ACCOUNTING 281: INTRO TO MANAGERIAL ACCOUNTING

SURVIVAL CHEAT SHEET

Class 2 - 1/11/17 - Core Concepts of Management Accounting

- Measuring Cost
  - Types of Costs
    - Financial Accounting Perspective
      - Product Costs: direct labor, direct materials, and manufacturing overhead
      - Period Costs: selling, general, and administrative costs
    - Managerial Accounting Perspective
      - Variable Costs: Costs that vary with sales volume
      - Fixed Costs: Costs that do not vary over the relevant range
    - Economics Perspective
      - Costs are classified according to decision relevance
        - Relevant Costs: Differential costs and opportunity costs
        - Irrelevant Costs: Sunk costs
  - Basic Cost Terminology
    - Cost- resources sacrificed to achieve a specific objective
    - Cost Object - anything of interest for which a measure of cost is desired
  - Classification Based on Traceability to a Cost Object
    - **Direct Cost**: a cost that can be traced directly and completely to a specific cost object, in a cost effective way
      - **A direct cost is traced to a cost object**
    - **Indirect Cost**: A cost that cannot be traced directly and completely to a specific cost object (Indirect costs are also referred to as Overhead costs (MOH))
      - **An indirect cost is *allocated* to a cost object**
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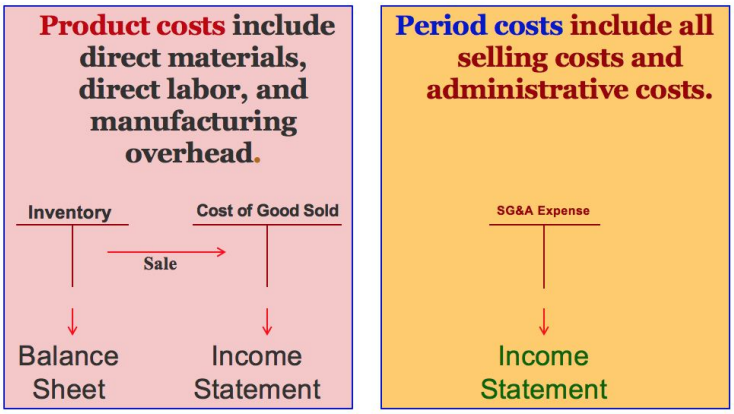
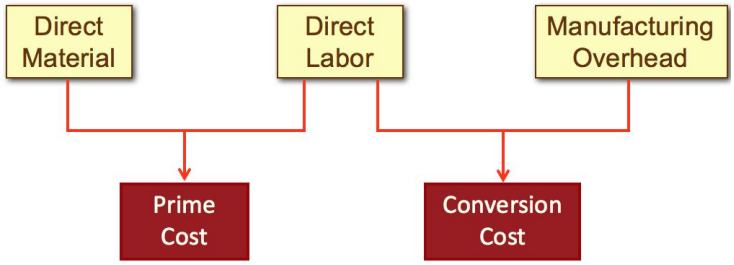
Cost	Cost Object
EX. Room service beverages	A particular hotel guest
1. The salary of the head chef	The hotel's restaurant
2. The salary of the head chef	A particular restaurant customer
3. Room cleaning supplies	A particular hotel guest
4. Flowers for the reception desk	A particular hotel guest
5. The wages of the doorman	A particular hotel guest
6. Room cleaning supplies	The housecleaning department
7. Fire insurance on the hotel building	The hotel's gym
8. Towels used in the gym	The hotel's gym

  - Cost Classifications for Preparing Financial Statements
    - **Product Costs** include direct materials, direct, labor, and manufacturing overhead
    - **Period Costs** include all selling costs and administrative costs



- Product cost or period cost?
  - Will the cost go away if you stop producing immediately?
    - If yes, product cost, if no then period cost

- Classifications of Manufacturing Costs
  - Direct Material, Direct Labor, Manufacturing Overhead



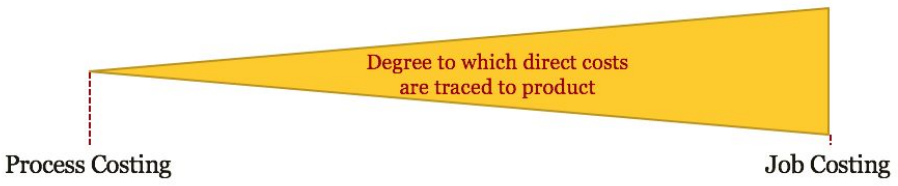
  - Prime costs, fundamental cost
  - Conversion cost, processing cost
- Classifications based on Behavior
  - **Cost Driver**- a factor whose change "causes" a change in the total amount of cost
    - That which "drives" the cost to be incurred, in the first place, or to change, subsequently
    - Specific costs may have more than one cost driver
- Cost Classifications
  - **Variable**- costs that CHANGE in total in proportion to changes in the related cost driver (but are constant on a per unit basis)
  - **Fixed**- Costs that DO NOT CHANGE for a given time period despite changes in the related cost driver (but, on a per unit basis, vary inversely with the level of activity)
- Multiple Classifications of Cost
  - As we have noted, costs may be classified as:
    - Direct or Indirect
    - Variable or Fixed
  - These multiple classifications give rise to the following cost combinations:

- Direct and Variable
- Direct and Fixed
- Indirect and Variable
- Indirect and Fixed

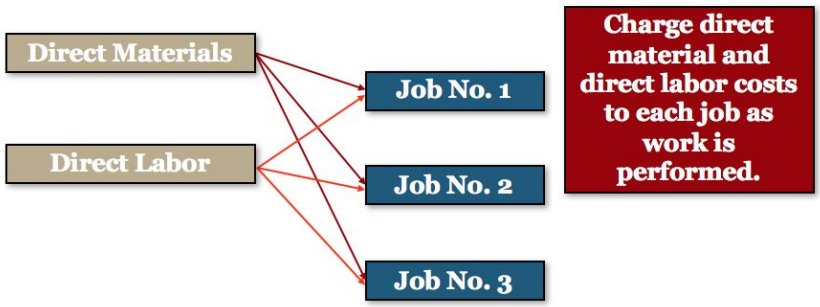
Class 3 - 1/18/17 - Introduction to Product Costing Systems

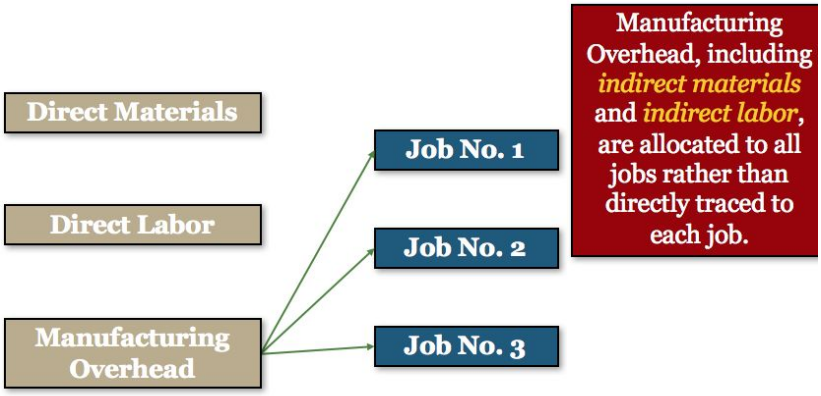
- Product Costing Systems - Job vs. Process Costing
  - There are two principal kinds of product costing systems. The choice between then substantially depends upon the nature of the firm's production process
  - Job Costing Systems
    - A job costing system is used by firms which produce relatively unique products or services or distinct batches of similar products (perhaps for different customers), each which is referred to as a "job"
    - In a job costing system, costs are assigned to each specifically identifiable job - cost object - as it moves through the production processes
    - A job costing system provides an estimate of the cost for each "job"
    - Examples of firms that use a job costing system:
      - Public accounting firms
      - Consulting firms
      - Advertising agencies
      - Government contractors
      - Custom manufacturers - tool and die firms
  - Process Costing Systems
    - Used in those cases where the firm produces relatively large quantities of goods that are substantially identical (i.e. mass production)
    - Costs are accumulated into cost pools (during the accounting period), one for each production department (process)
    - At the end of the period, costs are allocated from a department (process) cost pool to all of the units completed by it during that period (and to the units that remain "in process")
    - DOES NOT provide an estimate of the cost of each unit produced
      - Provides an estimate of the "average" cost of all the units produced in a period

As a practical matter, job costing and process costing systems represent the two ends of a spectrum of cost accounting systems used by firms. Most companies use a cost accounting system that contains elements of both.



- Key Building Blocks of a Product Costing System
  - Cost Object
    - To which Direct Costs are Traced
    - Indirect costs are allocated
  - Cost Pool
    - A logical grouping of related (typically, overhead) costs
  - Cost Allocation Base
    - Typically, a cost driver that is used as a basis for systematically distributing (allocating) indirect costs to a cost object
- Approach to Job Costing
  - 1. Identify the job that is to be the cost object:
    - E.g. a consulting engagement, a single product, or a batch of products
  - 2. Identify the DIRECT COSTS that will be traced to that object
  - 3. Identify the pool(s) of INDIRECT cost associated with the cost object
  - 4. Select some reasonable basis (which may or may not be a cost driver) to allocate the indirect costs to a specific object
  - 5. Calculate the allocation rate for each indirect cost pool (indirect-cost allocation rate)
  - 6. Assign costs to the cost object - the direct costs that are traced to it and the indirect costs that are allocated to it



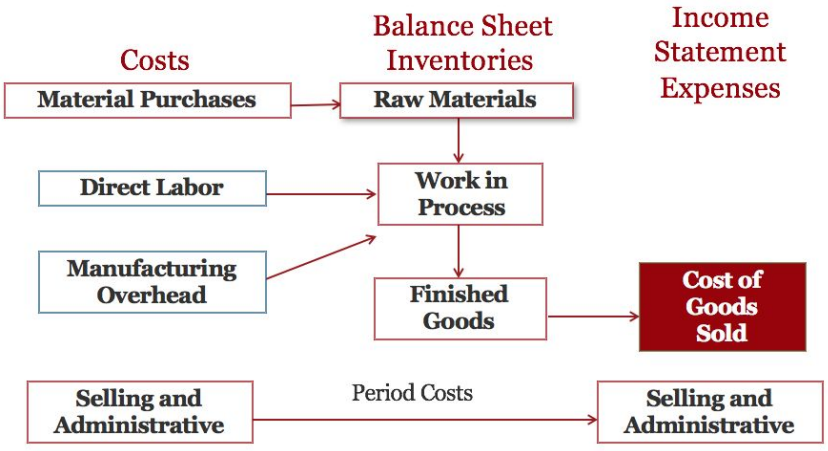


- Manufacturing Overhead Application
  - **Manufacturing Overhead** - Manufacturing costs other than direct materials and direct labor (All indirect costs that are still product costs)

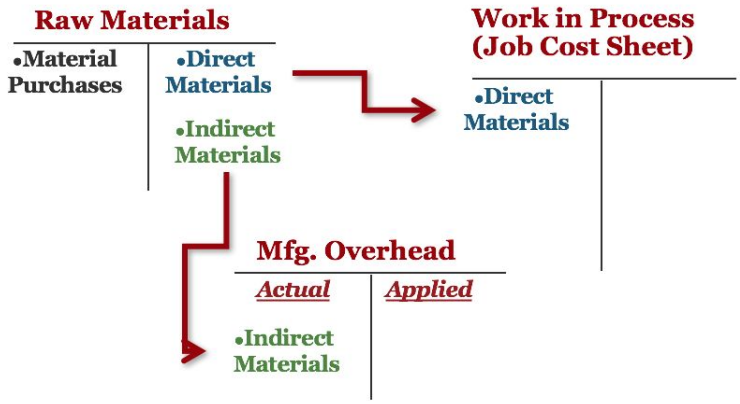
- The predetermined overhead rate (POHR) used to apply overhead to jobs is determined before the period begins
- POHR = (Estimated total manufacturing overhead cost for the coming period)/(Estimated total units in the allocation base for the coming period)
  - ^tells how much company will allocate to a given job
- Overhead Applied = (Amount of Application base actually incurred on the job) x POHR
  - AKA number of hours of manufacturing x POHR
- Generic Calculation Sheet

Direct Materials	(Materials x amount)
Direct Labor	(Labor hours x rate)
Manufacturing Overhead	(hours x POHR)
Total Cost	(stuff combined)

Class 4- 1/23/17 - Product Costing Systems

- Key Definitions
  - **Raw Materials** - include any materials that go into the final product
  - **Work in process**- consists of units of production that are only partially
  - **Finished goods**- consists of completed units of product that have not been sold to customers
  - **Cost of goods manufactured** - include the manufacturing costs associated with the goods that were finished during the period
- Flow of Costs: A Conceptual Overview
  - 

- The Purchase and Issue of Raw Materials: T-Account Form



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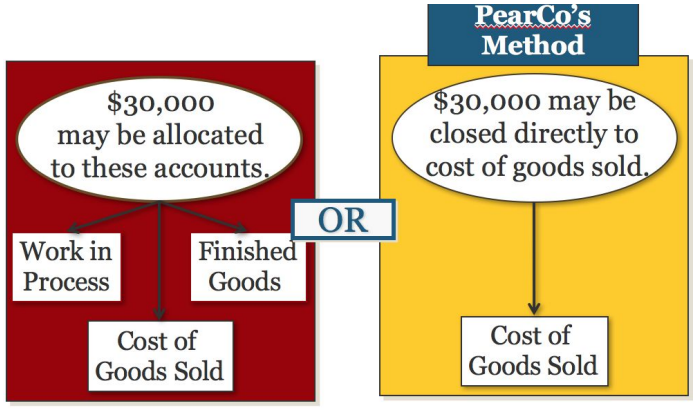
- When raw materials are purchased,

Class 5 - 1/25/17 - Product Costing Systems (Continued)

- Underapplied and Overapplied Overhead - A closer look
  - The difference between the overhead cost applied to Work in Process and the actual overhead costs of a period is referred to as either underapplied or overapplied overhead
  - Underapplied Overhead- exists when the amount of overhead applied to jobs during the period using the predetermined overhead rate is *less than* the total amount of overhead actually incurred during the period
  - Overapplied Overhead- exists when the amount of overhead applied to jobs during the period using the predetermined overhead rate is *greater than* the total amount of overhead actually incurred during the period
- Different T accounts when doing Managerial Accounting
  - Accounts in order of transfer of Funds
    - Raw Materials
    - Work in Process
      - Credits are Cost of Goods Manufactured (debit same amount in finished goods)
    - Finished Goods
      - Credits of Finished goods are “cost of goods sold”
    - Manufacturing Overhead
      - Holding spot for indirect costs
      - Can put in and take out funds at ANY time
  - Disposition of Under- or Overapplied Overhead
    - Complex Approach
      - Allocate a portion of the over- or underapplied overhead to work in progress inventory, finished goods inventory, and cost of goods sold
      - Allocation would be based on the relative dollar value in each of the three accounts involved

- 

Class 6 - Activity Based Costing (ABC) Systems - 1/30/12

- Conventional Product Costing SYstems vs. ABC Systems
  - <u>Conventional Costing</u>
    - In a conventional product costing system, direct labor and material costs are traced to the cost object (the "job" or the department)
    - However, overhead costs are accumulated into relatively few cost pools and are allocated to a cost object using a corresponding small number of (typically, readily observable) allocation bases/drivers, typically related in some way to the volume of production (such a direct labor hours or machine hours)
    - In such systems, the assignment of direct costs to a cost object is relatively precise, reflecting the cost of the resources used
      - However, in many cases, the same cannot be said with respect to overhead costs
    - The assumption underlying a conventional cost allocation process is that the volume of output drives ALL costs, either directly or indirectly, through the QUANTITY of raw materials or labor used
    - Problem arises when there are MULTIPLE objects (jobs or departments) differing with respect to volume or complexity, etc, such that **each object consumes support resources (overhead) in significantly different quantities (and costs) and <u>not necessarily in proportion to the volume of output</u>**
      - Examples of support activities not driven by the volume of output
        - Order taking
        - Expediting
        - Production setup
        - Engineering order changes
        - Engineering order changes
        - Production scheduling
    - Over and Undercosting (AKA cross-subsidization)
      - **Overcosting**- a product consumes a LOW level of resources but is allocated HIGH costs per unit

        - An overcosted product absorbs too much cost, making it seem less profitable than it really is
    - **Undercosting**- a product consumes a HIGH level of resources but is allocated LOW costs per unit
        - AN undercosted product absorbs too little cost, making it seem more profitable than it really is

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Class 7 - 2/1/17 - Activity Based Costing Systems (Continued)

- Activity Based Costing - A Refinement
    - ABC represents an alternative way of thinking about overhead cost allocation
        - Begins with a view that overhead costs are caused by **purposeful activities**, such as:
            - Quality control
            - Set ups
            - Engineering
            - Shipping and receiving
        - ***costs may vary in ways that do not correspond to variations in production volume
    - Under ABC, **overhead** costs are accumulated into "homogeneous" cost pools defined in terms of the activities that drive them
        - Overhead costs in each pool are allocated to the products (or other cost objects) based on the proportion of the causal activity that each uses (i.e. using the activity driver for each pool as the allocation base for the pool of costs)
    - The objective is to group related activities together to form cost pools that are homogeneous with respect to their cost driver
    - And, as a "fringe benefit" of that analysis, it is often possible to identify activities that can be eliminated, redesigned, or outsourced in order to reduce costs
    - In an ABC System, overhead costs are allocated in TWO stages:
        - 1. To cost pools representing groups of related activities (rather than departments as in a conventional cost system)
        - 2. Then from those "activity based" cost pools to the specific jobs, product lines (or other cost objects) that use/cause them
- Strengths and Weaknesses of the ABC approach
    - Weaknesses
        - Cost of implementation may exceed benefits
        - Some allocations are still arbitrary
            - Implementation of ABC costing typically still assumes a linear relationship between indirect costs and their drivers
        - Reducing the consumption of an activity (driver) need not necessarily reduce overhead when there are fixed costs involved
    - Strengths
- Comparison of ABC vs. Traditional Costing System
    - Each method is mathematically correct