

Merchandising Operations

- involves purchasing products (inventory) to resell to customers
- inventory for merchandising companies can consist of many different items
- 2 common characteristics of inventory in a company
 - they are owned by the company
 - are in a form ready for sale to customers
- **merchandise inventory** is needed to describe many different items that make up total inventory
- **retailers** are merchandising companies that purchase and sell directly to consumers
- **wholesalers** are merchandising companies that sell to retailers
- **manufacturers** are companies that produce goods for sale to wholesalers (or others)
- manufacturing companies have inventory -> may not all be available for sale
 - is owned by the company
 - inventory is in the process of production for sale to customers
- inventory has three categories in manufacturing companies
 - **raw materials** - basic goods and materials on hand and will be used in production - have not been sent into production
 - **work in process** - the portion of inventory which production has started but not complete
 - **finished goods** - inventory that is manufactured and are complete and ready for sale

Operating Cycles

- accounting cycle concepts are the same for a merchandising company and service company
- **operating cycle** is the time it takes to go from cash to cash in producing revenues
 - operating cycles for merchandising companies are longer than service companies
- service companies perform services for cash or on account
- merchandising companies - company purchases merchandise for cash or on account *before* it can sell it for cash or on account

Income Measurement Process

- in merchandising companies the main source of revenue comes from the sale of the merchandise
 - referred to as **sales revenues**
- expenses in merchandising companies are divided into two categories
 - **cost of goods sold**
 - **operating expenses**
- **cost of goods sold** is the total cost of the merchandise that was sold during the period
 - is directly related to the revenue recognized from the sale of goods
- **gross profit** is the sales revenue - cost of goods sold
- operating expenses are deducted in order to determine profit before income tax
- **operating expenses** are expenses incurred in the process of earning sales revenue
 - in merchandising companies - includes many of the same expenses found in service companies
 - salaries, insurance, utilities, depreciation
- income tax expenses are deducted from profit before income tax - determines profits or losses
- service companies refer to revenues as service revenues instead of sales revenue

Inventory Systems

- merchandising companies keep track of inventory in order to determine what is available for sale and what has been sold
 - inventory and cost of goods sold
- beginning inventory + cost of goods sold = cost of goods available for sale
- goods being sold are assigned to the cost of goods sold account
- goods not sold at the end of the period are referred to as ending inventory
- **ending inventory** are the goods that have not been sold
 - is reported as merchandise inventory
 - known as a current asset on the statement of financial position
 - reported on the income statement as the cost of goods sold expense

Perpetual Inventory System

- **perpetual inventory system** provides detailed records that are

- maintained for the cost of each product that is purchased and sold
- are continuously showing the quantity and cost of inventory purchased, sold and on hand
- to record inventory items purchased in a perpetual inventory system
 - debit merchandising inventory (increase)
- to record inventory items sold in a perpetual inventory system
 - purchased item is debited by the Merchandise Inventory Account (increasing)
 - cost is transferred from Merchandise Inventory account to the Cost of Goods Sold (expense)
- **perpetual inventory systems record the cost of goods sold and reduction in inventory (quantity and cost) at the same time the sale occurs**
- as a result -> merchandise inventory is able to reflect the amount of ending inventory on hand
- inventory is the largest current asset for a merchandiser
- adjusting for inventory shortages
 - cost of goods sold is debited
 - merchandise inventory is credited
 - inventory losses are considered part of the cost of selling goods
 - missing inventory is removed from the merchandise inventory account
 - it now reflects the actual amount of inventory on hand
- adjusting for inventory overages
 - merchandise inventory is debited
 - cost of goods sold is credited

Periodic Inventory System

- detailed inventory records of merchandise on hand are not kept throughout the period
- **cost of goods sold is determined at the end of the accounting period**
- physical inventory counts determine quantities on hand, costs are then assigned to items
- after ending inventory is determined, information is used to calculate the cost of goods sold throughout the period
- Steps to Determining the COG sold in a periodic inventory system
 - **Beginning Inventory** - the cost of goods on hand at the beginning of the accounting period - the amount that is the

- previous periods ending inventory
- **Cost of goods available for sale** - the cost of goods purchased to the beginning inventory is added. total equals the cost of goods available for sale during the period
- **Ending Inventory** - subtract ending inventory from cost of goods available for sale = cost of goods sold

Recording Purchases of Merchandise

- purchases of merchandise for resale -> recorded in the merchandise inventory account
- purchase cost increased by freight costs
- net result - > cost of goods purchased

Purchases

- purchases of inventory can be made for cash or credit
- Cash purchases
 - recorded by a debit to Merchandise Inventory (increase)
 - credit to Cash (decrease)
- credit purchases are supported by purchase invoices
 - **purchase invoices** indicates the total purchase price and other information
 - buyers do not prepare separate purchase invoices
 - prepared by sellers

May 4	Merchandise Inventory	3,800	
	Accounts Payable		3,800
	(To record goods purchased on account from PW Audio Supply, terms 2/10, n/30, FOB shipping point)		

Sales Taxes

- are collected by merchandising and service companies on the goods they sell and services provided

Freight Costs

- determines whether the buyer or seller pays for the transportation of goods
- freight terms state who pays for the transportation of goods and who is responsible for the risk of damages
- **FOB** represents 'free on board'
- **FOB SHIPPING POINT** goods are delivered to the point of shipping by the **seller**
 - buyer pays the freight costs to get goods from the point of shipping to destinations

- responsible for all/any damages which may occur
- **FOB DESTINATION** goods are delivered by the seller to their destination
 - seller pays freight charges to get the goods from point of shipping to their destination
 - responsible for any/all damages that may occur
- how to record a FOB shipping point
 - debit merchandise inventory
 - credit cash



Illustration 5-4
Freight terms

- cost of inventory includes the purchase costs and any other costs that are incurred in bringing inventories to the location
 - freight paid by the buyer is recorded as part of the cost of the merchandise purchased

May 4	Merchandise Inventory	150	
	Cash		150
	(To record payment of freight on goods purchased)		

Purchase Returns and Allowances

- reasons for a return
 - purchasers are unhappy with merchandise
 - damages
 - defective
 - inferior quality
- buyers receive cash refunds if purchase was made with cash
- credit is given if purchases are made on account
- buyers chose to keep merchandise if seller is willing to give an allowance (deduction) from purchase price
- results in a decrease in cost of goods sold
- recording a return of goods

- debit accounts payable
- credit merchandise inventory

May 8	Accounts Payable	300	
	Merchandise Inventory		300
	(To record return of goods to PW Audio Supply)		

Discounts

- **quantity discount** gives a reduction in price according to the volume of the purchase
- larger the number of items purchased, the better the discount
- **quantity discounts are not recorded/ accounted for separately**
- **purchase discounts** offered to encourage customers to pay the amount owed early
 - offers advantages to both parties
 - purchaser saves money
 - seller is able to shorten its operating cycle - by converting accounts receivable into cash earlier
- purchase discounts are noted through credit terms
 - specifies the amount of the discount, time period it is offered, indicates the date which the purchaser is expected to pay the full price
 - example
 - 2/10, n/30
 - if paid within 10 days, a 2% discount will be given otherwise the buyer has 30 days to pay the full amount
- quantity discounts are not recorded
- purchase discounts are recorded
- discounts are not taken on freight costs

May 14	Accounts Payable	3,500	
	Cash		3,430
	Merchandise Inventory		70
(To record payment to PW Audio Supply within discount period)			

- Adjusting entry if the discount is not taken:

June 3	Accounts Payable	3,500	
	Cash		3,500
	(To record payment to PW Audio Supply with no discount taken)		

Recording Sales of Merchandise

Sales

- To record a sales revenue
 - assets (cash or accounts receivable) are debited
 - sales accounts are credited
- To record a sales revenue in which a customer paid in advance
 - unearned revenues are debited
 - sales revenues are credited
- every sales transaction must be supported by a supporting document
 - a supporting document which provides evidence of sales
 - **sales invoices**
- **two journal entries are required to record each sale in a perpetual inventory system**
- First entry records sales revenue
 - cash/ accounts receivable are debited
 - sales is credited
- second entry records the cost of merchandise sold
 - cost of goods sold debited
 - merchandise inventory is credited

$$\begin{array}{l} \text{A} \\ +3,800 \end{array} = \begin{array}{l} \text{L} \\ \end{array} + \begin{array}{l} \text{SE} \\ +3,800 \end{array}$$

Cash flows: no effect

May 4	Accounts Receivable	3,800	
	Sales		3,800
	(To record credit sale to Sauk Stereo, terms 2/10, n/30, FOB shipping point)		

$$\begin{array}{l} \text{A} \\ -2,400 \end{array} = \begin{array}{l} \text{L} \\ \end{array} + \begin{array}{l} \text{SE} \\ -2,400 \end{array}$$

Cash flows: no effect

4	Cost of Goods Sold	2,400	
	Merchandise Inventory		2,400
	(To record cost of merchandise sold to Sauk Stereo)		

Sales Taxes

- collected by merchandising companies on the goods that they sell
- when a company collects sales taxes from selling a product/service they are not recorded as revenues
- collected on behalf of the government
- recorded as a liability until they are paid to the government

Freight Costs

- FOB destination
 - the seller assumes responsibility for getting goods to the destination
- freight costs incurred by the seller on outgoing merchandise are an operating expense to the seller
 - debited to the Freight Out or Delivery Expense account
 - cash is debited

May 4	Freight Out	150	
	Cash		150
	(To record payment of freight on goods sold)		

Sales Returns and Allowances

- when customers return goods/ given price reductions, seller will return cash or reduce the buyers accounts receivable if goods were purchased on account
- returns require **two entries in a perpetual inventory system**
- First Entry records
 - debit to sales returns and allowances
 - credit to the accounts receivable
 - **cash would be credited if the return was a cash sale**
- Sales Returns and Allowances are a **contra revenue account** to sales
 - balance of sales returns and allowances is a debit
- why is the contra account used?
 - used instead of debiting the sales account to disclose the amount of sales returns and allowances
 - debiting directly to sales hides the percentage of total sales that ends up being lost through sales returns and allowances
 - can distort comparisons between total sales in different accounting periods

May 8	Sales Returns and Allowances	300	
	Accounts Receivable		300
	(To record return of goods by Sauk Stereo)		
8	Merchandise Inventory	140	
	Cost of Goods Sold		140
	(To record cost of merchandise returned by Sauk Stereo)		

Discounts

- no separate entry for quantity discounts
- sales are recorded at invoice price
- discounts from the seller point of view are a sales discount
- is offered on the invoice price less sales returns and allowances
- Sales discounts are used to record sales discounts
- sales discounts is a contra revenue account
 - normal balance - debit
- used so that management can monitor if customers are taking advantage of cash discounts

May 14	Cash	3,430	
	Sales Discounts	70	
	Accounts Receivable		3,500
	(To record collection from Sauk Stereo within discount period)		

June 3	Cash	3,500	
	Accounts Receivable		3,500
	(To record collection from Sauk Stereo with no discount taken)		

Summary of Sales Transactions

Gross Sales	-	Sales Returns and Allowances	-	Sales Discounts	=	Net Sales
\$3,800	-	\$300	-	\$70	=	\$3,430

Illustration 5-5
Formula for net sales

Summary of Merchandising Transactions

	Transactions	Recurring Journal Entries	Debit	Credit
Purchases	Purchasing merchandise for resale.	Merchandise Inventory	XX	
		Cash or Accounts Payable		XX
	Paying freight costs on merchandise purchased FOB shipping point.	Merchandise Inventory	XX	
		Cash		XX
	Receiving purchase returns or allowances from suppliers.	Cash or Accounts Payable	XX	
		Merchandise Inventory		XX
Paying creditors on account within discount period.	Accounts Payable	XX		
	Merchandise Inventory		XX	
	Cash		XX	
Paying creditors on account after discount period.	Accounts Payable	XX		
	Cash		XX	
Sales	Selling merchandise to customers.	Cash or Accounts Receivable	XX	
		Sales		XX
		Cost of Goods Sold	XX	
		Merchandise Inventory		XX
	Giving sales returns or allowances to customers.	Sales Returns and Allowances	XX	
		Cash or Accounts Receivable		XX
		Merchandise Inventory	XX	
	Paying freight costs on sales, FOB destination.	Cost of Goods Sold		XX
		Freight Out	XX	
	Receiving payment on account from customers within discount period.	Cash	XX	
Sales Discounts		XX		
Receiving payment on account from customers after discount period.	Accounts Receivable		XX	
	Cash	XX		
		Accounts Receivable		XX

Income Statement Presentation

- **single step income statement** has only one step
 - subtracts total expenses from total revenues - only things needed to calculate profit before tax
- **multistep income statement**
 - shows the multiple steps needed when determining profit before tax

Single Step

- data is classified in two categories
 - revenues - includes operating and non operating revenues and gains
 - expenses - includes cost of goods sold, operating expenses and non operating expenses and losses
- cost of goods sold, interest expense and income tax expense should be separately reported on the income statement

- Companies following ASPE do not have to list their expenses in any specific order
- Companies following IFRS classify expenses by nature or function
- classifying by **nature** expenses are reported according to their natural classification
- classifying by **function** means expenses are reported according to the activity for which they were incurred
- when cost of goods sold are classified by nature for a manufacturing company -> called change in inventories of finished goods and work in process
 - classified by function -> called cost of goods sold
- **administrative expenses** relate to general operating activities such as management, accounting and legal matters
- **selling expenses** are associated with making sales
 - includes advertising expense and expenses of completing the sale - delivery and shipping expenses
- if a company chooses to classify expenses by function -> it should also disclose additional information on the nature of certain expenses (depreciation, employee benefits)
- reasons for using a single step income statement
 - it makes more sense to divide the income statement by expenses and revenues because a company does not recognize profit until revenues exceed expenses
 - is simple and easy to read

Multi Step Income Statement

- shows several steps in determining profit or loss
- useful because it highlights the components of profit separately
- 5 main steps
 - **Net Sales** - (sales returns and allowances + sales discounts) - gross sales = net sales
 - **Gross Profit** - cost of goods sold - net sales = gross profit
 - **profit from operations** - operating expenses - gross profit = profit from operations
 - **non operating activities** - results of activities not related to operations are added (as other revenues and gains) or subtracted (as expenses and losses) = profit before income tax
 - **Profit** - income tax expense - profit before income tax = profit (loss)

- First three steps involve the company's principal operating activities
- fourth step distinguishes between operating and non operating activities
 - necessary if the company has non operating activities

Net Sales

Sales revenues		
Sales		\$480,000
Less: Sales returns and allowances	\$12,000	
Sales discounts	8,000	20,000
Net sales		460,000

Gross Profit

- gross profit represents the merchandising profit of a company
- operating expenses have not been deducted - it is **not** a measure of overall profit of a company

Net sales	\$460,000
Cost of goods sold	316,000
Gross profit	144,000

Profit from Operations

- operating expenses - gross profit

Gross profit		\$144,000
Operating expenses		
Salaries expense	\$45,000	
Rent expense	19,000	
Utilities expense	17,000	
Advertising expense	16,000	
Depreciation expense	8,000	
Freight out	7,000	
Insurance expense	2,000	
Loss on sale of equipment	200	114,200
Profit from operations		29,800

Non Operating Activities

- consists of other revenues and gains and other expenses and losses that are **unrelated** to the company's main operations
- non operating activities are presented on the income statement after profit from operations
- the distinction between the two is important for external users
- profit from operations are viewed as sustainable and long term
- non operating activities are viewed as non recurring and short term
- when determining next years income analysts put more weight on this year's profit from operations because it has more **predictive value** and less weight is put on this year's non operating activities

Profit from operations		\$29,800
Other revenues and gains		
Interest revenue	\$3,400	
Other expenses and losses		
Interest expense	1,600	1,800
Profit before income tax		31,600

Profit

- final outcome of all the company's operating and non operating activities

PW AUDIO SUPPLY, INC.
Income Statement
Year Ended December 31, 2012

Sales revenue		
Sales		\$480,000
Less: Sales returns and allowances	\$12,000	
Sales discounts	8,000	<u>20,000</u>
Net sales		460,000
Cost of goods sold		<u>316,000</u>
Gross profit		144,000
Operating expenses		
Salaries expense	\$45,000	
Rent expense	19,000	
Utilities expense	17,000	
Advertising expense	16,000	
Depreciation expense	8,000	
Freight out	7,000	
Insurance expense	2,000	
Loss on sale of equipment	200	<u>114,200</u>
Profit from operations		29,800
Other revenues and gains		
Interest revenue	\$ 3,400	
Other expenses and losses		
Interest expense	<u>1,600</u>	<u>1,800</u>
Profit before income tax		31,600
Income tax expense		<u>6,300</u>
Profit		<u>\$ 25,300</u>

Evaluating Profitability

Gross Profit Margin

- a company's gross profit expressed as a percentage is the **gross profit margin**
- the margin is generally considered more informative than the gross profit amount
- margin expresses more meaningful information between the gross profit and net sales
- $\text{GROSS PROFIT MARGIN} = \text{GROSS PROFIT} / \text{NET SALES}$

Profit Margin

- profit is expressed as a percentage of sales
- measures the percentage of each dollar of sales that results in profit
- $\text{PROFIT MARGIN} = \text{PROFIT} / \text{NET SALES}$
- What is the difference between gross profit margin and profit margin?
 - gross profit margin indicates how much higher the selling price is than the cost of goods sold
 - profit margin indicates how well the selling price covers all

expenses

- profit margins can be improved by increasing its gross profit margin or by controlling its operating expenses
- gross profit margins and profit margins are **profitability measures**
- high level of turnover of inventory companies experience lower gross profit and profit margins