

# **MANAGEMENT ACCOUNTING**

## **MODULE NAME – RESPONSIBILITY ACCOUNTING**

### **Module Learning Objectives:**

**After studying this module, this module will be able to**

- Appreciate the nuances of responsibility accounting.
- Understand the various responsibility accounting centres within an entity.
- Cognize the contents of a responsibility report and the presentation of the report.

### **THIS MODULE INCLUDES**

1. Concept of Cost, Revenue, Profit and Responsibility Centres.
2. Preparations of Responsibility Report.

# Concept of Cost, Revenue, Profit and Responsibility Centres

## CONCEPT OF RESPONSIBILITY ACCOUNTING-

It is used to measure performance of divisions of an organisation rather than organisation as a whole. Responsibility Accounting is a system of control where responsibility is assigned for the control of costs. The persons are made responsible for the control of costs. Proper authority is given to the persons so that they are able to keep up their performance. In case the performance is not according to the predetermined standards then the persons who are assigned this duty will be personally responsible for it. In responsibility accounting the emphasis is on men rather than on systems. Responsibility Accounting collects and reports planned and actual accounting information about the inputs and outputs of responsibility centres”

## MEANING OF RESPONSIBILITY ACCOUNTING-

Responsibility accounting is a system of management accounting under which accountability is established according to the responsibility delegated to various levels of management and a management information and reporting system instituted to give adequate feedback in terms of the delegated responsibility. Under this system, divisions or units of an organisation under a specific authority in a person are developed as responsibility centres & evaluated individually for their performance.

## DEFINITIONS OF RESPONSIBILITY ACCOUNTING-

**Horngreen: defines** “Responsibility accounting is a system of accounting that recognizes various responsibility centres throughout the organisation and reflects the plans and actions of each of these centres by assigning particular revenues and costs to the one having the pertinent responsibility. It is also called profitability accounting and activity accounting”. According to this definition, the organisation is divided into various responsibility centres and each centre is responsible for its costs. The performance of each responsibility centre is regularly measured.

**Institute of Cost and Works Accountants of India defines Responsibility accounting as** “a system of management accounting under which accountability is established according to the responsibility delegated to various levels of management and a management information and reporting system instituted to give adequate feedback in terms of the delegated responsibility. Under this system divisions or units of an organisation under a specified authority in a person are developed as responsibility centres and evaluated individually for their performance.”

## ESSENTIAL FEATURES OF RESPONSIBILITY ACCOUNTING-

### 1. Inputs and Outputs or Costs and Revenues

- a. The implementation and maintenance of responsibility accounting system is based upon

information relating to inputs and outputs.

- b. The physical resources utilized in an organisation such as quantity of raw material used and labour hours consumed, are termed as inputs. These inputs expressed in the monetary terms are known as costs.

## **2. Planned and Actual Information or Use of Budgeting**

- a. Effective responsibility accounting requires both planned and actual financial information.
- b. It is not only the historical cost and revenue data but also the planned future data which is essential for the implementation of responsibility accounting system.

## **3. Identification of Responsibility Centres**

- a. The whole concept of responsibility accounting is focused around identification of responsibility centres.
- b. The responsibility centres represent the sphere of authority or decision points in an organisation.

In a small firm, one individual or a small group of individuals, who are usually the owners may possibly manage or control the entire organisation.

## **4. Relationship between Organisation Structure and Responsibility Accounting System**

- a. A sound organisation structures with clear-cut lines of authority—responsibility relationships are a prerequisite for establishing a successful responsibility accounting system.
- b. Responsibility accounting system must be so designed as to suit the organisation structure of the organisation.

## **5. Assigning Costs to Individuals and Limiting their Efforts to Controllable Costs**

- a. After identifying responsibility centres and establishing authority-responsibility relationships, responsibility accounting system involves assigning of costs and revenues to individuals.
- b. Only those costs and revenues over which an individual has a definite control can be assigned to him for evaluating his performance

## **6. Performance Reporting**

- a. A control system to be effective should be such that deviations from the plans must be reported at the earliest so as to take corrective action for the future. The deviations can be known only when performance is reported.
- b. Responsibility accounting system is focused on performance reports also known as 'responsibility reports', prepared for each responsibility unit.

## **PRE-REQUISITES OF RESPONSIBILITY ACCOUNTING**

- It should be a big company with divisionalised organisation structure.
- The organisation should have clearly set goals and targets.
- Managers should actively participate in establishing budgets against which their performance is measured.
- Managers are held responsible only for those activities over which they exercise significant degree of control.
- Performance reporting should be timely and contain significant information relating to the responsibility centres.

## CONCEPT OF RESPONSIBILITY CENTRE-

### RESPONSIBILITY CENTRE

- The main focus of responsibility accounting lies on the responsibility centres.
- A responsibility centre is a sub unit of an organization under the control of a manager who is held responsible for the activities of that centre.
- It is like a small business to achieve the objectives of a large organization.

#### 1. COST CENTRE

- A cost or expense centre is a segment of an organisation in which the managers are held responsible for the cost incurred in that segment but not for revenues.
- According to CIMA, London a cost centre is “a location person or equipment, for which costs may be ascertained and used for purposes of cost control”
- Responsibility in a cost centre is restricted to cost.
- For planning purposes, the budget estimates are cost estimates; for control purposes, performance evaluation is guided by a cost variance equal to the difference between the actual and budgeted costs for a given period.
- Cost centre managers have control over some or all of the costs in their segment of business, but not over revenues.
- In manufacturing organisations, the production and service departments are classified as cost centre. Also, a marketing department, a sales region or a single sales representative can be defined as a cost centre.

#### 2. REVENUE CENTRE

- It is a segment of the organisation which is primarily responsible for generating sales revenue.
- A revenue centre manager does not possess control over cost, investment in assets, but usually has control over some of the expense of the marketing department.
- The revenue centre manager will control the selling price, promotion mix and product mix

#### 3. PROFIT CENTRE

- Also called business centre
- It is a segment of an organisation whose manager is responsible for both revenues and costs.
- In a profit centre, the manager has the responsibility and the authority to make decisions that affect both costs and revenues (and thus profits) for the department or division.
- The managers are encouraged to act as if they were running their own separate business.
- The main purpose of a profit centre is to maximise profit by making decisions relating to production volume, product mix, selling price, marketing strategy.

#### 4. INVESTMENT CENTRE

- It is responsible for both profits and investments.
- The investment centre manager has control over revenues, expenses and the amounts invested in the centre's assets.
- He also formulates the credit policy which has a direct influence on debt collection, and the inventory policy which determines the investment in inventory.
- The manager of an investment centre has more authority and responsibility than the manager of either a cost centre or a profit centre.

## PREPARATIONS OF RESPONSIBILITY REPORT

Responsibility performance reporting implies the reporting phase of responsibility accounting. Responsibility reporting has two purposes:

- To determine the degree of performance in the area of responsibility for which the responsibility manager is directly responsible.
- To formulate measures to improve the performance of the responsibility centre manager.

The responsibility reporting should be suitable and relevant with respect to content, frequency of reporting and level of details required. In order to provide relevant contents in the report, only those items that are controlled by the particular responsibility centre manager should be reported. Frequency of reporting and the quantum of details in the report can be decided in terms of requirements.

Reports should fit the organization chart, that is, the report should be addressed to the individual responsible for the items covered by it, who, in turn, will be able to control those costs under his jurisdiction. Managers must be educated to use the results of the reporting system.

Report should be prompt and timely. Prompt issuance of a report requires that cost records be organized so that information is available when it is needed.

Reports should be issued with regularity. Promptness and regularity are closely tied up with the mechanical aids used to assemble and issue reports.

Reports should be easy to understand. Often they contain accounting terminology that managers with little or no accounting training find difficult to understand, and vital information may be incorrectly communicated. Therefore, accounting terms should be explained or modified to fit the user. Top management should have some knowledge of the kind of items chargeable to an account as well as the methods used to compute overhead rates, make cost allocations and analyze variances.

Reports should convey sufficient but not excessive details. The amount and nature of the details depend largely on the management level receiving the report. Reports to management should neither be flooded with immaterial facts nor so condensed that management lacks vital information essential to carrying out its responsibilities.

Reports should give comparative figures, i.e., a comparison of actual with budgeted figures or of predetermined standards with actual results and the isolation of variances.

Reports should be analytical. Analysis of underlying papers, such as time tickets, scraps tickets, work orders, and materials requisitions, provide reasons for poor performance which might have been due to power failure, machine breakdown, an inefficient operator, poor quality of materials, or many other similar factors.

Reports for operating management should, if possible, be stated in physical units as well as in terms of money since monetary information may give a foreman not trained in the language of the accountant a certain amount of difficulty.

Reports may tend to highlight departmental efficiencies and inefficiencies, results achieved future goals or targets.

Responsibility reports help each successively higher level of management in evaluating the performances of subordinate managers and their respective organizational units. The reports should be tailored to fit the planning, controlling and decision making needs of subordinate managers and should include both monetary and non- monetary information.

## Responsibility Report for Cost Centres

(₹)

General Manager	Actual Cost	Budgeted Cost	Variance
Sales Department	3,65,000	3,75,000	(+)10,000
Production Department	3,75,000	3,75,000	-
Office and Administration	1,10,000	1,15,000	(+) 5,000
Interest on loans	20,000	15,000	(-) 5,000
Total	8,70,000	8,80,000	(+)10,000

(₹)

Production Manager	Actual Cost	Budgeted Cost	Variance
Mfg. section	94,000	96,000	(+) 2,000
Testing section	1,20,000	1,21,000	(+) 1,000
Assembly section	1,61,000	1,58,000	(-) 3,000
Total	3,75,000	3,75,000	-

(₹)

Foreman (Manufacturing Division)	Actual Cost	Budgeted Cost	Variance
Direct materials	50,000	48,400	(-) 1,600
Direct labour	31,000	34,000	(+) 3,000
Indirect labour	12,000	12,000	-
Supplies	1,000	1,600	(+) 600

Total	94,000	96,000	(+) 2,000
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### Analysis:

It is observed from the above that, each responsibility report contains items and information which are required by the concerned responsibility centre manager and which are within his responsibility area.

Similarly, Responsibility Reports can also be prepared for other centres.

## SOLVED ILLUSTRATIONS & CASES

### Illustrations 1.

The processing department of a large company informs the marketing department that the price of processing 2,00,000 items will be ₹50,00,000. The marketing department submits the material for the item two weeks later than originally planned and tells the processing department that the scheduled date of completion has been advanced two weeks. In order to achieve the new schedule, the processing department incurs an additional production cost of ₹16,00,000.

- (i) In an organization using responsibility accounting, where would the additional costs be assigned? Would these costs be considered controllable costs? What effect might this have on future printing orders from the marketing department?
- (ii) In an organization that does not use responsibility accounting, where would the various costs be assigned? What effect might this have on future printing orders from the marketing department?

### Solution:

- (i) In an organization using responsibility accounting, the originally quoted price of ₹ 50,00,000 plus the additional cost of ₹16,00,000 would be assigned to the marketing department. This would be considered a controllable cost. The long-range effect might be that the marketing department will become more cost-conscious and will plan activities better.
- (ii) In an organization that does not employ responsibility accounting; the additional production costs most probably would be assigned to the processing department. There would be no motivation by the marketing department to adhere to scheduled dates or to plan processing needs in a better fashion.

### Illustration 2

The receipt of raw materials used in the manufacture of products and the shipping of finished goods to customers are under the control of the warehouse supervisor. Approximately 60% of the warehouse supervisor's time is spent on receiving activities and 40% on shipping activities. Separate employees handle the receiving and shipping operations. The labour-related costs for the warehousing function are as follows:

Warehouse supervisor's salary

₹40,000

Receiving clerks' wages	₹75,000
Shipping clerks' wages	₹55,000
Employee benefit costs (30% of wage and salary costs)	₹51,000
	₹2,21,000

The company employs a responsibility accounting system for performance reporting purposes. The costs are classified on the report as period or product costs. You are required to state the total labour-related costs to list on the responsibility accounting performance report as product costs under the control of the warehouse supervisor for the warehousing function.

**Solution:**

This question focuses on product costs that are under the control of the warehouse supervisor. The supervisor controls both receiving and shipping, but shipping is a selling cost. Thus shipping is a period cost that is expensed in the period in which it is incurred, so shipping costs are not product costs. Therefore, the costs for the shipping department are not part of the answer, even though they are controllable by the warehouse supervisor. The supervisor's salary is not controlled by the supervisor, so that is not a part of the answer, either. The labour-related product costs that the supervisor can control include only the wages and benefits of the receiving department. The receiving clerks' wages are ₹75,000 and their benefits are 30% of this amount (₹22,500). Therefore, the supervisor controls ₹ 97,500 of costs (₹75,000 + ₹ 22,500).

**Illustration 3**

The following information for R & Co. for the prior year:

- The company produced 1,000 units and sold 900, both as budgeted.
- There were no beginning or ending work-in-process and no beginning finished goods inventory.
- Budgeted and actual fixed costs were equal, all variable manufacturing costs were affected by production volume only, and all selling variable costs were affected by sales volume only.
- Budgeted per unit revenues and costs were as follows:

Sales price	₹100
Direct materials	₹30
Direct labour	₹20
Other variable manufacturing costs	₹10
Fixed manufacturing costs	₹5
Variable selling costs	₹12
Fixed selling costs (₹3,600 total)	₹4
Fixed administrative costs (₹1,800 total)	₹2

Calculate the contribution margin earned by R & Co. for the prior year

**Solution:**

Contribution margin is calculated as sales revenue minus the variable costs for the units sold. The sales price is ₹100 per unit and the variable costs total ₹72 per unit: Direct Material - ₹30; Direct Labour - ₹20; other variable manufacturing costs - ₹10; Variable selling costs - ₹12. Thus, contribution is ₹28 per unit (₹100 – ₹72). 900 units were sold, giving a contribution margin of ₹ 25,200.

**Illustration 4**

The Hind Company allocates national magazine advertising cost to territories on the basis of circulation, which is determined by an index that measures relative buying power in the territories. Top management wants to know if this method of allocation gives appropriate cost and benefit figures to make the following decisions:

- (a) For deciding whether or not to close an unprofitable territory
- (b) For deciding whether or not a territorial manager has obtained sufficient sales volume
- (c) For determining how efficiently the territorial manager has operated the territory
- (d) For determining whether or not advertising costs are satisfactorily controlled

**Solution:**

The answers are as follows.

- (a) It is not appropriate for deciding to close the territory. Closing the territory will not change the amount of national advertising expenses. For deciding what action to take with respect to the territory, the segment margin (sales less variable expenses less direct territorial fixed expenses) should be compared with the amount of cost that can be saved by closing that territory. This will show whether or not the territory is making a contribution to costs that will continue regardless of the decision.
- (b) It may be appropriate for concluding that a territorial manager has obtained sufficient sales volume. National advertising is one of the general distribution costs to be allocated to territories if there is evidence of cause-and-effect relationships.
- (c) The method is not appropriate. A territorial manager should be judged on the basis of expenses that he or she has to control. By its nature, national advertising must be centrally controlled.
- (d) It is not appropriate to allocate national advertising costs to territories from a control standpoint. Control can be exercised only over the total expenditure for national advertising and at the source; control is not aided by allocating this total to territories.

The following concepts are highlighted in the contribution approach to cost allocation:

- Contribution margin -Sales less variable costs.
- Contribution controllable by segment managers - Contribution margin less direct fixed costs controllable by segment managers. Direct fixed costs include discretionary fixed costs such as certain advertising, research and development, sales promotion, and engineering.

- Segment margin - Contribution controllable by segment managers less fixed costs controllable by others. Fixed costs controllable by others include such traceable and committed fixed costs as depreciation, property taxes, insurance, and the segment managers' salaries.
- Net income - Segment margin less unallocated common fixed costs.

### **Illustration 5**

You have a client who operates a large retail self-service grocery store that has a full range of departments. Management has encountered difficulty in using accounting data as a basis for making decisions concerning possible changes in departments operated, products, marketing methods, and so forth. List several overhead costs, or costs not applicable to a particular department, and explain how the existence of such costs (sometimes called common costs or joint costs) complicates and limits the use of accounting data in making decisions in such a store.

#### **Solution:**

There are many examples of "common" costs to the sales department of a self-service grocery store. Some are rent, supervision, trucking, and advertising.

Common costs are usually apportioned on various arbitrary bases to the sales departments, but for numerous managerial decisions such apportionments produce misleading results. Decisions as to discounting a department, adding a department, enlarging a department, or decreasing a department cannot be made based on the data produced from the apportionments. For example, if a department is discontinued because it appears to be unprofitable, it may be determined that the costs of other departments will increase as a result of having to absorb more of the shared common costs. Thus, the overall operating results will be less favorable if the "unprofitable" department is discontinued.

### **Illustration 6**

The monthly service charge a bank makes on a customer's checking account is based on the cost of handling each account. A customer disagrees with this policy because she cannot see how it is possible to determine the exact cost of handling her account. Do you agree with the customer? Discuss fully the problems involved in determining cost for such a service, including the limitations of the cost figures obtained.

#### **Solution:**

This is a problem involving fixed and common costs. Within considerable limits, the cost of operating a bank would not change because of the addition of new accounts or the loss of old ones. The depreciation and other costs associated with the bank building, fixtures and equipment, salaries of officers, and other such items are fixed costs of operation within very wide limits. There would have to be a considerable change in the number of accounts before there would be any noticeable impact on those fixed costs. There is also a question of joint use of facilities among the various phases of bank operations. For example, the vault houses not only the files of commercial accounts, but also the savings account records, collateral on loans, coins and bills, and many other types of property and records. Unless the bank is large and the work highly specialized, a teller will handle a good many types of operations during a working day. A given official may make loans, open new accounts, advise customers as to investments,

and so on. It would be extremely difficult to assign many of such operating expenses to any particular type of operation, let alone any account.

The problem of determining a reasonable and useful cost for handling an account involves obtaining data related to costs of functions and number of transactions handled, so that the direct or semi direct costs may be determined. The average labour cost per transaction for tellers and for transit, clearings, and bookkeeping functions can be obtained with considerable accuracy. Then it becomes necessary to allocate costs of all other necessary functions to these and other principal banking operations. Like all allocations of fixed or indirect overhead, the allocations will be arbitrary, but they can be made in a reasonable and logical manner by using appropriate bases.

While the costs obtained from such an accounting procedure may be useful for setting service charges, it must be recognized that they do have one important limitation. They are average costs and not “differential costs.” Therefore, they have limited usefulness for certain types of management decisions relating to expansion or contraction of services or changes in operations.

### **Illustration 7**

Consider each of the following scenarios:

- (i) Mr. P K. Dhawan, plant manager for the laser printer factory of Bharat Co. brushed his hair back and sighed. December had been a bad month; two machines had broken down, and some direct labourers (all on salary) were idled for part of the month. Materials prices increased, and insurance premiums on the factory increased. No way out of it —costs were going up. He hoped that the marketing VP would be able to push through some price increases, but that really wasn't his department.
- (ii) Ms. Sonam Kapoor was delighted to see that her ROI figures had increased for the third straight year. She was sure that her campaign to lower costs and use machinery more efficiently (enabling her factories to sell several older machines) was the reason why she planned to take full credit for the improvements at her semi- annual performance review.  
For each of the above independent scenarios, indicate the type of responsibility center involved (cost, revenue, profit, or investment).

### **Solution:**

- (i) Cost center — Total cost
- (ii) Profit center — Operating Income

**Hint:** For explanation of the same, please read the relevant portion of the Study Module.