

7

Costing of Service Sector

LEARNING OBJECTIVES:

After finishing this chapter, you will be able to understand and appreciate the peculiarities involved in the costing of service sector. Through this chapter you will gain an understanding as to the various methods applied by service sector entities to determine their unit costs.

7.1 INTRODUCTION

Service sector companies provide their customers with services or intangible products. The activities of service sector may be used for both: (i) Provision of services to outside customers (ii) Provision of services internally (i.e. captive consumption). The types of services that may be provided, by service sector are of diverse nature and have their own peculiarities and requirements in respect of the cost accounting treatment, however, the general principles of costing discussed in earlier chapters relating to manufacturing sector also apply to service sector.

7.2 MAIN CHARACTERISTICS OF SERVICE SECTOR

- (i) Activities are labour intensive: Due to their inherent nature, the activities of service sector are generally labour intensive. The direct material cost is either small or non-existent. The labour cost (i.e. salary and wages) constitutes a significant portion of the total operating costs of a service sector entity. For example, cost of stationery used by a professional consultant for expressing an opinion in black and white, for a client will be small or even non existent in case he gives verbal opinion. In the preceding example direct labour cost (i.e. the salary of the consultant) constitutes a significant portion of the total operating cost as compared to the material cost which constitutes a negligible portion.
- (ii) Cost-unit is usually difficult to define: The selection of cost unit for service sector is relatively difficult to ascertain as compared to the selection of cost unit for manufacturing sector.



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The following table provides some examples of the cost units for service sector.

(A) To External Customers Cost Unit

(i) Hotel Bed nights available, Bed night occupied

(ii) School Student hours, Full time students

(iii) Hospital Patient per day, Room per day

(iv) Accounting firm Charged out client hours

(v) Transport Passenger km., quintal km.

(B) Internal services Cost Unit

(i) Staff canteen Meals provided, No. of staff

(ii) Machine maintenance Maintenance hours provided to user department

(iii) Computer department Computer time provided to user department

(iii) **Product costs in service sector:** Costs are classified as product or period costs in manufacturing sector for various reasons viz.

- (i) To determine the unit manufacturing costs so that inventories can be valued and the selling prices be determined & verified.
- (ii) To report production costs on income statement.
- (iii) To analyse costs for control purposes.

The only difference between manufacturing and service sector is that in service sector there is no physical product that can be stored, assembled and valued. Services are rendered and cannot be stored or placed in a vault. In service sector the cost of material is insignificant. Rendering a loan service, representing someone in court of law or selling an insurance policy are typical services performed by professionals. For computing unit cost of these services the most important cost would be professional's labour cost. The direct labour cost is traceable to service rendered. In addition to labour cost the service sector like manufacturing sector incurs various overhead cost. In service sector those overhead costs which are incurred for offering a service are classified as service overhead (like factory overhead in manufacturing sector). In order to arrive at the correct cost incurred for rendering services, it is imperative that such overheads be allocated/apportioned over the cost units.

7.3 COLLECTION OF COSTING DATA IN SERVICE SECTOR

Costs are accumulated under various heads for control purposes and for decision making. Costs thus, collected are usually grouped under fixed costs and variable costs. The format in which costs data is presented depends upon the nature of industry and the need of the



management. In the Cost Accounting book of PE-II level we have discussed in the chapter of operating costing the costing methods appropriate for different types of service sector i.e. Transport Sector, Hospital, Hotel, College etc. Often composite cost units such as passenger km, bed, nights etc. are used by these organisation for ascertaining the cost per unit in respect of these services respectively. For preparing a cost sheet under operating costing, costs are usually accumulated for a specified period viz. a month, a quarter or year etc. Since there is no direct relationship between the costs and level of services there is tendency in service sector to view all the costs as over- heads. If such a view is taken the cost control will be achieved by controlling the inputs rather than the outputs i.e. control will be relatively ineffective. This gives an impetus for the application of Activity Based Costing in service sector, with a desire to secure better understanding of costs, as an aid to decision making and cost control. Although the Activity Based Costing was initially developed for manufacturing sector, it can be applied with equal effectiveness to service sector for understanding cost behaviour of service sector entities as well.

7.4 COSTING METHODS USED IN SERVICE SECTOR

Like manufacturing sector companies in the service sector, generally adopt one out of the following two basic costing methods to assign costs to services. These are:

- Job costing method: In job costing method the cost of a particular service is obtained
 by assigning costs to a distinct identifiable service. In service sector like Accounting firm,
 Advertising campaigns etc. job costing method is used. For assigning indirect costs
 (overheads) models such as Activity Based Costing may be used.
- 2. **Process costing method:** In process costing system the cost of a service is obtained by assigning costs to masses of similar unit and then computing unit cost on an average basis. Retail banking, Postal delivery, Credit card etc. uses process costing method.
- 3. **Hybrid costing method:** Many companies uses a method of costing which is neither job costing nor process costing method. They in fact uses a hybrid costing method which combines elements of both job costing and process costing methods.

The job costing and process costing for manufacturing sector have been discussed in the Cost Accounting book of PE-II level. The same cost principles as discussed for manufacturing sector will apply to service sector.

- **7.4.1 Job costing method in service sector:** The two significant costs which are incurred in service sectors are :
- (i) Direct labour
- (ii) Service overheads

For ascertaining the price of a service provided by service sector if job costing method is followed, the costs for each job are to be monitored continuously. There are two main uses of this job cost information :



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- 1. To guide decisions on job pricing
- 2. To assist in enhancing profitability by cost planning and cost control

The five steps which are generally adopted for assigning costs to individual jobs are as follows:

Cost Accumulation

- (i) Identify the job that is chosen as cost object: For instance, litigation work for Motorola India Ltd. by Dua & Associates by assuming that work requires 100 budgeted hours of professional labour.
- (ii) Identify the direct cost categories for the job: In the above example the professional hours required for doing litigation work is a direct cost.
- (iii) Identify indirect costs (overheads) associated with the job: This step requires identification of indirect costs incurred for providing services. These costs may include the costs of support labour, computer time, travel, telephone/fax machine, photocopying etc.

Cost Allocation

- (iv) Select the cost allocation base to be used in assigning each indirect cost to the job: This step requires the selection of cost allocation base that has a cause and effect relationship between changes in it and changes in the level of indirect costs. The allocation base suitable for allocating indirect cost of law firm is professional labour hours.
- (v) Identify the rate per unit of the cost allocation base used to allocate cost to the job: The budgeted indirect cost allocation rate is computed by using following formula

Budgeted total quantity of cost allocation base

Budgeted total indirect cost

Budgeted total indirect cost

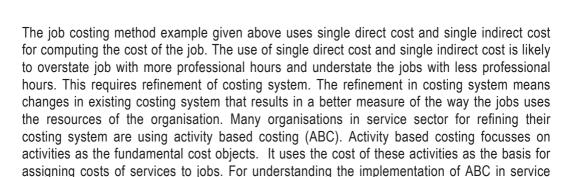
The indirect cost of job is computed as = Budgeted indirect cost rate × Professional labour

hours reqd. for job

Example

Dua and Associates is a law firm specialising in carrying out litigation work for clients. It has 25 professionals who work for clients (5 partners and 20 associates). The average budgeted total compensation per professional for 1999 is Rs. 1,04,000. Each professional is budgeted to have 1,600 billable hours to clients in 1999. Dua and Associates is a highly respected firm and all professionals work for clients to their maximum 1,600 billable hours. All professional labour costs are traceable to jobs on a per hour basis. The budgeted indirect cost (legal support) in 1999 is Rs. 22,00,000. The indirect costs are allocated to the jobs using professional labour hours as the allocation base. In this example for ascertaining the cost of job company consider single direct cost rate (i.e. Professional labour) and single indirect cost rate.





In the above example Dua and Associates for refining its costing method reviewed its work activities and collected information about how each litigation work vary in their use of resources. They identified that the direct costs are of the following five categories. These are:

- Professional Partner labour
- 2. Professional Associate labour

sector consider the above example.

- 3. Office support labour.
- 4. Phone/fax/photocopying: Traced on as identified basis or per monthly billing from third parties.
- 5. Travel: Traced on as identified basis, per monthly billing from third parties.

Similarly, indirect costs are identified into two categories. These are:

- 1. *General support:* The allocation base is budgeted professional labour hours.
- 2. Out of town support: The allocation base in law firm is lawyer days at non-local site.

With refined costing system service organisation has more accurate cost information for services. This helps them to adjust their pricing policies for services

7.4.2 Process costing method in service sector: In this method the cost of service is obtained by assigning costs to masses of units and then computing unit costs on an average basis. Let us explain this with an illustration.

Illustration

The loan department of a Canara Bank performs several functions in addition to home loan application processing task. It is estimated that 25% of the overhead costs of loan department are applicable to the processing of home-loan application. The following information is given concerning the processing of a loan application:



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Direct professional labour:

	Rs.
Loan processor monthly salary :	80,000
(4 employees @ Rs. 20,000 each)	
Loan department overhead costs (monthly)	
Chief loan officer's salary	5,000
Telephone expenses	750
Depreciation Building	2,800
Legal advice	2,400
Advertising	400
Miscellaneous	650
Total overhead costs	<u>12,000</u>

You are required to compute the cost of processing home loan application on the assumption that one hundred home loan applications are processed each month.

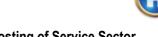
Solution:

Statement showing computation of the cost of processing a typical home loan application

	Rs.
Direct professional labour cost	80,000
(4 employees @ Rs.20,000 each)	
Service overhead cost (25% of Rs. 12,000)	3,000
Total processing cost per month	83,000
No. of applications processed per month	100
Total processing cost per home loan application	830

7.4.3 Customer Costing in service sector: The customer costing is a new approach to management. The central theme of this approach is customer satisfaction. In some service industries, such as public relations, the specific output of industry may be difficult to identify and even more difficult to quantify. Further, where there are multiple customers, identifying support activities i.e. common costs with particular customer may be more problematic. In such cases, it is important to cost customers. An analysis based on Activity Based Costing of customers profitability provides valuable information to help management in pricing customer. Consider a banking sector. A bank's activities for customer will include the following types of activities. These are:





- (i) Stopping a cheque
- (ii) Withdrawal of cash
- (iii) Updation of pass book
- (iv) Issue of duplicate pass book
- (v) Returning a cheque because of insufficient funds
- (vi) Clearing of a customer cheque.

Different customers or categories of customers use different amount of these activities and so customer profiles can be build up and customer can be charged according to the cost to serve them

For example (i) In Computer Institute the cost of providing a course for enrolled students may be determined by a variety of factors, such as type of course (Oracle or Java) and the level of course (introduction or advanced). (ii) A hotel may have activities that are provided for specific types of customers such as well laid gardens, swimming pool and a bar. Older guest may appreciate and use the garden, families the swimming pool and business quests the bar. If the activities are allocated to relevant guest a correct cost per bed occupied can be calculated for each type of category.

For customer costing purpose, the costs are divided into following categories. These are:

- Customer Specific costs: These are the direct and indirect cost of providing service to each customer plus customer related cost assigned to them. For example cost of express courier service to a client/customer who requests overnight delivery of some agreement.
- (ii) Customer-line categories: These are the cost which are broken into the broad segments of customers and not individual customer.
- (iii) Company costs: These are those costs which are not allocated to either customer line or individual customers but charge to company. The example is the cost of advertisement to promote sale of service.

7.5 PRICING OF SERVICE SECTOR

In the chapter of pricing strategies and transfer pricing in this book we have discussed the methods followed for pricing by manufacturing sector. The service sector follows a different approach for pricing their service. Although a service has no physical existence it must be priced and billed to customers. Most service organizations use a form of time and material pricing to arrive at the price of a service. Service companies such as appliance repair shops, automobile repair business arrive at prices by using two computations, one for labour and other for materials and parts. As with a cost based approach a mark up percentage is used to add the cost of overhead to the direct cost of labour, materials and parts. If materials and



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parts are not part of service being performed, then only direct labour costs are used as basis for determining price. For professionals such as accountants and consultants a factor representing all overhead costs is applied to the base labour costs to establish a price for the services.

Illustration

Motorcraft has just completed repair work on Car No. DL 6CB 2051 of Mr. X. The parts used to repair the vehicle cost Rs. 500. The company's 40% mark up rate on parts covers parts—related overhead costs. Labour involved 9 hours of time from a Motorcraft service engineer whose wages are Rs. 50 per hour. The current overhead work up rate on labour is 80%. You are required to compute how much Mr. X will be billed for his car repairs.

Solution:

Computation of the amount Mr. X should be billed for his car repairs. Parts charges:

	Rs.	Rs.
Repairs parts used	500	
Overhead charges		
(40% of Rs. 500)	<u>200</u>	
Total parts charges	700	
Labour charges:		
9 hours @ Rs. 50 per hour	450	
Overhead charges		
(80% of Rs. 450)	<u>360</u>	
Total labour charges		<u>810</u>
Total billing amount		<u>1510</u>

Self Examination Questions

- 1. Mention the main characteristics of service sector.
- 2. Explain briefly the costing methods which are used in service sector for ascertaining the costs of services rendered.
- 3. Write be short notes on:
 - (i) Customer costing in service sector.
 - (ii) Pricing by service sector.