

The Relevance of Variance Analysis in Managerial Cost Control

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Abstract

Cost plays a prominent decision making role in the life of an individual and organisation because it is a central focus of daily financial activities. In any financial engagement, usually for a reward, the costs that are incidental to the engagement could be broadly analysed into material, labour and overhead. For an organization to break-even and proceed to record profit, costs must be controlled so that they can be within acceptable limits. This is achieved through setting costs standards and formulated process of comparing the standards against the actual costs, which ordinarily gives rise to variance. One simple question is that: will costs variance analysis be exceptionally relevant irrespective of any standard set? The objectives of the study are to review and analyse literature to find out what constitutes efficient standard in a manufacturing organisation with a view to disclosing realistic variance for management cost control and based on the review and analysis to assess the extent to which costs variance analysis can adequately be useful in controlling costs to provide for improved profit. The study finds that efficient standards are those standards set by the combined effort of operation/technical managers and top management of a manufacturing sector and that the standard to be adopted should be the one that will assist management in attaining its strategic goals with less cost, through effective cost control. The study recommends that realistic standards should be put in place through participation of the operators and top management with a view to achieving optimal results. Besides, all variances falling within the pre defined boundary should be investigated and the report be adequately implemented without delay to guide against future variance.

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1 Introduction

Cost, in whatever way one looks at it, plays a prominent decision making role in the life of an individual and a business or non-business organisation. It is the central focus of daily

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financial activities because of its significant role. Cost relates to the amount of expense actual, nominal or notional that has been incurred or that has to be incurred for a specified activity or function. This relevance will culminate into a direct impact on any normal individual and management of any organisation in taking financial decision. The word cost cannot stand in isolation without qualification. It must always be identified with a particular activity or function; it is about what must be given up in order to obtain something. For instance, cost of a text book, a biro, a laptop, a chair, a show and the rest, indicates what must be given up to obtain those items of products or services.

In any financial engagement usually for a reward, the costs that are incidental to it could be broadly analysed into material, labour and overhead. This is because material is always required in any production process; labour is another requirement to meet the remuneration payable to the workers and, thirdly, overheads which are treated as indirect expenses and are either variable or fixed. However, in a service oriented business, emphasis on costs will be significantly different from say a manufacturing outfit as it will be more on labour and overhead. Cost of material will usually be ignored as no raw material will be needed to carry out a management accounting consultancy service, for example.

For an organization to break-even and proceed to record profit, costs must be monitored and controlled so that they can be within acceptable limits. Cost control has to be put forward by an organization in response to the considerable pressures of competition (ICAN, 2006). Determinations of costs and actual performance are obviously needed for effective management control in costs reduction and avoidance through waste in any form to enhance an organisation's turnover and earnings. This is achieved through setting of a standard in each element of cost in an activity process. The operation of a standard costing system will be required for: i) the accurate preparation of standard costs and ii) comparison of standard with actual costs and the regular review of standards (Lynch, 2005).

The results of comparing the standard costs with actual performances rarely agree irrespective of the practicability of the standard costs in place. There are always differences referred to as variances. However, when the variance occurs, it should not be a base for criticising the performance of the manager or operator controlling the costs, rather it is a notice to the management that an exception to the standard or budget has occurred and may require investigation and possibly explanation to adjust subsequent costs for control purpose. To minimise the size of the cost variance and improve the performance, operators are expected to be actively involved in providing information and setting the standard instead of management alone. Besides, involving the operators and other personnel directly involved in setting standards could create the desirable motivation, and commitment that could trigger them to be efficient in order to achieve the standards developed by them.

In practice, the approach may differ and be difficult as management alone and possibly with few others may dominate or take over the responsibility of these technical managers. Once this freedom of providing information and participation in the standard setting is denied, it may give rise to generation of undue variance. The study of associated costs will then become complex. The expected outcome can create generous or slack standard costs that would not reflect efficient standards. This therefore could form the basis for disagreement with what is attainable or realistic. This is clear because managers or operators cannot be expected to implement a plan unless they are aware and are part of what is involved (ICAN, 2006).

One major derivative question is: will costs variance analysis be exceptionally relevant irrespective of any biases introduced in deriving standard costs? The two objectives directly from the question are: i) to review and analyse literature to determine what constitutes attainable and efficient standard in a manufacturing organisation with the view to disclosing controllable and realistic variance for management cost control and ii) based on the review and analysis, to assess the extent to which costs variance analysis can adequately be useful in controlling costs in any form to provide for high turnover and improve earnings. It is of the opinion that reviewing the concept of costs, management cost control and variance analysis as a tool for cost control would provide analytical answers to achieve these objectives.

2 Concept of Cost in Production Process

Studying cost is usually commenced with the past experience in order to give an insight into its behaviour which could provide information for a realistic estimate of what the next cost of a product or service should be. The cost accounting is always linking the concept of cost to production or service as the costs must be incurred to give birth to productive output. The Chartered Institute of Management Accountants (CIMA) as cited in Adeniji (2009, p. 2) defines cost as “the amount of expenditure (actual or notional) incurred on, or attributable to, a specified thing or activity”. This definition is satisfactory, but not complete; it fails to highlight the purpose of incurring the cost, which is to achieve a certain objective. This is because cost is an opportunity or resources forgone for a purpose. Adeniji (2009) also contributes that cost represents the total amount of expenditure incurred or yet to be incurred in the course of manufacturing a product or rendering services. This contribution cannot also stand as a good test for lack of purpose of incurring the cost.

Dandago and Tijjani (2005, p. 2) sees cost “as the value of economic resources used in the production of goods, services, income or profit”. However, the term cost is not exactly the same as value; cost is the amount incurred or to be incurred in generating goods/products, services, income, profit or loss rather than its *value or worth*. Lucey (2003) views cost as the amount of expenditure incurred on, or attributable to, a specified thing or activity. Lucey (2003) only refers to past activity; whether past or future is signifying the same meaning. Cost could therefore be said to be the money measurements of resources that are required in an organization or by individual so that its objective can be achieved. Different types of costs are required for different types of financial decisions. For instance, costs needed for the purpose of product costing are usually analysed as direct and indirect costs while costs that reflect the impact of different activity levels and are relevant to decisions relating to activity volume are present in the form of fixed costs and variable costs (Glautier and Underdown, 2001).

3 Managerial Cost Control

A cost is said to be controllable if the management has discretion in choosing to incur it or can significantly influence its amount within a given, usually short period of time (Blocher; Chen; Cokins and Lin (2005). The purpose of cost control is to maintain a cost of a product or service to within a properly and efficient standard. Cost control involves all methodologies of controlling costs for efficient utilisation of resources to achieve the objective of an organization. It therefore becomes a process and any devising techniques that will continually guide and monitor costs that could give rise to immediate control action by management for effective measurement and corrections.

For cost control, the management will require relevant data, and this can obviously come from classification and analysis of costs. It may however, be possible to obtain total costs without possible classification and analysis but the accruing advantage will be missing. The clear theoretical purpose for costs analysis is to indicate to the management any area of inefficiencies, and the extent of various forms of waste, whether of materials, time, expenses or in the use of machinery, equipment and tools (Owler and Brown, 1982).

The information for standard setting process is a very serious and fundamental issue that deserves special recognition in an organisation even individual. Primarily, it is expected to be the responsibility of operators/managers in their areas of specialisation rather than top management. The operators are the personnel directly involved in an activity process; they are engaged in all the stages from the beginning to the end of a function, whether in a production or provision of service. This active participation has gained them the requisite knowledge for been in the position to provide near true and reflecting information for generating realistic or attainable standard costs on a product or service.

The process of cost control, according to ICAN (2006) is as follows: i) setting the acceptable or expected level of costs for various activities ii) measuring actual cost of activities as they unfold iii) comparing actual costs with those pre-determined and iv) taking corrective action

where necessary. ICAN (2006) also states that the setting of standard costs for comparison with actual costs will employed budgetary control and standard control tools. CIMA as cited in Adeniji (2009) defines standard cost as the planned unit cost of the products, components or service produced in a period. The standard cost may be determined on a number of bases. The main uses of standard costs are in performance measurement, control and in the establishment of selling prices. A standard cost, apart from being related to production costs, may also be looked at from the view of selling and distribution costs, administration costs and other costs.

In spite of the significant importance of standard cost in cost control technique, Dandago and Tijjani (2005) highlight some problems associated with this technique as i) incorporate impact of inflation into the standards ii) determination of standard method to adopt specially in labour considering the short term nature of the standard iii) what materials to be used considering the quality, waste and price. Other problems noted including possibility or probability of efficient mix component of required materials, estimating costs in the case of seasonal materials or discount and the knowledge and time needed to construct efficient standards. Despite these drawbacks, standards evaluate objectives and performances by comparing budgeted to actual. Besides, it establishes cost control, cost inefficiencies and overruns are pinpointed and yet assists in decision making as areas of inefficiency are identified.

Irrespective of the standard method adopted, it is rare to produce efficient results where standard costs will equal actual cost incurred in a production process. The typical types of standard are ideal. Ideal standard is forward looking rather than historical standard. It is designed to be perfect in its implementation to achieve maximum efficiency in all aspects of production process. This standard is not easily attained because during the operation, accidents may occur, unexpected events could arise and undesirable circumstances may equally manifest themselves. In practice, where few companies employ these standards, they often modify performance evaluations and reward structures so that employees are not frustrated by frequent failures to attain the ideal standard (Blocher; Chen; Cokins and Lin, 2005).

Another type of practical standard and which is a direct opposite of ideal standard is currently attainable. This will state the performance region at a defined level that a worker can achieve without having to exert extraordinary effort. This standard is often referred to as practical because it represents an established standard specifically premised on what is considered practicable within the organisation. In addition, it makes provisions for idle time or loss of production due to machine breakdown, loss of power, lack of raw materials, industrial dispute, repairs and maintenance (Adeniji, 2009). Some authors (Adeniji, 2009; Omolehinwa 2007; ICAN, 2006 and Dandago and Tijjani, 2005) are of the view that basic standard is another standard that should be given attention and recognised both in the academic and practice. Basic standard is designed mainly to satisfy a given objective and therefore should not be subjected to frequent changes. It is an old established standard for specific purpose.

As addition, Oowler and Brown (1982) and Blocher; Chen; Cokins and Lin (2005) suggest that flexible budget could be used as another means of controlling costs through variance that may occur in a period. That is, cost will be controlled through the implementation of flexible budget. Flexible budget is a budget that is expected to efficiently adjust the revenues and costs to the extent of output recorded in a particular period. The aim is to incorporate any change either favourable or otherwise and further revise the operational budget on costs and possible revenue for efficiency. Another control measure usually adopted by management in costs control is the periodic and regular budget revision. This control mechanism may discourage budgeting department and cost units to prepare their operational budgets. However, budget revisions need to ensure that revisions are allowed only if circumstances have changed significantly and are beyond the control of the management (Blocher; Chen; Cokins and Lin, 2005).

4 Variance Analysis as Tool for Cost Control

Standard costing and variance analysis are exceptionally important tools because they reveal and play essential role in the financial analysis and decision making by the management. When practical or realistic standards of performance are put in place, taking into consideration wastage and other losses, and the actual performance deviates positively or negatively from the predetermined level of performance, then there will be a question of why cost variance (ICAN, 2006b). The basic concept of variance is simply the difference between actual costs incurred and standard or budgeted costs applied to an activity or service process in a period. What will the management do if variance has been established? First, the management should recognize that the variances are only a starting point, a clue for investigation and secondly, from the view point of control, these variances should be measured as soon as possible. The longer the delay, the staler would be the data and the fewer the opportunities for corrections (Horgren, 1978).

The analysis of variance will be based on the various elements of costs in a process, usually into material, labour and overheads. It is the analysis and comparison of the variables that had caused the variation between the standards and actual performance for the purpose of highlighting and preventing wastes in whatever form. In other words, variance analysis is the analysis of performance by means of variances and it is aimed at promoting management action at the earliest possible stage (Lynch, 2005). In a sentence, the accurate analysis and follow-up of variances is what pays off in cost control.

From the literature (Dandago and Tijjani, 2005 and ICAN, 2006), material variance could arise from instability of prices, supply of material and management lapses such as inefficient purchasing policy, uncertainty of required materials and mistakes, reversal of specification and inadequate resources. Labour variances are said to be caused mainly by management lapses like improper determination of internal rate, provision for labour turnover and idle time, quality of labour and poor conditions of machine. In view of this, Horngren (1978) states that direct material and direct labour are controlled with the help of standard costs.

Variances from overheads are due to changes in production volume, labour disputes, poor production scheduling, poor production quality and major shifts in demand for products (Adiniji, 2009). Horngren (1978) simply looks at the causes to be the actual expenditure being different from the budgeted expenditure and actual production being different from the budgeted production as the recovery rates are always based on the budgeted figures. Horngren (1978) also believes that other costs including overhead are usually controlled with the help of overhead budget. He concludes that the distinction probably arose because of different timing and control techniques for various costs. Direct material and direct labour are generally relatively costly and are easily identifiable for control purposes.

For the variance to serve as a control measure, management must create time to investigate the causes of every cost variance that arises from comparison of standard and actual performance. Management by exception is always employed to provide the function of the investigation. But what constitutes an exception in this case and how does management know when to follow up a cost variance and when to, become important questions for examination. Management usually does not provide for these answers when standards are set; however, deliberations would arise when the variances have occurred. At time, management applies judgement and experience in making guesses, pursuing hunches and relying on intuition to determine when cost variances should be looked into for control (Hilton, 2005).

According to Omolehinwa (2007), some of the guidelines (which according to the researchers) are equivalent to rules of thumb that management adopts to investigate the magnitude of variance with a view to controlling costs are: i) cost effectiveness of such investigation ii) materiality of the cost variance iii) regularity of occurrence of the cost variance iv) extent of control that can be exercised by management and v) the source of the cost variance. Omolehinwa (2007) believes that cost benefit analysis should be put in place in carrying out cost variance investigation, that is, if the cost out weighs the benefit, the investigation should be avoided. The benefit should not be the ultimate aim at this point, but

to find out the underlying causes for the purpose of cost control and to avoid future reoccurrence if possible.

Rarely exists, is what action in terms of materiality, percentage or amount is required at the point of setting standards to reduce problems of what cost variance should be subjected to investigation or not when it occurs for cost control. If the question is addressed before variance, then investigation becomes necessary if it falls within the defined boundary. Reoccurrence of the cost variance and extent of control are practical factors if cost variances are to be re-examined to serve as control measure. In addition to the source of the cost variance, reviewing the plan or standard method adopted should form another prominent factor in the cost control process through variance analysis.

In support of these factors for cost variance investigation, Hilton (2005) outlines the guidelines that are often applied by management as i) size of variance ii) recurring variances iii) trends iv) controllability v) favourable variance and costs and benefits of investigation. The only addition here is the favourable variance. He is of the strong view that it is just as important to investigate significant favourable variances as significant unfavourable variances because by investigating the variances, management can learn about the improved method and can favourably be extended to other areas in the organization. Adeniji (2009)'s view on this investigation is not different from these two authors as he recommends six factors as follows: i) the cost and benefit analysis of the investigation ii) the actual amount involved in the variance iii) the trend of the variance iv) materiality aspect of the variance to the organisation v) size of the variance and vi) proportionate significance of the variance. However, factors ii, iv and v appear to overlap one another because they centre on materiality of the variance.

5 Summary of Findings and Conclusion

Cost control is a continuous process being exercised by management in particular for the purpose of achieving its basic objective of containing costs within the efficient pre-determined level. Costs should therefore be controlled at the point at which they are incurred and also assigning responsibilities for variances is, therefore of the utmost importance. Variances are usually generated because pre-determined costs hardly agree with actual performance in practice. By applying cost variance analysis to identify areas of alarm, management has actually devised a tool to monitor and control project and the general health's condition of an organisation.

The observed findings from the review and analysis of the previous researchers' work are: i) efficient or realistic standards are those standards that are set by the effort of operator/technical managers and top management of an organisation so that they can lead to greater commitment towards meeting the targets set therein ii) the standard to be adopted should be the one that will assist management to attain its strategic goals with less cost through control of costs iii) reviewing of the variances should focus on the most concerned areas so that management can become aware of any changes in the organization iv) that management must create time to investigate cost variances that require investigation for control purposes in order to improve the efficiency of an organisation and v) that variances should be disposed off as soon as possible to achieve the opportunities for corrections.

Finally, realistic standards should be put in place through participation of the operators and top management with a view to achieving optimal results. Besides, all variances falling within the pre defined boundary should be investigated and the report be adequately and properly implemented at once to guide against future variance.

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