Chapter 2 – Product Costing Concepts and Systems

LO 1: Understand and apply the concepts of cost, opportunity cost, committed cost, fixed cost, variable cost and sunk cost.

Opportunity cost: The highest foregone value that could be obtained from the sacrifice of a resource.

LO 2: Understand and explain the concept and measurement of the out-of-pocket or cash cost and the accounting or accrual cost.

Cash or out-pocket-cost: The incremental cost paid by cash or credit to achieve a particular purpose.

LO 3: Understand an explain variable cost, committed cost, fixed cost and sunk cost.

Variable costs: Costs which vary in direct proportion to production values.

Committed costs: Costs incurred because of policies or contractual obligations. Committed costs reflect management decisions and any decision can be changed – at some cost.

Discretionary costs: Comparable with committed costs but can be changed quickly and easily.

Fixed costs: A matter of the scale of decision-making and the divisibility of the resource, which does not change in total within a defined range of underlying productive activity. Thus, a fixed cost reflects a capacity decision.

Decisions cause costs – and we stress again that costs do not just happen – but no resource decisions are irreversible. Because all future costs are variable with respect to some decision, no future cost really can be truly fixed.

Sunk costs: Cannot be change by any future decision.

Accrual cost: An average cost: Dividing the total cost of resources used during an extended time period (e.g., a year) divided by a measure of the resources used to pick up orders. The total accrual costs includes the previously calculated, out-of-pocket fuel costs plus the previously left-out committed costs.

LO 4: Explain product cost, period cost, expense direct cost and indirect cost.

The concept of cost used most often for financial and tax reporting is accrual cost.

Cost accounting system: Accumulates and reports accrual costs for external reporting.

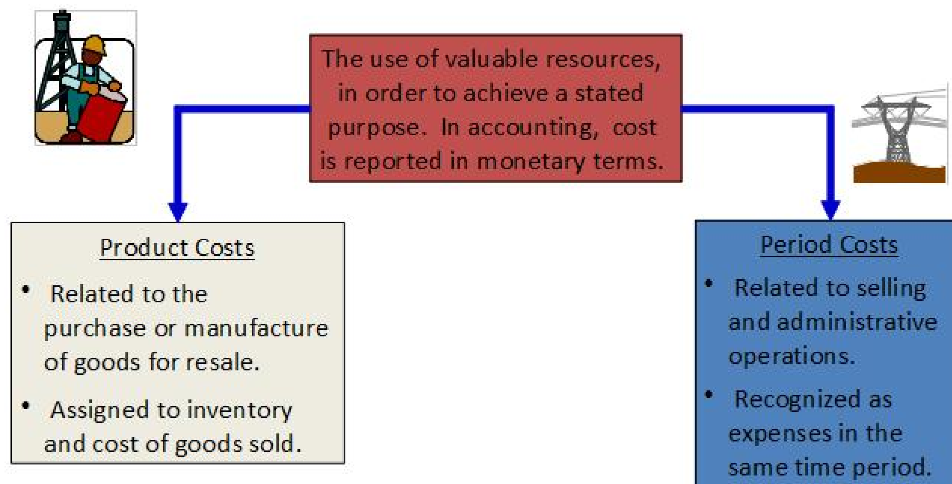
Expense: Is the measure of the cost incurred when a resource is consumed or sold for the purpose

of generating revenue. Expenses are matched to revenues to measure income. The terms product cost and period cost reflect the business transactions that cause their conversion into expenses.

Product cost: A cost assigned to goods that were either purchased or manufactured for resale. An historical cost of the inventory of manufactured or purchased goods until the goods are sold.

Cost of sales: The cost of product inventory acquired by a retailer or wholesaler from a manufacturer for resale consists of the purchase cost of the inventory plus any shipping charges.

Period cost: Any cost that is not a product cost. For external reporting purposes.



LO 5: Analyse the product costs of typical manufacturing, retail and service firms for decision making and evaluations.

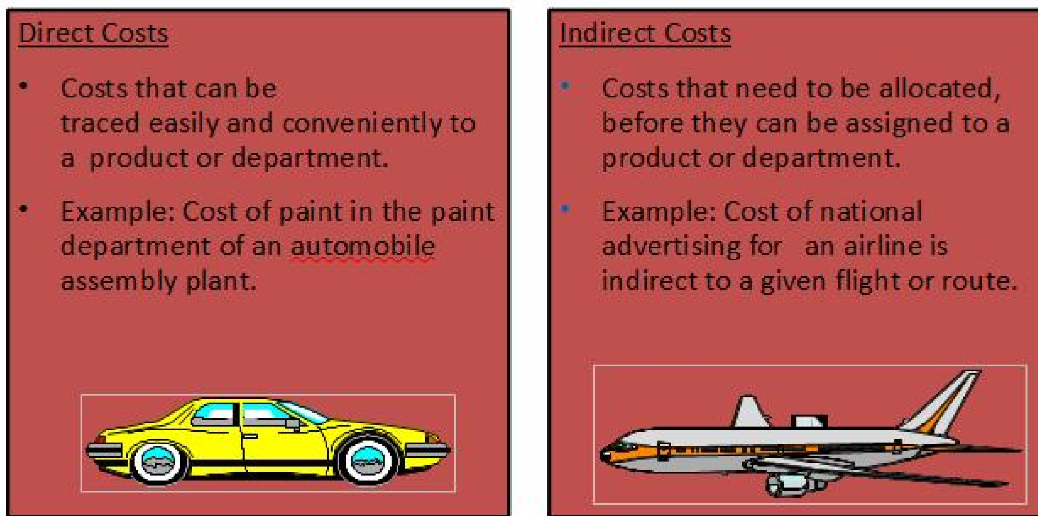
Gross margin ration: Measure of income contributed before period expenses, interest and taxes divided by sales turnover.
Gross margin = Sales turnover – Cost of sales
Gross margin ration = Gross margin/Sales turnover

Operating income: Gross margin – Period expenses

Return on sales ration: Operating income / Sales

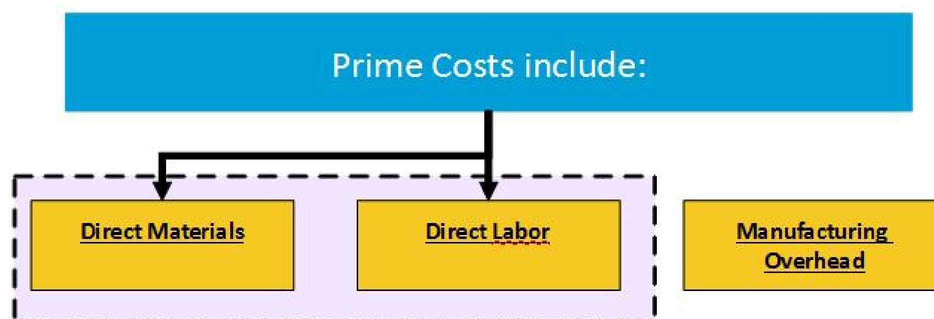
A manufacturing company has a more complex statement of income than do service or retail companies.

Manufacturing costs: include direct costs, which are the costs of resources that are physically observed being used to create specific products. These include direct materials and direct labour. Manufacturing costs also include indirect costs.



Direct costs: Direct materials are resources such as raw materials, parts and components that one can observe being used to make a specific product. The cost of raw material that is observably used in or traced to production equals the direct material cost.

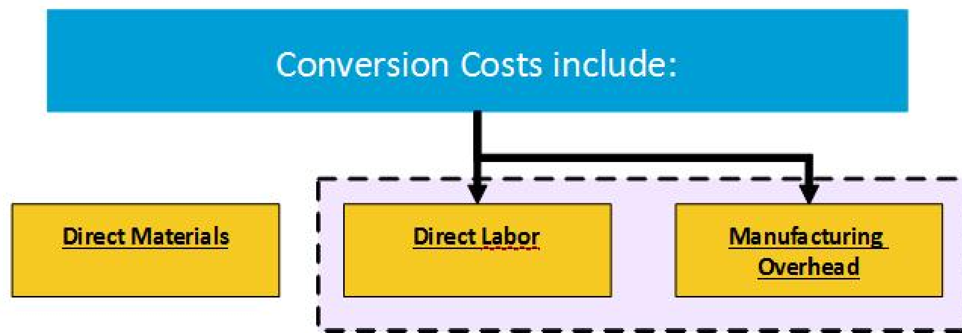
Direct labour: The cost of compensating employees who convert direct material into a finished product.



Manufacturing overhead cost: An indirect cost that includes resources necessary for manufacturing process, but which cannot be easily traced to specific units of product. Manufacturing overhead includes indirect material, indirect labour and other manufacturing costs that are shared resources for multiple products or cannot be traced.

Indirect material cost: Includes all materials that either (1) are not part of the finished product but are necessary to manufacture it or (2) are part of the finished product but are insignificant in cost. ('Insignificant in cost' means that the cost of collecting information about the use of these materials exceeds the value of the information collected.)

Indirect labour cost: The wages of production employees who do not work directly on the product yet are required for the manufacturing facility's operation.



Conversion cost: When all labour cost is a small part of total manufacturing costs, some companies include labour with overhead and term the total indirect cost as a conversion cost.

Overtime premium: An extra hourly compensation paid to an employee who works beyond the time normally allowed by regulation or labour contracts.

Idle time: The time that an employee does not spend productively because of events such as breakdowns or new set-ups.

Non-manufacturing costs: Includes selling and administrative costs.

Selling costs: include costs such as sales commissions, etc..

Administrative costs: Costs incurred to manage the organisation and provide staff support.
Period costs: non-manufacturing costs that are expensed in the period incurred for external reporting purposes.

Sometimes distinguishing between manufacturing costs and non-manufacturing costs in conceptually difficult. Some of these costs have no clear-cut classification, so companies usually set their own guidelines and follow them consistently.

Stages of production:

1. Ordering and delivery of raw materials.
2. Raw materials inventory, which are costs of materials that have not yet been put into production.
3. Work in progress inventory, which is the cost of partially completed products in process.
4. Finished goods inventory, which is the cost of products ready for sale or delivery to customers.

Waste: The cost of unrecoverable resources applied to defective products that cannot be sold.

Shrinkage: Cost of unrecovered stole or mis-shipped finished products.

Both waste and shrinkage are considered period costs so that these costs are not buried in costs of goods completed or costs of sales.

LO 6: Prepare a schedule of cost of goods completed and sold using a flexible financial model.

Financial model: A spreadsheet which is a flexible calculation of financial outcomes.

A financial model has two related but separate sections: data input and financial analysis.

Cost of direct materials used, TOrm = BBrm +TIrm – EBrm
Cost of goods completed, TOwip = BBwip + TIwip – EBwip
Cost of sales, TOfg = BBfg + TIfg – Ebfg