



**TEAM PACIFIC CORPORATION**

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## **INVENTORY AND MANUFACTURING ACCOUNTING**

November 17, 2023



**REYES TACANDONG & Co.**  
FIRM PRINCIPLES. WISE SOLUTIONS.





# INVENTORY AND MANUFACTURING PROCESS OF **TEAM PACIFIC**



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## KEY CONCEPTS

Tangible assets that are:

- Held for sale in the ordinary course of business (**finished goods**)
- In the process of production for such sale (**work in process**)
- In the form of materials or supplies to be consumed in the production process or in the rendering of services (**raw materials and manufacturing supplies**)



# Types of Inventory



## Finish goods (residual inventory)

- Held for sale in the ordinary course of the business

## Work in process

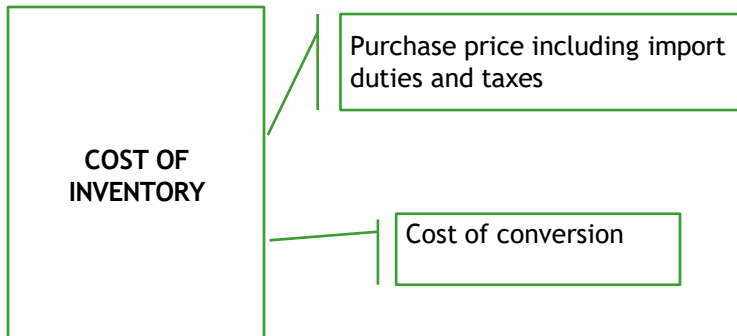
- In the process of production for such sale

## Raw materials, Supplies

- In the form of materials or supplies to be consumed in the production process or in the rendering of services



# Inventory Cost



# Manufacturing Cost Classifications



## Direct Materials

- Materials used in the manufacturing process; significant part of the finished goods (FG)

## Direct Labor

- Employees who work directly with the raw materials in converting them to FG

## Manufacturing Overhead (OH)

- Costs incurred that cannot be considered direct materials or direct labor: indirect materials, indirect labor and other manufacturing OH



## Variable OH

- costs that change as the volume of production changes or the number of services provided changes

## Fixed OH

- costs that do not change even while the volume of production activity changes



# Prime vs Conversion Costs



## *Prime Cost*

Direct Materials

Direct Labor

## *Conversion Cost*

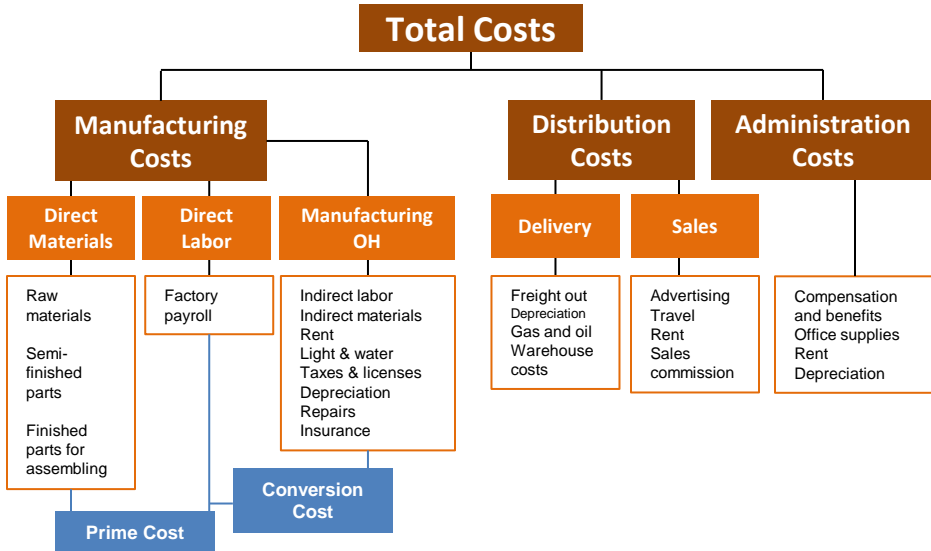
Direct Labor

Manufacturing OH





# Cost for a Manufacturing Company



# System of Cost Accumulation



**ACTUAL  
costing**

**STANDARD  
costing**

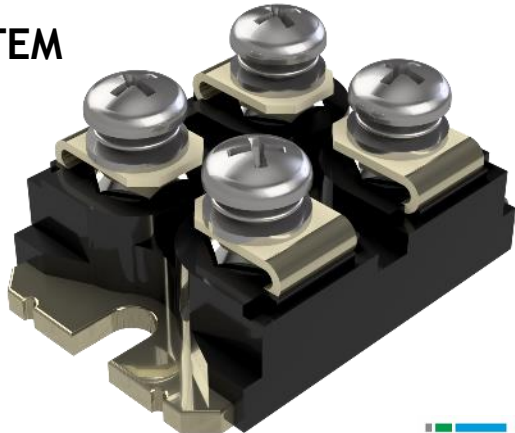
**NORMAL  
costing**



**JOB ORDER COST SYSTEM**

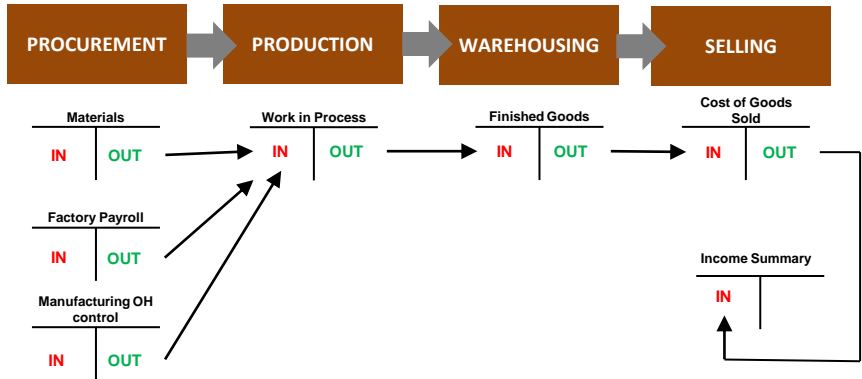
**PROCESS COST SYSTEM**

**DUAL SYSTEM**



# JOB ORDER: Cost Flow and Work Flow

Flow of the costs through the accounting information system parallels the flow of products through manufacturing operations.



## SCRAP

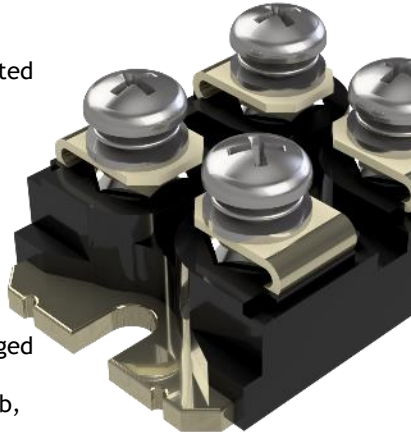
- If value is immaterial, recognize revenue when sold
- If material and job-specific, may be credited to WIP
- For high value scrap, record to Scrap Inventory Account

## SPOILAGE

- Charged to a particular job order
- Charged to manufacturing OH

## REWORK

- If due to normal production process, charged to Manufacturing OH
- If unusual and identifiable to a specific job, should be added to the cost of the job



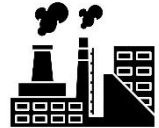
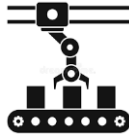


Questions  
and answers?



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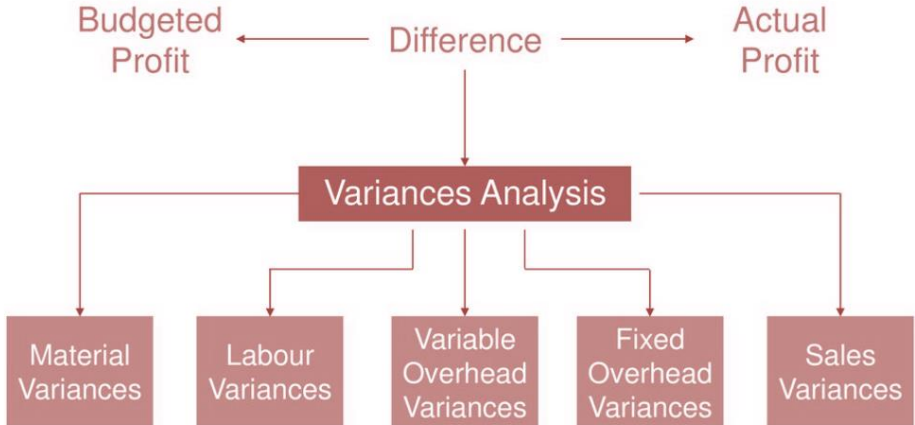




# BASIC VARIANCE ANALYSIS

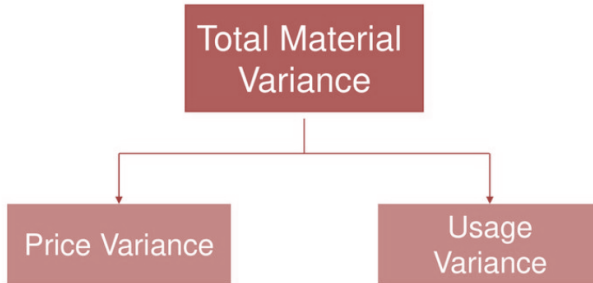






# Material COST Variance

Differences **between prices paid and prices determined**;  
and Difference **between quantities consumed and quantities of materials allowed** for production.





# Material COST Variance

Differences **between prices paid and prices determined**;  
and Difference **between quantities consumed and quantities of materials allowed** for production.

**Can be computed using the formula:**

$$\text{Material Cost Variance} = (\text{SQ} \times \text{SP}) - (\text{AQ} \times \text{AP})$$

where,    **AQ = Actual Quantity**  
              **AP = Actual Price**  
              **SQ = Standard Quantity for the actual output**  
              **SP = Standard Price**



**SOT-227 requires 10 kgs of Material A at the rate of ₱4/kg. The actual consumption of SOT-227 was 12 kgs at the rate of ₱4.50 per kg. How much is the MCV?**



# Material PRICE Variance



Can be computed using the formula:

$$\text{Material Price Variance} = (\text{Standard Price} - \text{Actual Price}) \times \text{Actual Quantity}$$

**SOT-227 requires 10 kgs of Material A at the rate of ₱4/kg. The actual consumption of SOT-227 was 12 kgs at the rate of ₱4.50 per kg. How much is the MPV?**



# Material USAGE or QTY Variance



Can be computed using the formula:

$$\text{Material Qty. variance} = (\text{SQ for actual output} - \text{AQ}) \times \text{Standard Price}$$

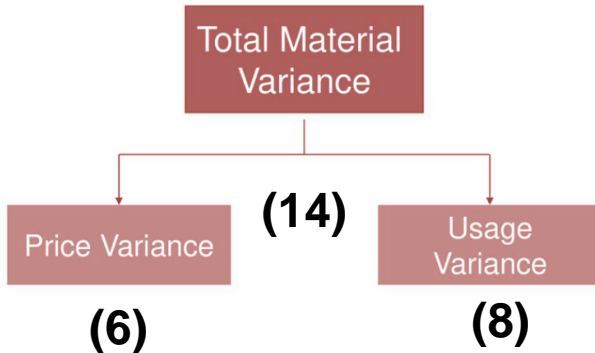
**SOT-227 requires 10 kgs of Material A at the rate of ₱4/kg. The actual consumption of SOT-227 was 12 kgs at the rate of ₱4.50 per kg. How much is the MQV?**





# Material COST Variance

Differences **between prices paid and prices determined**;  
and Difference **between quantities consumed and quantities of materials allowed** for production.



# Labor COST Variance

Differences between the **actual direct labor paid** and **standard direct labor specified** for the output achieved.





# Labor COST Variance



Differences between the **actual direct labor paid** and **standard direct labor specified** for the output achieved.

**Can be computed using the formula:**

$$\text{Labour Cost Variance} = (\text{SH} \times \text{SR}) - (\text{AH} \times \text{AR})$$

where,    **AH = Actual hours**  
              **AR = Actual Rate**  
              **SH = Standard hours for actual output**  
              **SR = Standard Rate**



The standard time and rate for TO-247 are given below:

Standard Hours - 15

Standard Rate - ₱4/ hour

Actual data:

Actual production - 1000 units

Actual hours - 15,300 hours

Actual rate - ₱3/hour

What is the labor cost variance?

# Labor RATE Variance



Can be computed using the formula:

$$\text{Labour Rate Variance} = (\text{Standard Wage Rate} - \text{Actual Rate}) \times \text{Actual Time}$$

The standard time and rate for TO-247 are given below:

Standard Hours - 15

Standard Rate - ₱4/ hour

Actual data:

Actual production - 1000 units

Actual hours - 15,300 hours

Actual rate - ₱3/hour

What is the labor rate variance?



# Labor TIME or EFFICIENCY Variance



Can be computed using the formula:

$$\text{Labour Efficiency variance} = (\text{SH for actual output} - \text{AH}) \times \text{Standard Rate}$$

The standard time and rate for TO-247 are given below:

Standard Hours - 15

Standard Rate - ₱4/ hour

Actual data:

Actual production - 1000 units

Actual hours - 15,300 hours

Actual rate - ₱3/hour

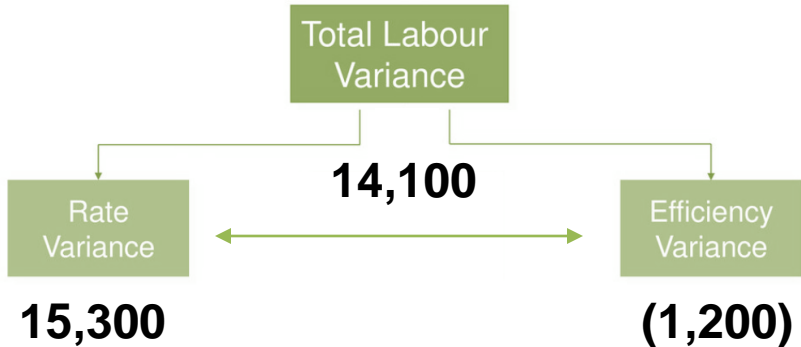
What is the labor rate variance?





# Labor COST Variance

Differences between the **actual direct labor paid** and **standard direct labor specified** for the output achieved.





# Variable Overhead (VOH) Variance

Differences between the **standard variable overhead** and **actual variable overhead incurred**.

Can be computed using the formula:

**Variable OH Cost Variance = Standard Variable OH on actual production – Actual variable OH**

OR

**Variable OH Cost variance = (Actual time or standard hours for actual production x Standard variable OH Rate) – (Actual Variable OH)**

**Where, Standard variable OH Rate per unit or per hours =  $\frac{\text{Budgeted OH}}{\text{Budgeted output or hours}}$**



# Variable Overhead (VOH) Variance



**Budgeted production for the year – 5,000 units**

**Actual production – 4,600 units**

**Budgeted variable OH – 100,000**

**Actual variable OH – 93,000**

**What is the variable OH cost variance?**





# Fixed Overhead (FOH) Variance

Differences between **fixed overhead incurred** and **fixed overhead absorbed**.

Can be computed using the formula:

**Fixed OH Cost Variance = (Recovered or absorbed Fixed OH) – (Actual Fixed OH)**

OR

**(Actual output) x (Standard OH Rate) – (Actual OH Rate x Actual Output)**





# Fixed Overhead (FOH) Variance



**Normal capacity – 5,000 hours**

**Budgeted FOH - ₱10 per standard hour**

**Actual level of capacity utilized – 4,400 standard hours**

**Actual FOH - ₱52,000**

**What is the Fixed OH cost variance?**





Questions  
and answers?





# VALUATION

Inventories shall be measured at the lower of **cost** and **net realizable value**.

estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

# Estimating NRV



**Finish goods**  
(residual inventory)

NRV is estimated selling price less cost to sell

**Work in process**

NRV is estimated selling price less cost to complete and sell

**Raw materials,  
Supplies**

NRV is estimated replacement cost of the materials/ supplies



# Example



Faith Co. has a partially-completed inventory with the following data:

Production costs incurred to date	2,900,000
Production costs to complete	2,800,000
Transport costs to customer	300,000
Future selling cost	400,000
Estimated selling price	5,500,000

1. *At year-end, the inventory shall be measured at what amount?*
2. *Prepare the entry to record the loss on inventory write-down.*



## In summary,



- NRV is based on the **most reliable evidence** available at the time the estimates are made.
- NRV also take into consideration the **purpose** for which the inventory is held.
- **Inventories are usually written down to NRV item by item.** In some circumstances, however, it may be appropriate to group similar or related items.
- Annual assessment is required.





# Collaborative Discussion







THANK YOU FOR  
YOUR TIME AND  
ATTENTION.

