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Introduction:

Management requires financial data as well as other information to manage the businesses and their operation in the market. It is an important activity in the businesses and managers gather information regarding the market and environment using the management accounting methods such as environmental analysis, variance analysis, market analysis, balanced scorecard, and financial analysis. Variance is an important method and technique of the MA which is helpful in planning for the business and monitoring the progress to get the performance on the track. The variance may be applied to measure whether the assets, strategies and tactics of the firm are performing effectively to cut the cost, improve the profit and sales. Hence, this study is going to discuss variance analysis and identify the variance in sales as well as the material of the XLG. At the same time, it will critically analyze the importance of variance analysis in the efficiency of the manager for decision making. It will measure two options such as make or buy for the products or material in the plant of the company to find the best one for XLG.

Part A:

Sales Variance:

Sales is the revenue and income of the firm generated from selling the products or services to the buyers in the market. Hence, sales are forecasted by the firms in advance and this target is put before actual sale after the end of the period to find how the firm has performed. Excess of actual sales indicates a positive sign and vice versa (Horngren et al., 2002). Budgeted as well as actual sales volume, price and standard margin are given below:

Chemicals	X	Y
Budgeted Sales	595	595
Actual sales	850	750
Standard Price	£35	£30
Actual price	£45	£37
Standard Margin	£25	£20

The variance in sales price:

Price varies based on the trend line of demand and supply of the products in the market. Hence, the standard price can be higher or lower than the actual market price of the goods or services. This may put direct effects on the variance in the prices of the products (Kinney and Raiborn, 2011).

SPV = (Price at which chemicals sold-price determined as standard) * Actual sales

Hence,

Description	Actual Price (£)	Standard Price (£)	Difference (£)	Actual Volume	Sale price variance (£)
Chemical X	45	35	10	850	£8500
Chemical Y	37	30	7	750	£5250

Based on the analysis of results, it can be stated that there are prices at which the chemicals actually sold is higher than the pre-determined prices and this has caused positive variance in the sales price of the XLG. It means there is good demand for the chemical in a given market.

Variance in the contribution of sales volume:

Volume defines the quantity of the goods sold by the firms in the market. The volume is also predetermined by the businesses and they are compared with the actual volume they sold in the given market. The variation in the volume may also affect the profit and revenue of the entity (Horngren et al., 2002).

(The volume of goods actually sold – the volume estimated in the budget)*Standard margin

Hence,

Description	Actual sales (Units)	Budgeted sales (Units)	Difference (Units)	Standard margin (£)	Contribution variance (£)
Chemical X	850	595	255	25	£6375 (F)
Chemical Y	750	595	155	20	£3100 (F)

From the analysis, it is interpreted that higher demand for the chemicals caused higher positive variance in the sales contribution of the Chemical X and Y.

Material Variance:

Material is an input in the production process to get the output that is served to the final consumers for satisfying their wishes and needs. The material may be purchased or produced by the firms. The company determines the budget for the material and regarding the cost. If the actual cost the company pays to the suppliers is more than the price it determined for material, there is inefficiency in the business and it may lead increment in the prices (Drury, 2013).

Chemicals	X	Y
Standard price	£2.50	£2.50
Revised price	£4.50	£4.50
Actual paid	£3.70	£3.70

Sales volume	850	750
Units of material	$1 \times 850 = 850$	$1 \times 750 = 750$

Material price planning:

$(\text{Original standard price} - \text{market price}) \times \text{quantity of material}$ (Drury, 2013)

Hence,

X	Y
$(2.50 - 4.50) \times 850$ $= -£1600(A)$	$(2.50 - 4.50) \times 750$ $= -£1500 (A)$

From the computation and results, there is an adverse variation in material price planning because the market price is increased over the standard price.

Material price operational:

$(\text{Market price} - \text{negotiated and paid price}) \times \text{Actual units of material}$ (Drury, 2013)

Hence,

X	Y
$(4.50 - 3.70) \times 850$ $= £680 \text{ Favorable}$	$(4.50 - 3.70) \times 750$ $= £600 \text{ favorable}$

Merits and Demerits of Variance analysis:

This is the most common technique being used among the organizations for ensuring good monitor the processes and strategies. Managers may make an effective decision on the basis of the result found in the variance analysis. Managers aim to keep the variance lower and improve positive performance or variance.

Merits or advantage of the variance:

Managers develop decisions and actions for attaining the interest and goals of the business to enhance the values to shareholders and to improve the organizational efficiency and operation. The variance is a good to measure and technique to determine and analyze the gap in the performance and determine the issues in the current strategies or actions based on the results. Managers identify and analyze the issues effectively and may aid to check the issues in the performance at the starting point to remove the risks in the operation and raise the effectiveness in the actions and tactics (Horngren et al., 2015). The managers in the production department focus on increasing productivity and gaining goals of reducing the cost in the operation. The anticipated cost of the entity is compared with the actual cost to a made decision on how to manage the variation and how the variation is influencing the company.

In the case of XLG, the actual sales achieved by the company for its products (Chemical X and Y) have exceeded the budgeted volume in the targeted market. It means there is effectiveness in the operation and marketing of the XLG as the manager is efficient to make effective strategies and tactics to attain the goals. The lesser cost of the chemicals and good marketing techniques of the XLG enable it to attain the goal of increasing sales. Variance analysis encouraged managers in XLG to continue to use strategies and focus on the innovation for attaining the objectives (Bai, 2016). The sales of entity went above the budgeted sales and the variance may enable the managers for making decisions regarding the future and planning the performance effectively.

Apart from this, the current performance gap and issues may be determined by using the variance analysis in XLG and to anticipate the future productivity and performance for the business very effectively. Each of the departments uses the variance analysis for monitoring the performance and deviation in the capacity as well as the demand of the products (Heong et al., 2013). The manager of the purchasing department in XLG determined the general price in the market that is quite greater than the standard price. Managers negotiated with the suppliers for determining the price and they compromised the price of the material to pay £3.70 per unit instead of £4.50 in the market. This reduces the cost and expenses of the XLG in the production to get competitive benefits (Kaplan and Atkinson, 2015). XLG may use the variance as a good control mechanism.

Demerits of variance analysis:

A variance may affect the decision and reliability of the decision adversely. The standard determined for the performance of the businesses is supposed and assumed and they are not anticipated by analyzing the situation and analysis of the past performance of the business. The past-oriented practices are conducted in the variance analysis as the past figures and measures in the past financial statements or budget are considered to determine the variance. This may affect the effectiveness in the actions and decision of the respective managers in the XLG because it takes into account past figures which are altered as per the change and they could be manipulated by the managers. Hence, it may lead to the wrong decision. Apart from this, this analysis is not able to get significant data and insight into the performance of the managers (Drury, 2013). Lesser speed in the information available to the management may affect the operation as it may lead to loss of the profit and opportunities the firm realizes in the market.

In addition to this, managers in the XLG may determine cost fluctuation in the operation and they may develop the ways to cut the cost such as negotiation, comprise in the quality of material, cheaper sources, and others to enhance the profit margin. This can be a wrong way and variance analysis may encourage the managers in XLG to take the action to get maximum profit from the operation. The material of low quality can influence the functioning and quality of the chemical that can harm the users of the chemical in the market (Bai, 2016). Variance is not effective for identifying what is causing the higher variation in the performance and this may be a great challenge before the firm finds the reason behind a higher degree of deviation in the performance. Risk should be considered before selecting any method and analysis technique to take measures to control the risk and improve the results. Hence, manipulation is normal during the variance analysis as the manager may easily churn the accounts of the company, and measures to show the results are favorable (Heong et al., 2013). This can be a big disadvantage of variance analysis for the organizations.

Part B:

It is a very critical concept in businesses to decide the best way to reduce the cost and increase the profit margin. This concept states that if the cost of manufacturing the products is lesser than buying the same from others, it can be better for the organizations to manufacture to gain more profit and vice versa. The cost and profit are two important measures which managers apply and

consider in the analysis of two options whether the products should be produced or bought from others. XLG requires FamaQ necessarily for producing its own products named Chemical X and Chemical Y. FamaQ is a unique material that XLG uses for producing the chemicals for generating unique attributes and functioning of the chemicals and to improve the experience of the users. Currently, it is sourcing and purchasing the material from Brazil-based suppliers and this may influence the competitiveness of the XLG. The competitive advantage of the firm may depend on the differentiation, quality and the prices of goods or services. A higher degree of kinds of risks such as importing, transportation, quality, price, currency rate, operation, and market risk may affect the efficiency and effectiveness of the operation of the XLG. It may lead issues and challenges to XLG in the market of the UK to gain a competitive advantage over its close competitors. For instance, increased cost of the material in the market, delayed delivery of the material to XLG and currency fluctuation may increase the cost of the company for purchasing material and may reduce its profit margin (Sillanpää, 2015). Making goods in their own plant and house may provide full control over the material quality and its cost that may enable XLG to avail of chemicals to consumers at affordable prices.

Furthermore, the information about the markets influences the decision. The research by XLG helped it to determine the demand for the chemical in a targeted market in the UK. It is estimated the demand for Chemicals X and Y in the UK market would be increasing by 45% and this would have a good implication on the growth and success of products of the company in the market. Higher demand may require the production of the chemicals in higher volume and this would lead the purchase of a higher volume of the FamaQ (Daneshgar et al., 2013). The purchase manager will have to procure the material in a larger amount which is impossible to get in a larger volume of material in a shorter period. On the other hand, the production of FamaQ will enable XLG to produce the material in sufficient volume to create products in an effective manner. Therefore, it can be stated that making FamaQ in the house of the XLG is effective than purchasing the material for producing chemicals (Andersson, 2011). Hence, the opting option of producing the material of FamaQ should be selected by XLG.

In addition to this, the cost is also a critical factor to be considered in decision making because it influences the profit margin. The material cost and expenses may become the cause for increasing the prices and this may influence the performance of an entity. The cost for the

FamaQ as a standard price is £2.50 while the market price of this material is about £4.50. It indicates the actual prices are greater than the standard price and cost of FamaQ in the market. If XLG decides the option of making the material in its house, it will cost £3 for each unit. The difference in the cost of two options is significant. The option of producing the material is profitable and cheaper than the sourcing of the material (Rosyidi et al., 2020). It may improve profit margin and may improve the capability of the entity to avail the chemicals to consumers at a lesser price. The delivery has a great influence on the operation of the firm. The time consumed by the suppliers in delivering the material may lead the cost higher and influence the experience of the organization. The uncertainties and other issues influence the delivery period and this cause cost of the FamaQ and influence customer satisfaction due to delay in delivery of the material (Andersson, 2011). Therefore, XLG should focus on the production of FamaQ to avail of the material on time and to enhance the consumer experience. Sourcing material consumers too much time than production. This enables XLG for attaining the competitiveness producing this material in the house.

Conclusion:

Based on the above analysis, it can be concluded that variance provides assistance to the managers for managing and monitoring the operation of the business. A variance may give assistance to reduce the gap in the performance while it is leading manipulation and inefficiency in the operation or performance. This report has suggested that XLG should manufacture material FamaQ for growing the profit margin instead of purchasing the material for creating chemicals.

References:

- Andersson, F. (2011) Make-or-buy decisions and the manipulability of performance measures. *The BE Journal of Theoretical Economics*, 11(1).
- Bai, G. (2016) Applying variance analysis to understand California hospitals' expense recovery status by patient groups. *Accounting Horizons*, 30(2), 211-223.
- Daneshgar, F., Low, G. C., and Worasinchai, L. (2013) An investigation of 'build vs. buy' decision for software acquisition by small to medium enterprises. *Information and software technology*, 55(10), 1741-1750.
- Drury, C. (2013) *Costing: an introduction*. USA: Springer.
- Drury, C. M. (2013) *Management and cost accounting*. USA: Springer.
- Heong, A. Y. K., Heang, L. T., Said, J., and Teng, Y. S. (2013) Adoption, Benefits and Challenges of Strategic Management Accounting Practices: Evidence from Market. *Asia-Pacific Management Accounting Journal*, 8(2), 27-45.
- Horngren, C. T., Bhimani, A., Datar, S. M., Foster, G., and Horngren, C. T. (2002) *Management and cost accounting*. Harlow: Financial Times/Prentice Hall.
- Horngren, C. T., Datar, S. M., and Rajan, M. V. (2015) *Cost accounting: A managerial emphasis*. Harlow: Financial Times/Prentice Hall.
- Kaplan, R. S., and Atkinson, A. A. (2015) *Advanced management accounting*. UK: PHI Learning.
- Kinney, M. F., and Raiborn, C. A. (2011) *Cost accounting*. South-Western, UK: Mason, OH.
- Rosyidi, C. N., Imamah, N. U. F., and Jauhari, W. A. (2020) An optimization model of make or buy decision and quality improvement of components using rebate. *Cogent Engineering*, 7(1), 1767266.
- Sillanpää, I. (2015) Strategic decision making model for make or buy decisions. *International Journal of Logistics Economics and Globalisation*, 6(3), 205-222.