Using cost-volume-profit to increase business

Unit I Case Study

“ Alaska Coffee”

Using Cost-Volume-Profit to Increase Business

Methods of Analysis for Business Operations

INTRODUCTION

Cost-volume-profit (CVP) analysis is a method utilized to ascertain the means that support the changes affecting the costs and volume that impacts a company’s operating income and net income. When this method is deployed, there are several schools of thought that can be raised which includes sales price per unit are constant and stable. According to (Render, Stair, 2017) when you consider variable and fixed costs expenses, there is a variation with the amount being produced whereas on the other hand the fixed remains the same regardless of the amount of volume the company produces. In performing this analysis, there are several assumptions made from the perspective of when a profit would be expected can be based on the projected volume of sales, price, and cost mix (variable or fixed cost). Furthermore, the basic question is when you can anticipate making a profit or at the very least breakeven! Therefore, when the relative cost and time are considered, the derivation of probabilities from a frequency distribution may be more desirable.

The CVP analysis is recognized across various business acumens in the sense that this process is god sent is in presenting the value of CVP insights to improving business. What is critical in CVP analysis is not the skill in the

computations, as it is not complicated, but the skill in developing and defending the assumptions in the model (Said, 2016). This aspect is key for helping Alaska Coffee have a successful launch and see continuous improvement.

CVP ANALYSIS FOR ALASKA COFFEE

As a result of the analysis, it appears that Angelo has a better perspective on his fixed costs given that he has taken possession of the coffee shop by way of the signed lease and expected monthly expenses. However, when you consider the various other details of the model it paints a different picture regarding the variable and demand cost can fluxuate given the unpredictability of the CVP Analysis. Having a clear expectation of how this process will drive profits will assist Angelo in making the best decisions towards achieving the desired end-state to improving his business over a period. Utilizing the below listed assumptions will aide in creating a breakeven analysis that will demonstrate the potential revenue earnings to support the overall sales to account for the monthly fixed costs:

sales basket given sales mix:

sales, units	75	15	5	5	
	$	$	$		$
sales	150.00	45.00	20.00	$ 7. 50	222.50
variable	$	$	$	$	

cost	18. 75	7. 50	10. 00	5. 00
contribution margin	$ 131. 25	$ 37. 50	$ 10. 00	$ 2. 50
	$ 181. 25			

weighted average 81.

contribution margin 46%

breakeven in units given sales mix

fixed costs $ 2, 700 14. 90 baskets

CM per basket $ 181. 25

Units to sell to achieve

breakeven

coffee	1, 092
espresso	250
scones	75
bear claws	75
	1, 492

breakeven in revenue given sales mix

fixed costs	$ 2, 700	$ 3, 314
CM % weighted	81. 46%	

The above calculations details that selling approximately 1, 342 cups of either coffee and/or espresso will account for the monthly fixed costs with the assumption that an additional 12% (150 of the coffee drinkers) purchase a pastry with their beverage. Furthermore, this calculation is based upon the accuracy of the price for supplies and inviting to the potential customers without special incentives to generate sales. When you factor in 1, 342 cups of beverage over a 30day period or roughly 48 sales per day with at a minimum 5 or 6 of those customers purchasing pastries with their beverage. As a result of this scenario, the assumption can be made that Angelo may already have a sense that this activity can be achieved. The next step will highlight steps to increasing the business output.

BUSINESS IMPROVEMENTS

Based on the other coffee establishments in the area, Angelo has priced the beverages comparably, and has lowered his premium as compared to other premium coffee shops. With, his prices appear to be realistic and should be attractive to the daily coffee drinkers to generate the customer traffic to be

competitive with other shops. Given that if Angelo can prepare 50 cups of coffee and/or espresso per day which is greater than the breakeven amount to generate a profit. If Angelo focus his efforts on increase sales it will require additional staff during the peak hours which will cause an increase in the monthly due to the additional manpower needed to run the shop. With that in mind, it will require an adjustment in the sales to reach the breakeven point because of the additional staff.

The current sales variety is vital from the standpoint that it allows Angelo to achieve the desired end-state for the coffee. Presently, it is safe to assume that 10 to 15% of his daily customers will mix purchase a pastry item and giving that there is a drastic price difference between the scones and the bear claws ($4 vs. $1. 50). With the price difference between the scones and bear claws could potentially lead to a bias towards the lower price bear claws (see earning margin for each product below).

	coffee	espresso	scones	bear claws
sales mix	75%	15%	5%	5%
sales price	$ 2. 00	$ 3. 00	$ 4. 00	$ 1. 50
variable cost	$ 0. 25	$ 0. 50	$ 2. 00	$ 1. 00

contribution margin	$ 1. 75	$ 2. 50	$ 2. 00	$ 0. 50
contribution margin %	87. 5%	83. 3%	50. 0%	33. 3%

So, Angelo may wish to consider making the prices more comparable to each other so that bakery items offer similar levels of profits and pricing.

Therefore, as the graph shows, Angelo should consider adjusting the prices for both the beverages and pastries which would eliminate any bias in purchasing to maintain a balance between pricing and profits. With the current pricing of the beverages approaching 90%, I firmly believe that any changes in supply cost could have an adverse effect on his profits. By closely monitoring the business expenses and making minor pricing adjustments will control any margin creeps.

CONCLUSION

As a benefit for the near-term, utilizing a CVP analysis as a guide is a good way to gauging the assumptions in this model. At this point, Angelo should continue to make updates to the computations on a regular basis to monitor the sales mix, prices, along with the variable and fixed costs as a means of tracking the volume to breakeven and to meet or exceed targeted profits.

REFERENCES

- Render, B., Stair, R. M., Jr., Hanna, M. E., & Hale, T. S. (2017). Quantitative analysis for management (13th ed.). Upper Saddle River, NJ: Pearson.