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The Effect of using Standard Costs in Controlling Cost Elements

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Abstract: ***Recently, standard costs are widely used in cost management because of companies' needs to remain competitive for better productivity and cost. To achieve that goal, standard costs have been used in good cost management in order to control the cost elements in production. This study aims to find out the effect of using standard costs in controlling the elements of cost. The method used in this research is descriptive qualitative analysis and uses a literature study to collect the data. The research results show that cost control using standard costs can enable companies to carry out their planning and control functions easily, while standard costs can also be used to support management functions by communicating targets and maintaining an efficient internal control system. Some of the negative aspects that managers might consider when setting standard costs are that individual performance can be performance-oriented, lack of motivation of other employees, poor morale, frustration, and resistance.***

Keywords: Standard costs, cost control, value of standard costs.

I. INTRODUCTION TO STANDARD COSTS

Standard costs are instrumental in assessing the overall performance of an organization and its individual cost elements. These are predetermined costs based on technical estimates or past records. They serve as benchmarks for preparing numerous budgets, working plans, and for controlling expenses. For financial purposes, therefore, standard costs constitute the conceptual measuring rod. After actual performance, a comparative report is prepared, and any inefficiencies reported are subject to investigation and necessary action. Managers investigating these unplanned excess costs will have to make a judgment about the performance of their subordinates. If there are unfavorable management situations, this prompts the managers, if corrective action is delayed, to report the variance to the higher levels of hierarchy for the necessary administrative approval for their actions. (Datar & Rajan, 2021)

The basic reasons for the adoption of standard costs, therefore, are intended to enable management to: (a) set realistic budgets and records; (b) compare actual performances with those of the standard and assess the variance in order to analyze the nature and cause of the difference and take appropriate measures to remove the causes; (c) improve operations and control the cost of the product and service, thereby increasing profitability. There is a primary difference between standard and budget. The latter is a forecast – an effort to anticipate the future economically; in contrast, standard is the norm for measuring the two performances. The former is a future forecast, while the latter is the expected performance. The use of standard costs has been sharply criticized. The system could be used for manipulation. Apart from these problems, there are also technical objections to the basic elements of standard costs: direct labor, direct materials, overheads, sales units, etc. (Reis, 2022)

A. Definition and Purpose of Standard Costs

Standard costs can be defined in a simplistic way as the costs an organization expects to incur in order to produce goods or services under normal conditions and production parameters. More conceptually, standard costs can be seen as a representation of what inputs should actually cost, and these inputs are influenced by the decisions made by technical or professional personnel within the firm regarding input requirements, prices paid, and the levels of cost capacity within the firm. The purpose for which standard costs are normally set falls broadly into a number of categories, which include the setting of standards for external or internal reporting, budgeting, and benchmarking; preparing cost-plus pricing and other cost data for long-range decision-making; controlling the cost elements that production managers are responsible for; and performance evaluation for managerial personnel. (Arfi et al.2021)

Setting standard costs allows skilled forecasters to indicate the probable cost likely to be incurred in the manner of operating technically feasible decisions used in preparing standard costs. Variances between actual costs and standard costs can readily be calculated and used for the purpose of breakeven analysis, forecasting, or projecting future expenditure based on actual or anticipated volumes. By determining the budgeted expenditure, an immediate variance analysis compares standard directly with planned actual, highlighting for management the effect of any comparative volume or price element implicit in the plan.

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Standard costs are used to make management more accountable in their performance monitoring activities. The operational and financial effect on profit and cash flow from making a decision based on standard would then be immediately recognizable. (et al., 2022)

B. Types of Standard Costs

Standard costs are classified on the basis of their inclusiveness and are categorized using different terms. Ideal standards are those that can be attained under the best possible conditions with no inefficiencies or wastages. The standards set are intended to be very stringent and aimed at achieving the best possible performance. These standards are used for the purposes of obtaining the highest levels of efficiency. A normal standard can also be treated as an ideal standard. This standard reflects the ideal performance when things go well. The use of these types of standards in the cost control process leads to the setting of too low targets, which may in turn lead to low morale of the personnel. Frequent variances may also make people pay little attention to such variances.

The currently attainable standards awareness describes what an individual feels to be realistic performance expectations based on present good operating conditions. The activity level and the output are predicted from past experiences, and hence the standards are called currently attainable standards. They do not reflect average performance. The management selects the standard that reflects the best performance for the budgeted period. Variances are measured with respect to current performance, and thus these variances are more often usually favorable. The cost control process is usually more effective when the currently attainable standard is applied for controlling cost elements. It would make no sense to set currently attainable standards in a non-inflationary environment. Variance analysis under such a situation is not relevant. The standard cost that is usually set for comparison purposes over consecutive periods or years is termed as basic standards.

II. SETTING STANDARD COSTS

One of the central elements of accounting for making comparisons on costs, revenues, and inventory between companies is the standard cost system. Companies that use standard costs maintain standard costs for all their activities for themselves and their competitors. The use of standard costs in organizations is intended to create a standard budget to manage and control the cost and production process. The setting of standard costs, therefore, is crucial for the assessment of the overall budget and cost control. Actual costs are usually compared and variances analyzed so that management can learn the cause and effect of the actual costs that their products recoup, thereby taking corrective actions where necessary. (Hidayah and Syahrani2022)

Many companies use a variety of factors depending on the type of company in setting standard costs. Each company has characteristics and specific goals for various kinds of publics or stakeholders. However, a few factors must be considered and involved, as they include historical experience, input and top-level negotiation, operational efficiency, and external factors. There are various methods and techniques used in contemporary organizations to establish or gather cost data. The methods or techniques used in setting standard costs are useful to manage and control cost undercutting or underestimating unnecessary costs. Organizational goals, types of products, human resources, and their structure must be considered to use the method. The choice of the method also helps organizations to achieve proper operational performance, human resource development, organizational strengthening, and improved cost control as well as cost management. Setting standard costs that involve calculating normal losses, abnormal losses, or losses from evaporation is intended to suppress actual costs in the income statement, which ultimately makes the company's financial performance look more ideal. (Datar & Rajan, 2021)

A. Factors Considered in Setting Standard Costs

Various factors are considered when setting standard costs. The first requirement is a review of historical data. Performance in the recent past is particularly important, looking for such factors as trends in costs, the reasons for any trend found, and variances from standard. An input in a standard, if thought of as detailed standard costs, consists of several elements. For example, a material cost input might be thought of as the actual quantity of materials per unit, multiplied by the actual price of the materials. Standard inputs must be realistic and must be reviewed to ensure they are kept up to date. Apart from actual inputs being used in setting standard costs, it is necessary to include the degree of operational efficiency that the undertaking should be able to maintain. This means having some knowledge of the method of manufacturing or providing a service to enable more realistic standards to be set. This is a complex matter and may involve manufacturing expertise as well as management skill in judging future inputs. (Osaba et al.2021)

Setting standards requires a high degree of expertise and knowledge of a great number of factors. Businesses need to take into account various internal and external matters in setting these standards. For materials, the business needs to find out the current market price, terms of payment, and if there will be any price increases or decreases.

Businesses should also take into account the length and volume of work when considering the setting of standards. With regard to labor, businesses can get wage costs from the wage rate. Some of the costs that you also need to take into account include factory overhead costs like factory rent, heat, and light. Overhead expenditure can either be fixed or variable costs. A business also needs to get various other input costs like management expenditure and administration costs. Some information is more easily obtained. Internal sources may be, for example, the wages office, stores, purchase orders, or the cost accountant's records. Much of the information needed must be gathered from external sources. All this data must be processed and interpreted to provide valid standard costing information.

B. Methods of Setting Standard Costs

One of the largest debates in cost accounting is the appropriate method to establish standard costs. In overview, there are two major categories of methods to establish standard costs: traditional and advanced. Traditional methods have primarily been used in practice and include examining historical costs or using expert judgment. These methods have low requirements for data and time and are simply tools that the finance department can use when calculating the budget. Advanced methods of determining cost standards require extensive access to data and time to make the calculations. The two advanced methods that are most often used in practice are engineering cost estimates and statistical modeling. (Husereau et al.2022)

The choice of a method depends on who will carry out the process of establishing standard costs, the level of data availability, and the company's internal culture. In recent years, both academia and practitioners have suggested that managers should also use technology or software tools to establish standard costs. These tools allow managers to use all the data an organization has available to predict or estimate the standard costs, even if the costs do not follow standard economic behavior in some cases. The use of software and technology is not considered to be widely used, but there are more advanced companies actively seeking methods to use technology to establish standard costs. In addition to the method used, other important considerations related to establishing cost standards are the frequency of addition, deletion, and revision, as well as the process for review and update of administrative and operating policy changes in the organization when this occurs.

III. ADVANTAGES OF USING STANDARD COSTS

Standard costs provide predefined costs, which may be utilized for a number of things. Firstly, they can be used to measure the efficiency of a process or department. For this purpose, the differences between the actual costs incurred and the standard costs that should have been achieved are usually isolated in a number of variances. Thus, we can establish which cost elements or which employees proved to be less efficient than anticipated. Secondly, standard costs can offer protection against rapid cost increases. Thirdly, they can be used as a basis for estimating a job for an outsider, provided the standards employ a reasonable level of efficiency and are sufficiently up-to-date to provide a meaningful basis of cost estimates for the job. (Lu et al., 2020)

Standard costs provide a convenient control technique for management. Variance analysis may often indicate undesirable trends in the company’s affairs before these trends are serious enough to cause an actual problem. Overall, we can say that standard costs, if used appropriately, will encourage employees and managers to: achieve targets set in advance through the budgeting process; insofar as the achievement of the budgetary targets requires financial constraints, also adhere to cost limits; also, to value the need to conserve scarce resources. In short, managers and other responsibility center-holders can be held accountable for meeting predetermined levels of performance. From the manager's point of view, the system can be used to focus attention where it is needed and to set the agenda. Providing that the variance report and other performance figures indicate where further investigation is warranted, management by exception is practical. For some types of problems, control by measurable quantity provides the data for immediate assistance to be obtained from others. (Parekh, 2024)(Pallathadka et al.2023)

A. Cost Control and Variance Analysis

The expression of standard costs in financial reports serves as useful estimates for the product costs. In addition to that, they are introduced with an obligation for cost control. Consequently, if the actual costs exceed the standard costs, there could be potential problems in the future. Thus, standard costs are widely used with budgets and are used as a communication tool to show actual costs in comparison to standard costs. The cost control and the continuous operational improvements use variance analysis techniques that are explained in this paper. (Datar & Rajan, 2021)

Variance analysis is the assessment of the deviation of actual costs from the standard costs. Variance analyses are a necessary part of an effective system of cost control.

When the actual cost is determined, a variance report is prepared, which shows a comparison of actual and standard costs and a computation of the variances. The variances are then reviewed to determine if they are significant enough to warrant additional managerial attention, and hence, sometimes, to have the potential to influence corporate strategies. If the variance is significant, the company may take severe action to remedy or eliminate the costs frequently. In brief, variance analysis provides detailed guidelines to top-level managers as to the areas where corrective action is necessary. It is the first step toward the determination of the need for adjusting the standards so that they can be improved. That is to say, it helps improve profitability and quality in production. Depending on what is compared, the variance can be material cost variance, labor cost variance, overhead cost variance. Standard cost variances will encourage investigation into discrepancies and motivate performance improvements. They are a tool for cost control, operational efficiency, and lead to overall company cost efficiency. It offers information that will be useful for the preparation of the budget at the next planning period. (Maheshwari et al., 2024)

The variance can be used for short-term decision-making. For instance, if a manager is faced with lower sales to some markets, the decision can be made to use resources that favor the company's product. Her alternatives are useful to explore based on the variances that may arise, such as labor efficiency, production equipment efficiency, and material efficiency as well.

B. Performance Evaluation

Performance evaluation represents one of the most important areas where standard costs take a significant role in controlling cost elements. The basis for performance evaluation is to be found in the goals or plans. After setting the budgets, which are a set of performance objectives, standard costs for components thereof are established. Standards should reflect the level of performance that should be achieved, and if standard cost gives a measure of the performance required, any variance between the standard cost and the actual performance provides precise measures of both individual and departmental performance. Careful scrutiny of cause may well result in the acceptance by management that no blame can be attributed to responsible individuals or groups. In any event, management is ensured that all levels of personnel are fully aware of their responsibilities, the results of their actions on plans, and the need for the maintenance of initiative and goal attainment. (Datar & Rajan, 2021)

Performance evaluation based on standard cost is complemented by other performance evaluation methods, such as scorecards and key performance indicators, which may point to the subject of performance in terms of quality, service, customer satisfaction, and other much more subjective factors. Points to consider regarding the use of standard costs in performance evaluation include: it is of vital importance to establish realistic standards as to what should be achieved. This will enable production and cost personnel to view any subsequent comparison as fair. In certain industries, characterized by such a diversity of products and processes or by consistent changes in processes, a practical problem exists in attempting to relate the performance and standards and expect variations in different products. (Bacon, 2023)

The link between performance evaluation and standard costs is possible only under such circumstances where the accuracy of the standards is assured. The unit of measure must be such that it can be compared with some quantified goal, plan, or standard. The difference between the two figures provides the basis for action, and thus, based on standard costs, a persistent drive towards continuous improvement takes place. It is, therefore, important to apply a system of standard costing that integrates the setting, operation, and review of standards as a basis for performance evaluation. (Nwosu, 2024)

IV. CHALLENGES AND LIMITATIONS OF STANDARD COSTS

The concept of applying standard costs to the control of an organization's cost elements provides a target cost, a cost against which actual performance can be measured. Beyond this benefit, however, many researchers and professionals have highlighted a variety of challenges and limitations relating to the use of standard costing in business. Despite the description of an achievable territory between aspiration and performance standards, setting such flexible standards that reflect what should happen may be very challenging. (Datar & Rajan, 2021)

Several practical problems with the application of an achievable-cost motivational philosophy relate to the issue of obsolete standards. As external trading conditions change, an organization may need to adapt its operating strategy according to a more volatile environment. Similarly, internal operating factors can challenge managers and workers needing to apply allowable-cost philosophies in the work methods. All such instances illustrate the potential for flexible-standard motivational philosophy to demotivate those working at the operational coalface, particularly if there are relatively significant gaps between the initial standard and the true cost eventually being allowed. (Papp, 2023)

Proponents of behavioral sciences have also examined the motivational philosophies issue and found that of crucial importance is the effect of the adoption of stringent cost controls upon employee morale.

A behavioral systems argument, however, focuses on the causes of resistance to the application of standard costs. Because of the limitations in the use of achievable costs, it has been noted that the use of standard costing should be balanced to reflect the conceptual limitations. (Parker)

The limitations of standard costing could prompt an organization to remain adaptive, with post-standard cost measurement techniques reflecting the present capabilities of basic operating conditions, providing an updated standard for the coming time period. This would demonstrate clearly the gap between the aspiration of a firm and the flexibility of the business environment. It is through the recognition of these behavioral issues that much of the criticism of standard cost developed. (Dahal, 2022)

A. Difficulty in Setting Realistic Standards

Setting standard costs is an exercise in prediction, one that assumes a level of accuracy in order to be reliable. To set standards, organizations need to start by using factual information to establish what is currently achievable. This involves understanding the business, the objective of the business, and the processes that it needs to perform in order to reach their objectives. This in itself can be a complex and sophisticated process that is beyond some businesses. Once the current level of potential is known, an understanding of operating processes is needed. Variances can present as a result of not just a 'cost increase' that comes to mind for many setting standards. (Teixeira et al., 2021)

It could be a result of fluctuations in production, irregularity in material or labor prices, labor service levels, fluctuation in material quality, etc. The standards being set should use current resources and technology. Scenarios like using full-time contract staff for a big contract might not be standard practice, and thus setting standards based on this practice might be stretching too far. (Lai et al.2020)

There is little doubt that varied local and global influences contribute to this low expectation and thus set standards on inflated premises. This is a recipe for disaster because it means the organization not only harbors some delusions about its own ability but also sets the scene for negative management and employee agendas. There is also a 'big brother watching' scenario because if the standard performance expectations are not met, the company must show a performance issue through both this variance report and individual performance issues. Mitigation in the standard setting process has the potential to be more collaborative. Named process owners can be required to highlight the areas they believe should improve over a longer curve, between five and ten years. The process owners should always link improvement to possible constraints and opportunities in their operating area. (Kuchler et al., 2023)

A cross-functional committee can have the final say about what the improvement in standard costs in a desirable business environment would be. It is more important to get the standard close than off the 'wrong' end as the standards for target setting roll down the line. Variances against attainable potential would also be smaller, making it a quicker review and communication process. Any variance needs to be investigated to establish the root cause and monitored over a period of time to evaluate if it is sporadic or a genuine trend towards positive or negative change. (Lignell, 2024)

B. Behavioral Issues

Resistance to budget standard costs. In some organizations, individuals resist the implementation of standard costs for the following reasons: Unfairness. The staff may perceive the standard as being in some way impossible. Thus, a salesman might regard the sales budget as unreasonable. The problem may be exacerbated when a new regime introduces strict controls that have never applied. Excessive controls. Even when there is no perception of unfairness or unattainability of the standard, individuals can be frustrated and unhappy with severe variance investigation and blame culture behavior. Effect on morale. (Park et al.2021)

The behavioral difficulties described above can result in a reduction of morale and motivation. Communication - gaining acceptance. Resistance to controls does not occur when the practices adopted by managers and supervisors at the bottom are perceived as being proven at the personal level of each employee. Change management. The introduction of standard cost or budgeting will lead to behavioral tensions. Practice can help to reduce this. Practically, this involves balanced behavior evaluation and light-touch regulation, determined by collaboration and understanding. Not all employees will require this level of mutual understanding and respect. Most people are prepared to work efficiently for reasonable standards without too much motivational effort. Clarity of expectation. It is extremely important that everyone is entirely aware of the standards and budgets that apply to their responsibilities. In some organizations, defined standards are never published; thus, they are not widely known. A few employees in key positions may understand the level of the standard. Involvement. (Lill et al.2021)

In order to gain acceptance and limit the behavioral problems associated with standard cost and budgeting, employees should be involved in the set of standards and be allowed to negotiate any disagreements.

Organizational culture. It is not true to say that organizations with a comparativist culture should automatically take up standard cost and budgeting. However, at the crucial level, senior management must have the skills and aptitude to design accounting information systems and financial measures to support their company approach. In one realization of the communitarian philosophy, everything is shared, including profits and losses. In this situation, standard cost benefits from wholehearted backing from the workforce because the workforce simply will not cooperate in a separate approach. (Albayati et al., 2020)

V. IMPLEMENTING A STANDARD COSTING SYSTEM

A number of issues need to be addressed for an effective standard costing system to be in place. The objectives of the firm will determine the characteristics of the standard system: complete cost control, motivation of each employee, emphasis on direct materials cost, and emphasis on direct labor costs. The standards are established once some conditions are met. The accountants have gathered data and worked on it, the production personnel have made choices and determined speeds and settings, and the engineers have selected the most efficient method of production. (Fatimah et al.2020)

The implementation of a system of standard costing should start with a thorough review of the operations of the company and the objectives of its management. With the objectives of the system set, clear definitions of the standards should be made. These must be attainable with the best practice employed. Any variance may be the result of conditions external to the plant. (Awan et al.2021)

Special classes may be drawn up, and careful consideration should be given to the establishment of the correct cost centers. Standards must be set for labor, material, and production overheads. The amount or yield of loss of these three resources in production should be separately stated. The setting of standards should be regarded as just one step in the process. Employees need to be trained in the new routines and see the contribution to avoiding confusion and waste. Top management must be convinced of the need for a system and be prepared to review it regularly. Simple practical records and observation devices also improve general control and the recording methods. The design of the standard costing system needs to be closely correlated with other activities. The system must operate with other control systems. The choice of system will be influenced by the number of products and the estimated total hours involved. The system allows a vast amount of data to be collected and disseminated quickly, provided that the levels of tolerance are reasonable. Care also has to be taken with the system. The setting system must be such that it can operate within the procedures of the firm. It must also ensure that there is an annual review of standards. (Ologbenla2021)(Choiriyah et al.2022)

The primary objectives of any standard costs that are set must be to highlight deviations and assist in identifying causes of problems. The same primary objectives apply to the labor standards, which are set coincidentally with an investigation into the routing of the articles, which involves a specific atlas number of the process to which it is routed. In addition, the standards are used as motivation for attaining a cost target in the case of such ranges of activity. There are two systems outlined: the single and the double. A system is chosen and then there are records that provide the hours used and the hours recoverable time estimates for direct material, machine power, quantity of throughput, and machine labor cost details. Time recording is used down to operator levels on something on which more than one operator is employed. It was found when using the standard costing system that if the amount of work passed through one process exceeded the time set, then the time in the money would increase. If the amount of work fell below the standards, then time against costs would fall. (Maheshwari et al., 2024)

A. Steps in Implementing a Standard Costing System

In implementing a standard costing system, it is important to establish clear objectives and expectations for the implementation plan. Follow the steps detailed here as a guideline for the implementation process. The steps involved in implementing a standard costing system are as follows: • Setting clear objectives and expectations, so that the basis of the implementation process is clear; • Obtain the necessary data for the implementation. • Investigate the current situation. • Establish a vision of the costing system that will be developed in the future; and a few detailed steps. • Establish standard values. When setting standard values, cross-functional teams are key to implementing the system, because product or production costs are the result of a combination of different functions. Such development should take into consideration the few possible and manageable standards through sensitivity analysis on the planning assumption. Once the standard is accepted by the management, the staff must be trained accordingly so that the application of the standard is acceptable. An effective standard costing system needs an effective mechanism for feeding back information to the planning and actual controlling phase and also for converging the information from the actual controlling into the planning phase. Support from other related departments is also necessary. The implementation phase should be closely monitored for the effectiveness of the process, supported by resource requests as needed. (Jansson & Persson, 2020)

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B. *Key Success Factors*

The implementation of standard costs in many companies has been carried out without previous caution and proper guidance. Therefore, it is common that the standard costs set are not consistent with the defined business strategy, and the information generated is not suitable for making economic decisions. To avoid this occurrence, companies need to understand the success factors in a standard costing system. The following are the key success factors in the implementation of standard costing: (Suoniemi et al.2020)

1) Management Commitment and Leadership. Management commitment is a critical success factor in the successful implementation of standard costing. One of the actions taken by leaders to show their commitment is by communicating directly with all employees in the organization. The leader must establish an atmosphere and a conducive environment for change that builds engagement in the process. (Moktadir et al.2020)
2) Communicative Ability. The introduction of a standard costing system is a process that affects all parts of the organization. Its implementation depends on providing information that is easy to understand for all employees regarding the procedural course, explaining the purpose of the system, and guiding the role of all parties. Effective communication is essential in the early stages of the introduction of the standard costing system, where everyone involved in making decisions must know about the information to be obtained. Everyone affected by improvements must be involved in the changes decided by the organization. Only then is it possible to create consensus among those who feel their activities are being assessed. In addition, the consistency of this standard costing system contributes to improving synergy between all parts of the organization. (Datar & Rajan, 2021)

VI. COMPARISON WITH ACTUAL COSTS

One of the advantages of using standard costs is that they allow for comparative analysis with actual costs. These comparative analyses provide information on how efficiently an organization operates, especially in relation to costs. One of the metrics of this comparison is cost variances, often called differences between what should have been spent according to standards set by an organization and what was actually spent on assets or expenses. The variance is a quantitative measure of the discrepancy between the actual costs incurred and the standard appropriation costs that should have been incurred. There are several methods for calculating variances, ranging from individual or total variances to simple or advanced calculations. (Husereau et al.2022)

Variances indicate the performance of organizational operations as well as the results of decisions taken by an organization. The nominal difference is divided into favorable and adverse variances. This can be used as an input for making improvements and any changes in the operational or decision-making system. The variance does not necessarily provide a direct indication for taking corrective action. A variance must be thoroughly analyzed to obtain information on what might happen in operations. There are a number of limitations of variance as a performance measure. The understanding that this deviation does not necessarily mean that a responsible manager did not fulfill his or her obligations is one such limit. Regardless, performance evaluation is an integral part of deductive covariance. Approved measures are often derived from general norms or benchmarks formed to estimate acceptable levels of performance. It is available for most formulas. In these situations, it was desired to reveal the differences no one would expect. Organizations and professionals should, as often as economically possible, report such variances. In order to allow managers to take corrective action as soon as possible, accurate variances should be communicated promptly. Variance comparison is especially intended to contrast quantity with the associated standard or budget price. The relationship offers a perspective of the effect of a physical volume difference during the season compared with the standard. (Olayinka2022)

A. *Variance Analysis*

Variance analysis is a fundamental concept of standard costing and is the process of assessing the differences between standard costs and actual costs by identifying the factors that lie behind the deviation. Different variances include material variance, labor variance, and overhead variance. Material variance is divided into two categories: price variance and usage variance. Labor variance is also split into rate variance and efficiency variance. Overhead is divided into volume variance, capacity variance, efficiency variance, and expenditure variance. Material variances help assess how the factor price generally moves in the market, and efficiency variances not only provide the company with information about waste and spoilage, but also provide insights into labor movement. This also helps in identifying management control. (Datar & Rajan, 2021)

If there is a reduction in the adverse material or labor efficiency variances, it depicts operator and direct supervisor awareness. Over time, it starts developing a culture of conscious, careful, and steady workers. The actual material and labor costs impact the efficiency variance, so it is imperative to assess the material and labor efficiency variance. This should be done rapidly and at frequent intervals.

The process of variance analysis is also capable of revealing patterns of variation over time, which further guides the investigation and aids effective decision-making. Effective and timely weekly, monthly, or at most quarterly reports of cost variances enable preventive action relatively quickly. It must be remembered that the possibility for action to be taken reduces steadily as time elapses from day one of a new period. Hence, the timely preparation of cost variance reports is essential. Furthermore, the variance reporting process itself personifies an organizational commitment to and acceptance of the principle of continuous improvement. (Jung & Lim, 2020)

B. Interpretation of Variances

Analyzing variances is important in standard costing because various operational activities that make up the organization's value chain can be evaluated, and costs can be controlled or managers can be motivated. Thus, the essence of variances is to signal both operational inefficiency and significant opportunities for operational improvement. In the operational context, variance analysis is a comparative technique, and the likely explanation behind a variance is that management intervention was either too early and the variance is still mutually exclusive, or it is too late for the performance period to do anything about it. Despite this operational preoccupation, the performance measure should still be put into the broader perspective of organizational performance and context. (Datar & Rajan, 2021)

A number of techniques for variances can be valuable for enhancing decision-making. The investigation of a number of variances can allow for perceptive investigations of how consistently the organization is operating in line with the standard as well as the identification of the potential proponents of success and failure. Successful organizational examination goes beyond identifying only the causes of variance. Managers have to go the extra step of identifying which sort of variance investigation data can direct which sort of corrective action. One anomaly analysis of performance is not always conclusive. It is often allied to other performance improvement information. As managers may have to delay, a balanced and supportive organizational learning and intervention approach to performance evaluation is essential to deal with variance analysis. (Hera et al.2024)

VII. CASE STUDIES AND EXAMPLES

This section provides some practical examples and case studies of how standard costing is used. These cases all show how standard costing is implemented in various industries, using a range of costing methodologies. Although certain challenges were encountered by the companies, they have reported several additional potentials in the use of standard costing, such as the enhancement of cost control, performance evaluation, and decision-making. (Hera et al.2024)

Seven case studies and empirical examples of standard costing implementations in seven different organizations can be found. These cover a range of industries including a manufacturer of heavy equipment vehicles, a steel service center, a sporting goods manufacturer, a car manufacturer, a batching plant, a trade unit of the tourism industry, and a firm offering services in the ski industry. These organizations are both profit and not-for-profit, public and private, multinational and international. Each organization has different reasons for introducing standard costing and approaches to implementation. All report that standard costing has harmonized their different cost levels and verified that they have correctly allocated costs. However, they have also all experienced certain challenges when implementing standard costing. The lessons and conclusions learned from these examples and case studies may assist other organizations that are considering implementing standard costing models. (Harold, 2021)

Analyses of these case studies can be found in a number of recent publications. The first example discussed is the case of an auto equipment industry unit. The main duties of this unit revolve around four major activities: production, repairs, maintenance, and hangar. Standard costs have been used in this component to help control costs. Some benefits of the implementation include improved control of costs, forecasts of expenditures, and pricing. Nevertheless, overcoming resistance was difficult. Some of the findings were also presented in a panel discussion. Further empirical examples can be found in studies of sporting goods manufacturing and some companies. (Husereau et al.2022)

VIII. CONCLUSION AND FUTURE TRENDS

The research paper analyzes the effect of using standard costs in cost element control and determines the stages of the standard costing system and their use. The implementation of the standard costing system has proven its utility in ensuring financial management and operational performance. In today's dynamic market environment, the use of standard costs involves utilizing an enterprise's technical potential, having a reliable information system, and a management style structure based on managerial control. This requires steady attention on the part of managers to ensure that they learn. With this, standardization and the standard cost become a useful norm to ensure a more efficient and effective management system.

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Although standard costs have numerous advantages, their implementation is fraught with challenges such as psychological differences in employee responses and resistance, the time period required for setup and real operation of the standard costing system, and the costing method to be used in product costing.

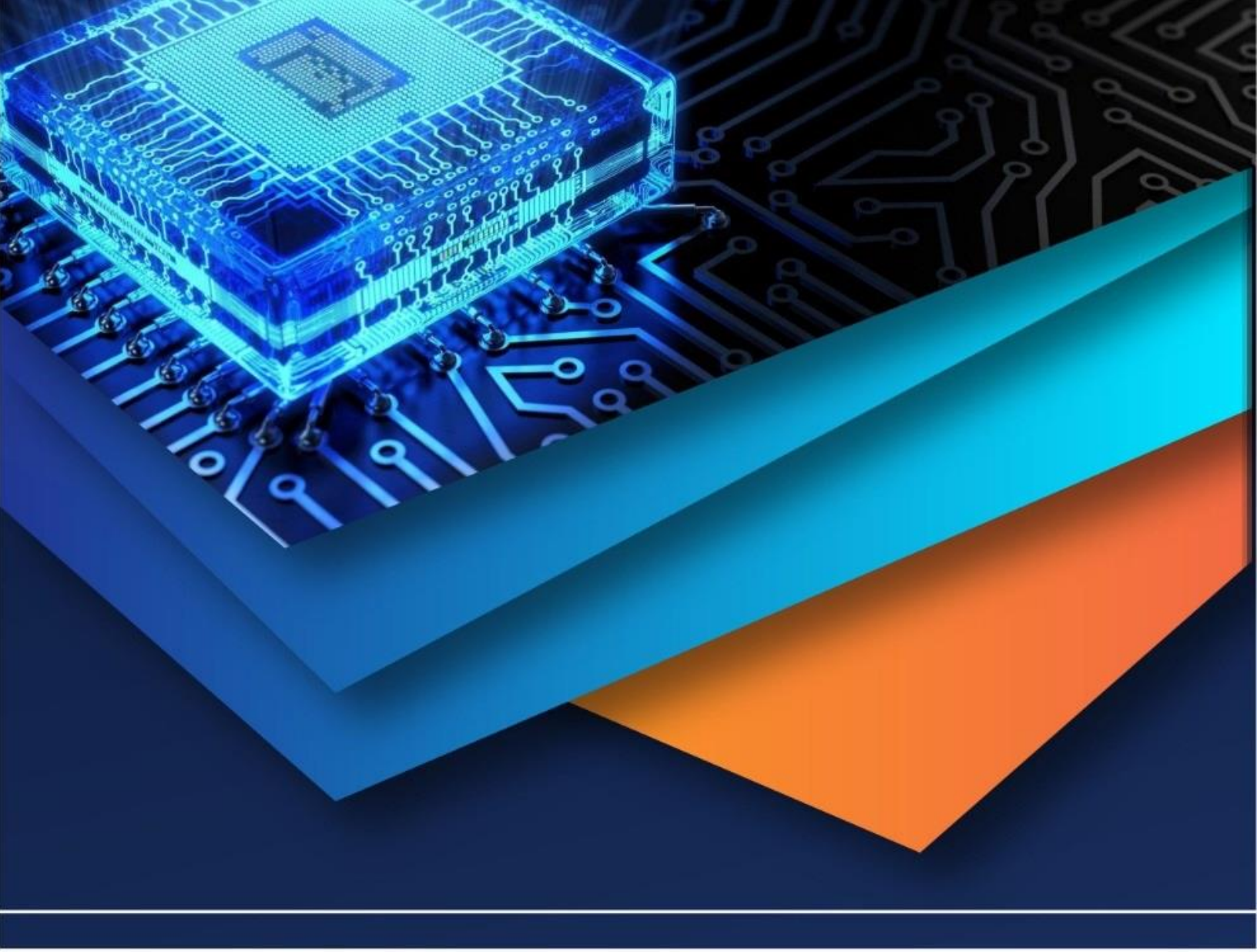
To establish the overall value of the standard costing system effectively focused on cost control implementation, the company should carefully apply the necessary techniques and tools as well as standard costing methods and techniques to develop a more efficient and effective practical guide for companies that want to apply and optimize the standard cost. In future studies, we recommend that researchers look at the role of standard costing in business planning and how companies can adapt standard costing to maximize profit in a dynamic cost management context. In contemporary management accounting practices and research developments, there is an emerging trend in cost management operations. This shift is marked by the increasing use of technology, the development of business intelligence, and the use of information-oriented organizations. In the future, as markets become increasingly dynamic and the need for production methodology continues to rise in integrated operational strategy, we might suggest that the enterprise make full use of the dynamic application of standard costs. The possibility of making decisions in value management based on a long-term approach to proactive management and technique would be a great leap forward to face the future as a successful implementer of dynamic organizational management.

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