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Cost Volume Profit Analysis For Profit Planning At Shinta Bakery

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Abstract

Cost-Volume-Profit Analysis (CVP) is an important financial management tool for businesses that want to understand the relationship between costs, sales volume, and profits. This analysis enables organizations to make decisions based on an understanding of break-even points, pricing strategies, and profit targets. By examining fixed costs, variable costs, selling prices, and desired profit levels, CVP analysis provides valuable insights to optimize business operations and maximize profitability. This research was conducted at MSME Shinta Bakery located on Jalan Bojonegoro Ngawi, Ngraho District, Kab, Bojonegoro, East Java. Shinta bakery is a company engaged in bread and cakes. The analysis methods in this study are break even point analysis, contribution margin analysis and contribution margin ratio, margin of safety analysis, and total operating laverage. The main benefit of CVP analysis is that it assists managers in determining the right selling price, planning the desired profit, as well as identifying potential areas to reduce costs. By understanding the concept of CVP, companies can optimize their cost structure and increase profitability. In addition, this analysis can be used to measure risk in business decision making and help managers understand the impact of changes in sales strategy or costs on net income. The results of this 2023 study show that BEP (units) must sell 56,849.27 and BEP (rupiah) must get income of IDR 105,970,145.45 so as not to experience losses. Contribution Margin Ratio 55%, Margin Of Safety in rupiah can be a maximum decrease of IDR 498,474,454.5 and Degree Of Operating Leverage shows Contribution Margin of 1.2 times operating profit

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Introduction

Every MSME has a goal to obtain maximum profit from the sale of goods or services provided. This is done for the progress of these MSMEs. For this reason, good management is needed in regulating MSMEs for tight trade competition out there.(Wayan et al., 2014)

Good management can help MSMEs achieve success by using effective and efficient strategies. Management must think about what will be done for the progress of these MSMEs in product sales by analyzing costs, products sold, and profits that will be obtained later. Management must be able to take business advantage in order to survive and management must estimate the risks that will be obtained in order to minimize failure

The more advanced the development of MSMEs, of course, there will be increased competition, especially in the same industry. So MSME owners must have a special strategy in order to survive and dominate the market by increasing the number of product sales or minimizing production costs so that the profits obtained will be maximized. therefore, MSMEs need a strategy to determine selling prices and sales volume targets.

Analysis of the cost of profit volume will help MSMEs to get the best composition of elements that affect profit achievement. This can help MSMEs control their efforts to predict the condition of MSMEs in the future.

The level of profit and loss can be calculated by Cost Volume and Profit (CVP) analysis with the break-even point method (BEP analysis) and safety limit analysis (Margin of Safety). Break even point analysis and margin of safety analysis are measurements that can be used to assist MSMEs in profit planning and assist owners in understanding the behavior of production costs and operating profits when there are changes in sales volume, selling prices, production costs and other fixed costs. The owner can determine the sales volume needed to achieve the desired profit target. Profit planning plays an important role in MSMEs because profit planning makes it easier for owners to carry out their business activities and make projections of the level of profit to be obtained. Profit planning is said to be good if the owner or manager of the company can consider profit-forming factors, namely costs, selling prices, sales volumes.

Theoretical Review The concept of accounting

According to Sumarsan (2013) "Accounting is an art in combining, recognizing, categorizing, and recording transactions related to financial aspects, with the aim of producing financial statements that are useful for parties who have interests.

Management Accounting

Management accounting, as explained by Blocher and his colleagues (2010), is a profession that involves cooperation in management decision making, developing planning and performance management systems, as well as providing expertise in financial reporting and control, with the aim of assisting management in formulating and implementing organizational strategies. Meanwhile, according to Soemarso (2009), management accounting is defined as a part of accounting related to solving specific problems faced by company management.

Cost Definition

Cost according to Horngren, et al (2008) is as a resource that is sacrificed or released (forgone) to achieve certain goals. A cost (such as direct materials or advertising) is usually measured in terms of the amount of money that must be paid in order to obtain a good or service.

Cost Classification

Types of costs according to the concept of break even consist of three, namely: Variable cost

Variable cost is a cost that is directly related to the level of production or sales because the amount is determined by how much production volume or sales are made.

Fixed cost

Fixed costs can be said to be related to time (function of time) and not related to sales levels. The payment is based on a certain accounting period and the amount is the same, up to a certain amount of this fee in total unchanged(Federico et al., 2013)Semi variable cost

Semi-variable costs are costs that are sometimes also called "semifixed costs" that have the characteristics of a combination of fixed costs and variable costs. An example of a semivariable cost is only a commission for sales men whose amount is fixed to a certain sales volume and increases in higher sales volume. Inside BEP there are only cost forms (fixed and variable). Therefore, semi-variable costs must be grouped into fixed costs or variable costs.(Winarko & Astuti, 2018) A) Sales volume can be interpreted as the composition of sales which is a combination of relative types of products, to the total sales revenue in one management company in order to achieve a combination of sales that can produce the greatest amount of profit achieved if the composition of sales consists mostly of products that have a high contribution profit(Ilyas et al., 2017a).

B) Profit in the general sense of the word is profit which means an increase in equity arising from an entity's transaction, an intensity or other event and certain conditions that may affect an entity during a certain period(Lulaj & Iseni, 2018).

C) Break-even analysis provides information on what is the minimum sales level that a company must achieve in order not to suffer losses. From this analysis, it can also be known to what extent the planned sales volume can fall, so that the company does not suffer losses. Break-even(Lulaj & Iseni, 2019) analysis is one form of cost analysis, volume is one form of cost, volume and profit analysis because to find out the break-even and margin of safety it is necessary to analyze the relationship between costs, volume and profit. If in the break-even analysis the weight of the analysis is placed at the minimum sales level that produces profits equal to zero, then in this analysis the focus of the analysis is placed on the extent to which changes in costs, volumes and selling prices result in changes in company profits. To facilitate analysis due to the effect of changes in costs, volume and selling prices on profits, profit and volume graphs can be made(Ilyas et al., 2017b).

Definition of Profit

According to Werner R. Murhadi (2012) "Net Profit is the final part in the income statement that reflects the company's performance in providing results for shareholders".(Samahati et al., 1009)

And according to Dr. Lyndon Saputra (284) "Profit can be defined as an increase in well-being. In the case of a company, this can be operationalized as the cash flow of the business unit plus the change in the value of the company".

From some of the opinions of the experts above, it can be concluded that the definition of profit is the final part in the income statement, namely profit after tax which describes the increasing welfare of a company(Elbaih & Housseini, 2018).

Cost Volume Profit (CVP) Analysis

CVP analysis is one of the main tools for planning and decision making. This analysis is useful early in the planning phase because it provides a simple framework for discussing relevant planning and data management issues.(Thanakitcharu et al., 2013) CVP analysis uses a cost calculation system where the cost of product uses Variable Costing. The approach to CVP analysis can be done in 2 ways, namely with a mathematical approach and a graphical approach.(Koraag et al., 2016)

Analisis Contribution Margin

A faster way to calculate break-even units is to center on contribution margin. The contribution margin is sales revenue minus total variable costs. At breakeven, contribution margin is equal to fixed expense. If you substitute the contribution margin per unit for the price minus the variable cost per unit in the operating profit equationaand obtain the number of units (Q), the basic break-even equation will be obtained as follows(Oliveira et al., 2019).

Operating Profit = (Selling Price per Unit x Q) – (Variable Cost per Unit x Q) – Total Fixed Cost

0 = {(Selling Price per Unit – Variable Cost per Unit)x Q} – Total Fixed Cost

0 = Contribution Margin per unit x Q – Total Fixed Cost

Q= Total Fixed Cost/Contribution margin per unit

Break Even Point (BEP) Analysis

The starting point in many business plans is how to determine the breakeven point, which is the point where revenue equals total costs and zero profit. (Blocher, et al 2010: 510). The break-even point can be calculated using(Stępień, 2017):

Equation method:

1. Break-even point in sales (Q = sales in units)

$$P \times Q = (v \times Q) + F + N$$

2. Break-even point in units of sales dollars (Y = sales in dollars)

$$Y = [(v/p) \times Y] + F + N$$

Contribution margin method:

3. Break-even point in sales units =

$$Q = F / (p - v)$$

4. Break-even point in dollar units =

$$Y = \frac{F}{(P - V)/P}$$

Where (p-v)/p = contribution margin ratio
Information:

p = profit (revenue)

Q = quantity (kuantitas/jumlah)
F = fixed costs v = variable costs N = Operating profit

Y = break-even point in sales dollars

Y/p = sales in dollars divided by price

Analysis Margin Of Safety

Safety marginiis units sold or expected to be sold or revenuee generated or expected to be generated that exceeds break-even volume(Fang et al., 2014). If the company's safety margin is the amount of certain sales expected in the next year, then the risk of suffering losses if sales decline will be smaller than if the safety margin is small. Managers experiencing low margins may want to consider various actions to increase sales or reduce costs. Such measures will increase safety margins and reduce the risk of suffering losses.(Ramadhani et al., 2018) Safety Margin = Revenue Target – BEP

Analysis Operating Laverage

According to Brigham and Houston (2001: 10), operating leverage is how much fixed costs are used in the operation of a company. Irawati (2006: 173) states that: "Operating leverage is the use of assets with fixed costs that aim to generate sufficient income to cover fixed and variable costs and can increase profitability." Hanafi (2004: 327) states that, "Operating leverage is defined as how much a company uses fixed operating expenses."

The theory explains that operating leverage is an use of assets that incur fixed operating costs in the form of depreciation and others in the hope of obtaining income to cover fixed costs and variable costs(Malbrain et al., 2015). Fixed operating costs are incurred in order for sales volume to generate revenue greater than all fixed and variable operating costs. The effect arising from fixed operating costs is a change in sales volume that results in a change in operating profit or loss greater than a predetermined proportion(Buckey et al., 2017). Operating leverage can also show the effect of revenue or sales on a company's operating profits. Knowing the level of operating leverage, management can estimate changes in operating profit as a result of changes in sales. This indicates that operating leverage relates to the company's sales and earnings before interest and taxes. The measure of operating leverage is the level of operating leverage called the Degree of Operating Leverage (DOL). Simultaneously Operating Leverage has a significant effect on earnings per share, while partially Operating Leverage does not have a significant effect on earnings per share.(Ekonomi dan Bisnis & Akuntansi Universitas Sam Ratulangi Manado, 2013)

Profit Planning

Planning is a series of actions to achieve a desired result. Basically, planning is a management function related to the selection of various alternative actions and policy formulation. In a company's management to achieve the expected profit, management must make a detailed plan to be able to assess a company's performance. Profit planning sets profit targets that also consider sales and expected costs for the next year and longer periods(E Susilawati, 2018). CVP analysis can assist managers in revenue planning to determine the level of sales needed to achieve the expected level of profit. For cost planning decisions, managers assume the expected amount of sales and profit is known, but want to find the value of variable costs or fixed costs needed to achieve the expected profit at the assumed sales amount.

Previous Research

Atika Pelawiten and Ventje llat (2014) entitled Cost Volume Profit Analysis for Profit Planning at UD Gladys Bakery. The purpose of the study was to determine the calculation of cost volume-profit analysis during 2012 at UD Gladys Bakery. The method used is the descriptive method.(Wulandari et al., 2018) The results of the study say that by using the analysis above we can calculate the amount of costs, products, and profits achieved

Research Methods

In this study, the author used a type of descriptive method research . The most common type of descriptive research includes assessing attitudes or opinions toward individuals, organizations, circumstances, or procedures. In this case, the type used is a procedure, where the author looks at how *cost-volume-profit* analysis in making short-term profit planning decisions at Shinta Bakery. The data used by the author is in the form of fixed cost and variable cost data obtained from Shinta Bakery's 2022 profit and loss statement.

Place and Time of Research

The research site was conducted at Shinta Bakery, located on Jalan Bojonegoro Ngawi, Ngraho District, Kab, Bojonegoro, East Java. The study started from the beginning of October.

Research Procedure

The procedures carried out in this study are as follows:

1. Collection of data on fixed costs, namely employee salaries and depreciation costs, and variable costs, namely raw material costs, gas costs, electricity costs, and water costs according to the data needed for analysis.
2. Data collection through interviews with Shinta Bakery management and documentation in the form of data collection at Shinta Bakery to obtain an overview of the company, organizational structure, data on bread sales and costs used.

3. Obtain data on fixed costs, variable costs, sales results and interpret the results of data processing and analyze costs, number of products and profits through the calculation of break even points, margin of safety, operating leverage, and contribution margin.
4. Draw conclusions and provide suggestions that are considered necessary as improvements in the existing cost volume profit analysis.

Data Sources

This study uses secondary data, namely obtained by the author from the literature in Management Accounting books and research articles.

Data Type

The type of data used in this study is quantitative data obtained from Shinta Bakery, which is data presented in the form of numbers obtained from addition or measurement

Data Collection Methods

The data collection methods used to obtain data and information related to this study are as follows.

1. Literature Research Conducted by studying literature relevant to this research, to be used as a theoretical basis in helping to discuss research problems.

2. Collection Method The data collection methods used are as follows.

the.

a. Observasi

That is a method of data collection carried out by diving directly into the object under study by observing what is targeted in taking data in accordance with what is needed. b. Interview

Data collection by making a list of questions to then interview the owner of Shinta Bakery.

Data Analysis Methods

The analysis methods in this study are break even point analysis, contribution margin analysis and contribution margin ratio, margin of safety analysis, and total operating laverage and profit planning analysis.

1. BEP (Break even point) analysis that describes an analytical technique to study the relationship between fixed costs, variable costs, profits and sales volume. According to Blocher, et al (2010: 514) the break-even point can be calculated using:

    1. Break-even point in sales (Q = sales in units) $P \times Q = (v \times Q) + F + N$

    2. Break-even point in rupiah

$$Y = \frac{F + N}{(p - v)/p}$$

2. Margin of Safety analysis (Safety level) which describes sales planning in order to avoid the risk of loss. According to Darsono (2009: 332) the margin of safety can be calculated by:
Margin of Safety %

$$\frac{\text{Total actual sales} - \text{Sales at the break event point}}{Total\ Total\ actual\ \text{s}}$$

3. Operating Leverage is a measure that shows the amount of profit changes due to changes in sales in a certain period. Operating Leverage can be calculated using the following formula: Operating leverage rate = contribution / profit margin

4. Contribution margin to calculate the difference between selling price per unit and variable cost per unit. Contribution margin calculation formula:

Contribution margin (value for money) = Sales – Variable Cost

CM (units) = Selling price per unit – Variable costs per unit

$$\text{Contribution margin ratio} = \frac{\text{contribution margin}}{\text{sales}}$$

RESULTS

Shinta Bakery is a company engaged in making bread and cakes. Shinta Bakery also offers special orders for birthday cakes, breads and snacks for various occasions. Shinta Bakery was founded by Mrs. Shinta on May 4, 2008 and is located on Road Bojonegoro Ngawi, Ngraho District, Regency , Bojonegoro, East Java. This strategic location allows the company to achieve greater profits. In running a company, good management is needed to handle every part that exists. For this reason, Shinta Bakery has also implemented a management structure that can control every production and sale. Shinta Bakery has fixed costs and variable costs. The following is the cost classification of Shinta Bakery.

1. Fixed costs
2. Labor costs
3. Depreciation expense
4. Variable costs
5. Electricity costs
6. Cost of raw materials
7. Gas fees
8. Water cost

Shinta Bakery produces bread. The following is the data on sales, fixed costs, and variable costs of Shinta bakery companies in 2022.

Table 1. Product Sales Data Table

Moon	Sales
January	40.100.000
February	43.253.000
Maret	32.800.000
April	54.120.000
From	47.501.000
June	48.985.000
July	40.505.000
Agustus	41.895.000
September	43.045.000
October	46.250.000
November	45.050.000
December	42.100.000
Total Sales	525.604.000

Source : *Shinta Bakery 2022*

Table 1 shows the number of Shinta Bakery bread sales during 2022, where the highest sales were in April and the lowest was in March.

Breakdown of Fees

Details of fixed and variable costs at Shinta Bakery in 2022.

Table 2. Total Variable Costs for the January-December 2022 period Shinta Bakery Year 2022

	Biaya Variabel				
Bulan	Biaya Listrik	Biaya air	Biaya gas	Biaya Bahan Baku	Biaya Variabel per bula
Januari	443.000	95.000	1.400.000	16.520.000	18.458.000
Februari	385.000	73.000	1.180.000	18.254.000	19.892.000
Maret	401.000	85.000	1.400.000	21.967.000	23.853.000
April	315.000	70.000	1.190.000	13.876.000	15.451.000
Mei	470.000	105.000	1.450.000	22.859.000	24.884.000
Juni	335.000	73.000	954.000	20.454.000	21.816.000
Juli	350.000	75.000	960.000	19.875.000	21.260.000
Agustus	432.000	90.000	975.000	21.345.000	22.842.000
September	375.000	75.000	960.000	20.769.000	22.179.000
Oktober	320.000	70.000	950.000	22.657.000	23.997.000
November	345.000	74.000	955.000	21.875.000	23.249.000
Desember	405.000	80.000	1.240.000	21.978.000	23.703.000
Total Biaya Variabel Perbulan					261.584.000

Source : *Shinta Bakery 2022*

Table 2 shows the total variable costs that companies used to produce bread during 2022. With a total variable cost of Rp. 261,584,000.

Table 3.Total Variable Costs for the January-December 2022 period Shinta Bakery Year 2022

Moon	Fixed costs		
	Depreciation Cost	Labor Cost	Total Fixed Costs
January	215.500	4.500.000	4.715.500
February	215.500	4.500.000	4.715.500
Maret	215.500	4.500.000	4.715.500
April	215.500	4.500.000	4.715.500
From	215.500	4.500.000	4.715.500
June	215.500	4.500.000	4.715.500
July	215.500	4.500.000	4.715.500
Agustus	215.500	4.500.000	4.715.500
September	215.500	4.500.000	4.715.500
October	215.500	4.500.000	4.715.500
November	215.500	4.500.000	4.715.500
December	215.500	4.500.000	4.715.500
	Total		56.586.000

Source : *Shinta Bakery 2022*

Table 3 shows the total variable costs that companies used to produce bread during 2022. With a total fixed cost of Rp. 56,586,000.

Table 4.Shinta Bakery's 2022 Profit Data

Moon	Total Revenue	Total Cost	Good
January	40.100.000	23.173.500	16.926.500
February	43.253.000	24.607.500	18.645.500
Maret	32.800.000	28.568.500	4.231.500
April	54.120.000	20.166.500	33.953.500
From	47.501.000	29.599.500	17.901.500
June	48.985.000	26.531.500	22.453.500
July	40.505.000	25.975.500	14.529.500
Agustus	41.895.000	27.557.500	14.337.500
September	43.045.000	26.894.500	16.150.500

October	46.250.000	28.712.500	17.537.500
November	45.050.000	27.964.500	17.085.500
December	42.100.000	28.418.500	13.681.500
Total	525.604.000	318.170.000	207.434.000

Source : *Shinta Bakery 2022*

Table 4 shows the total net profit earned during 2022. With a total net profit of IDR 207,434,000.

Cost-Volume-Profit for Shinta Bakery

Cost – Volume – Profit Analysis is an analytical method to see the relationship between the amount of costs incurred by a company and the amount of sales volume and profit obtained in a certain period. The basics of *cost-volume-profit* analysis that will be discussed are a series of analyses that will explain the relationship between costs, volume, and profit.

1. Contribution Margin Analysis

Contribution margin is the cost analysis of profit volume on the part of management accounting against profit margins in sales per unit and is useful in operational influence.

Contribution margin (value for money) = Sales – Variable costs

Contribution margin (units) = Selling price per unit – Variable costs per unit

The 2022 Contribution Margin can be calculated as follows.

	Total	**Per Unit**
Sales (2,000x262,802)	IDR 525,604,000	IDR 2,000
Variable Costs (995.36x262,802)	IDR 261,584,000	IDR 995.36
Contribution Margin	IDR 264,020,000	IDR 1,004.64
Fixed Costs	IDR 56,586,000	
Net Profit	**IDR 207,434,000**	

Contribution Margin $= \frac{Contribution\ margin\ per\ unit}{selling\ price\ per\ unit}$

=1,004.64/2000

=0.50 or 50%

The contribution margin in 2022 is IDR 207,434,000 and IDR 1,004.64 per unit

1. Break Even Point analysis

The calculation of *the break even point* for Shinta Bakery in 2022 is as follows.

P x Q = (v x Q) + F + N

Rp. 2000 x Q = (Rp. 995.36 x Q) + Rp. 56.586.000 + 0

2000Q = 995.36 Q + Rp. 56,586,000

1,004.64Q = IDR 56,586,000

Q = IDR 56,586,000 / 1004.64

Q = IDR 56,324.65

BEP in rupiah can be calculated:

$$Y = \frac{F+N}{(p-n)/p}$$

$$Y = \frac{56.586.000+0}{(Rp\ 2000-995{,}36)/Rp2000}$$

$$Y = \frac{56.586.000}{004{,}64/2000}$$

1.

$$Y = \frac{56.586.000}{0{,}50}$$

Y =113.172.000

The break-even *point in* 2022 was reached when the units sold had reached 56,324.65 units with total sales of Rp. 113,172,000 and at the time of the sale the company did not earn a profit. Because the total net profit obtained in that year was Rp 207,434,000

2. **Analisis *Operating Leverage***

Operating Leverage can be calculated using the following formula:

Operating Leverage = contribution / profit margin

$$\text{Operating Laverage} = \frac{Rp\ 264.020.000}{Rp\ 207.434.000} = 1{,}27$$

Corporate Profit Planning

A plan can be realized if management succeeds in running the company as measured by the amount of profit (profitability). Corporate profit planning made by looking at the actual sales of the previous year. For the next year, it is expected that the increase in sales until the end of December is 15% to Rp 604,444,600.With an estimated increase in fixed costs and variable costs of 3%. Fixed costs per year to Rp 58,283,580 and variable costs per unit to Rp 269,431,520 and estimated increase in selling price to Rp 2,300 For profit planning can be calculated as follows.

Contribution Margin Analysis

	Total	**Per Unit**
Sales (IDR 2,3000x262,802)	IDR 604,444,600	IDR 2,300
Variable Costs (1,025.23x262.802)	IDR 269,431,520	IDR 1,025.23
Contribution Margin	IDR 335,013,080	IDR 1,274.77
Fixed Costs	IDR 58,283,580	
Net Profit	**IDR 276,729,500**	

$$Contribution margin ratio = \frac{contribution margin per unit}{selling price per unit}$$

$$Contribution\ margin\ ratio = \frac{Rp\ \ 1.274{,}77}{Rp\ 2.300}$$

$$Contribution\ margin\ ratio = 0{,}55$$

The contribution margin in 2023 is IDR 335,013,080 and the contribution margin per unit is IDR 1,274.77. With a total net profit in 2023 of IDR 276,729,500.

1. Break Even Point Analysis

The Break Even Point analysis for 2023 can be calculated as follows.

BEP in sales units can be calculated:

P x Q = (v x Q) + F + N
Rp 2,300 x Q = (Rp. 1,274.77 x Q) + Rp 58,283,580 + 0

2,300 Q = 1,274.77 Q + IDR 58,283,580

1,025.23 Q = IDR 58,283,580

Q = IDR 58,283,580/ 1,025.23
Q = 56,849.27 units

BEP can be calculated:

$$Y = \frac{F + N}{(p - v)/p}$$

$$Y = \frac{\text{Rp } 58.283.580 + 0}{(Rp\ 2.300 - 1.025{,}23)/Rp\ 2.300}$$

$$Y = \frac{\text{Rp } 58.283.580}{0{,}55}$$

$Y = Rp\ 105.970.145{,}45$

2. Margin of Safety

Margin of safety = Budgeted revenue-Breakeven income

= IDR 604,444,600 – IDR 105,970,145.5

= IDR 498,474,454.5

With the following presentation:

IDR 105,970,145.5/ IDR 604,444,600 = 17%

3. Analisis *Operating Leverage*

$$Operating\ Leverage = \frac{\text{margin kontribusi}}{\text{Provit}}$$

$$Operating\ Leverage = \frac{\text{Rp } 335.013.080}{\text{Rp } 276.729.500}$$

$Operating\ Leverage$ = 1,2

Discussion

Break-even analysis provides information on the minimum level of sales that must be achieved by a company in order not to experience losses. The analysis also helps determine the extent to which a decrease in sales volumes is acceptable without harming the company. Break-even analysis presents sales volume planning data. At Shinta Bakery, several months almost suffered losses because variable costs and fixed costs increased without balance with product sales. Managers use Cost Volume Profit Analysis for decision making, planning, and execution of cost strategies. Companies need to estimate the profit to be achieved by considering the estimated increase in selling prices, fixed costs, and variable costs in a certain period. The break-even point is useful information for some companies to achieve operating profit above zero. In finding profit targets, the contribution margin and operating profit approaches are used. This CVP analysis also uses the margin of safety to evaluate the extent to which sales risk can be anticipated. If a company's safety margin is large in relation to expected sales in the coming year, then the risk of loss will be lower if sales fall below that safety margin.

The break-even point is useful information for some companies to achieve operating profits above zero. Cost Volume Profit (CVP) analysis provides a way to determine the number of units that need to be sold to achieve a specific profit goal. In an effort to achieve profit targets, contribution margin and operating profit approaches are used. In CVP analysis, margin of safety analysis is also used to evaluate the extent to which sales risk can be understood. If a company's safety margin is large in relation to expected sales next year, then the risk of loss will be lower if sales fall below its safety margin. If safety margins are low, management should consider options such as increasing sales or reducing costs. At Shinta Bakery, there are high variable costs and fixed costs. Previous research conducted by Lamsihar analyzed the profits and costs of several products, and from the research it was found that companies did not achieve expected profit targets due to lack of oversight of cost expenditures. This study supports previous research by Vincensia because the company does not yet have a standard for spending, which resulted in large expenditures. Therefore, in future profit planning, it is advisable to use the calculation of fixed costs and variable costs to determine the Break Even Point, Margin of Safety, revenue generated, and profit earned, so that the company can calculate the desired profit target.

CONCLUSION

The conclusions of this study are as follows:

1. Through cost, volume, and sales analysis at Shinta Bakery, company management can make decisions related to fixed costs and variable costs. Management can also determine the number of products that must be sold to achieve the desired profit target.
2. To analyze *cost-volume-profit*, methods that can be used include break-even point analysis, contribution margin analysis and_contribution margin ratio, *margin of safety analysis, total operating leverage*, as well as profit planning. With

these analytical tools, we can calculate the amount of costs, products needed, and profits that can be achieved.

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