# A report on the implementation of standard costing



In current years, various tools such as activity-based costing, the balanced scorecard and target costing have been used in the business community. However, traditional management accounting systems continue to be widely applied. One example is standard costing, which has been used on a wide front during the last century.

The purpose of this paper is to examine the widely use of standard costing system. Despite it is less relevant than newer accounting methods, standard costing is far from obsolete. Because of its simplicity, flexibility and affordability, standard costing remains a favorite cost accounting method among accounting and finance professionals.

## **Introduction:**

In today's time of rapid technologic change, tough global and domestic competition, total cost management is central to sustained corporate profitability and competitiveness. The management focus today is to minimize cost. The cost leadership strategy does not mean compromise on either quality or technology or product differentiation. Low costs are no advantage, if the customers are not willing to buy the product of low cost firm. Cost management has to be driven with customer as the focus.

The survival way for any company is how to manage its product/service cost, quality and performance. The customers are continuously demanding high quality and better performance products/services and at the same time, they want the prices to fall. The shareholders are also demanding a required rate of return on their investment with the company. Thus, cost has become a residual. The challenge is being able to manufacture or provide service with

the stipulated cost framework. Thus, cost management has to be an ongoing continuous improvement program.

# **Standard Costing**

In recent years, various tools such as activity-based costing, the balanced scorecard and target costing have been used in the business community (Kaplan & Cooper, 1998; Kaplan & Norton, 1996; Ansari et al...1997). However, traditional management accounting systems continue to be widely applied (Brewer, 2000).

One example of traditional management accounting is standard costing. Standards can be used with either job order or process costing system to provide important information for managerial planning, controlling, and decision making. Standard costing assists in setting budgets and evaluating managerial performance. The major motive to use standard costing is because it facilitates product costing estimation (Ask & Ax, 1997). Ask and Ax's study is supported by a study conducted by Puxty and Lyall (1989), which reported that 76 percent of the UK commercial and industrial companies operate a standard costing system.

Although it is used widely, people recently criticize it could not provide the information needed in today's competitive environment. Despite the criticism, there are few signs that the use of standard costing tends to decrease. The survey from Ask and AX (1997) showed that 12. 6 % of the companies investigated stated that they would abandon standards but on the other hand, 9. 9 % stated that they would like to convert to standard costing system.

# The History of Standard Costing

The standard costing system was developed in the early 1900s. According to Drury (1992), it was the scientific management principles recommended by F. W. Taylor and other engineers. Scientific engineers built up information about standards to set up "the best way" to use labour and material resources within manufacturing. Engineers used the standards to provide information for planning the flow of work so that the waste of materials and labour was minimized. Interestingly, engineers did not consider standards as a tool to control financial costs at that time (Drury, 1992)

The first thoughts of using standards as a tool to control costs came from G. Charter Harrison, who designed the first standard costing system. Started in 1911, Harrison worked for the Boss Manufacturing Company, Illinois, in USA – makers of work gloves. It took him a few years before he published the first set of equations for the analysis of cost variances (Solomons, 1968)

Harrison was not the only person on the standard costing scene. In 1908 and 1909 Harrington Emerson supported the development of an information system specifically directed towards the achievement of efficiency objectives. Emerson stated that information about standards allow managers to differentiate variances that are due to controllable conditions and variances that are caused by conditions beyond management's control (Solomons, 1968)

Traditionally standard costing systems are used in order to support the manufacturing industry. Today standard costing is widely used by all kinds of industries.

# The Purpose of A Standard Costing System:

The purpose of cost and management accounting is to provide financial information to managers to help them to plan activities, control the activities and see the financial implications of any decisions they make take (Hussey & Hussey, 1998). Standard costing systems provide cost data that can be used for many different purposes.

Ask and AX (1997) have identified several fields of application when it comes to a standard costing system. Their survey has the following reasons/purposes why a company may use a standard costing system:

Product Costing 82. 4%

Inventory Valuation 64. 8%

Variance Analysis 56.0%

Budgeting 45. 1%

Transfer Pricing 31. 9%

Drury (1996) gives a wider view of the purposes. He states that the main purpose a standard costing system can be used are:

To help in setting budges and evaluating managerial performance.

To act as a control device by stressing those activities which do not match to plan and thus alert decision-makers to those situations that many be out of control and in need of remedial action.

To provide a forecast of future costs that can be used for decision making purposes.

To simplify the task of tracing costs to products for inventory evaluation purposes.

To provide a challenging target with individuals are motivated to achieve.

There are many advantages with standards. Calculations are easier made and an effective performance controls are enabled, which provide opportunity to savings.

# **Critique Against Standard Costing Systems**

Standard costs are major elements within the management accounting area. They were used when organizations' conditions were stable, standardized products were produced and labour and material costs were the major costs components. But today's business environment is different.

The difficulties in the manufacturing process are increased when products are many and product series are short. (Ask & Ax, 1997) When difficulties increase, it has more complicated interpreting of variances. Moreover, it could be difficult to tie the variances to the particular persons or the particular areas.

Also, when the manufacturing conditions become more complex, the amount of fixed costs increases. Therefore, fewer opportunities will influence the total costs in the short term. Managers have less interesting to manage by using traditional thinking on how costs are influenced by volume.

As shown above, standards may be difficult to set in today's dynamic conditions. A standard costing system may be expensive to maintain and the additional record-keeping may become a burden to managers and they lose confidence in the system. (Hussey & Hussey, 1997)

Richard Fleischman and Thomas Tyson claimed that standard costing cannot provide adequate assistance in the areas of construction strategy and operational management. (Fleischman and Tyson, 1998) Don Hansen and Maryanne Mowen describe standard costing system as potentially "dysfunctional". (Hansen and Mowen, 2002) These criticisms have contributed to the dismissal of standard costing, especially for large companies that have more sophisticated method such as Activity Based Costing (ABC) and target costing. Mike Lucas even questioned that whether it is still appropriate for college accounting programs to teach this topic. (Lucas, 1997)

# **Global Acceptance of Standard Costing**

While academics pointing out the weaknesses of standard costing, people observed that this accounting tool continues to be widely used throughout the world. Studies showed that in developed countries the standard costing using rate is as high as 73% in the U. K. and 86% in Japan. (Garg, Ghosh, Hudick and Nowacki, 2003)

More specifically76% of 303 accountants in the U. K. and 73% of 85 finance and accounting specialists in New Zealand use standard costing. (Guilding, Lamminmaki and Drury, 1998) The authors also found that accountants viewed modern costing and production management tools as having no impact on how widely standard costing and variance analysis are used. A

study by Maliah Sulaiman, Nik Nazli and Norhayati Mohd Alwi of companies doing business in Malaysia found similar widespread dissemination and persistence of standard costing: 70% of 66 local firms and 76% of 21 Japanese are using standard costing.

These studies reveal that standard costing does not overemphasize cost control; however, it is linked to quality management. In addition, the Lucas and Sulaiman studies have shown that companies use historical performance instead of predetermined engineering standards on actual costs. Instead of using newer and costlier systems, companies chose to reconfigure existing system with more precise schemes, implying that firms have adapted standard costing to their specific needs and have not abandoned it.

## **Swiss Chalet Standard Costs System:**

# **System Description**

In order to demonstrate that standard costing is far from obsolete. I examined the standard costing system at Swiss Chalet, one of the biggest Canadian restaurant chains. The collected data of this study consists of indepth interviews with employees working with standard costing at different divisions within Swiss Chalet. The study about the standard costing in U. K., Dubai and Malaysia is also used.

First opened in 1954, Swiss Chalet now has more than 190 restaurants across Canada and United States serving their signature rotisserie chicken and a variety of other menu items.

In the beginning of each month, Swiss Chalet's area manger will send standard costs to each Swiss Chalet's store. The standard costs are generated through historical data and area manager's analysis based on each store's current situation. Then, management in each store can project materials, labor and overhead costs by reviewing the standard costs established for each of these cost elements. Then computer generate the variances and make managers recognize the differences between the actual activities and resource consumption and the expected activities and resource consumption. When the variance is significant, this is a signal for investigation, Managers will try to discover the cause and exert influence to correct it.

Therefore, "cost control and performance evaluation" is the main purpose of Swiss Chalet's Standard Costing System. According to Mann-Whitney U test Statistic13, inventory costing is the key function of standard costing for industries in U. K, Dubai and Malaysia. Also, Mann-Whitney U test suggests that the industrial-sector companies in U. K. use standard costing to a greater extent than the service sector for the functions of cost control and performance evaluation, costing inventories and computing product cost for decision making. Also, in only one instance has this pattern reverted toward the service sector: the use of standard costing as an aid to budgeting. These findings are consistent with those of other studies of industrial sector companies in Malaysia and the U. K. (Marie & Rao, 2010)

#### Material Standards:

Swiss Chalet's direct material components have three categories: foods, liquor and disposals. Foods include chicken, potatoes, ribs, and vegetables. Etc. Liquor includes wine, spirit and other non-alcohol beverages. Disposals include food boxes and bags to wrap food. Also, the standard cost of non-value-added materials such as discount materials, food wastes and voidable orders are also included for the purpose of reduction or elimination. When area mangers determine the standard cost, historical cost, store's current performance and cost-benefit trade-offs are involved in making quality decisions. When all quantity and price information has been gathered, component quantities are multiplied by unit prices to yield the total cost of each component. These totals are summed to determine the total standard material cost of one unit of product and the total standard material cost. Information about direct material of each component, their specifications (including quality), their quantities and total standard material cost are listed on a bill of materials.

This "average of historic usage" method is consistent with statistics of service sectors in Dubai, U. K. and Malaysia. According to Mann-Whitney U test Statistic, 76% of service sector in Dubai and 63% of service sector in Malaysia use "average of historic usage" to set up labor and material standards. On the other hand, nearly nine out of 10 industrial sector respondents in Dubai employed standards based on design/engineering studies, which is comparable to Japanese companies in Malaysia (81%). These firms appear to be significantly more scientific in their approach to standards setting compared to the service sectors, which predominantly used "average of historic usage method".

#### Labor Standards:

The procedures for developing labor standards are similar to those used for material standards in Swiss Chalet. Swiss Chalet has four types of works in the front of the house: servers, hosts, managers and bar tenders. They also have three types of people in the kitchen: cooks, line cooks and pre cooks. The standard costs of each type of worker in each specific time range are identified. Because they are in the restaurant business, labor requirement is different during the different period of the day. Therefore, their labor standards are specifically identified in each hour. Their managers' salaries are also counted into the labor standard costs although they are fixed overhead cost. Labor rate standards reflect the wages and fringe benefits paid to employees. Because employees in the same position are paid different wage rates based on their experiences in the restaurant business, a weighted average rate is computed and used as the standard. After labor tasks are analyzed, an operations flow document is prepared that lists all the necessary activities and labor costs in each time range.

#### Overhead Standards:

Swiss Chalet store has two types of overhead costs: utility costs and maintenance costs. (Managers' salaries are included in the labor costs). Utility costs include rent, gas and hydro, etc. Maintenance costs include equipment repair budget, sanitary service and pest controls, etc. Area managers use historical data, store situation and market price to determine the overhead standard costs.

Swiss Chalet's managers review the standard every month. Slightly more than half of Dubai industries (52%) conduct reviews semiannually, consistent with Japanese respondents in Malaysia (55%). On the other hand, domestic Malaysia firms in the U. K. were apt to review their costing standards annually at a rate of 35% and 68%, respectively. (Marie & Rao, 2010)

#### Material Variance:

Store managers do the inventory count every week and then input direct material cost they used of each component, their specifications (including quality), their quantities and total standard material cost into the computer system. The computer system generates the price variance and quantity variance.

Store managers usually can not do much about the price variance because they are not able to control prices. Head office has purchasing contracts with their suppliers with fixed prices in the yearly basis. The only price they can control is vegetable prices, which have seasonal fluctuation. Managers are able to influence the price according to the price variance.

Quantity variances are considered the responsibility of the person in charge of the kitchen. When the quantity variance is too big, managers have to think about the efficiency of the material usage, weather experienced employees are well allocated in different shift and weather further training should be provided.

#### Labor Variance:

When employees start to work and when they leave the store, they input their password into the computer system. Computer system automatically records their working hours and generates labor rate variance and labor efficiency variance.

If the labor cost is bigger than 29% of the total costs, head office will give a warning to the stores, demanding them to reduce the labor costs. Therefore, managers have to balance the use of experienced workers and inexperienced workers in a specific task by using labor efficiency variance and labor rate variance. Using highly skilled highly paid individuals for lower-level jobs could cause an unfavorable labor rate variance, accompanied by a favorable labor efficiency variance.

Therefore, Swiss Chalet examines variance "where the variance exceeds a given percentage of standard". In Dubai, 39% of industrial companies and 50% of service companies base their costing decisions on "managerial judgment", compared to roughly half of U. K. companies and one fourth of local and Japanese companies in Malaysia. However, 35% of firms in Dubai's industrial sector and 29% in its service sector answered when the variance exceeded a given percentage of standard, which is similar to the rates found in the Malaysia and U. K. studies. (Marie & Rao, 2010)

# II Usefulness and effectiveness of the System:

The major advantage of standard cost system in Swiss Chalet is that it highlights and allows management to manage by exceptions, that is, it allows management to concentrate on the areas where there are inefficiencies. It also allows company management to understand the quality

expected and costs that will be incurred in the preparation of each dish and what impacts deviations from these standards will have on costs and profits. When the variance is significant, this is a signal for investigation, Managers tries to discover the cause and exert influence to correct it. In the Swiss Chalet store I visited, costs are under control; productivity is high; workers are achieving bonuses based on team activity goals and employee morale is high in a work environment typically viewed as tedious.

The system is highly controlled and automated. The process is effective and the standards they set are appropriate and attainably. Although their standards are developed from past and current information, environmental, seasonal and economic factors are considered for the period in which the standards are to be applied. Swiss Chalet's material, labor and overhead standard costs are changed every month. For example, recently, Swiss Chalet eliminated many non value added labor movements, their labor time standards changed very soon accordingly.

Swiss Chalet's standards can be reached or slightly exceeded approximately 60% or 70% of the time with reasonable effort by workers. Their standards allow for normal, unavoidable time problems or delays. Their standards represent an attainable challenge and are able to motivate workers' performance and at determining how effectively and efficiently workers are performing their tasks.

## **III Recommendation:**

Process changes:

Under current system, area managers are the only people who do the standard costs setting. I believe that area managers could cooperate with purchasing manager, accountants, marketing managers and store managers to determine which choices are most appropriate. The cooperation will help the company better balance the interrelationship of cost, quality, quantity and selling price.

Under the current system, standard costs of each type of worker in each specific time range are used to calculate the total labor standards. However, workers salaries are different even in the same position because their experiences are different. Therefore, each individual's salary and individual numbers in one specific time range used to calculate the standard labor costs should be identified for managers better understand the standards and better improve their labor arrangement and improve their labor efficiency.

### Computer System change:

costing/

Swiss Chalet's current computer system is good, but still not highly automated. They still use fax to transit data and information within the organization are not highly shared within one portal. Therefore, I believe Enterprise Resource Planning System (ERP) will make their work process more effectively.

EPR system provides a much higher level of accuracy to gathering cost information. With most manufacturing processes being automated and operated with little direct labor, ERP system has the advantage of keeping an accurate record of overhead cost pools at all levels in an organization. ERP has greater capacity to accurately allocate costs and it is important for https://assignbuster.com/a-report-on-the-implementation-of-standard-

developing accurate standards. Standard costs can be prepared with, for example, the sub-module mySAP. com Financials under ERP system.

## Intermountain Health Care, Inc.'s Standard System

According to Mr. W. V. Rosqvist's research paper "Intermountain Health Care, Inc, (IHC) Satandard Costing System Methodology and Implementation", the IHC Standard Costing System is able to manipulate the procedure costs in any way desirable to provide meaningful groupings for analysis. The Standard Costing System provides hospital management with a tool for meeting increased cost pressures in the health care environment. The system is useful for pricing services, but it is also important to monitor productivity and analyze costs and profitability.

IHC is a not-for-profit hospital chain with 22 hospitals in the intermountain area and head office is in Salt Lake City. They have a complex approach to determine detailed standard costs for every procedure in the hospital. IHC's standard costing system was designed to link the hospital's financial management and case mix reporting system to provide significant information in the area of following:

Cost/Profit Studies: the ability to determine cost and profit at each of levels, such as patient, physician, medical specialty, payer and employer.

Marketing: to make complex decisions regarding the competitive market forces such as pricing, contracting and physician retirement. The analysis gives hospital the advantage to determine the financial impact of changes in volume.

Departmental Productivity: to monitor the department performance to help variance analysis and goal setting.

Utilization of Hospital Service: the ability to alter utilization, which depends on the ability to analyze current patterns and associated costs.

Cost Comparison: To compare costs to other hospitals to help managers to identify and learn the efficient methods.

Competitive Analysis: To study competitor information and make reasonable judgment of its costs. It will allow a significant view of the impact of price completion on all the competitors. It will help IHC to determine the extent to which it should compete on prices with other hospitals and with nontraditional health care providers, such as outpatient surgery centers.

The IHC approach to standard costing provides detailed costs for every individual charge item in the hospital. Fixed and variable costs are maintained for every item in broad categories: labor expense, supply expense, depreciation and hospital overhead.

After the implementation, their standard costing system is able to: provide full standard fixed and variable costs for management purpose in making pricing and marketing decisions; maintain a management reporting system compatible with existing system; provide an approach to compare hospitals and departments; provide accuracy while allowing easy and rapid maintenance. (M. V. Rosqvist)

# The Future of Standard Costing:

According to Cheatham and Cheatham (1996), many accountants do not know that a redesigned standard costing system can provide the important information that they need and updating their system is an easier process than adopting a new system. They also point out that standard costing system combines managerial, financial and operations accounting, which make it as a control system. But the possible replacement is only cost accumulation system.

Critics against the standard costing system questioned whether the system is useful in the manufacturing system of today. As we demonstrated above, it is still a widely used method, due to the fact that it provides cost information for many different ways in addition to cost control. A lot of companies adapted their standard costing system to report on these variables that particularly important to them. In companies where an activity-based system is implemented, standard costing is still essential when it comes to controlling the costs of unit-level activities.

Other criticism comes from that overemphasis is on the price and efficiency, which would make quality aside. Also, volume variance to measure utilization of capacity ignores overproduction and unnecessary build-up of inventory. In this situation the fact that variance analysis is not "locked in" to a set of variables is ignored. Used variables can be changed when the need arises. Examples of this are presented below. (Cheatham & Cheatham, 1996)

To use standards on the functions of raw material ordering and inventory levels, which give information about the effectiveness of suppliers. Because the objective is to deliver orders as placed, any variances are undesired.

Price variances can be combined with a quality variance to prevent purchasing managers from only focusing on price but do not pay attention to quality.

Raw materials inventory variances indicate an inventory build-up, because more material purchased than used, by reverted conditions. This is in line with a just-in-time theory.

Further criticism is about the non-focus of continuous improvement. But, standards based on engineering studies or historical data are not a necessary part of a standard costing system because standards can be changed by a lot of methods. Examples are listed as below. (Cheatham & Cheatham, 1996)

Use last period's results as standards. The last period's result has to be representative; otherwise it needs to be revised. It is also achievable to use a base period that comparisons are made.

Use benchmark as something outside companies. To compare with competitors or with the leader of the industry.

Use predetermined cost reduction by reducing the standard cost for every period by a predetermined amount to achieve constant improvement.

Finally, the reporting system of the standard costing system may be revised. In the traditional way internal completion often arises. By revising the reporting system, cooperation among workers, managers and departments can be supported.

## **Conclusion:**

Despite it is less relevant than newer accounting methods, standard costing is far from obsolete. However, redesign and update the standard costing system to adapt the new environment may be necessary. Because of its simplicity, flexibility and affordability, standard costing remains a favorite cost accounting method among accounting and finance professionals.