

Cost Accounting 2

Dr. Sameh Salim

كلية التجارة
— جامعة مدينة السادات —



Chapter 3

Standard Costs Framework

1 The concept of standard cost

2 Target costing definition

3 Activity-based costing Accounting

4 Standard cost objectives

5 Standardization of Direct materials costs

6 Standardization of Direct wages

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Objectives of Standard Costs

The use of the standard costing system helps in achieving many objectives, the most important of which are:



4/1 - Control of Costs:

This requires the following five steps:

- Having a planned performance.
- Measuring actual performance.
- Comparison of planned performance with actual performance.
- Determine the Variance (Differences) between the actual and planned performance.
- Take the necessary corrective actions.

4/2 - Pricing and Production Decisions:

The predetermined price is required in order to exclude all the waste elements when calculating the cost of the unit produced to determine its cost which the firm must recover through the selling price, and not by Allocating (Charging) the consumer with the elements of waste which the consumer does not consider in light of competition and open markets and in light of the trend towards economic freedom in markets.

4/2 - Pricing and Production Decisions:

The production decision depends on the variable (marginal) standard costs.

- If the market price is greater than the marginal standard cost, the firm can continue to produce because the difference between the price and the marginal cost covers the contribution margin (marginal profit) fixed costs until the Break-even point for the firm. **Then, it begins to realize a profit.**
- If the prevailing market price is less than the marginal standard cost, In this case, the company has **to stop production in the short term.**

4/3 - Performance evaluation:

- ***Standard costs represent*** an effective tool in evaluating the performance of the entity's employees, whether at the employees' level, department level, or product level
- ***It provides a quantitative measure*** of performance that does not depend on the personal opinion of those in charge of the performance evaluation process.

4/4- Cost Awareness:

- ❑ *The use of the standard* costing system to be effective in the firm as a tool for monitoring and evaluating the performance requires the employees' understanding of system in the firm.
- ❑ It is necessary that *The management and accounting department and planning budgets department* , to familiarize workers with the objectives and nature of this system and the importance of its use, and its impact on the cost of **their work, activities, incentives, and wages**.
- ❑ All this creates a sense of responsibility among the employees and, in turn, increases the cost awareness of these workers.

4/5- Management by objectives:

- ❑ Whereas the standard costing system includes *standards and objectives* that must be achieved, and it identifies the Variance (Differences) between the level of objectives and the level of implementation in an immediate and organized manner.
- ❑ It represents one of the important pillars of the management system by objectives at the level of costs in the firm.

4/6- Management by exception:

- ❑ The principle of management by exception represents what we call in accounting "the principle of materiality", which requires management to pay attention to problems or events of relative importance to the enterprise.

4/6- Management by exception:

- ❑ Whereas the standard costing system is based on the preparation of standards that must be achieved and adhered to, every difference from these standards that arises upon implementation must be paid attention to and studied *only* if this difference exceeds a certain limit (percentage).

4/7- Effectiveness of planning budgets:

- ❑ **Cost planning** and its impact on the preparation of planning budgets and their uses represent approximately 90 % of the operations of the budget.
- ❑ Therefore, the **availability of a good system for standard costs** in the firms helps a lot in the speed and ease of budget preparation (planning) and the speed and ease of using the budget and increase the degree of its effectiveness (monitoring and performance evaluation).

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Standardization of Direct Materials

- ❑ The standard is divided according to its nature and type into *a quantitative standard* and *a monetary standard*, whereby each of them has its methods and tools used to define this standard.

To standardize direct materials, work is done to determine the standard costs of direct materials *through three basic steps* that can be explained as follows:



5/1- Raw Material Quantity Standardization:

- ❑ The first step to be carried out is to determine the **standard quantity necessary to produce one unit of the product** of the raw material, or of each type of raw material used in the production of the product.
- ❑ If more than one raw material is **mixed for production**, as is the case in many industries, determine the standard quantity necessary for each of the raw materials

We need to do the following:

1- Determine the quality of the product

2- Determine the degree of mixing (mixing)

3- Determine the standard quantity of the unit

4- Determining the percentage of spoilage or normal waste

5/2- Raw material price standardization

- ❑ The second step is, after determining the quantity standard of raw materials necessary for making the product, to **define the price standard for each quantity standard** (weight - length-weight - number - distance) in order to determine the standard cost of raw materials.

Determining the price standard (standard price) requires the following considerations:

- ❑ Determining the *general trend of the prices* of raw materials used in the firm during the previous periods through the historical data
- ❑ *Forecasting the prices of raw materials* that are expected to prevail during the period of use of the standard (the coming period) through studies and market research for suppliers and producers.
- ❑ The purchase price does not include the *commercial discount and the quantity discount* as this discount relates to the purchase policy

Determining the price standard (standard price) requires the following considerations:

- ❑ The standard price of raw materials besides the purchase price of materials should include *the commissions, insurance, transportation, customs fees, and all expenses.*
- ❑ Determining the method used for pricing the materials issued from stores for the products that the firm will use *(first x first) or (last x first) or (weighted average)*

5/3 - Standard cost of direct materials:

- ❑ It represents the third and final step since after determining both the standard quantity and the standard price per unit of the raw material, the *standard cost of direct materials* per unit of product or production order can be determined easily through the following equation:

$$\text{Standard Cost of Direct Materials} = \text{Standard Unit Quantity} \times \text{Standard Price for a unit of raw material}$$

The standard cost card of direct materials is made for each unit of the product (for example, bakery industry), as it appears in the following simplified figure:

Company Direct Material Cost Standard Unit No.
Product number Card number:
Production order number:

Item No	Technical specifications	Quantity measurement unit	Standard Quantity for the unit	The standard price for the unit of measure	Standard cost of materials	Notes
11	Flour	kilo	3	2.00	6	
111	Chocolate	gram	100	0.10	10	
321	Eggs	Number	15	0.40	6	
541	Milk	Liter	2	2.5	5	
					27	

❑ A summary of direct materials standardization can be shown in the following simplified form:

Direct materials standardization

Standardization of materials quantity

Standardization of materials prices

Require identification:

- The degree of quality of the product
- The degree of blending
- Standard quantity per unit
- Standard quantity for normal spoilage

Require identification: -

- General price trend in previous periods
- The price expected to occur upon purchase
- Trade discount and quantity discount
- Other expenses until storage
- Terms of sale and delivery

Standard card of unit cost from direct materials

- Material A
- Material B
- Material C
- Material D

The End
Thank You

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