

A standard costing and variance analysis



Study suggests that many companies use standard accounting to determine costs and for measuring performance. However, there has always been speculation on standard costing being the most effective measurement. The actual cost usually differs from the standard costs, which is based on calculations and assumptions. Standard accounting takes into account various factors like price, specifications, quantity and quality of the material. The estimations involved in analyzing and setting standard costs involve the efficiency of the management. If a difference between the actual cost and the standard cost is observed, an investigation is required since it suggests the inefficiency in the calculation of estimates.

Relevance of Standard Costing and Variance Analysis

The standard costs are calculated according to the following flowchart and the variance is monitored and recalculated at every interval to reduce cost variance.

Definition of standard cost: “ a pre-determined cost calculated in relation to a prescribed set of working conditions, correlating technical specifications and scientific measurements of material and labor to the price and wage rates expected to apply during the period to which the standard cost is intended to relate, with the addition of an appropriate share of budgeted overhead” (CIMA [ICMA] definition)

The standard costs are to be set by the management after a set of calculations. These calculations can either be based on historical records or on engineering studies. Depending on the type of company and volatility in costs, a great deal of care is to be taken into setting standards.

Standard costing is usually applied in conjunction with other costing methods (or variance analysis):

Absorption and marginal costing

Job and process costing

Budgeting and budgetary control

Advantages of Standard Costing

The costing standards are helpful in establishment of prices, budgets and production schedules. The employees are motivated to maintain efficiency to reduce errors in achieving a target. 'Management by exception' is allowed to be practiced by variances. Record keeping and stock evaluation are harmonized and simplified due to a standard set of costing used across the system. Responsibility is defined with the help of variance analysis. The technical analysis necessary to set standards will result in better methods, greater efficiency and in cutting costs.

The standards provide essential control information which help in comparing the actual costs to the standards.

Disadvantages of Standard Costing

Firstly standard costing will not be very efficient for companies that use a 'lean' system. In lean production, the volumes produced are lowered and the inventories re consumed only after the determining amounts of the quantity demanded.

Secondly, there might be changes in the working practices, the prices and volumes of the raw materials, which reduce the standards and are misleading and inappropriate.

Many costs are incurred in maintain and calculating the standard costing systems.

Over assumptions of costs in an urge to make the standard costs favorable may lead to high cost variances. This may also lead to non-productive work like measuring and completing forms.

Standard costing is overly focused on statistical data and thus there might be a conflicting boundary between the standard cost and estimated cost. For example the overheads may require running at full efficiency even though the excess production is not required.

Standard costing maybe applicable in larger firms with high production lines and bigger resources, but for smaller firms, the basic thumb rule methods are more appropriate for use in control.

Alternative methods

Activity Based Costing

In this method, the costs are recognized due to the cause and effect relationship between the activities and costs that drive the company costs. This method can theoretically be used in any industry due to its flexibility in determining costs at different levels. ABC, just like the other traditional costing systems, it often results in recognizing indirect costs on easily

identifiable figures such as ‘ direct labor hours’. It often results in inaccuracy in assigning the costs to its relevant activity.

However, this method is used effectively in complex companies where certain costs are not easy to record and evaluate. It is used in companies which are not completely service based.

Balanced score card

The balanced score card is used as a performance measure and for strategic planning in major organizations. It was invented by Dr. Kaplan and David Norton that analyzed measurements in a combination of traditional and strategic method to give a more ‘ balanced’ view to the management. The balanced scorecard had four main perspectives:

Learning and growth perspective

The scorecard considers learning as one of the most important perspectives in the case of employees and at an organizational level. Funds can be adequately allotted by managers to ensure the training needs of a worker since the developing industry requires a continuous improvement in the skill level.

Business process perspective

In this perspective, metrics are used to allow the managers to understand the importance of their internal business and whether the products and services are capable of satisfying the customer’s needs. The metrics for a business process are best when designed by a highly experienced internal manager.

Customer perspective

The constant increase in the market trend from a customer's perspective has increased companies to use metrics to define customer satisfaction levels. If the quality of the products and services reduce, the customer satisfaction would drop and thus he would switch to a more competitive company.

Hence, frequent measures such as the scorecard and customer feedbacks have to be used to understand the customer's requirements.

Financial perspective

A company needs to constantly calculate its financial data and create a capacity to fund the current projects. The accuracy involved in this data will help the managers create a planned and organized expenditure. Data such as the risk assessment and cost-benefit data has to be identified in this perspective. The standard costing requires accuracy in calculating this data since any errors could cause a large cost variance and affect direct labor and direct material cost.

Target costing

Target costing is a cost management tool for reducing the overall product cost in a production life cycle. This approach is most commonly used in Japanese companies along with Six Sigma, Kaizen and various other approaches. Unlike traditional methods, target costing takes a very proactive approach to pricing. It analyzes the costing information of the product and suggests the best possible price upfront. This saves the wastage in time and costs involved in re-engineering and design. In particular, target costing concentrates on phase wise reduction of costs in a product life cycle. The

decisions involve a large team a multi-level team of staff from production, engineering, etc. to determine the acceptable market price.

Just-in-time method

The JIT method is one of the lean methods used in the new production systems. It is very efficient in supply chains and production units in determining the quantity of products to be produced depending on the customer requirements.

However, JIT method also results in a few disadvantages such as purchasing inventory that is not required immediately. Due to the stock up of inventory, there are chances of the goods being damaged or lost. Also, the more assets a company is holding, the higher premium it has to pay. Thus having excessive assets is not an efficient option. Assets include both ' cash' and ' inventory', but cash is more flexible and helps in precluding loans which means lesser liabilities for the organization.

When the demand increases, the orders would have to be rushed and thus greater staffing working in overtime is required. This would lead to an increase in the direct labor costs and also would reduce employee satisfaction. The company would also have to manage the orders in a short period of time which create a lot of trouble for the middle level management. This change in costs further affects the standard costing of a company.

Total Quality Management

Total quality management involves the continuous improvement of products and services while also involving the managers and employees in a quality

management approach. TQM is aimed at increasing the quality while reducing the wastage in production of goods.

Some of the popular companies involved in the adaptation of TQM include Toyota motor company, Ford motor company, Phillips semiconductor and SGL carbon.

TQM involves the continuous improvement of a process, and thus improving the future results of a process. It contains a combination of quality management tools which helps in increasing the quality at pace with the improving market standards.

Kaizen methods

Kaizen in Japanese stands for improvement in simple terms. When the word is split, 'kai' means change and 'zen' means good. The most important aspect of a kaizen method is to standardize your process. Most of the companies that follow the kaizen method use a PDCA life cycle.

One of the leading motor companies using this method efficiently is Toyota motors. Toyota has extensively implemented the 'continuous improvement' strategy in its lifecycle.

The basic steps of the kaizen method involve the Plan-Do-Check-Act life cycle. As the title suggests, the first step of the process involves planning the costs and estimating the costs accurately. The next step involves measuring and implementing the costs and the effectiveness using various measuring techniques. The third phase involves checking whether the standards are optimal and efficient and if not act accordingly towards continuous

improvement. After achieving the new results, these are set as the new standards and thus create accuracy. The cycle repeats itself continuously improving the process.

Pricing decisions in service sectors

Most healthcare organizations do not realize the benefits of standard costing in an organization and thus result in high cost variances. The application of standard costing systems used in such organizations can help in realizing the losses in unrecovered overhead on time and hence take corrective action.

In today's world, customers in the service sector demand the prices to be lowered and a better cost information system. The most effective way to deal with this is to use standard costing and variance analysis. Full costs per unit should be measured in advance of providing a service. The variable costs can thus be easily estimated since the facilities in the service sector directly use the pricing process.