

CHAPTER 2

An Introduction to
Cost Terms and Purposes

Basic Cost Terminology

- Cost – sacrificed resource to achieve a specific objective
- Actual Cost – a cost that has occurred
- Budgeted Cost – a predicted cost
- Cost Object – anything of interest for which a cost is desired

Basic Cost Terminology

- Cost Accumulation – a collection of cost data in an organized manner
- Cost Assignment – a general term that includes gathering accumulated costs to a cost object. This includes:
 - Tracing accumulated costs with a direct relationship to the cost object and
 - Allocating accumulated costs with an indirect relationship to a cost object

Direct and Indirect Costs

- Direct Costs – can be conveniently and economically traced (tracked) to a cost object
- Indirect Costs – cannot be conveniently or economically traced (tracked) to a cost object. Instead of being traced, these costs are allocated to a cost object in a rational and systematic manner

Cost Examples

- Direct Costs
 - Parts
 - Assembly line wages
- Indirect Costs
 - Electricity
 - Rent
 - Property taxes

Factors Affecting Direct/Indirect Cost Classification

- Cost Materiality
- Availability of Information-gathering Technology
- Operational Design

Cost Behavior

- Variable Costs – changes in total in proportion to changes in the related level of activity or volume
- Fixed Costs – remain unchanged in total regardless of changes in the related level of activity or volume
- Costs are fixed or variable only with respect to a specific activity or a given time period

Cost Behavior, continued

- Variable costs – are constant on a per-unit basis. If a product takes 5 pounds of materials each, it stays the same per unit regardless of whether one, ten, or a thousand units are produced
- Fixed costs – change inversely with the level of production. As more units are produced, the same fixed cost is spread over more and more units, reducing the cost per unit

Cost Behavior Summarized

	Total Dollars	Cost per Unit
Variable Costs	Change in proportion with output More output = More cost	Unchanged in relation to output
Fixed Costs	Unchanged in relation to output	Change inversely with output More output = lower cost per unit

Other Cost Concepts

- Cost Driver – a variable that causally affects costs over a given time span
- Relevant Range – the band of normal activity level (or volume) in which there is a specific relationship between the level of activity (or volume) and a given cost
 - For example, fixed costs are fixed only within the relevant range.

A Cost Caveat

- Unit costs should be used cautiously. Since unit costs change with a different level of output or volume, it may be more prudent to base decisions on a total dollar basis.

Different Types of Firms

- Manufacturing-sector companies – create and sell their own products
- Merchandising-sector companies – product resellers
- Service-sector companies

Types of Inventories

- Direct Materials – resources instock and available for use
- Work-in-Process (or progress) – products started but not yet completed. Often abbreviated as WIP
- Finished Goods – products completed and ready for sale

Types of Product Costs

- Direct Materials
- Direct Labor
- Indirect Manufacturing – factory costs that are not traceable to the product. Also known as Manufacturing Overhead costs or Factory Overhead costs

Distinctions Between Costs

- Inventoriable Costs – product manufacturing costs. These costs are capitalized as assets (inventory) until they are sold and transferred to Cost of Goods Sold
- Period Costs – have no future value and are expensed as incurred

Cost Flows

- The Cost of Goods Manufactured and the Cost of Goods Sold section of the income statement are accounting representations of the actual flow of costs through a production system.
 - Note the importance of inventory accounts in the following accounting reports, and in the cost flow chart

Cost of Goods Manufactured

Cellular Products
 Schedule of Cost of Goods Manufactured
 For the Year Ended December 31, 2007 (in thousands)

Direct Materials:			
Beginning Inventory, January 1	\$ 11,000		
Add: Purchases	73,000		
Cost of Direct Materials Available for Use	<u>84,000</u>		
Less: Ending Inventory, December 31	<u>8,000</u>		
Direct Materials Used		76,000	Calculates the cost of Direct Materials Used
Direct Labor		9,000	
Manufacturing Overhead:			Accumulates the three product costs for the current period
Indirect Labor	7,000		
Supplies	2,000		
Heat, Light & Power	5,000		
Depreciation - plant building	2,000		
Depreciation - plant equipment	3,000		
Miscellaneous	<u>1,000</u>		
Total Manufacturing Overhead Costs		<u>20,000</u>	
Manufacturing costs incurred during 2007		105,000	Adjusts the current period manufacturing costs to account for units actually completed
Add: Beginning WIP, January 1		<u>6,000</u>	
Total Manufacturing Costs to account for		111,000	
Less: Ending WIP, December 31		<u>7,000</u>	
Cost of Goods Manufactured		<u>\$ 104,000</u>	

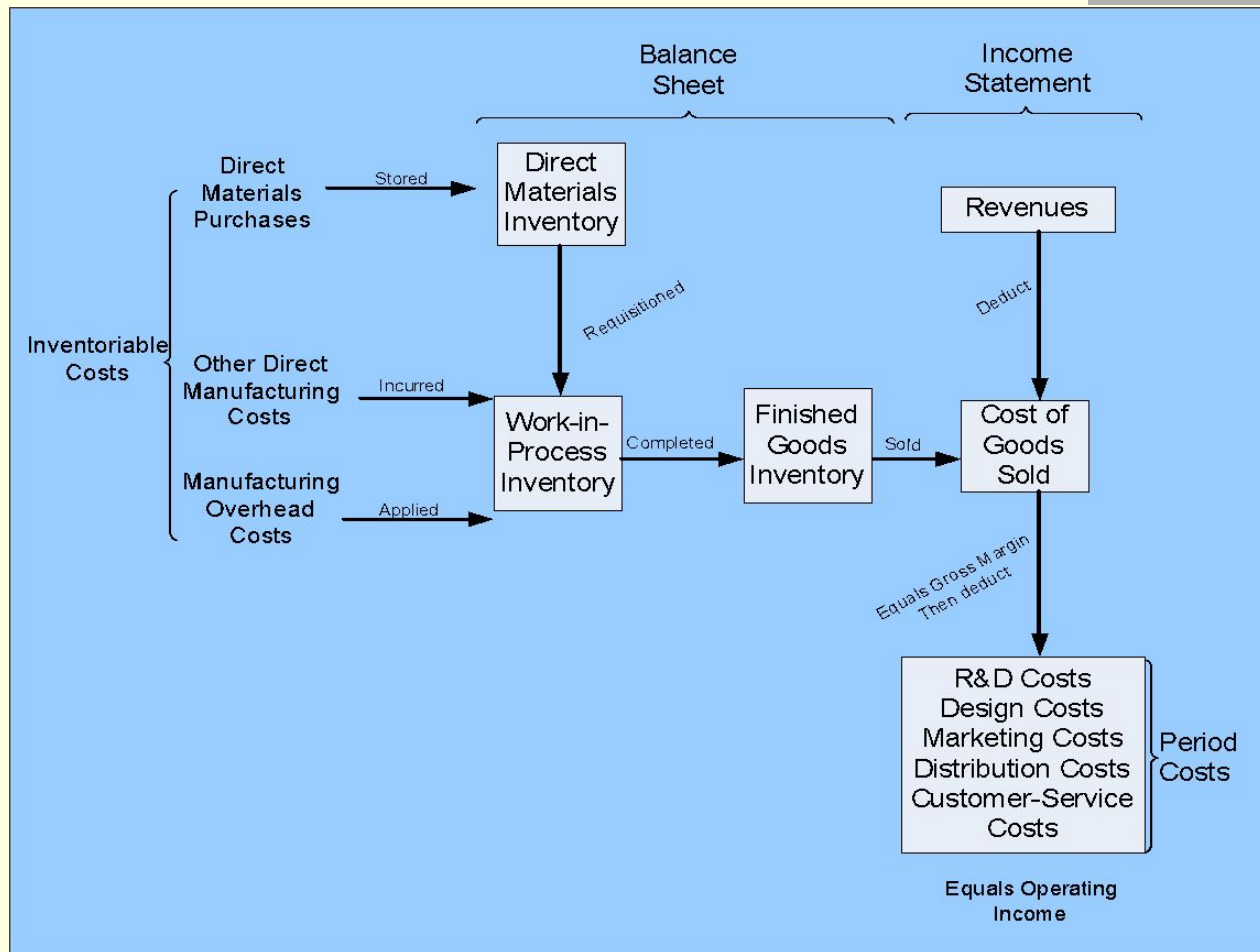
Income Statement

Cellular Products		
Income Statement		
For the Year Ended December 31, 2007 (in thousands)		
Revenues		\$210,000
Cost of Goods Sold		
Beginning Finished Goods, January 1	22,000	
Cost of Goods Manufactured	104,000	
Cost of Goods Available for sale	126,000	
Ending Finished Goods, December 31	18,000	
Cost of Goods Sold		108,000
Gross Profit		102,000
Operating Costs:		
Marketing, distribution, and customer-service	70,000	
Total operating costs		70,000
Operating Income		\$32,000

Figure carries forward from the Schedule of Cost of Goods Manufactured

Period Costs are expensed as incurred

Cost Flowchart



Other Cost Considerations

- Prime cost is a term referring to all direct manufacturing costs (labor and materials)
- Conversion cost is a term referring to direct labor and factory overhead costs, collectively
- Overtime labor costs are considered part of overhead

Different Definitions of Cost for Different Applications

- Pricing and product-mix decisions – may use a “super” cost approach (comprehensive)
- Contracting with government agencies – very specific definitions of cost for “cost plus profit” contracts
- Preparing external-use financial statements – GAAP-driven product costs only

Three Common Features of Cost Accounting and Cost Management

- Calculating the cost of products, services, and other cost objects
- Obtaining information for planning and control, and performance evaluation
- Analyzing the relevant information for making decisions