

Contribution margin deluxe models case

Business



Case Study: Contribution Margin and Variance Analysis By: Sachin Malhotra
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Dunning Course: 04-70-256 Section 2 Date: November 28, 2008 Explanation of Profit Decline The decline in profits was due to a combination of various market, as well as, production factors. Firstly, the decreased market share was a major cause of the decline in the profits. This was quite surprising for a company that is operating in a growing market.

The total market for woodstoves grew by 33% during the year and, had the company, maintained its market share, it should have achieved a \$505, 000 increase in its contribution margin over the budget. Instead, FFL's market share decreased by 1% which reduced the previously mentioned expected increase in contribution margin by \$202, 000. The net result was that the increase in market volume and the decreased market share should have still resulted in FFL increasing its contribution margin by \$303, 000 over the budget.

Secondly, the change in mix of sales was another cause leading to the decreased profits. FFL sold more of the Basic and less of the Deluxe models. Since the Deluxe model has a much higher contribution margin per unit (\$210 versus \$80), the change in mix of sales had a negative impact on profits, i. e. , decrease of \$234, 000.

This negative impact, however, is not enough to offset the positive impact of the sales quantity increase (i. e. , \$234, 000 decrease versus \$303, 000 increase). Thirdly, the change in Price also affected the profits.

The price of the basic model increased by 8.3% and the sales volume also increased.

The price increase alone would have a favorable impact of \$180,000 on revenue. The problem was with the Deluxe model. The price was decreased by 12.5% resulting in a revenue decrease of \$480,000. Also, the volume decreased despite the drop in selling price. The net effect of selling more Basic (at lower unit CM) and selling less Deluxe (at a higher unit CM) was a decrease in contribution margin of \$231,000.

Lastly, increased selling and administration costs led to further decrease in the profits. Although the variable selling and administration costs were right on standard, the fixed costs increased by 5.3%. It appears that FFL might have misjudged the market's preference for basic versus deluxe models of woodstoves when it prepared the budget. FFL should study the market environment more carefully to ensure that the marketing effort is correctly directed and to plan production better. Another major reason for the decline in profits was the increase in variable and fixed costs.

The variance analysis indicates that FFL experienced substantial savings in direct material costs during fiscal 19×4/x5. This may have resulted from volume discounts that were not considered in setting the standards and that arose as a result of the higher production volumes. However, this cost saving was partially offset by inefficient usage of materials. Usage of direct labor and variable overhead were also somewhat inefficient. However, these inefficiencies were not enough to offset the direct materials cost savings.

The main contributors to the increase in costs were the direct labor and variable overhead rates.

One might venture to guess that the budget was incorrectly prepared (i. e. , did not reflect expected labor rate increases) or that FFL experienced problems with the labor union during the year resulting in a new labor contract with negotiated rates much higher than anticipated. Overall, variable costs to produce the Deluxe Model decreased by \$7. 00 per unit, but this were not enough to offset the large decrease in selling price.

On the other hand, variable production costs for the Basic Model increased by \$18. 0 per unit indicating some inefficiencies in its production process. These inefficiencies more than offset the cost savings from the Deluxe Model's production process. Fixed manufacturing costs increased by 4%. This increase may have been necessary given the increased volume and change in production mix.

Perhaps increased investment in machinery, supervisory staff or other fixed costs may have been required to accommodate the increased sales volume. It must be determined whether these higher costs are expected to continue in the future.