



Break Even Point Analysis of Flower Bucket Business Hellokadoku Payabakung Village, Deli Serdang Regency

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Abstract: The purpose of establishing a business is to gain profit or profit that can be used for survival. Likewise with the Flower Bucket Business "Hellokadoku" Payabakung Village, Deli Serdang Regency. This study aims to determine the value or point of Break Even Point in this business. This analysis is one of the tools used by the company's management to be able to do this to help in knowing how much a certain level of sales is, so that the company does not make a profit and also does not experience a loss (break even). The type of research used in this study is descriptive research with quantitative. With this approach, the data source used is secondary data. Based on the results of the analysis, it can be seen that the BEP value of the Flower Bucket Business "Hellokadoku" in units of 24 pcs and if expressed in rupiah is Rp. 3,529,411.

Keywords: Break Even Point, Fixed Cost, Variable Cost

1. INTRODUCTION

Flower bucket hellokadoku is one of UMKM which is located in Paya Bakung Village, Hamparan Perak District, Deli Serdang Regency. This business was started in 2021 by a teenage woman named Vera Amelia who was assisted by 2 staff helpful work. He in the production and sales process product said. Hellokadoku Business focuses on making flower buckets where flower buckets are series flowers arranged in receptacle shaped basket small or similar, often called as a "bucket". The series This usually used For gifts, decorations, or various special events like wedding, birthday years, and celebrations others. Flower bucket hellokadoku Alone often get more turnover big when days big like graduation and day mother. Besides That main establishment A business This is For produce the benefits that can be obtained support sustainability its operations. However, the development of the business world and massive competition become the more intensive, temporary achievement profit always related close with aspect sale.

In running effort, important for owner business For moreover formerly determine the sales target to be achieved achieved in One period budget. Running business aiming For to achieve profit maximum, but Lots business experience failure consequence lack of careful calculation (Tania & Batu, 2022). In addition, to ensure sustainability business, management need knowing the minimum sales volume that must be achieved achieved so that the business No experience loss. If the planned sales target No achieved, management is also necessary understand how far has the decline gone sale Still can accepted without result in loss. One of the tools that can used For help management in matter This is break-even point (BEP) analysis. Analysis This is part from approach cost-volume-profit that

helps identify connection between cost fixed , cost variables , and sales volume . Break-even point analysis is often utilized in planning finance For help manager take purposeful decision minimize loss , maximize benefits , as well as predict expected benefits through determination price sell per unit, quantity minimum production , design products , and factors other (Mauliddiyah, 2021) .

In managing business This required Break-even analysis or analysis connection between cost , volume, and profit . Where the method This used For manage , interpret , and align production data use support taking decision management . Break-even describes a condition in which a business No to obtain profit and also experience loss . In other words, a business considered be at the point break even If his income equivalent with the total costs incurred . In context flower bucket business , analysis This become tool important For understand interaction between cost fixed , cost variables , and sales volume . With know point break even , owner business can determine amount production or the minimum sales target that is needed achieved so that the business produce benefits . For example , for avoid loss , flower bucket business must sell amount series flowers that at least reach point break even . If the sales No reach number said , the effort will experience loss. With Thus , break-even point analysis can be done help owner flower bucket making business decision strategic related production , determination price , or sales volume adjustment For ensure sustainability effort and achieve profit .

Based on description of the background back above , author interested For do study with title “ *Break Even Point Analysis on the Flower Bucket Business ' Hellokadoku ' in Payabakung Village , Deli Serdang Regency .*”

2. LITERATURE REVIEW

Understanding Break Even Point Analysis

Break-even point analysis is method For determine the point at which total revenue The same with total cost , so that business No experience profit and also loss . Cost variable is the total cost changed in a way comparable with changes in production volume . In other words, the more high production volume , the more the total cost is also large the variables that are issued (Supriyono RA, 2000) . Besides That cost still tend No changed although happen fluctuation in production volume , during change the Still within reasonable limits (Mulyadi, 2001) . The purpose of break-even point analysis is For determine amount minimum sales required to generate revenue The same with costs , so that business No experience loss or profit .

According to (Suharto, 2017) Break-even point analysis is very useful good perpetrator business For analyze influence cost fixed and price to point breakeven and profit , as well as as tool important in planning and decision making . (Ardiyanto & Arief, 2017) say that In general general , analysis This also provides information about the useful margin of safety as indicator for management For estimate how far has the decline gone sale Still can tolerated without cause loss in business

Ultility Break Even Point (BEP) Analysis

According to (Kuswadi, 2015) , break even point (BEP) analysis offers several advantages for company management, including the following:

- 1) To find out the relationship between selling price, sales volume, production costs and other costs and the company's profit and loss.
- 2) As a way to plan profits
- 3) As a tool to monitor ongoing operations
- 4) As a consideration for determining the selling price; and
- 5) As a means to take price changes into account.

Benefits of Break Even Point Analysis

Whether manufacturing or services, BEP is essential to prevent losses. Here are the benefits of BEP (RA & Mulyadi, 2009) :

- 1) Planning tools to generate profits.
- 2) Provides information about various levels of sales and their relationship to the possibility of earning profits based on the relevant sales levels.
- 3) To find out the relationship between selling price, sales volume, and costs incurred to determine the company's profit and loss.
- 4) To find out the minimum sales amount, both in monetary units and in product units, so that the company does not experience losses.
- 5) Evaluate the company's overall profit.
- 6) Transform complex reporting systems into easy-to-read and understand graphs.
- 7) Assists in determining selling prices.
- 8) Assist in decision making on the following matters:
 - a. The minimum sales amount that must be maintained so that the company does not experience losses.
 - b. The amount of sales that must be achieved to earn a certain profit.

- c. How much sales must decrease so that the company does not suffer a loss?
- d. To find out how changes in selling prices, costs, and sales volume impact the profits obtained.

Weaknesses of Break Even Point (BEP)

Although this break even point analysis is widely used by businesses, it is important to remember that it has several weaknesses. The main weaknesses include assumptions about linearity, cost classification, and limited use for short periods of time (Purwanto, 2016) .

1) Assumptions about linearity

The selling price per unit and the variable cost per unit are usually not independent of the amount of sales. In other words, achieving a certain level of sales can only be achieved by lowering the selling price per unit. This will inevitably cause the revenue line to curve rather than be straight. In addition, with more sales and full capacity, the variable operating cost per unit will also increase. This may be due to higher overtime wages or a lack of efficient workers.

2) Cost classification

The second weakness of break even point analysis is that the costs are semi-variable, meaning they are difficult to classify because they remain fixed at a certain level and then change after that point.

3) Period of use

One of the weaknesses of break-even point analysis is its limited time of application; it is usually only used for projecting operations for one year. If a business spends a significant amount of money on advertising or other costs, the results of that spending (additional investment) will not be seen in the near future because operating costs increase. As a result, the amount of revenue that must be achieved according to break-even point analysis must also be greater than the increased operating costs.

There is only one type of product produced or sold, which is a weakness of other break even point analysis. If there is more than one type, the sales composition, also called sales composition, will remain the same. In today's era, companies must produce many products to increase their competitiveness, which is difficult. There is an additional assumption that the selling price per unit of goods will not change regardless of the number of units of goods sold or the overall price. Break even point analysis is usually only used

to make operational projections for a year because it has a limited time period. If a business spends a lot of money on advertising or other costs, the results of these expenses (additional investment) will not be seen in the near future because operating costs increase. As a result, the amount of income that must be achieved according to the break even point analysis must also be greater than the increased operating costs

3. METHODS

The data sources used in this study are secondary data, which are primary data that have been processed and presented by the collector or other parties in the form of tables or diagrams. The data required includes information related to the elements used to calculate the break-even point (BEP), such as fixed costs, variable costs, sales volume, and selling price. Data collection for this analysis was carried out through documentation and literature studies. In the context of the "Hellokadoku" flower bucket business, the data is needed to calculate the revenue needed to reach the break-even point, which is useful in managing finances and business planning.

a. Break Even Point calculation based on units

$$\text{BEP (in Units)} = \frac{FC}{P-VC}$$

Where :

BEP (Q) : Number of product units produced and sold

FC : Fixed Cost

Q : Selling Price per Unit

VC : Variable cost per unit

b. Break Even Point Calculation in Rupiah

$$\text{BEP}(Q1) = \frac{FC}{1 - \frac{VC}{S}}$$

Where :

Q1 : Product sales volume in Rupiah

FC : Fixed costs

VC : Variable costs

S : Revenue (sales volume x selling price per unit of product)

4. RESULTS AND DISCUSSION

Table 1. Fixed Costs Per Month and Variable Costs per Piece

Description	Flower Bucket
<u>Variable Costs</u>	
Raw Material Cost	Rp. 70,000
Unforeseen expenses	Rp. 20,000
Direct Labor Cost	IDR 30,000
Total Variable Cost	Rp. 100,000
<u>Fixed Costs</u>	
Indirect labor costs	Rp. 1,000,000
Electricity cost	Rp. 150,000
Machine Depreciation Cost	Rp. 50,000
Total Fixed Cost	Rp. 1,200,000

Source: Processed Data

Table 2. Summary of Total Fixed Costs, Variable Costs and Selling Price Data

Product	Fixed Costs	Variable Cost/Pcs	Selling Price/Pcs
Flower Bucket	Rp. 1,200,000	Rp. 100,000	Rp. 150,000

Source: Processed Data

Discussion

Break Even Point for Flower Bucket is expressed in units

$$\text{BEP (units)} = \frac{1.200.000}{150.000 - 100.000}$$

$$\text{BEP (units)} = \frac{1.200.000}{50.000}$$

$$\text{BEP (unit)} = 24 \text{ Pcs}$$

Break Even Point for Flower Bucket is stated in Rupiah

$$\text{BEP (Rp)} = \frac{1.200.000}{1 - \frac{3.000.000}{4.500.000}}$$

$$\text{BEP (Rp)} = \frac{1.200.000}{1 - 0,66}$$

$$\text{BEP (Rp)} = \text{Rp } 3,529,411$$

Break-even point, or known as the break-even point, is a condition where the company's total revenue is equal to the total costs incurred, so that there is no profit or loss (profit/loss = zero). Based on the mathematical analysis conducted using data obtained during the research on the "Hellokadoku" flower bucket business, it is known that this business needs to achieve revenue of Rp 3,529,411 or more to reach the break-even point

in rupiah value. Meanwhile, in units, this business must be able to sell at least 24 flower bucket products so as not to experience losses.

5. CONCLUSION

Based on the results of the analysis and discussion, it can be concluded that calculating the break-even point (BEP) is an important step that needs to be taken by every company, including MSMEs, as part of business planning. With BEP analysis, fixed and variable costs can be clearly identified, so that business owners have guidance on the minimum production or sales limits that must be achieved to avoid losses. In the case of the "Hellokadoku" flower bucket business, the BEP value is determined at 24 units in product units and Rp 3,529,411 in sales value. Exceeding this BEP value is the key to achieving profit and maintaining business sustainability.

LIMITATION

In this study, there are limitations to the problem so that it is not too broad, so the problem above only focuses on the analysis of the break event point of the "Hellokadoku" flower bucket business in Paya Bakung Village, Deli Serdang Regency.

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