

MANAGEMENT ACCOUNTING

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Introduction

Variance analysis identifies and explains the reasons for the deviations. The sum of all variances laminates the overall over-performance and underperformance of a specific financial year. Variance cost provides useful information for performance evaluation. The analysis aids efficient budgeting activity as the management wishes to have lower deviations from the planned budgets. Making or buying decisions compares the cost and benefits of producing the required product internally to the costs and benefits of outsourcing it from an external supplier. Internal production requires the consideration of maintenance and purchase expenses, for example, additional labor of storing, producing, and storing a particular good. Buying expenses include the price of the product, transport expense, and sales tax. Companies should make products that are in-line with core competencies, critical to the product's success, and provide a competitive advantage.

PART A

a)

Sales volume contribution variance

Description	Actual sales volume	Budgeted sales volume	Difference	Standard margin	Sales volume variance
X	850	595	255	25	6375
Y	750	595	155	20	3100

$$6375 + 3100 = 9475 \text{ Favorable}$$

High-quality raw materials and proper care caused the favorable sales volume variance during the production process.

Sales price variance

Description	Actual price	Standard price	Difference	Actual volume	Sales price variance
Chemical X	45	35	10	850	8500
Chemical Y	37	30	7	750	5250

$$8500 + 5250 = 13750 \text{ favorable}$$

The favorable sales price variance implies that a higher selling price was realized during the period than anticipated in the standards. The increased selling price was due to a significant increase in demand for cleaning products as most people became hygiene conscious in light of the pandemic (Zimmerman, 2016). The use of famaQ gave the Company a competitive advantage. Therefore, the number of competitors decreased in the market. The favorable sales price is also caused by improved product differentiation and market segmentation. Favorable

sales-volume variance suggests a higher standard profit than the budgeted contribution. They occur when there is favorable sales-quantity variance and also favorable sales-mix variance.

b)

Material price planning variance

$$(2.50-4.50)1600 = -3200 \text{ Adverse}$$

The adverse material price variance implies that the Company purchased materials at a higher price because of low supply.

Material price operational variance

$$(4.50-3.70)1600 = 1280$$

Material price operational variance suggests that there was a change in the quality of purchased materials.

Variance Analysis

Variance refers to the difference between the planned amount and the actual amount. Variance analysis identifies and explains the reasons for the deviations. The difference impacts business performance. There are several types of variances: material, labor, and overhead variances (Wezniak, 2018). The sum of all deviations laminates the overall over-performance and underperformance of a specific financial year. Variance cost provides useful information for performance evaluation.

Favorable variances occur when actual costs are less than standard fees, and vice versa.

Variations are caused by changes in market conditions, which renders standard costs behaviors unrealistic (Chiu, 2018). The assigned budgeting standards may also be too idealistic.

Additionally, service delivery may not be up to the mark, and in some instances, there can be no

basis for planning. The analysis identifies areas of improvement for the Company, assist in understanding reasons for fluctuation and solutions to reduce adverse variances.

Advantages of variance analysis

It assists managers in making efficient, detailed, and forward-looking budgetary decisions. The analysis aids productive budgeting activity as the management wishes to have lower deviations from the planned budgets. It also facilitates responsibility assignment and engages the control mechanism in departments (Wen, 2020). The management enhances control in departments that have unfavorable variances to increase efficiency. More so, it acts as control mechanisms whereby analysis of significant deviations on essential items helps the Company know the causes of variation (Jiang, 2017). The control mechanism also aids the management to look into possible ways of how much deviation can be avoided.

Planning, standards, and benchmarks encourage forward-thinking and a proactive approach to setting performance benchmarks. Variances are computed when planned targets are prepared for performance comparison (Debiasi, 2018). It boosts responsibility accounting because the evaluation enables measurement and control of responsibility centers. For example, departments are answerable to material price and quantity variance, labor price variance, and overhead variance (Zhuo, 2018). The performance of each responsibility center is measured and evaluated against planned standards concerning areas under direct control.

Variance analysis also assists the management to undertake remedial actions upon adverse variances. For example, the management can purchase bulk raw materials at a discount, buying quality goods to eliminate unfavorable variance of material variance (Ray, 2016). Regarding labor variance, the management can bonus and incentives to workers to reduce adverse labor

efficiency variance. Efficiency variances can be solved by training workers with quality skills. The control can also purchase substitute material due to the unavailability of planned material.

It also assists in fixing the responsibility of an individual department following the variance analysis of a single department. For example, the purchasing department can check the quotation of various suppliers before giving tenders. It also highlights all inefficient performances, including the extent of the inefficiencies. Adverse variances signify inefficiencies of various departments while the management analyzes the causes of differences. On the other hand, favorable variance implies the efficiencies of multiple departments.

Disadvantages of variance analysis

An accountant compiles monthly variances, yet in a fast-paced environment, management requires feedback continuously than once per month. A time gap affects remedial action since the analysis is based on results that are released later after quarterly closing (Dai, 2020). It is challenging to take effect upon variances because not all sources of differences are available in accounting data. Budgeted exercise may also be loosely done, which is bound to deviate from actual numbers. Failure to perform a detailed analysis of each factor leads to the creation of reduced budgets that might not be helpful in variance analysis. A resulting variance may not be useful when the standards are derived from political bargaining.

Standard costing is applied to businesses involved in the manufacture of standardized goods in mass production. However, the non-standardized production of small batches creates problems following the absence of historical benchmark standards. The required time for the entire process may not be feasible following the short-life cycle (Xu, 2019). Time and investment are required for the application of new approaches to standard costing. The plans provide a productive basis

for variance analysis of overheads in service sector organizations. The implementation of a management information system would facilitate variance analysis.

It is challenging to conclude the causes of variance and also assigning operational difference to a particular department within the firm. Significant variations cause planning inefficiencies since setting defective standards. In some scenarios, variance analysis does not offer the basis of investigations in the firm (Kuznetsov, 2019). The relevance of variance analysis decreases as a control mechanism decreases as the reporting period's duration increases since the delay in providing such information minimize its significance for the management's decision-making needs. The use of continuous budgeting systems significantly reduces the lead times associated with variance analysis. However, it might be costly in terms of management time and resources required to implement an information system with the necessary functionality.

Variance analysis may also encourage short-termism because of the inherent tendency towards short-term, quantified objectives and results. A negative perception of the organization's variance analysis helps workers to set budget slacks. The behavioral issue can be eliminated by involving employees in the budgeting process to promote fairness. The performance measurement system should also be based on strategic direction. Costly mistakes and assumptions can be made if less sophisticated managers and other users of accounting information view adverse variances as bad and favorable variances as well.

In a nutshell, variance analysis identifies and explains the deviations between the planned amount and the actual amount. The analysis aids efficient budgeting activity as management wishes to have lower deviations from the proposed budgets. It also facilitates responsibility assignment and engages the control mechanism in departments. The management enhances

control in departments that have unfavorable variances to increase efficiency. Planning, standards, and benchmarks encourage forward-thinking and a proactive approach to setting performance benchmarks. It is difficult to take action upon differences because not all sources of variances are available in accounting data. Budgeted exercise may also be loosely done, which is bound to deviate from actual numbers. It is challenging to conclude the causes of variance and assign operational difference to a particular department within the firm. Significant variations cause planning inefficiencies since setting defective standards.

PART B

Relevant costs are incremental costs and revenue of implementing a business decision. They eliminate unnecessary data that complicates decision making. Types of material costs are avoidable costs, opportunity costs, future cash flows, and incremental costs. Make or buy decision incurs relevant cost such as variable cost of manufacturing components.

Make or buy decision of fameQ.

Making or buying decisions is a strategic choice to either produce a product internally or outsource it from a supplier. It compares the cost and benefits of providing the required product privately to the costs and benefits of outsourcing it from an external supplier (Channappa, 2016). A comparison of accurate prices requires the Company to consider all aspects of the acquisition and storage of an item versus creating an item internally.

Internal production requires the consideration of maintenance and purchase expenses, for example, additional labor of storing, producing, and storing a particular good. Buying expenses include the price of the product, transport expense, and sales tax (Rosyidi, 2019). The buy decision can be influenced by a lack of in-house skills, requirements of small volume, and desire

for multiple sourcing. Similarly, the make decision can be affected by existing idle production capacity, better quality control, and reliability of the supplier. Companies should make products that are in-line with core competencies, critical to the product's success, and provide a competitive advantage.

Make a decision

FamaQ should be produced because it gives XLG a competitive advantage since it is a superior cleansing agent that has assisted the Company in maintaining its leading market position. XLG Company has also secured the patent to utilize it; it cannot be copied by competitors in the industry (Borg, 2019). The item is critical to the product's success, considering the customer's perception of the superior cleaning agent. Additionally, FamaQ fits well within the Company's core competencies to fulfill plans. The Company has various stores in the U.K., sells products online, and hosts a lot of demonstrative events that lure customers to their products (Zhang, 2019). The superior cleaning agent helps clean and shine floor surfaces cleans stains off any surfaces and can also be used on upholstery fabrics and kitchen surfaces.

Furthermore, famaQ requires specialized design and manufacturing expertise, and the number of capable and reliable suppliers is limited. The Company secured the patent to utilize the product, and thus it cannot be copied by competitors in the industry. More so, the cost consideration also influences the make decision. It is cheaper to make the product than outsourcing it from a supplier (Haktanir, 2019). The Company also needs to exert direct control over the quality of FamaQ. Design secrecy is also required to protect proprietary technology; for example, XLG Company has also secured the patent to utilize it; competitors in the industry cannot copy it.

The Company also needs to control the lead time, transportation, and warehousing cost.

Regarding the lead time, the delivery times have reduced by 15 working days (Rosyidi, 2020).

Concerning transportation cost, coronavirus pandemic has increased the transportation cost of FamaQ. Coronavirus has instigated the enforcement of lockdown and restriction on international travel. Since famaQ is produced in Brazil, it must be conveyed through air transported, which is more expensive than sea transport. Making a unit of famaQ in the U.K. is three, which is cheaper than outsourcing cost (Buttayio, 2017). FamaQ is required in large quantities following the increased demand for chemical X and Y by 45%. The need is likely to continue following market research of the product and its constituents. The Company is going to shift to online sales during the pandemic period.

The decision to make famaQ meets the relevant costing criteria. The future cash outflows will be a lead time, transportation, and warehousing cost. The superior cleaning agent creates a competitive advantage by creating barriers of entry for competitors. FamaQ is required in large quantities following the increased demand for chemical X and Y by 45%. The need is likely to continue following market research of the product and its constituents. The Company is going to shift to online sales during the pandemic period.

Vertical integration

Vertical integration is a strategy of expanding a business to control more than one level of the supply chain. It impacts a company concerning cost and product differentiation. Vertical integration is favored by sufficient large production quantities to benefit economies of scale (Serrano, 2016). The Company should adopt vertical integration to manage all tasks from manufacturing famaQ raw materials to producing XLG products. A vertically integrated

company depends less on its suppliers and so it is assured of a smoother flow of materials and parts for the manufacturing activity. The Company can also manage quality better by manufacturing famaQ instead of depending on suppliers' quality control standards. XLG Company will even realize profits from the component it is making.

Vertical integration will also aid XLG Company in achieving economies of scale by producing famaQ, the superior cleaning agent. The combination also assists the Company in maintaining quality control over the production process (Reiffenstein, 2018). The Company is not at the risk of suppliers cutting down the supply of famaQ. More so, the integration assists the Company in differentiating from competitors through the production of a superior cleaning agent. The combination creates entry barriers for competitors. Furthermore, the alliance also protects the proprietor processes of using famaQ product to produce a useful product.

Conclusion

In a nutshell, XLG Company should make famaQ because the superior cleaning agent creates a competitive advantage by creating barriers of entry for competitors. FamaQ is required in large quantities following the increased demand for chemical X and Y by 45%. The application is likely to continue following market research of the product and its constituents. The Company also needs to control the lead time, transportation, and warehousing cost. It is cheaper to make the product rather than outsourcing it from a supplier. The Company also needs to exert direct control over the quality of famaQ. Design secrecy is also required to protect proprietary technology; for example, XLG Company has also secured the patent to utilize it; competitors in the industry cannot copy it. Vertical integration is favored by sufficient large production quantities so that the firm can benefit from economies of scale. The Company should adopt vertical integration to manage all tasks from manufacturing famaQ raw materials to

producing XLG products. A vertically integrated company depends less on its suppliers and so it is assured of a smoother flow of materials and parts for the manufacturing activity. Vertical integration will also aid XLG Company in achieving economies of scale by producing famaQ, which is the superior cleaning agents. The alliance also assists the Company in maintaining quality control over the production process. The Company is not at the risk of suppliers cutting down the supply of famaQ. More so, the integration assists the Company in differentiating from competitors through the production of a superior cleaning agent. The combination creates entry barriers for competitors. Furthermore, the alliance also protects the proprietor processes of using famaQ product to produce a useful product.

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