E-Content for M.Com Semester-IV

SUBJECT-COMEC 2

ADVANCED COST ACCOUNTING

UNIT-II

Services Costing

TOPICS-Cost Collection

Transport Costing

Fixed, Running & Maintenance Charges

Log Sheet

The Related Numerical Problems

S.S Prasad
Associate Professor
Vanijya Mahavidhalaya
Patna University, Patna
E-mail:ssprasad1421@gmail.com

Mobile No: 9431662241

Services Costing

Meaning and Definition

Service costing is also known as Operating Costing is used for establishing costs of services rendered or services are offered for sale and no items are produced. Service costing is used in service organizations like Transport companies, Hotels, Hospitals, Power generation, Boiler houses etc.

CIMA defines service costing as "cost accounting for services or functions (e.g. canteen, maintenance, personnel). These may be referred to as service centres, departments or functions".

Operating cost applies where standardized services are provided by an undertaking or by a service cost center within an undertaking.-ICMA England.

NATIONAL INCOME (2018-2019)

Agriculture -17%

Industry –29.6%

Service sector –54.3%

The role of service sector in national economy has become significant nowadays. The term service is being used extensively under different contexts. It means services rendered by various departments within the organization or organizations providing services to outside firms, viz personnel, maintenance, canteen, hospitals, boiler house, captive power units, hotels, road maintenance, water supply transport- goods and passengers, educational institutions, firms-law, accounting and management consultancy, electricity companies and computer service departments. Such service organizations render a variety of services.

The basic features of service costing are as follows:

- a. Services are standardized.
- b. Investment in fixed assets is high and working capital is low.

c. Major portion of the total cost is fixed cost.

Hence, the cost per unit of service rendered is affected by the economies and sale of operations.

Cost per unit will decrease if more units of services are rendered. For example, in a passenger transport company, if buses run fully capacity, the cost per passenger will be lower than that if buses do not run full capacity.

Cost unit

The selection of cost unit is different in operating costing. There are simple cost units and composite cost units. In simple cost units the unit is obvious, for example, per student, per mile, per bed etc. In composite cost unit, more than one unit is combined for example:

Name of the Service/Undertaking	Cost unit
Passenger transport	Per passenger kilometre
Goods transport	Per tonne kilometre
Hospital	Per patient bed, Per patient day or week
Electricity supply	Per kilowatt hour (KWH)
Canteen	Per meal person
Cinema theatre	Per man show
Gas works	1,000 cubic feet produced
Steam production	1,000 Ibs. raised
Lodge	Per person per day

Service Costing vs. Output Costing

Service costing	Output costing	
1. The cost of direct materials consumed will be relatively small as compared to cost of labour and other expenses.	The cost of direct materials often a greater proportion to the total cost.	
2. Generally a multiple cost unit is adopted like Tonne-kilometre, Room-day, Kilowatt hour etc.	2. Simple cost unit is applied like no. of units produced.	
3. The procedure for recording different costs will vary according to the nature of service.	3. Costing procedures are similar for all output manufacturing companies.	
4. Services may be varying for internal consumption or for revenue earning.	4. Output is always meant for sale to external customers.	
5. Costs are generally analyzed into fixed and variable costs for collection and control purposes.	5. Normal costing principles and procedures are followed for collection and control of costs. Costs are accumulated as Prime Cost, Factory Cost, Cost of Production and Cost of goods sold, etc.	

Transport Costing

Transport operating costing is applied in those organizations where services are provided for carriages of passengers, carriage of goods from one place to another. Though, transport services can be related to air, water and land. But here the study deals with the cost of transport service specificity provided by means of land especially by bus or truck.

Objectives

- 1. To ascertain the cost per unit of operating the vehicles and to fix the rates for the carriages of goods or passengers.
- 2. To compare the cost per unit of motor vehicles with the cost of other means of transport and to find out the profitable routes.
- 3. To compare the cost of one motor vehicles with the cost of other mother vehicle. This helps to ascertain the efficiency of each vehicle and to control the cost of each vehicle.
- 4. To keep a control over the cost of petrol, lubricants and maintenance.
- 5. To help to fix hire charges of vehicles where the vehicles are given on hire.
- 6. To help to apportion the cost of transport in different departments availing of services of transport.

Collection of Costs

Like job or contact costing, each vehicle is given a distinct number. All the basic documents of that vehicle will contain the number. The driver has a separate daily report or log book for each vehicle. It will give the performance statistics of each vehicle. It will be helpful for the ascertainment of cost control. All the details of the cost incurred in the course of the day can be known from the log book.

Selection of units

In transport costing, the cost unit is passenger kilometer or tonne kilometer or composite unit.

By this we can ascertain the cost of carrying a load of one tonne or a passenger for a kilometer.

Operating Cost Sheet/Cost statement

A separate cost sheet for each vehicle is maintained by the cost accounting department. Every month a vehicle operating statement is prepared. Total fixed costs, operating maintenance charges are collected .This will be posted to

respective vehicles. These are divided by the total units (tonne miles or passenger miles) to arrive at average unit cost.

Cost per Unit= Total cost during the period

Number of service units during the periods

In cost sheet, generally the expenses are divided in to two heads.

- 1. Standing or fixed expenses
- 2. Variable charges

But in case of service operating institutions expenses are divided into three heads being:

- 1. Standing charges
- 2. Maintenance charges
- 3. Running charges

1. Standing Charges

These expenses are of fixed nature and have to be incurred even if the service is being rendered or not rendered. Such expenses include:

- Rent of buildings
- Managers, supervisors & Office staff salaries
- Insurance
- License fees
- Road tax
- Interest on Capital
- Office & Administrative expenses, etc.

2. Maintenance Charges

This category of expenses includes all these expenses which are essential to maintain the services in proper running condition. They may be

- Repairs
- Maintenance and General Servicing
- Oiling and Greasing of Machines and Tools
- Stores
- General Expenses and Equipment etc.

3. Running Expenses

These are of variable nature and depend up on the quantum of services rendered. These may be:

- Oil and Fuel
- Salary of Operators
- Commission allowed
- Bad Debts
- Depreciation etc.

PROFORMA

Operating Cost Sheet

Amount A. Standing Charges: Depreciation of which (period basis or percentage basis) Insurance of vehicle Tax, License fee etc. Interest Administration Expenses B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	Vehicle No	Month ended
A. Standing Charges: Depreciation of which (period basis or percentage basis) Insurance of vehicle Tax, License fee etc. Interest Administration Expenses B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	Carrying Capacity	
Depreciation of which (period basis or percentage basis) Insurance of vehicle Tax, License fee etc. Interest Administration Expenses Sub-Total B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil & Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		Amount
Insurance of vehicle Tax, License fee etc. Interest Administration Expenses B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses CLeaning Expenses CLeaning or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	A. Standing Charges:	
Insurance of vehicle Tax, License fee etc. Interest Administration Expenses B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses CLeaning Expenses CLeaning or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	· · ·	
Interest Administration Expenses Sub-Total B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil & Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation-Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Interest Administration Expenses Sub-Total B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil & Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation-Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	Tax, License fee etc.	
B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Passenger-km E. Revenue		
B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Passenger-km E. Revenue	Administration Expenses	
B. Maintenance Charges: Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km =Total Operating Cost Total Ton-km Operating Cost per Passenger km =Total Operating Cost Total Passenger-km E. Revenue		Sub-Total
Garage Staff Salaries Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	B. Maintenance Charges:	
Garage Other Expenses Repairs & Renewals Overhauling Expenses Cleaning Expenses Cleaning Expenses Sub-Total C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Repairs & Renewals Overhauling Expenses Cleaning Expenses Sub-Total C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	-	
Overhauling Expenses Cleaning Expenses Sub-Total C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Cleaning Expenses Sub-Total C. Operating or Running Charges: Petrol Oil & Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	•	
C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
C. Operating or Running Charges: Petrol Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	8 P	Sub-Total
Petrol Oil & Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	C. Operating or Running Charges:	
Oil &Grease Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Salaries of Running Staff Driver Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Driver Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Mechanic Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Cleaner Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Depreciation- Tyres Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Battery Sub-Total D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
D. Total Operating Cost (A+B+C) Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	Dattery	Sub-Total
Operating Cost per ton km = Total Operating Cost Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue	D. Total Operating Cost $(A \perp B \perp C)$	540-10441
Total Ton-km Operating Cost per Passenger km = Total Operating Cost Total Passenger-km E. Revenue		
Operating Cost per Passenger km = <u>Total Operating Cost</u> Total Passenger-km E. Revenue		
Total Passenger-km E. Revenue		
E. Revenue		
H Not Protif	F. Net Profit	
G. Tonne-Kilometre Carried		

H. Cost per Tonne-kilometre

Example:

Prepare a statement of Operating Cost per passenger km for bus for the month of August 2018 from the following particulars. Also calculate profit for the month.

Cost of Bus	₹40,000
Estimated Life of the Bus	80,000 km
Km during the month of August	2,000
Average number of passengers per km	50
Salaries of drivers, conductors and cleaners etc.	₹1,000
Insurance	₹50
Road tax	₹30
License fee	₹80
Staff salaries	₹500
Garage rent	₹200
Petrol	₹600
Depreciation on tyres	₹100
Repairs and maintenance expenses	₹200
Terminal office expenses	₹500
Bus fare per passenger km	₹0.06

Solution	Statement of Operatin	g Cost Per	riod: August 2018
(A)Standing Charges	}		₹
Salaries of driver	s, conductors and cleansers, etc.		1,000
Insurance			50
Road tax			30
Licence fee			80
Staff salaries			500
Garage rent			200
Terminal office e	expenses		500
		Total Standing Charges	2360
(B)Maintenance Cha	rges:		
Repairs and main	tenance expenses		200
		Total maintenance Charge	es 200
(C)Running Charges			
	vehicle (40,000/80,000) x 20,000		1,000
Petrol	(., ,, , , , ,		600
Depreciation on	tyres (assumed to be variable)		100
		Total Running Charges	1700
	·	Total Costs (A) + (B) +	(C) 4260

	Passenger km
Operating cost per passenger km	₹ 0.0426
Total fare during the month (₹0.06 x 1, 00,000)	₹ 6,000
Profit earned during the month (₹6,000- 4260)	₹1,740

References:

- 1. Cost Accounting
 - Ravi M. Kishore (Taxmann, New Delhi)
- 2. Cost Accounting
 - V. Rajasekaran
 - Prabhakar Rao (PEARSON)
- 3. Cost Accounting
 - Prof M.L Agarwal
 - Dr. K.L Gupta
 (Sahitya Bhawan Publication)
- 4. Cost Accounting
 - Dr. P.C Tulsian (S.Chand)
