Introduction to Inventory

* Inventory, or Stock, describes the goods and materials that a business holds for the ultimate purpose of resale (or repair)

Inventory Management

* Inventory management is primarily about specifying the size and placement of stocked goods.
  + Size – physical quality (to know when to restock)
  + Placement – determining where your stock is physically located
* To protect the regular and planned course of production against the random disturbance of running out of materials or goods
* Concerned with associated costs of inventory

Reasons for Keeping Stock

* Time
* Uncertainty
* Economies of Scale
* Appreciation in Value (example: liquor that tastes better as it ages)

Common Categories of Stock

* Raw Materials
* Work-in-Progress
  + Things that are actually in the stage of production
* Finished Goods
  + The actual goods sold to customers
* Goods for Resale
  + Products returned to seller from customers that are returned to inventory
* Stocks in Transit
  + Goods that are in the process of delivery
* Consignment Stocks
  + Stocks that you don’t own. These are owned by your suppliers

Inventory Costs

* Carrying Cost
  + Cost of holding items in Inventory
  + Examples:
    - Facility Storage costs (rent, utilities, etc.)
    - Material Handling (equipment)
    - Labor
    - Record Keeping
    - Borrowing to Purchase Inventory
    - Product Deterioration, Spoilage, etc.
  + Either as a specific value, or as percentage
* Ordering Cost
  + Costs associated with replenishing stock of inventory being held
  + Examples:
    - Transportation and Shipping
    - Customs Brokerages
    - Taxes and Tariffs
  + Reacts inversely to Carrying Cost
    - If ordering cost is high, carrying cost is low.
    - If carrying cost is high, ordering cost is low.
* Shortage Cost
  + Also referred to as Stockout Costs
  + Occurs when customer demand cannot be met due to stock unavailability
  + A form of opportunity cost – difficult to quantify