

Rjet financial analysis task 4

Business



In order for a company to succeed and be successful, it is very important for the company to understand the difference between profit and cost of goods. There are costing tools that can help a business figure out what the cost of product is during the manufacturing process. These tools are beneficial for a company to figure out how much profit can be made. These tools take the cost of manufacturing the unit and subtract it from the sale price of the product. Having this information, the profit per unit, is very beneficial for a company to know which products they should produce more heavily, or which ones to eliminate. I want to discuss two costing methods that are beneficial to a company.

The first costing method is called traditional costing. Traditional costing is the process of coming up with unit cost by dividing total cost to make the product by the direct labor used to make the product. This process will assume that the direct labor is the major driving cost. Overhead costs, and indirect costs are combined then are given out based on their rational split. In the spreadsheet it shows Competition Bikes Inc.

, has a total overhead of \$471, 000. They have allocated \$232, 280 for CarbonLite, and \$239, 020 for titanium. By adding the overhead costs to the direct costs, we get \$679, 380 for CarbonLite, and \$641, 320 for titanium. Now if you divide the total cost of the product by the number of units, you will get \$1, 359 for CarbonLite, and \$713 for titanium. You can now be able to determine the profit for each of the splits by subtracting the unit cost from the sales price.

For traditional costing, you will get a profit per unit of \$136 for CarbonLite, and \$187 for titanium. Traditional costing is very versatile and easy to use. It is also very good for companies to use when they only have one line of product, or a larger ratio of direct cost and overhead. The next costing method is activity-based costing. Once a company gets larger and expands, their labor will likely decrease due to the company adapting automation. This is where activity-based costing is very beneficial.

Activity-based costing is process of calculating direct charges, the same way traditional costing does it, but you will calculate the overhead costs a different way. In the traditional costing process, the rational split were combined to get the overhead cost. In activity-based costing, to get the overhead cost, you only add together activities to get your overhead cost. For Competition Bikes Inc. , they have \$282, 985 for CarbonLite, and \$188, 415 for titanium in overhead costs.

Now when you calculate the unit cost with the new overhead costs, you get \$1, 460 for CarbonLite, and \$656 for titanium. The profits per unit are \$35 for CarbonLite, and \$244 for titanium. When the traditional costing process was used, it was evident that the profits per unit were very similar. However, when you used activity-based process, it was quite clear that the profit was much larger on titanium than was expected, and it was much lower for CarbonLite than expected. I suggest that Competition Bikes Inc.

, use activity-based costing to get way more accurate results. A2a.

Breakeven point It is essential for a company to know how to make a profit in order to succeed. It makes planning for the future of a company much easier

by knowing how much profit it is going to make in the future. This aids in the company knowing how much to sell product for, how many employees are required, when products should be upgraded, and when product should be discontinued. These questions can be answered by effective financial planning.

One method of effective financial planning is to find the breakeven point of the company by using cost-volume profit analysis. Cost-volume profit analysis is a process that shows relationships between volume, cost, and profit. By using these relationships you can determine the breakeven point of the company. The breakeven point is when the number of sales will break even, meaning having no loss, or no profit. The first step in cost-volume profit analysis is finding the CM (contribution margin) per unit.

The CM is profits is resulted by subtracting sales from variable costs. For Competition Bikes Inc. , they have a CM per unit of \$111 for CarbonLite, and \$221 for titanium. Since Competition Bikes Inc. has two different types of bikes, they are going to have two different CMs.

In order to make sense of having two CMs, we can calculate the weighted average contribution margin (WACM) for each unit, based off the CMs combined. To calculate this you add the product of sales mix multiplied by the CM of each of the items, which gives us \$127, 200. The total of the CMs is divided by the sales mix total, which is 700. This will then give you a WACM of \$181. 71. This means that each unit that was sold an average of \$181.

71 was profited. Now you need to calculate the breakeven point from the WACM. You need to divide the WACM by the total mixed cost, which is \$400,000. This equals 2201 units. This means that Competition Bikes Inc.

needs to sell a total of 2201 units reach the breakeven point. We can also forecast how bikes will be sold, and of what kind. Competition Bikes Inc. sells 450 titanium bikes for every 250 CarbonLite bikes that are sold. With this ratio, and applying it to the total mix of bikes, Competition Bikes Inc.

will sell 1415 titanium bikes, and 786 CarbonLite bikes. Now if you multiply the total amount of bikes by the total revenue per unit, you will get \$1,273,500 for titanium, and \$1,175,070 for CarbonLite. If you sum these to values together you will get the mixed total revenue of \$2,448,570. This is the total amount of money that Competition Bikes Inc. needs to make in order to reach the breakeven point.

They can also determine the loss/profit by adding/subtracting the average of \$181.71 for each bike that is sold above or below the 2201 units. A2b.

Breakeven Analysis Change The breakeven analysis works well for finding the breakeven point for a company. The problem with breakeven analysis, is that material price can change throughout the year.

For example if the cost of materials raise 10%. This is going change the breakeven point for the company. The variable cost for CarbonLite is \$1,384 to \$1,451, and for titanium, it will be \$679 to \$709. You will calculate the CM as described earlier and will see that the CM per unit will drop. The CM for CarbonLite will drop from \$111 to \$44, and for titanium, and \$221 to \$191.

Next the WACM will decrease from \$181. 71 to \$138. 31. This is approximately 25% drop from the original WACM. These calculations show how a 10% increase in material cost can have such a dramatic effect on the WACM.

Now I'm going to discuss the effects of the breakeven point when fixed costs are increased by \$50, 000. In order to calculate the breakeven point, you need to divide the current WACM by new fixed cost \$450, 000. This gives a mixed sales total of 3, 254, which is approximately 50% higher than the previous total. With the higher fixed cost, the new breakeven point is \$3, 619, 990. If the cost of materials raises 10%, and the fixed cost is increased \$50, 000, Competition Bikes Inc.

would lose approximately \$43. 00 profit per unit. They would also need to sell 1053 more bikes, in order to increase profit by \$1, 117, 420 to achieve the new breakeven point, from the previously calculated breakeven point of \$2, 448, 570.