

Hampshire company cost-volume analysis



Quantitative Analysis and Memo to Management

Here is the cost-volume analysis for Hampshire Company, that you requested. A cost-volume profit analysis is used to assist managers within companies to maintain maximum profits in relation to them number of units sold, pricing, variable cost, and fixed cost. With this analysis we will explain the breakeven point, margin of safety, contribution margin, and target operating income. Once read, you will understand the prediction of cost vs profit in the short-term economic decisions. The cost-volume profit will also provide tools to determine the profitability of the management position. When incorporating a cost-volume profit analysis, it will determine the change in the sales and cost of the businesses everyday process.

When determining the current operating income of The Hampshire Company, it showed that they were producing 60, 000 units of umbrellas to be sold. Then charging \$12. 50 per umbrella in 2014. \$750, 000 (60, 000 x \$12. 50). Showing that \$360, 000 in variable cost is what covered the materials, labor, manufacturing of the products, expenses, with a total fixed cost at \$295, 525. 00, that made the net income at \$94, 475. The Hampshire Company showed that the budget was maintained at a correct process. the contribution margin had a total revenue subtracted the total variable cost. At \$6. 50 per unit and the ratio at 52% (\$6. 50/\$12. 50) for the current sales, this showed that The Hampshire Company was making . 52 cents off each selling price at \$12. 50 with the fixed cost at \$6. 50(\$12. 50-6. 00). Then once calculating the breakeven revenue of the contribution margin at \$6. 50, the breakeven quantity was 45, 465 with current sales of 60, 000 units. This will leave you at a margin of safety of 14, 535. and the breakeven revenue

was \$568, 313. 00. The breakeven analysis refers to the point in which the total cost and revenue are equal. Then the breakeven point is used in determining the units or dollars of revenue needed to cover the total costs (Peavler, 2019). In 2014, the Hampshire Company made a breakeven point due to selling 60, 000 umbrellas and had a revenue of \$750, 000, putting them over the breakeven point margin. The margin of safety was 14, 535 units and at \$181, 683, with a 24% percentage of MOS. The Hampshire Companies budget shows that the higher level of MOS the lower risk the business has complications in the near future. The operating leverage is showing the break-even point by total variable cost, fixed cost, and the sales of the company. When using the breakeven point, it will incur the loss of the profits. If it shows anything higher than the breakeven point, then it is revenue. An increase or decrease within the fixed cost of the operating system will show a huge impact to the breakeven point. Determining that the volume of umbrellas is needed to sell under a different cost and price. The Hampshire company showed that they had an operating leverage of 4. 13. When examining the fixed cost vs variable cost on sales, it shows that the increase profit, causes decrease in loss. If the use of the operating leverage increases in profit as the sales increase, the higher the operating leverage has a greater risk of loss in sales. The operating leverage is to help balance the range of fixed cost and number of products produced. When calculating the Cost-volume profit, it is showing that management has alternated pricing, and the sales have increased by 20% with a total income of \$172, 475. The management can take the sales and show that they are on an unconventional place and also decreasing the risk of loss within The Hampshire Company.

When producing the short-term plan, the most profitable products and services that can predict what will occur if sales drop. The cost-volume will analyze the relationship between fixed cost and variable cost, that will allow The Hampshire Company to reach profit and the targeted income (Kenton, 2019). When comparing the contribution margin and profitability of each product and service, it allows management to determine the price of the product and how to structure the sales commission (Gallo, 2017). When determining the calculation of the contribution margin, the percentage of each sale will remain after eliminating the variable cost. This will then pay the direct cost to profit over the years.

The Cost-volume profit analysis is a great system to use for management teams within businesses to gain an understanding of the company's financial status. When it comes to managing a business, every manager needs to know the breakeven point, and should understand the potential sales of managing the cost of a product. Changes will occur and will cause impacts on the results of producing the product, and changes within the variable cost or changes within the fixed cost will affect the analysis. Some businesses have limitations on not benefitting from using CVP. If a company deals with a variety of different type of products, then there could be possible obstacles that could include external and unplanned cost within the distribution of the products. Cost-volume profit is a simple way to quickly determine the information on the overall financial wealth of the Hampshire Company.

Stated earlier in this letter, the Hampshire Company is breaking even with a safety margin. The current sales of 60,000 units that the company can possibly get a decrease in sales can by \$181,687.50. When using the data <https://assignbuster.com/hampshire-company-cost-volume-analysis/>

provided and estimate that the increase in units sold to 72, 000, will increase revenue by \$150, 000. That would make the net income at \$172, 475, instead of at \$94, 475. This will show an increase in sales at 20% without the fixed costs fluctuating. Being able to set your target income at \$900, 000 from the current income of \$750, 000, by increasing the sales by 12, 000 units will show an unchanged in the fixed cost, variable cost, and the selling price per unit.

The Hampshire Company inventory management is based on the cost within the company. This cost is called relevant cost and they are the future cost and variable cost that can change throughout the process and with the number of products produced that can change the production. The two different methods used within are the optimal cost allocation (variable cost and absorption cost). Variable costs include the production cost and the operating income that is varied on the change on product sold. Absorption costing is the other form that uses all the production cost of the fixed and variable method, which is \$94, 475. The absorption cost is showing \$148, 475 of the operating income. \$50, 000 increasing fixed manufactured cost per unit produced at a more significant value. So, with using the absorption cost shows a great optimal cost method due to the relevant cost including the absorption cost method that shows the lowering of the variable cost method.

When looking at the two methods, I think that they both can give an advantage and a disadvantage. The absorption cost shows an accurate cost based on the revenue and price for the product. The absorption method is used with the internal reporting, external reporting, and long-run decision

evaluations. Absorption costing shows that the operating income can be higher than the variable cost, due to having more producing inventory, than product selling per unit. The absorption cost can also help the business increasing the operating income and raising the margins with more inventory.

JIT (Just in Time) was started to inventory the demand of production, it was showed to be a very useful plan for production of goods. The Hampshire Company is not requiring stocking the direct material in the production of products. The JIT system will also important for creating the products in a higher quality, so they can produce at a lower cost. So, JIT can help decrease the inventory cost and reduce their performance of insurance or rentals. The business also saw that the JIT is a complex system that initials the process of raw material to finish goods. So, The Hampshire Company can create a workflow that will show support in the system and may have issues during production. JIT can gain high cost and make the Hampshire Company lose money if they could not produce enough to meet the required order of supplies. The JIT has a better benefit using the controlling cost and material usage that helps improve the production and storage.

The pros of using the just-in-time inventory system are eliminating overstock and waste of products, minimizing inventory and freeing up resources to allow for more space to produce products, setups becoming faster for production, cost to be traced to the unit it produced, and turnover ratio will increase.

The cons of using the just-in-time inventory system are costly investments, long-term commitment, risk of receiving supplies on time, and trained employees through the process of production. JIT has a benefit of saving the cost of sold umbrellas at 60, 000 by 80, 000, so they have 20, 000 left. So, stating that the Hampshire Company has to spend \$98, 000 of cost inventory. So, if The Hampshire Company uses the JIT, they would eliminate \$98, 000 of over-produce cost, and save the cost to the business. The inventory system shows that it is the better system to use for The Hampshire Company. The overproducing of 20, 000 units will represent 25% of the units produced. JIT system is showing to be more effective than other systems. MRP (Material Requirement Planning System) is based on a forecasted demand that may lead the company to over costing production. The JIT system is a dynamically linked system, that is better applied for short lead times, while MRP is not linked, and is better suited for long lead times. Whereas the JIT system enhances the value of processes (Chiumbi., 2010). That stated, JIT is more effective way of producing and wasting of materials used for production, and it can also manage the demand of goods in inventory.

Benchmarking is the continuous improvement and process of comparing levels of performance within the business of specific process. It can help The Hampshire Company improve or set the performance of the company's target by identifying, adapting, and implementing the product cost. For companies that want to remain agile and competitive in our Digital Age, benchmarking must go beyond tracking the bottom line if the goal is to drive excellence. Companies need to benchmark digital performance and progress

in order to avoid disruption, gain a competitive edge, drive innovation, make informed predictions and decisions, and ultimately, improve performance (Albanese, 2017). The Hampshire Company calculation showed an inefficient because they use the price variance is unfavorably due to higher price.

Showing that, they have to use a higher costing than the standard. So, they have to continue to manage and improve the sales and quality of the product. The four approaches of benchmarking are internal, external, functional, and generic (Albanese, 2017). Internal benchmarking, which is to evaluate key performances and develop the standard orders that go across the leverage of organization that compares to other companies (Albanese, 2017). External benchmarking determines the performance by comparing similar organizations that may be a non-competitive or competitive company. This is showing to be the hardest approach to be successful due to too many external factors. Functional benchmarking is used to research and compare the operation within the same industry. Then the generic benchmarking, compares the operation that is unrelated within the industries that approach the examination and collective data which ignores the legal issues within the company.

The benchmarking method should be used to determine and understand the internal and external process of the company. Using the external approach is used because it is the best approach to have an overview of both internal and external. It shows the approach of the analyzed and identified situation within the business and any competitors. It also compares successful companies process to improve within the business itself.

The cost-volume profit method that the Hampshire Company showed it worked well with using a single product. The stick umbrellas had an indirect cost with a single cost rate. Since the Hampshire Company is expanding, the production of umbrellas, they are having to switch to the alternative costing method. Activity based costing is assigned in the manufacturing overhead costs to produce the products in a more logical manner than the traditional approach of simply allocating costs on the basis of machine hours (Kenton, 2019). First, activity-based costing assigns the cost of the activities that are in causes of the overhead production. Second, it is assigning the cost of the activities within the production, only to the products that are demanding within the activities. Lastly, Hampshire Company producing stick umbrellas, would benefit from activity-based costing, but for collapsible umbrellas the traditional costing system would work best. The stick umbrellas would work well with the ABC system, because it will show that adding up the cost are lower than previously, and making operating income is higher than the previous statement. Stated in other words, the variable costs would have been to be fixed cost that can be traced to the product that was produced based on the allocations per unit produced.

Now that Hampshire Company is producing more stick umbrellas, the activity-based costing would be advised to be used with the production of the umbrellas. The majority of income within the Hampshire Company is from the stick umbrellas, so brining in the collapsible umbrellas would not affect the production of the stick umbrellas. Based on the income statement, they would even out on the expense vs costing report. The stick vs collapsible umbrellas while using the traditional method would cost \$10. 92

per unit and only \$10.79 using the ABC method. Based on the results of this, collapsible umbrellas will make a larger gap in the cost per unit, \$11.12 using the traditional vs \$13.86 using the ABC. The ABC system shows it focuses on a particular expense related to the manufactured of the new umbrellas. Using the activity-based costing when examining a product with a high production rate and/or low production rate. It will determine where the income is being spent mostly and where it is being earned mostly.

If the Hampshire company decides to use the activity-based cost method, they should understand that the resources based on the cost will implement the continuation of the system. Then the managers will have to determine the cost and how to explain that they want to be more costly than required to increase profit. The Hampshire Company should adapt to this method, instead of using the traditional method, because it allocates based on the amount of product it's products daily. When using the ABC method, it is customizable for products that are indirect to each specific umbrella that is produced. When allocating the direct and indirect cost, it shows that the products identified are at true cost with the collapsible umbrellas. The traditional method shows the cost per unit to produced collapsible umbrellas at a price of \$11.12, but when using the activity based the cost per unit price is \$13.86. The difference between each price is because of the overhead and can be traced back to the product, it allows for more cost per unit. Showing in this price difference, identifying the price to sell is \$14.00 for collapsible umbrellas, this shows the adjusted increase of profit margin to 1%. But, by switching to the activity-based method, the Hampshire Company can allocate \$2.74 more in cost per unit.

The quantitative analysis that is recommended to the Hampshire Company are based on the current price of stick umbrellas that are tracked using the contribution margin at 52%. Selling 5, 000 units at \$11. 00 per unit will help increase profits by \$9, 000. The operating leverage of 4. 13, gives the chance to increase sales without increasing the cost. It will allow a target income of \$900, 000 and not have to worry about the risk of fixed and variable cost. Then being able to increase the units by 20% (72, 000) units, that will target the company's income to \$900, 000 and increase the net income to \$172, 475. Switching the absorption method to the allocate method within the income statement will increase the operating income by \$54, 000. This method could increase the reporting period and operating income. The JIT inventory system would be helpful by reducing the spent of \$32, 000 of overhead cost. It can also decrease the storage required for materials and decrease the cost of insurance. The MRP inventory system can be beneficial needs at this time of switching. It can help with reducing the cost, production time, ad materials. The operational benchmark would be recommended to balance the financial, operational, and manufacturing of competitors that produce the same product. This will show the managers of Hampshire Company who is ranking in competition. ABC method is what is recommended to use then the traditional method. The variable cost due to activity that drives the cost and allocating the direct cost can be used by effectively by the operating income. The collapsible umbrellas have a selling price of \$14. 00, so the selling price should be increased to \$15. 50 for a profit increase of 10. 5% from 1%. Showing a balanced scoreboard looks into four categories (financial, customer, internal processes, and learning) that can balance the growth in finance and increasing the operating income by

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reducing the cost that can increase the shareholders value (Horngren, Datar, & Rajan, 2014).

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