

# [Accounting for decision making case study sample](https://assignbuster.com/accounting-for-decision-making-case-study-sample/)

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Break-even point indicates the number of units to be sold by a company to meet all its expenses and make zero profit. It is calculated by dividing fixed cost of production divided by the contribution per unit. Where, contribution per unit is the difference between selling price per unit minus variable cost associated with one unit. Referring to the excel sheet, Pringly’s break-even point at the first scenario is 142857. 1429 units while in the second 147058. 8235 units are required to break even (Walther, 2010).   
The units required to be sold so as that the company can achieve a profit of $ 4 Million should be around 170, 000 units in both scenarios. To determine this possibility, it is necessary to calculate expected value of each outcome presented. There is 25 % chance that the company will makes sales of 150, 000 units, 50% chance that the company will sell 180, 000 units and 25% chance of selling 200000 units. First, when the company realizes 150000units of sales it will fall short 20, 000 units so as to achieve the expected profit. Second, when the company sells 180, 000 units it will exceed profit target by around 10, 000 units. Finally, the company will exceed the targeted profit if it sells 200000 units by around thirty units. It is therefore necessary to calculate how much the company will fall short or exceed the targeted profit in the three possibilities. In all the three possibilities agreed on by the management the company is certain that it will break even. This means that there is no possibility of acquiring a loss. However, the keen interest of the management is to determine whether the required profit of $ 4million will be attained. Contribution per unit is of $140 in the first scenario. Therefore, when 150 000 units are sold the company will realize a profit of 150000\*140-20000000= $1 Million. This amount falls short of$ 3 Million given the target of $ 4 Million. If, the company sells 180000 units a profit of 140 \*180000-20000000= $ 5. 2 million. This amount exceeds the profit target of 4M by $ 1. 2 million. Finally, realizing a sales volume of 200000 units the company raises a profit of$ 8 million. This exceeds the targeted profit by $ 4 million (Tsorakidis, 2009).   
This analysis may be useful with a company with wide range of products if only each product is considered independently. In addition, care should be taken when calculating fixed costs of each product. This avoids associating fixed cost with only one product while in real sense it should be proportioned between two products. Therefore, if this is not possible then break even analysis cannot be applied in a company with wide range of products. This is because break-even point assumes that only one product is considered and costs of the product can be distinguished as either fixed or variable (Horngren, Datar, & Rajan, (2012).   
ROI is a financial metric which evaluates the efficiency or the consequences of an investment. It compares gains and costs of investment, where investments with positive and high ROI are preferred. It can therefore be useful for this company when introducing the new product. The company can use ROI to determine whether to invest $ 20 million or 25 million dollars on fixed cost. Referring to financial calculations on the excel sheet it is found that whether the company decides to invest 25 or 20 million dollars the resulting ROI is positive. However investing 25 million dollars gives a higher ROI hence, it should be preferred by the management. Residual income can also be applied in this type of investment by considering whether there is any residual after incurring all costs associated with the investment. It is quite clear from excel sheet provided that, marginal contribution is positive. In addition the company has very high chances of selling adequate units to raise a profit of 4 million dollars (Vanderbeck, 2002).   
In a nut shell, the management can use break-even point analysis, ROI as well as residual income in determining whether to invest in this product.

## References

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