned number of units sold	3,000	5,500	3,500	12,000
Actual number of units sold	3,500	4,500	2,300	10,300
Estimated market size	6,500	7,500	5,500	19,500
Actual market size	6,000	8,000	5,000	19,000
Standard selling price per unit	₹ 12	₹7	₹ 10	₹29
Actual selling price per unit	₹ 10	₹ 8	₹9	₹ 27
Standard margin per unit	₹7	₹3	₹5	

Calculate the following:

- i. Total sales volume variance
- ii. Total sales mix variance
- iii. Sales quantity variance
- iv. Total sales price variance
- v. Market share variance
- vi. Market size variance

#### **Solution:**

i. Total Sales Volume Variance

Sales Volume Variance =  $\sum$  [(Standard Margin Per Unit) x (Actual Sales – Planned Sales)]

Sales Volume Variance (Alpha)

$$=$$
 ₹ 7 x (3,500 - 3,000)  $=$  ₹ 3,500

Sales Volume Variance (Beta)

$$= 3 \times (4,500 - 5,500) = 3,000 (-)$$

Sales Volume Variance (Gamma)

$$=$$
 ₹ 5 x (2,300 - 3,500)  $=$  ₹ 6,000 (-)

Total Sales Volume Variance

$$= 3500 - 3000 - 3000 - 3000 = 5500 (-)$$

The negative total sales volume variance of  $\stackrel{?}{\underset{?}{?}}$  5,500 indicates the opportunity to earn a margin of  $\stackrel{?}{\underset{?}{?}}$  5,500 foregone by the organization.

ii. Sales Mix Variance

Sales Mix Variance

- = \( \sum \) [(Standard Margin Per Unit Standard Average Margin Per Unit)
- x (Actual Sales Actual Sales at Standard Sales Mix)]

Standard average margin per unit

$$= \{ [\{(7x3,000) + (3x5,500) + (5x3,500)\} \div (3,000+5,500+3,500)] \}$$

$$= \{ [\{21,000+16,500+17,500\} \div (12,000)] \}$$

= ₹ 4.58

Actual Sales at Standard Sales Mix (Alpha) =  $3,000 \times (10,300 \div 12,000)$  = 2,575 units

Actual Sales at Standard Sales Mix (Beta) = 5,500 x ( $10,300 \div 12,000$ ) = 4,721 units

Actual Sales at Standard Sales Mix (Gamma) =  $3,500 \times (10,300 \div 12,000)$  = 3,004 units

Therefore,

Sales Mix Variance (Alpha)

$$=$$
₹ (7 - 4.58) x (3,500 - 2,575)

$$=$$
₹ 2.42 x 925  $=$ ₹ 2,238.5.

Sales Mix Variance (Beta)

$$=$$
₹ (3 - 4.58) x (4,500 - 4,721)

Sales Mix Variance (Gamma)

$$=$$
 ₹ 0.42 x 704 (-)  $=$  ₹ 295.68 (-).

Total Sales Mix Variance

$$= 2.238.5 + 349.18 - 295.68 = 2.292.$$

The positive total sales mix variance of ₹ 2,292 indicates that the organization had gained the potential to earn an additional margin of ₹ 2,292. Sales of Alpha were greater than planned while sales of Beta and Gamma were less than planned. Since, standard margin per unit of Alpha (7) was much higher than the standard average margin per unit (`4.58), AML benefited from the positive variance in its performance. Standard margin per unit of Gamma (5) was also higher than the standard average margin per unit (`4.58) but this did not benefit AML much as it also had a negative variance in sales. Since Beta's standard margin per unit (`3) was less than the standard average margin per unit (`4.58), lower actual sales of Sandal when compared to the planned sales benefited the organization.

## iii. Sales quantity variance

Sales Quantity Variance =

[Standard Average Margin Per Unit x (Actual Total Sales - Planned Total Sales)]

Sales quantity variance

$$= 34.58 \times (10,300 - 12,000) = 37,786 (-)$$

The negative sales quantity variance of ₹ 7,786 indicates that the opportunity to earn a margin of ₹ 7,786 was lost by the organization since overall, fewer units of Alpha, Beta, and Gamma were actually sold when compared to the planned number of units to be sold.

#### iv. Sales price variance

Sales Price Variance =

 $\sum$  [Actual Sales Revenue - (Actual Sales Volume x Standard Selling Price Per Unit)]

### Alpha:

Actual Selling Price of Actual Sales Volume = 3,500 x ₹ 10 = ₹ 35,000 Standard Selling Price of Actual Sales Volume = 3,500 x ₹ 12 = ₹ 42,000 Sales Price Variance = ₹ 35,000 - ₹ 42,000 = ₹ 7,000 (-).

#### **Beta**:

Actual Selling Price of Actual Sales Volume =  $4,500 \times ₹ 8 = ₹ 36,000$ Standard Selling Price of Actual Sales Volume =  $4,500 \times ₹ 7 = ₹ 31,500$ Sales Price Variance = ₹ 36,000 - ₹ 31,500 = ₹ 4,500.

#### Gamma:

Actual Selling Price of Actual Sales Volume = 2,300 x ₹ 9 = ₹ 20,700 Standard Selling Price of Actual Sales Volume = 2,300 x ₹ 10 = ₹ 23,000 Sales Price Variance = ₹ 20,700 - ₹ 23,000 = ₹ 2,300 (-).

Total Sales Price Variance = ₹ 7,000 (-) + ₹ 4,500 + ₹ 2,300 (-) = ₹ 4,800 (-).

The negative sales price variance of  $\mathfrak{T}$  4,800 indicates that the organization has lost revenue of  $\mathfrak{T}$  4,800 due to a variance in the standard and the actual sales price.

#### v. Market share variance

Market Share Variance

- = [(Standard Average Margin Per Unit) x (Total Actual Market Size)
- x (Total Actual Market Share% Total Planned Market Share%)]

Total Actual Market Share %

- = (Total Actual Number of Units Sold ÷ Total Actual Market Size) x 100
- $= (10,300 \div 19,000) \times 100 = 54.21\%$

Total Planned Market Share %

- = (Total Planned Number of Units Sold ÷ Total Estimated Market Size) x 100
- $= (12,000 \div 19,500) \times 100 = 61.54\%$

Market Share Variance

Negative market share variance of ₹ 6,378.57 represents the margin lost since the organization was unable to achieve its planned market share.

## vi. Market size variance

Market Size Variance

- = [(Standard Average Margin Per Unit) x (Total Planned Market Share%) x (Total Actual Market Size Total Estimated Market Size)]
- = ₹ 4.58 x 61.54% x (19,000 19,500) = ₹ 1,409.27 (-).

The negative market size variance of  $\ge$  1,409.27 indicates the margin foregone by the organization due to reduction of the market size.

## **Activity 7.1**

Given below are the costing details of three products, A, B, and C of XYZ Limited for the year 20xx-x1. XYZ Ltd. uses the profit method for calculation of the various components of revenue variance.

Details	A	В	С	Total
Planned number of units sold	50,000	65,000	45,000	160,000
Actual number of units sold	60,500	57,000	38,500	156,000
Estimated market size	70,000	80,500	65,500	216,000
Actual market size	75,000	65,000	55,000	195,000
Standard selling price per unit	₹ 16	₹ 10	₹ 13	₹ 39
Actual selling price per unit	₹ 14	₹11	₹ 12	₹ 37
Standard margin per unit	₹ 13	₹7	₹8	

### *Calculate the following:*

- i. Total sales volume variance
- ii. Total sales mix variance
- iii. Sales quantity variance
- iv. Total sales price variance
- v. Market share variance
- vi. Market size variance

Answer:		

## 7.6.2 Expenditure Variance or Cost Variance

Expenditure (or cost) variance is the difference between planned expenditure (or standard cost) for a period and actual expenditure incurred over that period. The factors due to which it arises can be divided into two categories - operational causes and non-operational causes. Operational causes can be further divided into controllable causes and uncontrollable causes.

### 7.6.3 Operational causes

Operational causes occur due to operational activities like purchases. Uncontrollable operational causes are not directly under management control. For example, in operational activities involving human beings, a small degree of involuntary variations creep in from time to time, as human performance cannot be consistent over a period of time. Such variances are uncontrollable.

Controllable operational causes are those which are under the management's control. For example, implementing a new method of operation may lead to improved performance due to favorable efficiency and volume variances. In contrast, if there is a machine failure, it would lead to unfavorable efficiency and volume variances.

### 7.6.4 Non-operational causes

Non-operational causes relate to problems in the usage of the costing system. Variance could be misreported due to a system malfunction caused by wrong data entry, programming defects in the information system, etc. For example, when the cost of materials is recorded wrongly, it would lead to cost variance for materials. If its value is recorded as less than the correct or budgeted value, then it would lead to favorable variance, and if the value is recorded as higher than the actual value then the variance would be negative. In both cases, it would provide a wrong picture to the management.

Inappropriate estimates, budgets, or standards can lead to the reporting of variances (even if operational performance is satisfactory). For example, if project budgeting does not factor in any provisions for contingencies, then most probably the actual cost of the project would exceed the budgeted cost - wrongly reflecting an unfavorable variance. Moreover, standards may become obsolete over a period - if not reviewed and revised regularly, it will lead to wrong reporting of variance.

#### 7.6.5 Types of cost variance

Cost variance can be of two types: fixed cost variance and variable cost variance.

*Fixed cost variance:* This is the difference between the planned or budgeted fixed cost for a period and the actual fixed cost. Expenses incurred on electricity, rent, administration, etc., can be categorized under fixed costs. These costs remain fixed for a particular time, and do not depend on quantity of production or sales.

*Variable cost variance:* This is the difference between the actual variable cost and the planned or budgeted variable cost for a period. Variable costs are those which vary directly with quantity of production. Expenses for raw materials and labor are some of the variable costs. For calculation of variable cost variance, the budgeted variable cost should be adjusted with the actual quantity of production.

If the actual expense (fixed or variable) is less than the budgeted expense (fixed or variable), it leads to a favorable (positive) variance. If the actual expense (fixed or variable) is more than the budgeted expense (fixed or variable), it leads to unfavorable (negative) variance.

Example: The key Ratios for Performance Analysis of Hero MotoCorp.

<b>Example: The Key Ratio</b>	os for Perf	formance	Analysis (	of Hero M	lotoCorp.
<b>Key Financial Ratios</b>	Mar-22	Mar-21	Mar-20	Mar-19	Mar-18
Basic EPS (₹)	123.78	148.39	181.91	169.48	185.14
Diluted EPS (₹)	123.78	148.37	181.91	169.47	185.13
Cash EPS (₹)	156.29	182.24	222.84	199.59	212.97
Book Value [Excl Reval Reserve]/Share (₹)	789.94	760.68	707.7	643.66	589.33
Book Value [Incl Reval Reserve] /Share (₹)	789.94	760.68	707.7	643.66	589.33
Dividend / Share (₹)	95	105	90	87	95
Revenue from Operations/Share (₹)	1,463.74	1,541.57	1,443.61	1,684.63	1,613.95
PBDIT/Share (₹)	196.48	230.18	237.11	281.42	290.74
PBIT/Share (₹)	163.96	196.31	196.16	251.28	262.91
PBT/Share (₹)	162.67	195.21	228.97	250.85	262.6
Net Profit/Share (₹)	123.77	148.36	181.89	169.46	185.15

Source: https://www.moneycontrol.com/financials/heromotocorp/ratiosVI/HHM, April 2022, (Accessed on 18th August, 2022)

## **Activity 7.2**

Given below are the details of fixed costs and variable costs incurred during a period. Fill in the blanks in Tables I and III, indicating whether the resultant individual and total variances are favorable or unfavorable.

**Table I: Fixed Cost Details** 

Items	Budgeted Expense (₹)	Actual Expense (₹)	Variance (Favorable/ Unfavorable) (₹)
Electricity	50,000	65,000	15,000 (Unfavorable)
Rent	75,000	1,00,000	
Administrative expenses	2,25,000	2,25,000	
Fixed Overheads	1,40,000	1,20,000	
Total			

Contd....

**Block 2: Selected Techniques for Management Control** 

Table II: Variable Cost Details				
Items	Budgeted Cost per Unit (₹)	Actual Cost per Unit (₹)		
Raw materials	12,000	15,000		
Labor	5,500	10,000		
Overheads	40,000	35,000		

Number of units produced is 2,000.

**Table III: Variance Analysis** 

Total Budgeted Variable Cost (₹)	Total Actual Variable Cost (₹)	Variance (₹)	Favorable/ Unfavorable
2,40,00,000	3,00,00,000	60,00,000	Unfavorable
	Variable Cost (₹)	Variable Cost     Variable       (₹)     Cost (₹)	Variable Cost $(\tilde{\tilde$

## **Check Your Progress - 2**

Following are the details of Sandal and Jasmine - two brands perfume manufactured by Essence Pvt. Ltd. in a year. The company has adopted the profit method (and not the value method) for analyzing revenue variance.

	Sandal	Jasmine	Total
Planned number of units sold	70,000	85,000	155,000
Actual number of units sold	90,000	70,000	160,000
Estimated market size	850,000	650,000	15,00,000
Actual market size	600,000	400,000	10,00,000
Standard selling price per unit	₹ 85	₹ 75	₹ 160
Actual selling price per unit	₹ 115	₹ 60	₹ 175
Standard margin per unit	₹ 15	₹ 10	-

### Unit 7: Business Performance: Targets, Reporting, and Analysis

The following questions (6 to 10) are based on the data given in the table.

- 6. What is the Sales Volume Variance of Sandal?
  - a. ₹300,000
  - b. ₹270,000
  - c. ₹210,000
  - d. ₹150,000
  - e. ₹ 5,00,000
- 7. What is the total Sales Mix Variance for Sandal and Jasmine in the year? (approximately)
  - a. ₹49,460
  - b. ₹61,300
  - c. ₹396,630
  - d. ₹88,709
  - e. ₹ 75,000
- 8. What is the Sales Quantity Variance for Essence in the year?
  - a. ₹ 61,300 (-)
  - b. ₹61,300
  - c. ₹ 6,130,000
  - d. ₹ 6,130,000 (-)
  - e. ₹ 6,130
- 9. What is the Sales Price Variance for Jasmine in the year?
  - a. ₹ 5,250,000 (-)
  - b. ₹4,200,000
  - c. ₹ 1,050,000 (-)
  - d. ₹2,700,000
  - e. ₹ 1,00,000
- 10. What is the Market Share Variance for Essence in the year?
  - a. ₹ 695,142
  - b. ₹ 142,613
  - c. ₹107,690
  - d. ₹111,637
  - e. ₹ 765,543

## 7.7 Summary

- Based on certain plans regarding their business outcomes, organizations set targets for financial and non-financial performance.
- Actual performance can be tracked with respect to targets with the help of either year-to-date reporting or period-to-period reporting.
- For period-to-period reporting, targets can be divided into four types flat line target, step target, seasonal target, and growth curve target depending on the patterns they follow.
- Business performance depends on many external and internal factors. External factors are beyond the control of the organization whereas the internal factors can be controlled by the management.
- To evaluate and analyze actual performance with respect to planned performance, the actual performance should be recorded and documented properly in the form of performance reports. The corporate annual report is a mandatory reporting requirement for organizations.
- An organization's performance can be evaluated along various dimensions - financial measures, customer satisfaction and behavior toward organization and competitors, internal business processes, and growth.
- The difference between actual and planned financial performance can take place due to cost or expenditure variance, revenue variance, or both.
- Revenue variance has two components, sales price variance and sales volume variance.
- Sales volume variance can be divided into sales mix variance and sales quantity variance.
- Sales quantity variance can be further sub-divided into market share variance and market size variance.
- Expenditure variance can be classified into fixed cost variance and variable cost variance.
- Cost variance or expenditure variance can arise due to several factors, which
  can be divided into two categories operational causes and non-operational
  causes.

#### 7.8 Glossary

**Cost variance:** Cost variance or expenditure variance is the difference between planned expenditure or standard cost for a period and actual expenditure incurred over that period.

**Fixed cost variance:** Fixed cost variance is the result of the difference between planned or budgeted fixed cost and the actual fixed cost. Fixed cost remains fixed for a particular time frame and does not depend on quantity of production or sales.

**Market share variance:** Market share variance is a comparison of actual market share achieved to the organization's planned market share. It is defined as the product of standard average margin per unit, total actual market size, and difference between total actual market share percentage and total planned market share percentage.

**Market size variance:** Market size variance is a comparison between total actual market size and the total estimated market size. It is defined as the product of standard average margin per unit, total planned market share percentage, and the difference between total actual market size and total estimated market size.

**Profit method:** The profit method (also called margin variances) is a type of sales variance analysis in which variances are calculated in terms of their impact on profit.

**Revenue variance:** Revenue variance is the difference between the actual and the planned revenue of a company. This difference can occur due to the difference between the actual and planned sales volume, due to the difference between the actual and planned selling price, or due to both.

**Sales mix variance:** Sales mix variance is defined as the product of the difference between the standard margin per unit (of the item) and the standard average margin per unit and the difference between actual sales and actual sales at standard sales mix.

**Sales price variance:** Sales price variance refers to the change in revenue caused by a difference between the actual selling price of the units sold during a period as compared to the standard selling price. It is defined as the difference between the product of the actual sales volume and the standard selling price per unit and the actual sales revenue.

**Sales quantity variance:** Sales quantity variance is defined as the product of the standard average margin per unit and the difference between actual total sales and the planned total sales for a period.

**Sales variance analysis:** Sales variance analysis is used to identify the reasons for the discrepancies between the expected outcomes and the actual outcomes. A thorough analysis of the variance will help in better control of sales activities.

**Sales variance:** Sales variance can be calculated either through the value method or through the profit method. In the value method, the components of revenue variance are calculated in terms of the sales value. In the profit method, the components of revenue variance are usually calculated in terms of the margin.

**Sales volume variance:** Sales volume variance as per the profit method is represented by the product of margin per unit and the difference between actual sales and planned sales.

**Value method:** The value method is a type of sales variance analysis in which the variances are calculated in terms of sales value.

**Variable cost variance:** Variable cost variance is the difference between the actual variable cost of production, and the planned or budgeted variable cost of production. Variable costs are those which vary directly with quantity of production.

#### 7.9 Self-Assessment Test

- 1. Both financial and non-financial targets can be framed by organizations to assess and enhance their business performance. Explain the importance of setting targets for tracking organizational performance. What are the various ways in which performance can be tracked?
- 2. An organization's success or failure depends on external or internal factors. Describe these factors.
- 3. The information required to evaluate the actual performance against the planned performance should be collected, collated, analyzed, and documented as a report that can be easily understood. Discuss the issues related to the content and format of reports, with the example of corporate annual report.
- 4. 'In a competitive business environment, it is necessary to evaluate performance based on multiple performance dimensions'. Substantiate the statement along with a discussion on the various performance dimensions used by organizations.
- 5. Distinguish between the value method and the profit method for calculating revenue variance. Assuming the value method, tabulate the various components of revenue variance with the respective formulas to be used for calculating these components.
- 6. Write short notes on the following:
  - a. Causes of cost variance
  - b. Types of cost variance

### 7.10 Suggested Readings/Reference Material

- 1. Stephen P Robbins, David A. De Cenzo and Mary Coulter (2022). Fundamentals of Management: Essential Concepts and Applications, Fifteenth Edition Pearson Paperback, 30 June 2022.
- 2. Subhash Chandra Das (2019). Management Control Systems Principles and Practices, PHI Learning Pvt. Limited, Paperback 15 July 2019.
- 3. Pravin Durai (2019). Principles of Management: Text and Cases, First edition, Pearson India Education Services Pvt. Ltd.; Second edition (31 August 2019).
- 4. Merchant, Kenneth A (2017). "Management Control System: Text and Cases", Pearson Education Asia.
- 5. Saravanavel, P (2022). Management Control Systems Principles and Practices. First edition, Himalaya Publishing House.

## 7.11 Answers to Check Your Progress

# 1. (c) Targets enable only monitoring of performance and not improvement in performance.

Targets may be applied at different levels of the organization. They can be applied to the organization as a whole, or at different levels like the business unit level, the branch level, the project level, the team level, or even the individual level. Targets enable monitoring of performance. The actual performances are tracked on a periodic basis, say, weekly, monthly, quarterly, or yearly. Differences or variances are identified and analyzed. If the present targets are achieved, the organization may think of enhancing the target, and from then on, strive to achieve the new target. Thus, targets also enable improvement in performance. The management can set targets keeping in mind the targets of competitors, industry's best practices, and the resources of the organization.

### 2. (b) Year-to-date

Performance can be tracked and reported in two ways, that is, year-to-date or period-to-period. If the performance is tracked for the whole year, it is called year-to-date performance reporting. If the performance is tracked on a periodic basis, that is, monthly, weekly, or seasonally, it is called period-to-period reporting.

#### 3. (b) Step target

In period-to-period reporting, the step target is used when the management expects changes in the business or the business environment in the planning horizon that might lead to changes in performance. The management then sets targets in a staggered fashion.

## 4. (d) The type of target

Report format refers to the layout of the information in the report. The way the information is presented in the report is a function of three factors: the information to be provided, the questions to be answered, and the form of the presentation of the report.

#### **5.** (c) Year

The information to be provided in the report consists of a title and variables. These variables can again be classified into three types i.e., categorical, ordinal, and quantitative. Here, 'market share in %' and 'brand-wise revenue in ₹' are quantitative variables, the 'year(s)' for which information has been provided is the ordinal variable, and the division is the categorical variable. In this case, the 'year' variable takes values from 2003 to 2008; the 'division' variable takes the two values 'Garments Division' and 'Toys Division'.

### 6. (a) ₹300,000

Sales Volume Variance

 $= \sum [(Standard Margin Per Unit) x (Actual Sales-Planned Sales)]$ 

Sales Volume Variance (Sandal) =  $[₹15 \times (90,000-70,000)] = ₹300,000$ .

### 7. (d) ₹88,709

Sales Mix Variance

= ∑ [(Standard Margin Per Unit - Standard Average Margin Per Unit)

x (Actual Sales - Actual Sales at Standard Sales Mix)]

Standard Average Margin Per Unit

$$= \{(15 \times 70,000) + (10 \times 85,000)\} \div (70,000 + 85,000)$$

Actual Sales at Standard Sales Mix

= Planned Sales x (Total Actual Sales ÷ Total Planned Sales)

Actual Sales at Standard Sales Mix (Sandal) =  $70,000 \times (160,000 \div 155,000)$ 

$$= 70,000 \text{ x } 1.03 = 72,100 \text{ units}$$

Sales Mix Variance (Sandal) =

$$( \ge 15 - \ge 12.26 ) \times (90,000 - 72,100 ) = \ge 49,046$$

Actual Sales at Standard Sales Mix (Jasmine) =  $85,000 \times (160,000 \div 155,000)$ 

$$= 85,000 \text{ x } 1.03 = 87,550 \text{ units}$$

Sales Mix Variance (Jasmine)

Total Sales Mix Variance

$$=$$
 ₹ 49,046 + ₹ 39,663  $=$  ₹ 88,709 (approximately).

## 8. (b) ₹ 61,300

Sales Quantity Variance

= [Standard Average Margin Per Unit x (Actual Total Sales - Planned Total Sales)]

## 9. (c) ₹1,050,000 (-)

Sales Price Variance =

 $\sum$  [Actual Sales Revenue - (Actual Sales Volume x Standard Selling Price Per Unit)]

Actual Selling Price of Actual Sales Volume (Jasmine)

$$= 70,000 \text{ x} \notin 60 = \notin 4,200,000$$

Standard Selling Price of Actual Sales Volume (Jasmine)

$$= 70,000 \text{ x} \ 3.250,000$$

Sales Price Variance (Jasmine)

$$=$$
 ₹ 4,200,000  $-$  ₹ 5,250,000  $=$   $-$  ₹ 1,050,000.

## 10. (a) ₹ 695,142

Market Share Variance

= [ (Standard Average Margin Per Unit) x (Total Actual Market Size)

x (Total Actual Market Share% - Total Planned Market Share%)

Total Actual Market Share %

= (Total Actual Number of Units Sold ÷ Total Actual Market Size) x 100

$$= (160,000 \div 1000,000) \times 100 = 16\%$$

Total Planned Market Share %

= (Total Planned Number of Units Sold ÷ Total Estimated Market Size)

$$x 100 = (155,000 \div 1500,000) \times 100 = 10.33\%$$

Market Share Variance (Sandal + Jasmine) =

 $( \ge 12.26 \times 1,000,000 \times (16\% - 10.33\%) = \ge 695,142.$ 

## Unit 8

## **Auditing**

## **Structure**

8.1	Introduction
8.2	Objectives
8.3	Categories of Audits
8.4	Financial Statement Audit
8.5	Internal Audit, Fraud Auditing, and Forensic Accounting
8.6	Management Audit
8.7	Social Audit and Environmental Audit
8.8	The Auditing Process
8.9	Benefits and Limitations of Auditing
8.10	Summary
8.11	Glossary
8.12	Self-Assessment Test
8.13	Suggested Readings/Reference Material
8.14	Answers to Check Your Progress Questions

"The auditor is a watchdog and not a bloodhound."

<sup>1</sup>Lord Justice Lopes in Kingston Cotton Mill Company case (UK) (1896)

### 8.1 Introduction

The auditor's job is to give a true and fair picture of the financial statements but not to hunt the company with revenge. This is what the above quote and this unit showcases.

In the previous unit, we discussed how to evaluate the business performance using targets. In this unit, we shall discuss the technique of auditing.

Audit is the activity of examination and verification of records and other evidence by an individual or a body of persons so as to confirm whether these records and evidence present a true and fair picture of whatever they are supposed to reflect. Audits are most commonly used in the accounting and finance function.

<sup>&</sup>lt;sup>1</sup> https://en.wikisource.org/wiki/Re\_Kingston\_Cotton\_Mill\_Company\_(No.2)\_(1896)

This unit will first explain the different categories of audit, and discuss financial statement audit. We shall then move on to internal audit, fraud auditing and forensic accounting. We shall also discuss management audit, social audit and environmental audit. Finally, we shall discuss the auditing process, and the benefits and limitations of auditing.

## 8.2 Objectives

After studying this unit, you should be able to:

- Define the term 'Audit'
- Discuss how audit is categorized into different types based on emphasis, audience, purpose and scope.
- Identify the different types of audits for relevant usage
- Describe the auditing process in any given organization
- Illustrate the benefits and limitations of auditing.

## 8.3 Categories of Audits

According to the Institute of Chartered Accountants of India, auditing is a systematic and independent examination of data, statements, records, operations, and performances (financial or otherwise) of an enterprise for a stated purpose. Do we use same type of auditing process when stock is to be verified and performance of the human resources is to be verified? No, based on the purpose of the audit we use different models of audits. Let us go into further details.

In any auditing situation, the auditor perceives and recognizes the propositions before him for examination, collects evidence, evaluates the same, and on this basis, formulates his judgment which is communicated through his audit report. Basing on the objective various categories of audits will be employed.

Audit ensures that an enterprise's activities and their effect on different events and transactions are correctly accounted - this is not only for achieving the control objective of 'reliability of financial reporting' but also for the prudent and effective management of the enterprise.

Audits are not synonymous and tend to be categorized based upon its audit objective. The categorization is done basing upon:

- Emphasis (on financial data and/or non-financial data)
- Primary audience (that is, for external reporting or for internal use),
- Primary purpose (compliance, certification, communication, and/or control), and
- Scope (limited to the organization, or also concerned with the impact of/on the environment)

Table 8.1 summarizes the different categories of audits.

**Table 8.1: Categories of Audits** 

Audit	Brief Description of each Audit Category
Category	
Financial statement	Gives an opinion on the accuracy of the financial statement
audit	Ensures compliance with the relevant accounting standards and reporting frameworks
Internal audit	An independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization
	Need not be limited to books of accounts and related records
Fraud auditing and forensic	• Fraud audit: Deters, detects, investigates, and reports fraud
accounting	Forensic accounting: Related to the legal system, especially issues of 'evidence'
Operational audit	Audits operational aspects of the enterprise
	Includes quality audit and R&D audit
Information	Audit of computer systems
systems audit	Checks whether the computer system safeguards assets, maintains data integrity, and contributes to organizational effectiveness and efficiency
Management audit	Audit of the management, as a tool for evaluation and control of organizational performance
	Examines the conditions and provides a diagnosis of deficiencies with recommendations for correcting them
Social audit	Audit of the enterprise's reported performance in meeting its declared social, community, or environmental objectives
Environmental audit	Environmental compliance audit: A checking mechanism
	Environmental management audit: An evaluation mechanism

Source: ICFAI Research Center

### **Example: Forensic Audit Impact on FEL's Debt**

On 12<sup>th</sup> September 2022, a forensic auditor was appointed to audit the non-performing loan accounts of Kishore Biyani promoted Future Enterprises Limited (FEL). The appointment was made by the company's lead bank 'Central Bank of India'.

The appointment gained significance because it was made when FEL placed a 'debt restructuring proposal outside the court' for its lenders on 9<sup>th</sup> July 2022. The company failed to repay the loan amounting ₹ 6,700 crore to its lenders. In August 2022, two of its trade creditors filed an insolvency petition in the NCLT (National Company law Tribunal) for declaring FEL as insolvent. NCLT was yet to render its decision.

So, forensic audit (also called as fraud audit) report significantly impacted on the lenders' opinion on debt restructuring proposal and NCLT in its decision making.

Source: https://economictimes.indiatimes.com/news/company/corporate-trends/lenders-of-future-enterprises-appoint-a-forensic-auditor/articleshow/94169499.cms, 13<sup>th</sup> September, 2022, accessed on 16<sup>th</sup> September, 2022

## 8.4 Financial Statement Audit

A financial statement audit is defined as 'an exploratory critical review by an independent public accountant of the underlying controls and accounting records of a business enterprise that leads to an opinion of the propriety of the financial statements of the enterprise'.

As per the UK Auditing Practices Board, "Financial statement audit is an exercise whose objective is to enable auditors to express an opinion whether the financial statements give a true and fair view of the entity's affairs at the period end and of its profits or loss for the period then ended and have been properly prepared in accordance with the applicable reporting framework (e.g., relevant legislation and applicable accounting standards)."

Financial statement audits are conducted for the following reasons:

- To examine the correctness of financial statements
- To establish whether they present a true and fair picture of the organization's financial position at a given time
- To check compliance with regulations like the Generally Accepted Accounting Principles (GAAP) (such an audit is referred to as a statutory financial audit).

## 8.4.1 Concepts in Financial Statement Audit

Objective assessment of the financial statements requires significant inspection and evaluation of the organization's statements of accounts. This inspection and

evaluation involves the application of certain key concepts. These key concepts are described below.

#### 8.4.2 Audit materiality

Critical or essential information that can influence the decisions of the stakeholders is considered as 'material' information. With respect to financial statements, "Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements. Materiality depends on the size of the item or error judged in the particular circumstances of its omission or misstatement. Thus, materiality provides a threshold or cut-off point rather than being a primary qualitative characteristic which information must have if it is to be useful." Materiality will also be influenced by the legal and statutory requirements. Judgments regarding materiality constitute an evaluation of the quantity and quality of misstatements in the financial statements. When financial statements are doctored to present a robust picture of the organization's financial health to stakeholders, it is referred to as 'material misstatement' of financial data.

#### 8.4.3 Audit evidence

Audit evidence is any kind of information that the auditor uses to determine whether the financial statements being audited are in accordance with the established rules and regulations. Audit evidence comprises the basic accounting data and all the supporting information like contracts, and inspection records available to the auditors. For the audit evidence to be useful enough to form a reasonable basis for the auditor's professional opinion, it has to fulfill certain criteria, namely, sufficiency, which relates to the amount or quantum of audit evidence that is available; and appropriateness, which relates to the quality of the audit evidence.

#### 8.4.4 Audit risk

Audit risk is the risk of an auditor failing to detect actual or potential material losses or account misstatements at the conclusion of the audit. The auditor designs his/her audit strategy based on an acceptable level of the audit risk that he/she intends to undertake. Audit risk is the product of three components:

- Inherent Risk (I.R.): Inherent risk is the risk of a material misstatement
  assuming that there are no related internal control structure policies or
  procedures. These risks arise due to various factors that affect the entity's
  operations.
- Control Risk (C.R.): As per Information Systems Audit and Control Association (ISACA), "Control risk is the risk that a material misstatement could occur in an assertion for an account balance or class of transactions, and would not be prevented or detected on a timely basis by the internal

control policies and procedures. "Control risk is the risk that an error occurring in an audit area, which could be material, individually or in combination with other errors, will not be prevented or detected and corrected on a timely basis by the internal control system.

• Detection Risk (D.R.): As per ISACA, "Detection risk is the risk that the auditor's substantive procedures will not detect an error which could be material, individually or in combination with other errors. "Detection risk is influenced by the procedures that are used by the auditors to audit the system and the way in which they are applied.

$$A.R = I.R \times C.R \times D.R$$

Audit risk is the product of the three components just mentioned. This audit risk should not be greater than the acceptable audit risk – the maximum risk that the auditor wishes to accept.

Let us consider a specific situation where the probability of existence of a material misstatement has been assessed to be 60% (0.60). Let there be a 20% (0.20) probability of the internal control system preventing or detecting this occurrence of material misstatement. If the internal control system fails to do so, let there be a 55% (0.55) probability of the auditor detecting this misstatement.

In this case, the inherent risk is the probability of the existence of a material misstatement.

That is, Inherent Risk (I. R.) = 60% = 0.60

Control risk is the risk of the internal control system not preventing or detecting this occurrence of material misstatement.

Therefore, Control Risk (C.R.) = (1 - 20%) = (1 - 0.20) = 0.80

Detection risk is the risk of the auditor not detecting this material misstatement.

Therefore, Detection Risk (D.R.) = (1 - 55%) = (1 - 0.55) = 0.45

Then the audit risk is the product of inherent risk, control risk, and detection risk.

Audit Risk (A.R.) = I.R.  $\times$  C.R.  $\times$  D.R.

$$= 0.60 \times 0.80 \times 0.45 = 0.216 = 21.6\%$$
.

If the expectation is that the audit risk should not exceed 20%, then the auditor should take necessary steps to increase the probability of detecting the misstatement and decrease the detection risk. This would, in turn, decrease the audit risk to an acceptable level.

## 8.4.5 True and fair concept

The concept of true and fair in the audit report deals with the opinion of the auditor as to whether the state of affairs and their results as confirmed by the auditor during the audit process are truly and fairly represented in the financial statements

being audited. For a financial statement to be assessed as a true and fair representation of an organization's state of affairs, the auditors expect:

- Consistency in adhering to accounting principles
- Correct valuation of assets in accordance with the relevant accounting principles
- Separate disclosure of exceptional items that are material to the organization's financial health etc.

## **Activity 8.1**

While conducting a financial statement audit in Star Ltd., it was assessed that the probability of existence of a materialism statement to be 55% (assuming there are no related internal control structure policies or procedures). The probability of the internal control system preventing or detecting the occurrence of material mis statement on a basis was estimated to be 35%. On the internal control system's failure to do so, the probability of the auditor's substantive procedures detecting this mis statement was 65%. Calculate the audit risk in the system.

Answer:			

## 8.4.6 Importance of Financial Statement Audits

The two important aspects of the accounting information of a firm from the point of decision-making are: the relevance and the reliability of the information. Financial statement audits by independent, certified professionals help in reducing the information risks associated with the following four factors: conflict of interest; consequence; complexity; and inaccessibility (remoteness) of information.

Conflict of interest: There could be a conflict of interest between the management that is responsible for preparing the financial statements and the various users of the financial statements. There could also be a conflict of interest between the different users of the financial statements.

Consequence: Financial statements help users in the decisions they take regarding investments, lending, etc., which have a social and economic impact on their businesses. Hence, it is necessary that the financial statements have all the required data. Thus users look for an external auditor's report for assurance that the statements adhere to the relevant reporting standards and disclose all the material information.

*Complexity:* Financial statements contain complex data which can be easily misinterpreted and are prone to a lot of errors. Users therefore take the help of external auditors to overcome this issue of complexity and to be reassured about the quality of the data.

*Inaccessibility of information:* The inaccessibility of accounting data to users often inhibits them from directly checking the quality of financial statements. This means that the users have to depend on the opinion of external auditors on the quality and authenticity of the financial statements.

## Example: Byju's adherence to Deloitte's recommendation

Byju's, India's edutech company, valued about \$22 billion, having 50,000 employees and 71 investors, was forced to change its revenue recognition practices by its statutory auditor Deloitte. The auditor flagged certain issues in Byju's financial statements for FY21, and refused to give an unqualified report (clean audit report) till such issues got resolved.

One of the major issue that Deloitte flagged was Byju's aggressive spending on its business promotion and legal expenses. Byju recorded total expenses amounting ₹ 7, 027.47 crore in FY21 as against ₹ 2, 873.34 crore in FY20, and the bulk of it fell under its business promotion and legal expenses. The auditor felt that this aggressive spending was unjustifiable, because Byju failed to justify its aggressiveness in comparison to its core competitors like Unacademy and Vedantu.

In adherence to Deloitte's verdict, Byju took over 18 months' time to change its recognition practices and to receive an unqualified audit report from Deloitte. Byju received its unqualified audit report for its financial statements on 29<sup>th</sup> August 2022.

Source: https://www.vccircle.com/insidebyju-s-financials-look-at-its-soaring-losses-shrinking-revenues; 15th September, 2022, accessed on 21st September, 2022

### 8.5 Internal Audit, Fraud Auditing, and Forensic Accounting

In the above paragraphs we discussed the importance of the different types of audits. Let us see where and when a particular type of audit is required and how do we do it.

Let us discuss some different types. Internal audit is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization. Fraud auditing and forensic accounting are undertaken by organizations to bring to light any frauds that have occurred in the organization's operations and/or record-keeping, and to pursue them within the framework of the legal system.

#### 8.5.1 Internal Audit

Internal auditing is needed because of the growing size and complexity of organizations. The traditional role of internal audit was to check whether the existing controls were effective and adequate, whether the financial reports and other records showed the actual results of the organization, and whether its subunits are following the policies and procedures laid down by the management.

The modern role of internal audit may be explained by a definition by the Institute of Internal Auditors, which describes internal audit as, "an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization. The objective of internal auditing is to assist members of the organization in the effective discharge of their responsibilities. To this end, internal audit furnishes them with analyses, appraisals, recommendations, counsel, and information concerning the activities reviewed." As per ICAI, "Internal audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements thereto and add value to and strengthen the overall governance mechanism of the entity, including the entity's strategic risk management and internal control system."

## 8.5.2 Need for internal auditing

The need for an internal audit is determined by the increasing size and complexity of organizational operations. In order to avoid discrepancies from creeping into their systems, processes, and operations, such organizations appoint teams of specialists called internal auditors to monitor, track, and report such discrepancies, or inefficiencies of personnel in the concerned departments. Usually, an in-house internal audit team undertakes the internal audit. Organizations also hire the services of different external auditing and consulting firms for the internal audit process.

## 8.5.3 Fraud Auditing and Forensic Accounting

Corporate crime or 'white collar crime' can be defined as offences that are committed by those in professional occupations conducting dishonest activities, by themselves or through their agents, for financial gain. Corporate crimes include both financial and non-financial frauds, internal audit frauds and compliance breaches, corruption, and tax evasion.

According to Albrecht, fraud is made up of three components -

- Theft act which involves taking cash, inventory, information, or other assets manually, by computer, or by telephone
- Concealment which involves the steps taken by the perpetrators to hide the fraud from others
- Conversion which involves selling or converting stolen assets into cash and then spending the cash.

According to the Institute of Internal Auditors (US), the 'deterrence, detection, investigation, and reporting of fraud' is the responsibility of the internal auditor. Frauds can be investigated or detected by 'Certified Fraud Examiners' (CFEs) who are trained to detect, investigate, and deter fraud. CFEs are professionals who are knowledgeable in four major areas – fraud investigation; legal standards regarding evidence of fraud; patterns of fraudulent financial transactions; and knowledge of the criminal behavior associated with fraudulent activities.

Organizations generally undertake audits at three levels - internal audits, audits by an external auditor, and audit by a public auditor. If any of these audits unearths evidence of fraud or indicates a possibility of fraud having occurred, a forensic accountant or a fraud auditor is called in for further investigation. The fraud auditor looks for potential loopholes in the system and does a deeper analysis of certain financial transactions by taking into consideration the underlying behavioral aspects.

Bologna et al defined forensic accounting as the "application of financial skills and an investigative mentality to unresolved issues, conducted within the context of rules of evidence.

- As a discipline, it encompasses financial expertise, and fraud knowledge.
   Also, it acknowledges a strong knowledge and understanding of business reality and the working of the legal system.
- Its development has been primarily achieved through on-the-job training as well as experience with investigating officers and legal counsel".

#### Example: Srei's Transaction Audit – A type of fraud auditing

On 13<sup>th</sup> June 2022, the transaction auditor of Srei Group (Srei Infrastructure Finance Limited Srei Equipment Finance Limited) submitted the auditor report to the RBI appointed administrator, citing governance and default issues. The auditor cited that certain fraud transactions took place during 2019 -2021 having a monetary impact of around 3,025 crore on Srei group.

Both the NBFCs (Non-Banking Finance Companies) came under RBI scanner when their assets and liabilities got mismatched due to non-payment from its customers during 2019-2021 (covid era). RBI filed an insolvency petition with NCLT (National Company Law Tribunal) against Srei group for corporate insolvency proceedings.

The transaction auditor was appointed at the time when Srei Group was under insolvency proceedings and thus the auditor's report would have a significant impact on the outcome of such proceedings.

Source: https://economictimes.indiatimes.com/news/india/srei-group-transaction-auditor-reports-about-rs-3025-cr-fraud/articleshow/92186713.cms, 13th June, 2022, accessed on 21st September, 2022

## **Check Your Progress - 1**

- 1. On which of the following basis, audit categories differ?
  - a. Emphasis
  - b. Primary audience
  - c. Primary purpose
  - d. Scope
  - e. Financial reports
- 2. What is the financial statement audit conducted to check compliance with regulations called?
  - a. Statutory
  - b. Operational
  - c. Forensic
  - d. External
  - e. Internal
- 3. What are the criteria to be fulfilled by the audit evidence to be useful enough to form a reasonable basis for the auditor's professional opinion?
  - a. Materiality and sufficiency
  - b. Appropriateness and fairness
  - c. Risk and materiality
  - d. Sufficiency and appropriateness
  - e. Materiality and fairness
- 4. In 20x8, Swift Software Inc., was found to have committed a serious financial fraud. It was confirmed that the company officials had been indulging in dishonest activities since 20x4 and that the internal auditors of the company had intentionally overlooked these activities. Identify which of the following responsibilities (according to the Institute of Internal Auditors) the internal auditors should have carried out in order to have prevented such a situation.
  - i. Deterrence
  - ii. Detection
  - iii. Investigation
  - iv. Reporting
  - a. Only i, ii, and iv
  - b. Only i, ii, and iii
  - c. Only ii, iii, and iv
  - d. Only i and ii
  - e. i, ii, iii, and iv

- 5. Organizations generally undertake audits at three levels, which do not include which of the following?
  - a. Audits by an external auditor
  - b. Fraud audit
  - c. Internal audit
  - d. Audit by a public auditor
  - e. Operational audit

## **8.6** Management Audit

A management audit appraises an organization's position and helps to determine where it (the organization) is, where it is heading with its current plans and programs, whether it is meeting its objectives, and whether any revision of plans is required to enable it to achieve its predefined goals and objectives.

## 8.6.1 Objectives and Benefits of a Management Audit

The main aim of conducting a management audit is to critically analyze and evaluate management performance.

Some of the benefits of conducting a management audit are:

- It helps detect and overcome existing managerial deficiencies and resulting operational problems.
- It helps evaluate the methods and processes used by the management to accomplish organizational objectives.
- It helps determine the effectiveness of the management in planning, organizing, directing, and controlling the organization's activities and ascertain the appropriateness of the management's decisions for achieving the organization's objectives.
- It can be used as a source of information in assisting the organization to accomplish the desired objectives.
- It provides an early-warning signal of managerial problems and related operational difficulties.
- It helps to objectively and impartially evaluate organizational plans, structure, and the directions that the management gives in the form of strategies and management processes.

### 8.6.2 Types of Management Audits

Management audits can be classified into complete management audit, compliance management audit, program management audit, functional management audit, efficiency audit, and propriety audit.

- Complete management audit: A complete management audit evaluates the organization's current activities and measures the gaps between its existing policies and objectives, and its actual activities.
- Compliance management audit: Auditors identify the gaps between the organization's existing policies and objectives, and its actual practices but do not make any recommendations for improvements. They simply present their observations to the top management.
- **Program management audit:** Program management audits are designed to appraise performance within a specified program. They do not disturb other operations of the organization. They measure how well a program is managed and how strong management commitments.
- **Functional management audit:** A functional management audit measures the difference between the actual performance of an organization and its objectives, with emphasis on a particular function.
- **Efficiency audit:** The objectives of an efficiency audit are to establish how an organization is operating with regard to economy and efficiency, and whether it has a system in place to gather information on these aspects. These audits are conducted to ensure that resources are utilized in such a way that they generate the best returns.

# Example: MoD's Efficiency Audit – A Path to Bolster Overall Performance

In July 2022, India's MoD (Ministry of Defence) took a decision for conducting an efficiency audit of its various activities performed in the defence ministry. The Controller General of Defence Accounts (CGDA) was entrusted with the responsibility to conduct the efficiency audit.

It covered the auditing of various defence subjects extending to critical review of wide ranging performances. The objective was to strengthen the overall internal oversight and risk management framework.

Source: https://www.financialexpress.com/defence/can-internal-performance-audit-help-boost-defence-ministrys-functioning/2615993/, 3<sup>rd</sup> August, 2022, accessed on 21<sup>st</sup> September, 2022

• **Propriety audit:** Propriety audits are conducted to examine the effects of the management's decisions and actions on society and the general public.

## **Activity 8.2**

Jay is an auditor with an engineering company. The company spends generously in purchasing quality material, hiring the right people, etc., but is not able to earn sufficient returns to justify the expenditure. In this context, Jay

is entrusted with the responsibility of performing an efficiency audit in the company. Is this a valid approach? Substantiate the answer with justification.
Answer:

## 8.6.3 Issues in Organizing the Management Audit Program

The management's approval is essential for the establishment of a general program for management audit. Audits are meant to highlight the strengths and weaknesses of the organization's operations. Some key issues in organizing the management audit program are devising the statement of policy; allocating personnel; drawing up training programs for staff; and deciding the audit time and frequency.

## 8.6.4 Devising the statement of policy

The statement of policy should lay down very clearly the scope of activities to be undertaken by the management auditor. The statement should clearly describe:

- The scope and status of the management/operational auditing within the organization
- Its authority to hold audits, issue reports, make recommendations, and evaluate corrective action.

## 8.6.5 Allocation of personnel

Personnel placed in the audit unit should have:

- Competence and required subject knowledge, experience, and professional ability
- A good understanding of audit processes and thorough knowledge of the fundamentals of organization and management
- Knowledge of the principles and effective methods of control and requirements for scientific appraisal
- A sound background in accounting and knowledge of other relevant disciplines
- Ability to deal successfully with human relations issues
- Ability to objectively appraise others' actions without generating undue suspicion

#### 8.6.6 Drawing up training programs for staff

A continuous training program is necessary to achieve quality in performing audit assignments. An effective training program enables the staff to assume additional responsibilities in the organization. It acts as an incentive for drawing capable people into the department and retaining them.

#### 8.6.7 Deciding the audit time and frequency

Management audits should be conducted often enough to provide protection against emerging problems. The time required to complete a management audit varies, depending on:

- The extent and nature of the assignment
- The number of auditors assigned to the work
- Whether more specialists in a particular field are required.

#### **Retail Field Audit**

Retail Field Audit is responsible for performing operational audit. It regularly focuses on event occurrence and performance, risk management practices, general back-office procedures, and food and safety compliances. They also have to ensure that testing and audit documentation is completed in accordance with the audit plan and departmental quality assurance guidelines. The Field Auditor must complete all site visits in a timely manner in order to communicate audit exceptions to the management.

Another important role of Retail Field Audit is to study the samples of retail outlet, gather information on sales volume, sales trend, stock level, and the effectiveness of store display on the shelf so that the customer can easily locate and promote.

The keys to getting the most value from in-Retail Field Audits are:

**Regularity:** Merchandisers should visit stores on a regular basis to make sure that the product is consistently displayed to maximize sales and any deficiencies should always be brought to the attention of the store manager.

**Consistency of Data Collection:** The data collected on those visits should remain consistent over time. The best practice for keeping audits consistent is to use a structured data.

**Stock Level Reporting:** There are several types of stock in a typical retail store: 1) *On-shelf stock* 2) Near shelf *stock and* 3) Backroom stock (godown). One of the responsibilities of field retail audit is to verify and check the stocks, and report so as to ensure that shortage of stock or out of stock situation is identified and necessary steps are taken.

**Planogram Compliance:** Detailed research was conducted by Emanuele Frontoni, Adriano Mancini and Primo Zingaretti on the maintenance of

planogram and its compliance and automating the process. Timely inspection and compliance checks will help the organization to optimize the space allotted while ensuring that the products are sequenced as per the design on the appropriate shelf and slots assigned as per the planogram. Studies have shown that there is a 20% increase in sales.

**Product Condition Optimization:** This is another important aspect in field audit. While displaying the product as per planogram, the merchandisers should also ensure the following:

- The products should be as fresh as possible.
- There should be no damage to the products.
- The packaging should be in perfect condition.

If there are any deviations from the above aspects, the product should be removed from the shelf and replaced with a fresh one. Any issues in this regard should be brought to store management's attention.

**Competitive Activity Reports:** The foot soldiers can provide valuable information about competitors, including how they price their product, what promotions they are running, and where they are having success with market penetration.

#### 8.7 Social Audit and Environmental Audit

In addition to focusing on increasing profitability and improving financial stability, companies should also be concerned about the impact of their operations on society and the environment. This need has given rise to the concepts of social accounting, social auditing, and environmental audit. Let us discuss some of important issues related to social audit and environmental audit.

#### 8.7.1 Social Audit

Social accounting is defined as "systematic accounting and reporting of those parts of a company's activities that have a social impact." It does not involve any accounting procedures.

A social accounting report contains the following information:

- Details of financial performance against the stated objectives of the organization
- An assessment of the impact of the organization's operations on local communities
- Report on the organization's environmental performance
- Report on the organization's compliance with statutory and voluntary quality and procedural standards.
- Views of stakeholders on the objectives and values of the organization.

"A social audit is a systematic attempt to identify, analyze, measure, evaluate, and monitor the effect of an organization's operations on society," according to Blake, Frederick, and Myers. Social audits assess adherence to the specified norms, which may pertain to the government's standards of social performance, standards established by the organization, or norms set by outside agencies. The aim of conducting a social audit is to influence the policies, objectives, and actions of the concerned organization to improve its social performance. There are various approaches used to conduct a social audit, which are:

- **Inventory approach:** This approach involves a simple listing and short descriptions of programs which the organization has developed to deal with social problems.
- **Program management approach:** This approach is a more systematic effort to measure the costs, the benefits, and the achievements of the organization.
- **Cost-benefit approach:** This approach attempts to list all social costs and benefits incurred by an organization in terms of money.
- Social indicator approach: This approach pertains to utilizing social criteria
   (e.g., suitable housing, good health, job opportunities) to identify community
   needs and then evaluating corporate activities in light of these community
   indicators.

Depending on the audit scope and coverage, Frederick, Myers, and Blake have identified six types of social audits. These are described in Table 8.2.

**Table 8.2: Types of Social Audits** 

Туре	Scope
Social balance sheet and income statement	This kind of audit requires quantification of social costs and income. It is conducted to reduce social costs in terms of money.
Social performance audit	This audit is conducted to assess the performance of companies with respect to some area of social or public concern. It can assume the form of a research-based appraisal that is conducted to find out the extent of pollution caused by cement and steel industries.
Macro-micro social indicator audit	This type of audit is conducted to evaluate an organization's social performance in terms of social indicators that signify public interest. It evaluates the contribution of the organization to the well-being of the local community.

Contd....

Constituency group attitudes audit	This kind of audit is conducted to ascertain how corporate actions affect employees or the general public in different ways. Depending on the findings of the audit, the policies or actions of the organization are modified.
Government mandated audits	This type of audit is conducted by authorized government agencies to study an organization's performance in areas of social concern. Such audits could relate to environmental protection, etc.
Social process or program audit	This audit is limited to specific processes and programs of an organization that may have social implications. It aims to appraise a program which has already been initiated by the organization.

Source: ICFAI Research Center

#### **Example: MGNREGS Audit**

On 13<sup>th</sup> September 2022, India's MoRD (Ministry of Rural Development) had cautioned States to carry out social audit of MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme), failure of which results into penal action that includes withholding of funds.

Social audit served as a check on corruption in the MGNREGS execution. The audit of infrastructure that fell under the scheme, wage payments, procedural compliances played a vital role in the social audit.

Source: https://www.thehindu.com/news/national/mahatma-gandhi-rural-employment-scheme-social-audits-marred-by-delays/article65886687.ece, 13<sup>th</sup> September, 2022, accessed on 21<sup>st</sup> September, 2022

#### 8.7.2 Environmental Audit

Environmental audits are used to evaluate the organization on various parameters, which include: conformance to the occupational health and safety requirements; conformance to the emission standards and license requirements of the local, state, and national governments; and generation, storage, and disposal of hazardous wastes. An environmental audit is an expensive procedure and generates a substantial amount of confidential information. It is necessary to get the top management involved in the audit.

Organizations undertake environmental audits for many reasons. They are:

- To enhance safety
- For environment management
- To minimize costs
- For securing a financier or a buyer
- To improve the image of the organization

There are two types of environmental audits -- environmental compliance audit and environmental management audit. Environmental compliance audit is a self-check mechanism while environmental management audit is a self-evaluation mechanism.

**Environmental compliance audit:** An environmental compliance audit is generally conducted to gauge the position of the organization against these compliance parameters on the day of the audit. The issues that arise at the time of environmental compliance auditing should be prioritized in such a way that the issue that may cause the most harm to the environment is documented and addressed first. It is performed to check--

- Conformance with the occupational health and safety requirements
- Conformance with the emission standards and license requirements of the local, state, and national governments
- An environmental compliance audit usually involves two main activities:
   Obtaining some physical proof of non-conformity
- Checking records and documents.

**Environmental management audit:** An environmental management audit is conducted to evaluate whether the organization's management has the resources to reach the level of compliance required and to maintain the level of compliance. The issues to be considered while conducting an environmental management audit are-

- Who is in charge of the environmental program?
- Who is responsible for the environmental issues?
- Who are the staff and how well are they trained?
- How well will a crisis be handled?
- How is the relationship of the organizational actors with the regulatory bodies?

#### 8.8 The Auditing Process

An audit is the activity of examination and verification of records and other evidence by an individual or a body of persons so as to confirm whether the records and other evidences present a true and fair picture of whatever they are supposed to reflect. The auditing process consists of various stages which have been represented below in Figure 8.1.

#### 8.8.1 Staffing the Audit Team

The audit team usually consists of three to four people who report either to the CEO or some other senior executive. The audit team should consist of both newcomers and experienced people, who have knowledge in diverse areas. The

team members should possess strong analytical and interpersonal skills and they should have an understanding of the organization's overall strategy and its goals and objectives. The audit team leader plays an important role in data gathering and is responsible for the overall success of the audit.

#### 8.8.2 Creating an Audit Project Plan

An audit plan should provide a step-by-step approach to conducting the audit.

This helps in proper allocation of resources, and in ensuring that audit tasks are begun and completed on schedule. It also ensures accountability and responsibility by clearly stating what is to be done, who is responsible for which task, and when the audit should be completed.

Staffing the audit team

Creating an audit project plan

Laying the groundwork

Conducting the audit

Analyzing audit results

Sharing audit results

Writing audit reports

Dealing with resistance to audit recommendations

Building an ingoing audit program

Figure 8.1: The Auditing Process

Source: ICFAI Research Center

#### 8.8.3 Laying the Ground work for the Audit

After preparing the audit plan, the next step is to gain the employees' support for the audit. The audit team leader should check with the manager in charge of the process or site being audited on whether required arrangements have been made. The team leader should hold discussions with employees regarding the timing of the audit, the methods of data collection, the availability of required data, etc.

#### **8.8.4** Conducting the Audit

The actual audit is conducted in a manner appropriate for the type and purpose of the audit. By studying the operations of the entire organization and its internal control systems, auditors have to assess the inherent and control risks before

deciding on how to conduct the audit. If the control risks are assessed to be high, the detection risk should be reduced by the extensive use of substantive procedures such as verification of documents, transactions, and account balances. The auditors perform tests of controls to check whether the internal controls are functioning appropriately and effectively. The broad categories of audit procedures are:

Verification: It is aimed at ascertaining the accuracy, reliability, and validity
of assets, records, statements, conformance to rules and regulations, etc., and
assessing the effectiveness of internal controls. Table 8.3 shows the various
procedures involved in verification.

**Table 8.3: Verification Procedures** 

Procedure	Description
Count	Checking the accounting records of physical assets by physically counting the assets
Compare	Identification of similarities or differences in the characteristics of information obtained from two or more sources. E.g. Comparison of actual operating procedures with prescribed policies and procedures.
Examine	Scrutiny of documents or other records in order to detect errors or irregularities
Inspecting tangible resources	Scrutiny of physical assets in order to detect errors or abnormalities
Recomputed	Checking the mathematical calculations that have been performed earlier
Reconcile	Matching two independent sets of records and to show mathematically, with supporting documentation, the differences (if any) between the two records.
Confirm	Obtaining information from an independent source so as to verify the existing information.
Vouch	Verification of recorded transactions or amounts by examining supporting documents. The purpose is to verify correctness, that is, whether recorded transactions represent actual transactions. Here, the direction of testing is from the recorded item to supporting documentation.

Contd....

Trace	Tracing procedures begin with the original documents and are followed through the processing cycles into summary accounting records. The purpose of tracing is to verify completeness, that is, whether all actual transactions have been recorded. Here the direction of testing is from supporting documentation to the
	testing is from supporting documentation to the recorded item.

Source: ICFAI Research Center

- **Observation:** It deals with watching the behavior of people or the performance of a certain activity or process. This is a technique of collecting primary data.
- **Inquiry:** Oral or written inquiries can be performed using interviews or questionnaires. The auditor has to take care that the questions are appropriately framed keeping in mind the position and expertise of the person being interviewed, and the answers are documented and confirmed.
- Analysis: Auditors perform analysis of documented data to calculate financial ratios, discover trends, identify exceptions, compare the current actuals with historical data or benchmarks, etc. The intelligent use of computers increases the efficiency and effectiveness of the analytical procedures.

#### 8.8.5 Analyzing Audit Results

When the audit is completed, the audit results are analyzed to check whether the available information is sufficient. If the information is found insufficient, additional information is sought. Analytical procedures (such as ratio analysis) are conducted to arrive at conclusions and recommendations. Analysis helps in identifying the gaps between an organization's targets and its actual performance.

#### 8.8.6 Sharing Audit Results

The audit results are presented at a feedback meeting before people who are affected by the audit or are interested in the results. The audit team's objective during the meeting is to present a clear and simple picture of the current situation, as revealed by the audit. Sharing the audit results involves: convening the meeting; presenting the audit findings and the audit recommendations; asking others to react to the data; and developing preliminary action plans.

#### 8.8.7 Writing Audit Reports

After the audit work is completed, a written report called the audit report is prepared. This report contains the auditor's views and opinions regarding the financial statements of the organization. It includes the scope of the audit work that is undertaken and also the accountability that the auditor accepts in terms of conclusions. It should be written with reference to relevant standards, wherever applicable.

In case of financial statement audits, the audit report should be prepared based on the following guidelines:

- The audit report should contain information on whether the financial statements of the organization conform to the GAAP.
- It should contain details of whether these principles are being consistently followed by the organization, that is, whether the application of the principles is similar both in the current period and the previous period.
- If the disclosures in the financial statements are not adequate, the audit report should explicitly say so.
- The report should state the opinion of the auditor regarding the fairness of the financial statements of the organization. In case the auditor chooses not to express his/her opinion, then the reasons for non-expression should be clearly mentioned.

#### 8.8.8 Dealing with Resistance to Audit Recommendations

Resistance to audit recommendations can take two forms - direct resistance and indirect resistance.

**Direct Resistance:** It is easy to identify and address the direct resistance. It usually comes from the management in the form of doubts expressed about the implementation of the audit team's recommendations. Some of the ways to deal with direct resistance by the concerned people are:

- i. Prioritizing the concerns raised by the management and deal with the serious ones immediately
- ii. Summarizing the concerns and convince the management that their concerns will be taken care of
- iii. Dealing with differences in opinion through free and fair dialogue in order to arrive at a resolution

**Indirect Resistance**: Indirect resistance to audit recommendations is subtle and more difficult to identify. Indirect resistance can be resolved by making the people (who are resisting) write down their concerns and having open talks with them.

#### **Example: BOB to revamp its ongoing audit program**

On 13<sup>th</sup> June 2022, Livemint had reported that Bank of Baroda (BoB), one of the India's largest banks, revamped its internal audit process for its local and global operations. It got plans to review its internal audit practices for domestic and global operations in order to improve and strengthen them.

Contd....

For review, BoB wanted to appoint a competent management consultant who would be entrusted to review the internal audits coverage, model and process. The management consultant would also suggest the framework to improve the quality of internal audit practises from the root level.

Through this revamp, BOB intended to have a framework for an ongoing audit program that covered a root cause analysis of recurring internal audit observations, an appropriate dashboard and data analytics tool to track major deviations triggering pre-emptive audit, timely fraud detection and appraise the same to prevent scams.

Source: https://www.livemint.com/companies/news/bank-of-baroda-to-revamp-internal-audit-processes-for-local-global-ops-11655142173753.html, 13<sup>th</sup> June, 2022, accessed on 22<sup>nd</sup> September, 2022

#### 8.8.9 Building an Ongoing Audit Program

Ongoing audit programs help in monitoring improvements in performance over a period of time. They help in systematically monitoring the changes taking place in the organization's work environment and also assist managers in dealing with resistance to change.

#### 8.9 Benefits and Limitations of Auditing

In order to maximize the benefits of auditing, organizations should make the most of audit results, identify improvement trigger points, lay down action plans and limitations, and attempt to achieve competitive advantage through systematic auditing.

#### 8.9.1 Benefits

The following are benefits of the auditing

- Auditing identifies opportunities for improvement of operational processes.
- It identifies outdated organizational strategies.
- Auditing increases the management's ability to address concerns.
- It enhances teamwork and commitment to change.
- Auditing acts as a reality check.

#### **Example: ICAI New Reporting Guidelines for Auditors**

On 27<sup>th</sup> April 2022, Business Standard reported that ICAI (Institute of Chartered Accountants of India) released new reporting guidelines to place more onus on the auditors.

Contd....

Accordingly, the auditors were required to certify that the transactions recorded in the company's financial statements were not violating the PMLA (Prevention of Money Laundering Act) and FEMA (Foreign Exchange and Management Act) rules. For this certification, the auditors should take the direct confirmation on 'borrowed funds' from all the parties to the transaction, including the ultimate beneficiary.

Source: https://www.business-standard.com/article/companies/new-reporting-requirements-for-companies-put-onus-on-auditors-122042601472\_1.html, 27<sup>th</sup> April, 2022, accessed on 22<sup>nd</sup> September, 2022

#### 8.9.2 Limitations

Auditing whatever be the objective has its own limitations. The following are some of the limitations in the auditing

- The quality of the audit will only be as good as the quality of the audit tool.
- A financial statement audit does not comment on the soundness of the management or on the safety of its practices. Nor does it assess the risk of losses if there is any change in the business environment.
- Though management auditing can highlight the changes that are important for the organization, it cannot be used for resource allocation or to decide which of the changes should be undertaken first.
- While an audit can bring out the weaknesses in the system and identify opportunities for improvement, it would not be beneficial unless there is a strong commitment to improve or strengthen the process being studied.
- In organizations which use audits to manage suppliers' performance, audits
  may prompt the suppliers to resort to unethical means, especially in the matter
  of adherence to labor standards, if they fear that their contracts may be
  terminated.

#### **Check Your Progress - 2**

- 6. Management audit helps managers overcome problems and adapt to the changing external environment. Which of the following is the main aim of conducting a management audit?
  - a. Detect and overcome existing managerial deficiencies and resulting operational problems
  - b. Critically analyze and evaluate management performance
  - c. Evaluate the methods and processes used by the management to accomplish organizational objectives
  - d. Ascertain the appropriateness of the management's decisions for achieving the organization's objectives
  - e. To address the financial problems

- 7. Frederick, Myers, and Blake have identified six types of social audits which mainly differ in terms of their scope and coverage. Which of the following is not among these types of social audit?
  - a. Macro-micro social indicator audit
  - b. Government mandated audits
  - c. Constituency group attitudes audit
  - d. Inventory audit
  - e. Social balance sheet audit
- 8. Arrange the following steps in their correct sequence with respect to the stages in the auditing process.
  - i. Creating an audit project plan
  - ii. Laying the groundwork for the audit
  - iii. Staffing the audit team
  - iv. Sharing audit results
  - v. Writing audit reports
  - vi. Analyzing audit results
  - vii. Building an on-going audit program
  - viii. Dealing with resistance to audit recommendations
  - a. i-ii-iii-iv-v-vi-vii-viii
  - b. ii-i-iv-iii-vi-v-viii-vii
  - c. viii-vi-vii-v-iv-ii-iii-i
  - d. iii-i-ii-vi-iv-v-viii-vii
  - e. v-i-ii-vi-viii-iii-iv
- 9. Vouching as an audit verification procedure involves which of the following?
  - a. Identifying similarities or differences in the characteristics of information obtained from two or more sources
  - b. Checking only the mathematical calculations that have been performed earlier
  - Matching two independent sets of records and showing mathematically, with supporting documentation, the differences (if any) between the two records
  - d. Verifying recorded transactions or amounts by examining supporting documents
  - e. Balance sheet preparation

- 10. Direct resistance to audit recommendations usually comes from the management in the form of which of the following?
  - a. The doubts expressed about the implementation of the audit team's recommendations
  - b. Questions regarding the reliability of the methods used by the audit team
  - c. Pretension of confusion
  - d. Excuses of lack of time and resources to implement the recommendations
  - e. Remaining silent indicating their disagree to the audit recommendations

#### 8.10 Summary

- Auditing is a systematic and independent examination of data, statements, records, operations, and performances (financial or otherwise) of an enterprise for a stated purpose. In any auditing situation, the auditor perceives and recognizes the propositions before him for examination, collects evidence, evaluates the same, and on this basis formulates his judgment which is communicated through his audit report.
- Audits may be categorized based on their emphasis; primary audience; primary purpose; and scope.
- The different categories of audits are: financial statement audit, internal audit, fraud auditing and forensic accounting, operational audit, information systems audit, management audit, social audit, and environmental audit.
- Financial statement audits are conducted: to examine the correctness of financial statements; to establish whether they present a true and fair picture of the organization's financial position at a given time; and to check compliance with regulations like the Generally Accepted Accounting Principles (GAAP).
- Objective assessment of the financial statements requires significant inspection and evaluation of the organization's statements of accounts which involves application of certain key concepts: audit materiality, audit evidence, audit risk, and the concept of true and fair.
- According to the modern approach, internal audit is an independent management function which furnishes organizations with analyses, appraisals, recommendations, counsel, and information concerning the activities reviewed.
- Frauds can be investigated or detected by 'Certified Fraud Examiners' (CFEs) who are trained to detect, investigate, and deter fraud.
- Forensic accounting encompasses financial expertise, fraud knowledge, and a strong knowledge and understanding of business reality and the working of the legal system. It involves the application of financial skills and an

investigative mentality to unresolved issues, conducted within the context of rules of evidence.

- A management audit appraises an organization's position. It helps the
  organization to determine where it (the organization) is, where it is heading
  with its current plans and programs, whether it is meeting its objectives, and
  whether any revision of plans is required to enable it to achieve its predefined
  goals and objectives.
- Management audits can be classified into complete management audit, compliance management audit, program management audit, functional management audit, efficiency audit, and propriety audit.
- A social audit is a systematic attempt to identify, analyze, measure, evaluate, and monitor the effect of an organization's operations on society. Social audits assess adherence to the specified norms, which may pertain to the government's standards of social performance, standards established by the organization, or norms set by outside agencies.
- There are various approaches used to conduct a social audit, which are: inventory approach; program management approach; cost-benefit approach; and social indicator approach.
- Depending on the audit scope and coverage, Frederick, Myers, and Blake have identified six types of social audits.
- Environmental audits are used to evaluate the organization on various parameters which include: conformance to the occupational health and safety requirements; conformance to the emission standards and licence requirements of the local, state, and national governments; and generation, storage, and disposal of hazardous wastes.
- There are two types of environmental audits -- environmental compliance audit and environmental management audit.
- The auditing process consists of the following steps: staffing the audit team, creating an audit project plan, laying the groundwork and conducting the audit, analyzing audit results, sharing audit results, writing audit reports, dealing with resistance to audit recommendations, and building an ongoing audit program.
- The benefits of auditing are that it identifies opportunities for improvement; acts as a reality check; identifies outdated strategies; measures performance improvements; strengthens management's ability to address concerns; enhances teamwork; and changes employee mindsets and increases acceptance to change.
- The quality of the audit will only be as good as the quality of the audit tool. While an audit can bring out the weaknesses in the system and identify opportunities for improvement, it would not be beneficial unless there is a strong commitment to improve or strengthen the process being studied.

#### 8.11 Glossary

**Audit evidence:** Audit evidence is any kind of information that the auditor uses to determine whether the financial statements being audited are in accordance with the established rules and regulations. It comprises not only the basic accounting data but also all the supporting information available to the auditors, such as contracts and inspection records.

**Audit plan:** An audit plan helps in better allocation of resources, especially if the resources are scarce, and in ensuring that audit tasks are begun and completed on schedule. It also ensures accountability and responsibility by clearly stating what is to be done, who is responsible for which task, and when the audit should be completed.

**Audit report:** An audit report is prepared after the audit work is completed. It contains the auditor's views and opinions regarding the financial statements of the organization; the auditor's name, his/her responsibility, and the type of audit conducted; the scope of the audit work that is undertaken and also the accountability that the auditor accepts in terms of conclusions.

**Audit risk:** Audit risk is the risk of an auditor failing to detect actual or potential material losses or account misstatements at the conclusion of the audit. The auditor designs his/her audit strategy based on an acceptable level of the audit risk that he/she intends to undertake. Audit risk comprises three components - inherent risk, control risk, and detection risk.

**Audit/auditing:** An audit involves the examination and verification of records and evidence by a person or body of persons so as to express an opinion about whether they present a true and fair view of what they are supposed to reflect.

Auditing can be defined as a systematic and independent examination of data, statements, records, operations, and performances (financial or otherwise) of an enterprise for a stated purpose.

**Complete management audit:** Complete management audit evaluates an organization's current activities and measures the gaps between its existing policies and objectives, and its actual activities.

**Compliance management audit:** In a compliance audit, auditors are asked to identify the gaps between the company's existing policies and objectives, and its actual practices. The auditors do not make any recommendations for improvements; they present their observations to the top management.

**Concurrent audit:** A concurrent audit is a mechanism by which the auditor can pinpoint the errors at an early stage of system development.

**Detailed audit:** A detailed audit is usually conducted as a follow-up to the general audit. This detailed audit is conducted when an unacceptable level of risk has been discovered by the general audit.

**Efficiency audit:** Efficiency audits are conducted to ensure that resources are utilized in such a way that they generate the best returns. The objectives of an efficiency audit are to establish how a company is operating with regard to economy and efficiency, and whether it has a system in place to gather information on these aspects.

**Environmental audit:** Environmental audits are used to evaluate the organization on various parameters. These parameters include: conformance to the occupational health and safety requirements; conformance to the emission standards and licence requirements of the local, state, and national governments; generation, storage and disposal of hazardous wastes; etc.

**Environmental compliance audit:** Environmental compliance audit is performed to check conformance with the occupational health and safety requirements and conformance with the emission standards and licence requirements of the local, state, and national governments.

**Environmental management audit:** An environmental management audit is conducted to evaluate whether the organization's management has the resources to reach the level of compliance required and to maintain the level of compliance.

Financial statement audit: A financial statement audit is conducted to examine the correctness of financial statements, and to establish whether they present a true and fair picture of the company's financial position on a particular date.

**Forensic auditing:** Forensic auditing deals with the court-related work undertaken by the accountants, taking into consideration the 'rules of evidence' and the prevailing legal system.

**Functional audit:** Functional audit addresses a particular set of activities, like marketing, purchasing, etc. The focus may be on a particular activity in one location or throughout the organization and may include a study of relationships among units.

**Functional management audit:** Functional management audit measures the difference between the actual performance of an organization and its objectives, with emphasis on a particular function.

**General audit:** General audit is usually a brief review of the project, carried out within a limited time period and with only a few resources. It usually touches on all the six dimensions of the auditing report, i.e., the present status of the project, the future status, the status of the crucial tasks, assessing the risk, information relating to other projects, and the limitations of the project.

**HRD audit:** HRD audit is a comprehensive evaluation of the current human resource development strategies, structure, systems, styles, and skills in the

context of the short-term and long-term business plans of a company. It aims to find out the future HRD needs of a company after assessing the current HRD activities and inputs available.

**Information systems audit / auditing:** An information systems audit provides the people who rely on a particular information system with an authoritative and objective opinion on the extent to which they can safely rely on that system. Information systems auditing can be defined as the process of collecting and evaluating evidence to determine whether a computer system safeguards assets, maintains data integrity, allows organizational goals to be achieved effectively, and uses resources efficiently.

**Internal audit / auditing:** Internal audit is an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements thereto and add value to and strengthen the overall governance mechanism of the entity, including the entity's strategic risk management and internal control system. Internal auditing is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization.

**Management audit:** Management audit is defined as an examination of the conditions in an organization, and a diagnosis of its deficiencies, with recommendations for correcting them. Organizations use management audits to examine their own structure, constituents, objectives, financial and other controls, operations, and resource utilization.

**Marketing audit:** A marketing audit is a functional management audit of the marketing function. It helps the senior management to identify the strengths and weaknesses of their organization, along with the opportunities and threats in the marketplace. It is used as a communication tool, an analytical framework to help take decisions, and for framing policies.

**Operational audit / auditing:** Operational audits are an extension of internal audits. These are used to audit the different functions, projects, safety, quality, etc., and could mean an audit of the entire organization. Operational auditing is a technique for appraising the effectiveness of a unit or function on a regular and systematic basis against corporate and industry standards.

**Organizational audit:** Organizational audit deals with organizational units like departments or manufacturing plants, and not with individual activities or processes. These audits study the effectiveness and efficiency of the organizational unit.

**Post-implementation audit:** In a post-implementation audit, the auditor acts as a reviewer of the particular application system after it has been developed and implemented.

**Program management audit:** Program management audit is similar to the complete management audit, the only difference being the fact that it focuses on a specific program. Program management audits are designed to appraise performance within a specified program; they do not disturb other operations of the firm.

**Propriety audits:** Propriety audits are conducted to examine the effects of the management's decisions and actions on society and the general public.

**Safety audit:** A safety audit is the study of an organization's operations and assets. It is aimed at identifying existing and potential hazards, and the actions needed to render these hazards harm less.

**Sales force management audit:** Sales force management audit is a cross-functional exercise that evaluates the entire selling operation in a company. It covers the sales management environment, sales management planning system, sales management organization evaluation, and the sales management functions.

**Service quality audit:** Service quality audit can be defined as an independent evaluation of service quality to determine its fitness for use and conformance to specification. The information that is obtained through conducting the service quality audit helps in establishing the correctness of the internal standards and the internal compliance.

**Social audit:** A social audit is a systematic attempt to identify, analyze, measure, evaluate, and monitor the effect of an organization's operation son society.

**Special assignment audit:** A special assignment audit is an operational audit which deals with process, quality, safety, risk, environment control techniques, etc. These audits are generally initiated at the request of the management for varied purposes.

**Technical audit:** A technical audit is conducted when a detailed audit fails to evaluate the technical aspects of a project satisfactorily because of the auditor's lack of technical knowledge. The project auditor then employs a technically qualified individual to conduct the audit based on certain guidelines.

**True and fair concept:** The concept of true and fair in the audit report deals with the opinion of the auditor as to whether the state of affairs and their results as confirmed by the auditor during the audit process are truly and fairly represented in the financial statements being audited.

#### 8.12 Self-Assessment Test

- 1. What are the different bases on which audits are categorized? Describe the broad categories of audits.
- 2. Mention the different concepts in financial statements audit. Describe the concept and calculation of audit risk in detail.

- 3. Distinguish between the traditional and modern internal auditing processes.
- 4. Certified Fraud Examiners (CFEs) are trained to detect, investigate, and deter fraud. Which are the areas they should be knowledgeable about?
- 5. Discuss the objectives and benefits of management audits.
- 6. What are the different types of management audits? Describe three of them in detail.
- 7. What are the different approaches used to conduct a social audit? Also, describe the various types of social audits.
- 8. What are the objectives of an environmental audit? Distinguish the two types of environmental audits.
- 9. Explain the steps in the auditing process with the help of a flowchart.
- 10. List the benefits and limitations of audits.

#### 8.13 Suggested Readings / Reference Material

- 1. Stephen P Robbins, David A. De Cenzo and Mary Coulter (2022). Fundamentals of Management: Essential Concepts and Applications, Fifteenth Edition Pearson Paperback, 30 June 2022.
- 2. Subhash Chandra Das (2019). Management Control Systems Principles and Practices, PHI Learning Pvt. Limited, Paperback 15 July 2019.
- 3. Pravin Durai (2019). Principles of Management: Text and Cases, First edition, Pearson India Education Services Pvt. Ltd.; Second edition (31 August 2019).
- 4. Merchant, Kenneth A (2017). "Management Control System: Text and Cases", Pearson Education Asia.
- 5. Saravanavel, P (2022). Management Control Systems Principles and Practices. First edition, Himalaya Publishing House.

#### 8.14 Answers to Check Your Progress

#### 1. (c) Primary purpose

Audit categories differ in terms of their emphasis (on financial data and/or non- financial data), primary audience (that is, for external reporting or for internal use), primary purpose (compliance, certification, communication, and/or control), and scope (limited to the organization, or also concerned with the impact of/on the environment).

#### 2. (a) Statutory

When a financial statement audit is conducted to check compliance with regulations, it is referred to as a statutory financial audit. This kind of audit is usually conducted at the end of every fiscal year by a certified external auditor. Statutory financial audits have to comply with certain accounting standards like the Generally Accepted Accounting Practices (GAAP). The US GAAP is followed in the US and the Indian GAAP in India.

#### 3. (d) Sufficiency and appropriateness

The criteria of sufficiency and appropriateness have to be fulfilled by the audit evidence in order to form a reasonable basis for the auditor's professional opinion. Sufficiency relates to the amount or quantum of audit evidence that is available. Appropriateness relates to the quality of the audit evidence, that is, whether it is persuasive enough for the auditor to arrive at a conclusion.

#### 4. (e) i, ii, iii, and iv

Elliot and Willingham define financial fraud as a deliberate fraud committed by management that injures investors and creditors through materially misleading financial statements. The internal auditor is the person who is primarily concerned with such incidences of fraud, be they small or big, and of whatever type. According to the Institute of Internal Auditors (US), the 'deterrence, detection, investigation, and reporting of fraud' are the responsibilities of the internal auditor.

#### 5. (b) Fraud audit

Organizations generally undertake audits at three levels - internal audits, audits by an external auditor, and audit by a public auditor. If any of these audits unearths evidence of fraud or indicates a possibility of fraud having occurred, a forensic accountant or a fraud auditor is called in for further investigation called fraud audit.

#### 6. (b) Critically analyze and evaluate management performance

The main aim of conducting a management audit is to critically analyze and evaluate management performance. It helps detect and overcome existing managerial deficiencies and resulting operational problems; evaluate the methods and processes used by the management to accomplish organizational objectives; determine the effectiveness of the management in planning, organizing, directing, and controlling the organization's activities; and ascertain the appropriateness of the management's decisions for achieving the organization's objectives.

#### 7. (d) Inventory audit

The six types of social audit, according to Frederick, Myers, and Blake, are: social balance sheet and income statement audit, social performance audit, micro- macro social indicator audit, constituency group attitudes audit, government mandated audit, and social process or program audit.

Various approaches can be adopted to conduct a social audit. An inventory approach involves a simple listing and short descriptions of programs which an organization has developed to deal with social problems.

#### 8. (d) iii-i-ii-vi-iv-v-viii-vii

The auditing process consists of the following stages: staffing the audit team, creating an audit project plan, laying the groundwork for the audit, analyzing audit results, sharing audit results, writing audit reports, dealing with direct and indirect resistance to audit recommendations, and building an ongoing audit program.

# 9. (d) Verifying recorded transactions or amounts by examining supporting documents

Vouching involves verifying recorded transactions or amounts by examining supporting documents. The purpose is to verify correctness, that is, whether recorded transactions represent actual transactions. Here, the direction of testing is from the recorded item to supporting documentation.

## 10. (a) Doubts expressed about the implementation of the audit team's recommendations

Direct resistance usually comes from the management in the form of doubts expressed about the implementation of the audit team's recommendations. There are different ways in which managers may show indirect resistance to audit recommendations received from the audit process. They may frequently ask for more details or provide unnecessary details to questions. They may also say that there isn't sufficient time to implement the audit team's recommendations. They may question the reliability of the methods used by the audit team to collect information. At times, they may pretend to be confused or remain silent indicating that they are uninterested in these commendations.

#### Unit 9

## **Transfer Pricing**

#### **Structure**

- 9.1 Introduction
- 9.2 Objectives
- 9.3 Concept of Transfer Pricing
- 9.4 Factors Influencing Transfer Pricing
- 9.5 Methods of Calculating Transfer Prices
- 9.6 Administration of Transfer Prices
- 9.7 The Indian Perspective
- 9.8 Summary
- 9.9 Glossary
- 9.10 Self-Assessment Test
- 9.11 Suggested Reading/Reference Material
- 9.12 Answers to Check Your Progress Questions

"If we are consistent, the ultimate test is the arm length test, and not the existence of a necessarily incomplete example or some arbitration rule that gives a mistaken aura of precision to what is inherently an inexact and highly judgmental process."

- Charles H. Berry

#### 9.1 Introduction

Arm's length transaction pricing is the key to Transfer Pricing and it is the ultimate one. In the absence of arm's length principle the transaction price is highly judgemental.

In the previous unit, we discussed the technique of auditing. In this unit, we shall discuss transfer pricing.

Decentralization is one of the approaches large organizations use to attain operational effectiveness. The main challenges in decentralization lie in designing responsibility structures and framing suitable policies and methods to determine the responsibility centers' performance. Transfer pricing helps in the smooth functioning of responsibility structures in such organizations. Many companies set up business units that cater to the needs of other business units within their own fold. In such cases, there will be a transfer of goods from the first business unit to the second. A major determinant of the revenue and profits of a profit center that sells a product to another internal customer is the transfer price. Where

the profit center buying the product is concerned, it is the major determinant of expenses incurred. So, the transfer price is an important factor for both the selling and the buying units.

This unit will first explain the concept of transfer pricing. We shall then move on to discuss the various factors influencing transfer pricing. We shall also discuss the different methods used for calculating the transfer prices. Finally, we shall discuss the administration of transfer pricing, and the concept of transfer pricing from the Indian perspective.

#### 9.2. Objectives

After studying this unit, you should be able to:

- Explain how the concept of transfer price is fundamentally aimed at stimulating the external market conditions within the organization.
- Discuss how transfer pricing can be a proper distribution of revenues and costs between responsibility centers.
- Identify the external and internal factors that influence the transfer pricing,
- Discuss internal and external factors can be applied for developing a proper mechanism for transfer pricing computation.
- Identify the most commonly used methods for calculating transfer prices
- Analyse the purview of transfer pricing from Indian perspective
- Identify the regulatory frame work operating on transfer pricing in India.

#### 9.3 Concept of Transfer Pricing

One business unit of an organization may manufacture and transfer components to another business unit of it which uses the components to assemble the final product. Here, the concept of 'transfer pricing' comes into play. The practice of transfer pricing helps the taxpayers either to minimize or avoid the impact of taxes on incomes, profits and gains. The reason being both the units belong to one organization. Let us understand the concept of transfer pricing.

A transfer price is the internal price charged by a selling department, division, or subsidiary of an organization for a raw material, component, or finished good and/or service from the buying department, division, or subsidiary of the same organization. The concept of transfer price is fundamentally aimed at stimulating the external market conditions within the organization so that the managers of individual business units are motivated to perform well. Transfer price does not have any direct impact on the organization's profits as a whole because its effect on the selling division's revenue is matched by its effect on the buying division's costs. Yet, when the profits of the selling and buying divisions are taxed at different rates, there would be some impact on the organization's profits as a whole.

Depending on the situation, transfer pricing mechanisms work in different ways. If all the divisions are completely independent of each other, then the selling division will sell its product to the buying divisions only at the market price. Sometimes, if the product is a key component or there is no external supplier for it, the individual business units will be forced to be interdependent. In such situations, cost-based transfer prices will be used, and the selling division will usually be allowed a profit margin over the cost of the product.

#### 9.3.1 Objectives of a Transfer Pricing Policy

Robert Anthony and Vijay Govindarajan, in their book 'Management Control Systems' stated that the fundamental principle of transfer pricing is that the transfer price should be similar to the price that would be charged if the product were to be sold to outside customers or purchased from outside vendors. The main objective of transfer pricing is the proper distribution of revenues and costs between responsibility centers. If two or more profit centers are jointly responsible for developing and marketing the product, then the resulting profit has to be shared between them. Broadly, there are three objectives that a transfer pricing policy should meet - goal congruence, performance appraisal, and divisional autonomy.

#### Goal congruence

While designing the transfer pricing mechanism, the interests of individual profit centers should not supersede those of the organization as a whole. The divisional manager, in maximizing his/her division's profits should not indulge in decision-making that fails to optimize the organization's performance.

#### Performance appraisal

Transfer pricing should aid in reliable and objective assessment of the profit center's' activities. Transfer prices should provide relevant information to guide decision-making, assess the divisional manager's' performance, and also assess the value added by profit centers toward the organization as a whole.

#### Divisional autonomy

The transfer pricing policy should aim at providing optimum divisional autonomy, thereby allowing the benefits of decentralization to be retained. Each divisional manager should be free to satisfy the requirements of his/her profit center from internal or external sources. There should be no interference in the process by which the buying center manager rationally strives to minimize costs and the selling center manager strives to maximize revenues.

Practically, it is a difficult task to simultaneously meet all these objectives. For multinationals, internal transfer pricing can determine where profits are to be declared and taxes paid. In case of transactions with sister concerns (legal entities) that supply intermediary products, it should be considered that different countries

have different tax and exchange rates. The transfer pricing policy should ideally enable multinational corporations to minimize tax liability.

#### 9.3.2 Transfer Pricing Objectives in International Business

Apart from the objectives of the transfer pricing policy between responsibility centers in domestic operations, multinational corporations should consider several other factors for arriving at their transfer pricing policy applicable between legal entities (their subsidiaries) in different countries. These objectives are given below.

#### Manage exchange rate fluctuations

Multinational corporations can reduce exchange rate risks through transfer pricing. If the value of a country's currency falls, then the country has to pay more for its imports. Similarly, if the value of the currency appreciates, the revenues from exports will fall for companies based in that country. Organizations can depend on their subsidiaries for imports and exports, and avoid these fluctuations through transfer pricing.

#### Handle competitive pressures

The subsidiaries of a company operating in different countries can use transfer pricing to reduce prices to face local competition. Companies can do this by establishing subsidiaries in the countries where the inputs are available at a low price. This will also help cut the price of the final product.

#### Reduce the impact of taxes and tariffs

Multinational corporations reduce their total tax liability by maximizing profits in countries where corporate taxes are low. This will result in reduction in the tax liability of the organization as a whole. Multinational corporations can also reduce the impact of tariffs on imports while purchasing products from the overseas business units of the organization. This will lead to low tariffs for the importing business unit, as most duties are levied on the value of the goods imported.

#### Movement of funds between countries

A multinational corporation may prefer to invest its funds in one country rather than another. Transfer pricing provides an indirect way of shifting funds into or out of a particular country.

#### **Indian Transfer Pricing Regulations and Amendments**

Ever since the enactment of the transfer pricing regulations in India with effect from April 2001, there have been few noteworthy judicial cases, which have established certain important transfer pricing principles, such as

 Preference for transaction-by-transaction analysis over the aggregation of transactions approach,

- Importance of functional similarity between tested party and equivalents, and
- Disregard of equivalents having controlled transactions.

Also, while the common issues such as availability of contemporaneous data and use of secret equivalents remain unresolved, the Indian tax authorities have increased their attention on complex issues including

- Intangibles,
- Procurement models, and
- Cost allocations

One such eminent case that has earmarked the transfer pricing landscape in India is stated below:

Schefenacker Motherson Limited (SML), a joint venture company is engaged in the manufacture of rear-view mirrors, supplied to automobile manufacturing companies in India and cable assemblies, exported outside India to group entities.

The transfer pricing report for the assessment year 2003-04 and 2004-05 of SML revealed that it had applied the <sup>2</sup>Transactional Net Margin Method (TNMM), to substantiate the arm's-length pricing and used cash profit to sales as the <sup>3</sup>Profit Level Indicator (PLI), to remove the effect of differences in capacity utilization, technology used, age of assets used in production and depreciation policies between SML and equivalent companies.

The Transfer Pricing Officer (TPO) rejected the use of cash profit to sales as an acceptable PLI. The TPO issued a show-cause notice during March 2006 to SML and the case got filed in the year 2007, before the Delhi Bench of the Income – tax Appellate Tribunal. After going through enormous observations, the Appellate Tribunal, opined that the elements that constitute the operating income should be decided on a case-by-case basis depending on the facts, circumstances and the nature of businesses involved.

This ruling highlighted the fundamental principle of comparability analysis, to compare like with the like. For this purpose, adjustments were asked to be made for material differences to make transactions/entities comparable to each other. Furthermore, the ruling created a precedent, in support of the use of cash profit to sales or cash profit to cost as a PLI, in applying the TNMM in certain circumstances. Hence, the decision got resolved in favour of the asses see

The transactional net margin method examines the net profit relative to an appropriate base (e.g. costs, sales, assets) that a taxpayer realises from a controlled transaction (or transactions that are appropriate to aggregate under the prescribed principles). Source: http://www.oecd.org/ctp/transfer-pricing/45763692.pdf, 2010.

<sup>&</sup>lt;sup>3</sup> PLI (profit level indicator) - Ratio that measures the relationship between an entity's profit and the resources invested or costs incurred to achieve that profit.
Source: http://www.ey.com/gl/en/services/tay/international-tay/transfer-pricing-and-tay-effective-sur

Source: http://www.ey.com/gl/en/services/tax/international-tax/transfer-pricing-and-tax-effective-supply-chain-management/2012-transfer-pricing-global-reference-guide---transfer-pricing-glossary-of-terms

on June 11, 2009 and this provision was made to effect from 1<sup>st</sup> Oct 2009 vide amendment to the Finance Act 2009.

## Example: India vs Sulzer Tech India Pvt. Ltd. – At arm's Length Transaction Price

M/S Sulzer Tech India Pvt. Ltd. received various IT and support services from M/S Sulzer Management AG an associated enterprise. The payment for the services has been calculated on cost plus margin basis and amounted to ₹ 2,52,49,650 − equal to cost plus 5%. It is considered as arm's length transaction pricing.

In July 2022, tax authorities disallowed the expenses on the ground that Sulzer Tech India has not benefitted from the services and the services have not been availed. Hence, tax authorities ruled that arm's length transaction price does not arise. Therefore, an adjustment of additional income of ₹ 2,52,49,650 was issued to Sulzer Tech India.

Source: India vs Sulzer Tech India Pvt Ltd, July 2022, Income Tax Appellate Tribunal, Case No ITAT No 633-MUM-2021 - (tpcases.com) 25th July, 2022, Accessed on 30th July, 2022

#### 9.4 Factors Influencing Transfer Pricing

There are several factors that influence the transfer pricing and the risk element involved in it. The factors can either be external or internal. It is critical to gain a clear understanding of where the transfer pricing risk lies and to mobilize the appropriate resources to mitigate such risk.

At the first instance, it is important have some conditions necessary for the development of a proper mechanism of transfer pricing which are:

#### Role definition

The role and scope of the team responsible for transfer pricing should be clearly defined. In some organizations, the transfer pricing department only draws up the transfer pricing policies, and the day-to-day operations like economic analysis, documentation, computation, and accounting are taken care by the finance and tax departments. In contrast, in some other organizations, it is also responsible for some or all of the facets of implementation and running transfer pricing matters on a day-to- day basis.

Irrespective of which model the organization follows, there should be a clear demarcation of activities between the transfer pricing team, and the accounts and taxation teams. Also, a document setting out each team's responsibilities should be circulated to all those involved to ensure allocation of the necessary tasks.

#### External advisers

The companies must be ready to appoint external advisers who can provide a bigger picture of the organization, whose knowledge and experience will be

valuable to the transfer pricing team, and who can provide resources which are not available in-house.

#### Competent managers

Organizations need managers who can balance long-term gains and short-term profits. As transfer pricing can be used for manipulating profits, organizations should have competent people skilled at negotiation and arbitration, who are capable of determining the appropriate transfer prices, so that long-term goals are not sacrificed for short-term gains.

#### Equity

In order to achieve goal congruency, managers of profit centers should ensure that the transfer prices charged by the selling profit centers are fair. The managers of the selling profit centers should be given the freedom to sell their goods in the external market, while managers of the buying profit centers should have the option of buying their goods from the external market. This will create an atmosphere of trust between the sister concerns and make the market a major determinant of transfer prices.

#### Information on prevailing market prices

The normal market price can be taken to fix the transfer price when the product is transferred from one profit centre to the other. The quality and quantity of the reference product should be identical to the product whose transfer price is to be fixed. Before they decide on whether to purchase goods from outside or in-house sources, managers should fully be aware of market conditions and should have all the necessary information regarding available options, and the cost and revenues of each option.

#### Proper investment

The transfer pricing department should be well funded and should coordinate well with other departments in the same organization, the transfer pricing departments of other business units, as well as with the top management. Another important aspect is compliance with the transfer pricing jurisdiction and maintaining documentation of transfer pricing in order to deal satisfactorily with any legal issues that may arise.

In reality, it is not possible to fulfill all these conditions due to the internal policies of the organization and certain external factors. These constraints, both external and internal, have been given below:

#### 9.4.1 External Constraints

External constraints are those imposed by the external environment like government regulations, climatic conditions, and which (i.e., external constraints) cannot be controlled by the organization. Examples of such constraints are given below.

#### Limited markets

The market for buying and selling the goods of the profit centers may be either very small or even non-existent.

Such a situation arises in case of highly integrated organizations where there is likely to be little independent production capacity for the intermediate products in the following cases:

- In the case of a sole producer of a unique or sharply differentiated product, for which outside capacity is non-existent; and
- In case of MNCs, if the intra-company trade takes place between divisions or subsidiaries in different countries and the interests of the company is in conflict with the interests of one or more of the host countries.

#### Excess or shortage of industry capacity

The business units of an organization may not be able to consider all opportunities available to it when there is an excess or shortage of capacity in the industry in which it operates. If there is a shortage, the buying centre may not be able to buy from the open market due to high price, while the selling centre sells in the open market. In the first case, the buying center fails to maximize its output as it does not have sufficient inputs, and in the second, the selling center will be maintaining higher inventories. If there is excess capacity in the industry, the buying centre is allowed to buy from the open market if it is able to get a good deal in terms of quality, price, and service, while the selling center may be allowed to sell its products if it gets a higher profit by doing so. Whatever be the case, the management should aim at taking decisions that optimize organizational profits.

#### 9.4.2 Internal Constraints

The constraints imposed and controlled by the organization itself are called internal constraints. These constraints arise (when due to excess capacity), the buying center is not allowed to purchase from outside sources, or when the company makes a major investment in the facilities during which it will not buy goods from outside even though outside capacity exists. To overcome these issues, the management is often forced to set a cost-based price as transfer price which is acceptable to both the buying and selling centers.

# **Example: MNCs may face Transfer Pricing Issues Due to COVID-19 Impact**

In the year 2020, many MNCs were renegotiating and slashing the fixed margin payable to the Indian entities. This is due to the Covid-19 impact and the Indian entities feared that there could be transfer pricing issues. The fixed margin payable by the MNCs was arrived at by using the arm's length principle. Large MNCs like Google, Microsoft and IBM also likely to face these issues.

Contd....

As a result of hard negotiations, the mark-ups could fall by half due to the Covid-19 impact. This is likely to lead the tax authorities questioning the Indian entities on the dip in income and slash additional taxes.

Source: https://economictimes.indiatimes.com/news/company/corporate-trends/covid-19-impact-transfer-pricing-issues-may-crop-up-at-mncs/articleshow/75111866.cms?utm\_source= contentofinterest& utm\_medium =text&utm\_campaign=cppst 13th April, 2020, Accessed on 30th July, 2022

	4 .	• 4	Λ	4
А	cti	vity	γY	
7 P	·	A T C	, ,	• •

The management at Mudra Textiles Ltd. (MTL) is in the process of formulating its transfer pricing mechanism. The management has defined the role and laid out the scope of work to be done by the people responsible for transfer pricing. Explain the other conditions to be fulfilled for the development of a transfer pricing mechanism. What are the external constraints that may be faced in fulfilling these conditions?

Answer:		

#### **Check Your Progress - 1**

- 1. The concept of transfer price is fundamentally aimed at which of the following?
  - a. Stimulating external market conditions within the organization so that the managers of individual business units are motivated to perform well.
  - b. Having a direct accounting impact on the organization's profits as a whole.
  - c. Matching the effect on the selling division's revenue with the buying division's costs.
  - d. Taxing the profits of the selling and buying divisions at similar rates.
  - e. Encouraging market for domestic products.
- 2. Broadly, there are three objectives that a transfer pricing policy should meet. Which of the given objectives usually do not pertain to transfer pricing?
  - a. Goal congruence
  - b. Performance appraisal
  - c. Profit maximization
  - d. Divisional autonomy
  - e. Stimulating external market conditions

- 3. Which of the following is an objective of transfer pricing between responsibility centers in domestic operations as well as international operations?
  - a. Managing exchange rate fluctuations
  - b. Inducing goal congruent decisions
  - c. Handling competitive pressures
  - d. Decreasing the impact of taxes and tariffs
  - e. Corporation's country-specific preferences for investing funds
- 4. ABC is a multinational corporation headquartered in country W with operations in countries X, Y, and Z as well. Corporate income tax rates in these countries are 35%, 20%, 25%, and 10% respectively. Using transfer pricing as the basis, identify the alternative which ABC would most probably choose to reduce the impact of income taxes on its operations as a whole.
  - a. Maximize the profit in its operations in country W
  - b. Maximize the profit in its operations in country Z
  - c. Minimize the profit in country X
  - d. Minimize the profit in country Y
  - e. Minimize the profit in country Z
- 5. Which of the following conditions, necessary for the development of a proper transfer pricing mechanism, entails giving freedom to the selling profit centers to sell in the open market and buying profit centers to buy in the open market?
  - a. Equity
  - b. Proper investment
  - c. Limited markets
  - d. Performance appraisal
  - e. Audit Committee

#### 9.5 Methods of Calculating Transfer Prices

Transfer prices are calculated differently in different organizations. Before adopting a method, organizations should evaluate all methods for suitability.

The most commonly used methods for calculating transfer prices are - the market-based pricing method, the cost-based pricing method, the negotiated pricing method, and the resale price method. Vertically integrated organizations can use methods like the two-step pricing method, profit sharing or profit split method, and two sets of prices method for calculating transfer prices.

## **9.5.1** Market-based Pricing Method or Comparable Uncontrolled Price (CUP) Method

Under this method, transfer prices are based on the prevailing open market price for goods and services. The market-based pricing method has two main advantages - the divisions can operate as independent profit centers with their managers being completely responsible for the business units' performance, and the tax and customs authorities favor this method as it is more transparent and they can cross-check the price details provided by the company by comparing them with market prices on that date.

In practice, however, it is difficult to use market price as a benchmark as there is no competitive market which can provide a comparable price due to the fact that there are price variations between markets because of differences in exchange rates, transportation costs, local taxes and tariffs, etc.

#### 9.5.2 Cost-based Pricing Method or Cost Plus Method (CP)

The cost-based pricing method calculates transfer prices based on the product or service costs that are available from the company's accounting records.

For applying this method, costs are divided into three categories - direct costs like raw materials; indirect costs like repair and maintenance that can be allocated among several products; and operating expenses that include: selling, administrative, and general expenses. Cost should be calculated carefully considering the acceptable accounting principles for the industry to which the company belongs and the country where the goods are produced. The company should also consider aspects like costs and margin percentage.

#### Costs

In the cost-based pricing method, it is important to decide the type of costs to be used - actual costs or standard costs. Standard costs are preferred as such costs are developed based on the standard cost structure of the division or on the basis of historical costs - the transfer price is estimated by adding a profit margin to this cost. The standard price is modified when there is a major change in the prices of materials or in wage rates. Using these costs prevent the inefficiencies of the selling divisions from being passed on to the buying divisions. If actual costs are used, there will be no motivation for the selling division to reduce the actual cost because if it does so, transfer price will be reduced and there will not be any increase in the division's margin.

#### Profit mark-up

The selling division may either use a percentage of the investment applicable to the product or a percentage of cost. The disadvantage with using the former is that the selling division would tend to employ new assets irrespective of their requirements. This is because the cost of new equipment will be included in the

margin, and would be able to reap higher profits. Organizations need to also decide on the treatment of fixed costs and research and development costs.

The cost-based pricing method is generally accepted by the tax and customs authorities of a country as it provides some indication that the transfer price approximates an item's real cost. This approach is, however, not as transparent as it may appear as it can be easily manipulated to alter the magnitude of the transfer price.

#### 9.5.3 Negotiated Pricing (NP) Method

Under this method, the buying and selling divisions negotiate a mutually acceptable transfer price as each is responsible for its own performance. This would lead to cost minimization and encourage the divisions to agree on a transfer price that would give them good return. Tax authorities have their reservations about this system as companies can easily manipulate transfer prices to minimize their tax liability.

#### 9.5.4 Resale Price Method (RP)

Under this method, the transfer price is determined by calculating back from the transaction taking place at the next level of the supply chain, by deducting a suitable mark-up from the price at which the internal buyer sells the item to an unrelated third party.

This method is more suitable when the reseller does not add much value to the goods before selling. As the value added increases, there will be difficultly in estimating the margin or mark-up percentage.

#### 9.5.5 Alternative Methods for Transfer Price Calculation

In vertically integrated organizations, if there is no proper transfer pricing mechanism in place, the division that sells the final product to outside customers may not be aware of the fixed costs involved in the internal purchase price. These companies adopt methods like two-step pricing, profit sharing, and two sets of prices to arrive at transfer prices.

#### Two-step pricing

This method considers the two cost components - fixed and variable for calculating transfer prices. Fixed cost is charged on a monthly basis, and includes the cost of facilities required for production such as electricity, capital equipments, and rent of shop floor. Variable cost is the cost incurred in producing each unit. A profit margin is then added to one or both these components.

#### Profit Sharing or Profit Split (PS) method

This method is used when the transactions between units are too integrated to be evaluated separately and the existence of intangibles makes it impossible to establish comparability with market conditions. Under this method, the product is transferred to the marketing unit at the standard variable cost. After the product is

sold, the business units share the profit earned based on the contribution made by each of them. The profit to be split is generally the operating profit, before the deduction of interest and taxes.

#### Two sets of prices

Under this method, revenue is credited to the manufacturing unit at the market sales price while the buying unit is charged for the total standard costs. The difference between the outside sales price and the standard cost is charged to the parent organization's account. These charges are later eliminated while drawing up consolidated financial statements. This method is used when there are frequent conflicts between the buying and selling units, which cannot be resolved by any method. The disadvantages of this method are - it is difficult to maintain a separate account each time a transfer of goods is made; and it motivates the managers to concentrate only on internal transfers (where they are assured of a good mark-up) at the expense of outside sales.

#### **Example: Transfer Pricing - Bombardier Involving Indian Arm**

M/S Bombardier Transportation Sweden provided sales, business development, customer services and project management services to its Indian arm Bombardier in year 2020 and charged a fee for the same. Tax authorities contended that the fee charged should be categorised as Fee for Technical Services (FTS) and it attracts tax at a higher bracket.

The matter had gone to the Appellate Tribunal. As the Sweden company had not given any technical knowledge, skills to the Indian arm, the Income Tax Appellate Tribunal said that the intermediary services provided by the Sweden company are not in the nature of FTS. Therefore, Bombardier got a reprieve from the tax authorities.

Source: Tax respite for Bombardier in a transfer pricing case involving Indian arm – VietNam Breaking News, 6<sup>th</sup> December, 2020, Accessed on 30.07.2022

#### **Activity 9.2**

Sanjay Limited is a company engaged in the manufacture of industrial plastic products. For calculating transfer price, the company was following the two-step pricing method. Due to some recent structural changes in the company, transactions between units have become too integrated to be evaluated separately. The management is considering taking up the profit sharing method of calculation of transfer prices. How is the two-step pricing model different from the profit sharing method of calculating transfer prices?

Answer:		

#### 9.6 Administration of Transfer Price

The administration of transfer pricing is a prerequisite in the organizations. Any error in implementation process of transfer pricing could cause legal issues and ultimately turn to be detrimental to the organization. Hence all the stakeholders are interested in the judicious implementation of transfer pricing.

The administration of transfer pricing is a prerequisite in the organizations

#### 9.6.1 Implementing Transfer Pricing

Implementing a transfer pricing mechanism involves:

- Articulation and communication of the transfer pricing strategy
- Documentation of the process and inter-organization agreements
- Involvement of a multi-disciplinary team
- Negotiations between the heads of various units
- Arbitration and conflict resolution in case conflicts arise

Articulation and communication of the transfer pricing strategy

The first step involves identifying the inter-organization transactions and operational prices. Then, the regulatory transfer-pricing policies that will be enforceable for each transaction have to be determined. Decision has to be taken on whether the regulatory transfer pricing policies should be different from the operational pricing for the sake of taxation or other legal issues. All these policies should be communicated to the concerned managers to avoid confusion.

Documentation of the transfer pricing process and inter-organization agreements

All transfer pricing policies and interdepartmental, inter-company agreements should be carefully documented to avoid the risk of being questioned by the tax or any other requisite authorities. Further they need to be flexible enough to operate even under conditions of market uncertainty, and should include clear definitions of the roles and responsibilities of all the parties involved.

Involvement of multi-disciplinary team

A multidisciplinary team in the transfer pricing team will help the company to efficiently practice transfer pricing as it requires proficiency in many areas like accounting, tax and legal expertise, knowledge of economics, and direct experience in operational functions such as R&D, manufacturing, marketing, and distribution.

Negotiation and conflict resolution

The business units negotiate among themselves before taking decisions related to transfer prices. These decisions are left to the respective line managers and there

is no involvement of the headquarters. At times, when the business units fail to arrive at a consensus on the transfer price, they follow a preset procedure for arbitrating such disputes.

Arbitration is done by the headquarters by assigning a single executive to talk to the business unit managers and arrive at an agreed price, or by forming a committee that would settle transfer price disputes, review sourcing changes, and change the transfer price rules, whenever necessary.

Organizations can form either a formal or informal system of arbitration to administer the transfer price mechanism and solve conflicts. In a formal system, both parties submit a written case to the arbitrator, who reviews it and decides on the price. In an informal system, most of the presentations are oral. Conflicts resolution techniques like forcing, smoothing, bargaining, and problem solving can be used by the management. Forcing and smoothing help in conflict avoidance, whereas bargaining and problem solving indicates conflict resolution.

#### 9.6.2 Transfer Pricing - Potential for Misuse

Organizations can misuse transfer pricing to minimize their tax liabilities, as well as to project a wrong image about their financial health, and thus mislead the stakeholders. With stringent government regulations, such instances are likely to become rare in future.

#### 9.7 The Indian Perspective

Liberalization of the Indian economy has resulted in increased cross-border related party transactions between India and other nations. Many indigenous organizations have grown rapidly and become multinationals with subsidiaries and affiliates in foreign countries.

#### 9.7.1 Transfer Pricing Guidelines

Transfer pricing regulations were introduced by the government with effect from April 1, 2001 to reduce tax avoidance by organizations operating in India. The regulations have chiefly been designed based on the OECD's (Organization for Economic Cooperation and Development) transfer pricing guidelines. According to the guidelines, companies can fix the transfer price, by adopting any of the Comparable Uncontrolled Price method (CUP), the Resale Price Method (RPM), the Cost Plus Method (CPL Method), and the Profit Split Method (PSM), and such other prescribed method, if any, based on the situation laid in transfer pricing methods. Detailed guidelines on the nature of the transaction, maintenance of documentation, adjustments and penalties, role of transfer pricing officers, and conflict resolution have also been provided to avoid confusion concerning transfer pricing.

#### Changes Proposed in Transfer Pricing (TP) Regulations in India

The Indian Government in the Budget 2017 has proposed three key proposals/amendments to Transfer Pricing (TP) provisions.

#### They are:

1. Introduction of Secondary Mechanism in the books of Associated Enterprises (AE) of a company.

The proposal seeks secondary adjustments in case of the following primary adjustments:

- Suomotu adjustment offered by the tax payer
- Adjustments made by the tax officer and accepted by the tax payer
- Adjustment determined by an advance pricing agreement
- Adjustment made as per Indian safe harbor rules
- Adjustment arising due to Mutual Agreement procedure resolution
- The primary adjustment is the difference between the TP based on arm's length principle and the TP at which the transaction took place. That is the excess money with AE, which has to be repatriated to India. If it is not repatriated, the amount will be considered as advance and interest will be calculated thereon. This is constructive loan approach by India, unlike others who opt for constructive dividend approach in case of secondary adjustments.
- 2. Restriction on deduction of interest paid/payable to Associated Enterprise.

The Organization for Economic Cooperation and Development (OECD)<sup>4</sup> has recommended alternative approach for countries to limit tax-based erosion through interest deductions and other financial payments. India has proposed to limit tax deduction of specific interest paid/payable by Indian companies or permanent establishment of foreign companies in India (other than Banks/Insurance companies) to Foreign Associated Enterprises or third party lenders. This is to the extent of 30% of EBIDTA. This will come into effect from Fiscal Year 2017-18 onwards. However, the provision will not apply to interest paid/payable up to ₹ (INR) 10 millions.

3. Rationalization of domestic TP provisions.

Implementation of domestic transfer policy provisions is applicable only in case of transaction where at least one entity is eligible for tax holiday.

Transactions pertaining to expenditure to specified persons will not fall under the purview of domestic TP provisions.

-

<sup>&</sup>lt;sup>4</sup> Action 4 of the Base Erosion and Profit Shifting initiative.

#### Example: Indian Start-ups - transfer pricing norms

Some Indian start-ups flipped their corporate structures so that they can hold their assets, shareholding and intellectual property outside India. These start-ups had created foreign companies for holding their Indian businesses. Such kind of start-ups could face investigation from the tax authorities.

Once the structure is flipped, Indian start-ups operated like agents/intermediaries and pay tax on part of payment only. Therefore, Income Tax department was investigating any violation of transfer pricing issues in such start-ups.

Source: https://economictimes.indiatimes.com/tech/startups/i-t-to-check-if-startups-flight-flouts-transfer-pricing-norms/articleshow/79612677.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst 8th December, 2020, Accessed on 30.07.2022

#### **Check Your Progress - 2**

- 6. For the purpose of applying a cost-based pricing method, costs are divided into three categories. Which of the following is not such a category?
  - a. Direct costs
  - b. Indirect costs
  - c. Operating expenses
  - d. Standard costs
  - e. General expenses
- 7. Identify the method of determining transfer price (which calculates backward from the transaction taking place at the next level of the supply chain).
  - a. Negotiated pricing
  - b. Resale pricing
  - c. Cost-based pricing
  - d. Market-based pricing
  - e. Profit-based pricing
- 8. The administration of transfer pricing involves close monitoring of the implementation process. Because any errors in the process, whether intentional or unintentional, are viewed as grave offences in the eyes of the law. It can be detrimental to the organization. The implementation process involves which of the following?
  - i. Articulation and communication of the transfer pricing strategy
  - ii. Documentation of the transfer pricing process and inter-organization agreements
  - iii. Involvement of multi-disciplinary team
  - iv. Negotiation and conflict resolution

- a. Only ii and iii
- b. Only iii and iv
- c. Only ii and iv
- d. Only i and iv
- e. i, ii, iii, and iv
- 9. Transfer pricing is a very important issue from the point of view of management control. Organizations can misuse transfer pricing to:
  - i. Minimize their tax liabilities
  - ii. Project a wrong image about their financial health
  - iii. Mislead the stakeholders
  - a. Only i
  - b. Only ii and iii
  - c. Only iii
  - d. i, ii, and iii
  - e. Only ii
- 10. Which of the given methods of calculating transfer price are approved by the guidelines issued by the Indian government on April 1, 2001, in line with the Transfer Pricing Guidelines issued by the Organization for Economic Cooperation and Development?
  - i. The Comparable Uncontrolled Price Method
  - ii. The Resale Price Method
  - iii. The Negotiated Pricing Method
  - iv. The Cost Plus Method
  - v. The Profit Split Method
  - a. Only i, ii, and iii
  - b. Only ii, iii, and iv
  - c. Only i, ii, iv, and v
  - d. Only ii, iii, iv, and v
  - e. Only i, iii, iv and v

#### 9.8 Summary

- Transfer price is the internal price charged when one business unit in the organization transfers goods or services to another business unit in the same organization.
- The main objective of transfer pricing is the proper distribution of revenue between responsibility centers. A transfer pricing policy should meet the three broad objectives of goal congruence, performance appraisal, and divisional autonomy.

- In international business, the additional objectives of transfer pricing are: managing exchange rate fluctuations, handling competitive pressures, reducing the impact of taxes and tariffs, and providing ease of movement of funds between countries.
- The conditions necessary for the development of a proper transfer pricing mechanism are: role definition, external advisers, competent managers, equity, information on prevailing market prices, and proper investment.
- Constraints to the implementation of a transfer pricing mechanism may be classified as external (limited markets; surplus or shortage of industry capacity) and internal constraints.
- The different methods for calculating transfer prices are: market-based pricing method (comparable uncontrolled price method), cost-based pricing method (cost plus method), negotiated pricing method, and resale pricing method.
- Vertically integrated organizations can use some alternative methods for transfer price calculation: two-step pricing method, profit sharing or profit split method, and two sets of prices method.
- The administration of transfer pricing involves close monitoring of the implementation process, because any errors in the process, whether intentional or unintentional, are viewed as grave offences in the eyes of law and can be detrimental to the organization.
- Implementing a transfer pricing mechanism involves: articulation and communication of the transfer pricing strategy; documentation of the process and of inter-company agreements; involvement of a multidisciplinary team; negotiations between heads of various units; and arbitration and conflict resolution in case conflicts arise.
- Organizations can misuse transfer pricing to minimize their tax liabilities, as well as to project a wrong image about their financial health, and thus mislead the stakeholders.
- The Government of India has introduced full-fledged transfer-pricing regulations with effect from April 1, 2001 to reduce tax avoidance by organizations operating in India.

#### 9.9 Glossary

Comparable Uncontrolled Price (CUP) method: In the CUP method of transfer pricing, also known as market-based pricing method, companies price the goods and services they transfer between their profit centers at a price equal to the prevailing open market price for those goods and services. That is, if the rate charged by the company is the same as the current market price - as if the transaction is taking place between two unrelated companies - then the method of estimating transfer pricing is known as market-based pricing method or the CUP method.

**Cost-based pricing method:** Cost-based pricing method calculates transfer prices on the basis of the cost of the product or service. These costs are available from the cost accounting records of the company.

**Negotiated Pricing (NP) method:** In the NP method of transfer pricing, the buying and selling divisions negotiate a mutually acceptable transfer price.

**Resale Price (RP) method:** The RP method of transfer pricing is similar to the cost-based pricing method. In this method, the transfer price is determined by calculating back from the transaction taking place at the next level of the supply chain, by deducting a suitable mark-up from the price at which the internal buyer sells the item to an unrelated third party.

**Transfer price:** A transfer price is the internal price charged by a selling department, division, or subsidiary of a company for a raw material, component, or finished good or service which is supplied to a buying department, division, or subsidiary of the same company.

**Two-step pricing method:** Two-step pricing takes into consideration two components of cost - a variable component and a fixed component, and a profit margin. The profit margin is added to one or both these components. The variable cost component is equal to the cost of production of each unit. The fixed cost component comprises the cost of the facilities required for production such as electricity, capital equipments, and rent of shop floor. The fixed cost is generally charged on a monthly basis.

#### 9.10 Self-Assessment Test

- 1. Transfer price is the price charged by the selling center from the buying center when the goods are transferred between business units within the organization. What are the general objectives of establishing a transfer pricing mechanism? What are the additional objectives that are specific to transfer pricing in international business?
- 2. What are the conditions necessary for the development of a proper mechanism of transfer pricing? Explain the internal and external constraints to the fulfillment of such conditions.
- 3. What are the different methods used for the calculation of transfer prices? Also describe the alternative methods which vertically integrated organizations may use.
- 4. The administration of the transfer pricing involves close monitoring of the implementation process. What are the activities involved in implementing a transfer pricing policy?
- 5. Write a brief note on government-established transfer pricing regulations to reduce tax avoidance by organizations operating in India.

#### 9.11 Suggested Reading / Reference Material

- 1. Stephen P Robbins, David A. De Cenzo and Mary Coulter (2022). Fundamentals of Management: Essential Concepts and Applications, Fifteenth Edition Pearson Paperback, 30 June 2022.
- 2. Subhash Chandra Das (2019). Management Control Systems Principles and Practices, PHI Learning Pvt. Limited, Paperback 15 July 2019.
- 3. Pravin Durai (2019). Principles of Management: Text and Cases, First edition, Pearson India Education Services Pvt. Ltd.; Second edition (31 August 2019).
- 4. Merchant, Kenneth A (2017). "Management Control System: Text and Cases", Pearson Education Asia.
- 5. Saravanavel, P (2022). Management Control Systems Principles and Practices. First edition, Himalaya Publishing House.

#### 9.12 Answers to Check Your Progress

# 1. (a) Stimulating external market conditions within the organization so that the managers of individual business units are motivated to perform well.

The concept of transfer price is fundamentally aimed at stimulating external market conditions within the organization so that the managers of individual business units are motivated to perform well. However, the transfer price does not usually have a direct accounting impact on the organization's profits as a whole because its effect on the selling division's revenue is matched by its effect on the buying division's costs. It gains importance when the profits of the selling and buying divisions are taxed at different rates that there is some impact on the organization's profits as a whole.

#### 2. (c) Profit maximization

Broadly, there are three objectives that a transfer pricing policy should meet - goal congruence, performance appraisal, and divisional autonomy. The concept of transfer price is fundamentally aimed at stimulating external market conditions within the organization so that the managers of individual business units are motivated to perform well.

#### 3. (b) Inducing goal congruent decisions

The objectives of the transfer pricing policy between responsibility centers in domestic operations as well as international operations are broadly, goal congruence, performance appraisal, and divisional autonomy.

#### 4. (b) Maximize the profit in its operations in country Z

Many multinational corporations make use of transfer pricing to reduce their total income tax liability. Organizations try to maximize the profit in countries where corporate income taxes are lower (in this case, country Z) and minimize the profit in countries where corporate income taxes are higher (in this case, country W), thus reducing the income tax liability of the organization as a whole.

#### 5. (a) Equity

The managers of the buying centers should be given the freedom to buy in the open market while the managers of the selling profit centers should be given the freedom to sell in the open markets. This will promote equity within the organization and ensure that the transfer prices are fair. It will also create a sense of trust and transparency among the various profit centers of the organization.

#### 6. (d) Standard costs

For the purpose of applying a cost-based pricing method, costs are divided into three categories: direct costs like raw materials; indirect costs like repair and maintenance that can be allocated among several products; and operating expenses that include selling, administrative, and general expenses. A problem that arises in the cost-based pricing method is deciding what costs are to be used: actual costs or standard costs. A standard cost is developed based on the standard cost structure of the division or on the basis of historical costs and the transfer price is estimated by adding a profit margin to this.

#### 7. (b) Resale pricing

Under the resale price method, transfer price is determined by calculating backward from the transaction taking place at the next level of the supply chain. This is done by deducting a suitable mark-up from the price at which the internal buyer sells the item to an unrelated third party.

#### 8. (e) i, ii, iii, and iv

The steps involved in the implementation of transfer pricing are: articulation and communication of the transfer pricing strategy; documentation of the transfer pricing process and inter-organization agreements; involvement of a multidisciplinary team; and negotiation and conflict resolution.

#### 9. (d) i, ii, and iii

Organizations can misuse transfer pricing to minimize their tax liabilities as well as to project a wrong image about their financial health, and thus mislead the stakeholders.

#### 10. (c) Only i, ii, iv, and v

According to these guidelines, organizations can adopt any of the following methods of transfer pricing: The Comparable Uncontrolled Price Method (CUP), the Resale Price Method (RPM), the Cost Plus Method (CPLM), and the Profit Split Method (PSM), depending on the situation. Detailed guidelines relating to the nature of the transaction, maintenance of documentation, adjustments and penalties, role of transfer pricing officers, and conflict resolution have been provided to avoid any confusion.

## **Management Control Systems**

### **Course Structure**

Block 1: Introduction to Management Control Systems		
Unit 1	Fundamentals of Management Control	
Unit 2	Design of Organization Structure and Control Systems in Corporates	
Unit 3	Organizational Culture	
Unit 4	Strategic Performance Control	
Unit 5	Business Ethics and Management Control	
Block 2: Selected Techniques for Management Control		
Unit 6	Budget as an Instrument of Control	
Unit 7	Business Performance: Targets, Reporting, and Analysis	
Unit 8	Auditing	
Unit 9	Transfer Pricing	
Block 3: Management Control: Functional Perspectives – I		
Unit 10	Financial Control of the Enterprise	
Unit 11	Marketing Control	
Unit 12	Management Control of Products and Operations	
Unit 13	Management Control of Operations: Cost, Performance and Audit	
Block 4: Management Control: Functional Perspectives – II		
Unit 14	Controls of Service Organizations	
Unit 15	Management Control of Projects	
Unit 16	Management Control of Research and Development	
Unit 17	Control of Human Resource Management	
Unit 18	Control and Governance of Information Systems	
Unit 19	Implementation of Management Control Systems	