CHAPTER II

LITERATURE REVIEW

2.1 Previous Research

This research has same relationship with several previous research. Thus this research has similarities and differences in the examined object. The following are some of the previous researches related to this research.

1. Alex Simon, Tian Septiana, Rama Gita Suci (2020)

The purpose of this study is to determine the application of CVP analysis as a basis for planning the expected profit for the second quarter of 2020 at MSME Sultan Barbershop. The research method used is a descriptive method with a case study approach by gathering information to data analysis using cost-volume-profit with a focus on various factors that affect changes in the earnings component. The results of the research carried out were in the first quarter the contribution margin was IDR 32,424,125. Minimum sales are IDR 19,330,018 and the break-even point is IDR 39,838,182. The company sets a profit of 20% from the first quarter. In order to achieve the expected profit, sales are targeted at IDR 62,775,909 in the second quarter.

Similarities between the research of Simon, et al., (2020) with researchers now lies on:

a. The research method is using a qualitative descriptive method.

b. Data collection techniques using interviews and documentation.

c. Data analysis using cost-volume-profit analysis.

The difference between current researchers and previous researchers lies on:

a. The subject of previous research was Sultan's Barbershop, while this research used UD DIOR “77”, Surabaya.
b. The research object of previous research was profit planning, while current research was profit planning and evaluation of sales improvement strategies.
c. The implementation period of the previous research was in the first quarter of 2020 while the period of this research was from June to November 2020.

2. Meidi Yanto (2020)

The title of this research is The Application of Cost-Volume-Profit (CVP) as The Basic Of Profit Planning in CV Usaha Bersama Tanjungpinang. The purpose of this study is analyze the factors that affect changes in CV Usaha Bersama by using cost-volume-profit analysis. The implementation of this analysis can be used as input for management in making calculations for planning more accurate earnings in the future. This research is a quantitative descriptive research and using secondary data such as sales volume data and cost data obtained from the company's income statement. The result of this research showed sales volume decreased, meanwhile the costs incurred every year have increased, and the company's contribution margin decreased every year which were causing lower profits. BEP analysis shows the company can still achieve sales above the BEP, and it can still make a profit even though it has decreased. The margin of safety obtained decreased every year, which caused the number of limits to decrease as the company's sales is getting smaller. Operating leverage increased but it was unable to leverage company profits, it can be seen that there is no increase in sales for each year. Target profit analysis shows that the company had still not succeeded in achieving the expected profit target.

Similarities between the research of Yanto (2020) with researcher now are on:

a. The research method was using descriptive qualitative method.
b. Data collection techniques was using interviews and documentation.
c. Data analysis was using cost-volume-profit analysis.

The differences between this researchers and previous researchers lies in:

a. The subject of previous research was CV Usaha Tanjungpinang, while this research uses UD DIOR "77", Surabaya.
b. The research object of previous research was planning for accurating the earnings, while current research was not only for profit planning, but also evaluation of sales improvement strategies.
c. The implementation period of the previous research was 2015 – 2019 while the period of this research was from June to November 2020.

3. Aznedra dan Desmerry Prima (2019)

The Cost Analysis and Value Against a Best Protection Machine to PT Panca Risa Pratama Group aims to determine the amount of sales volume that should be pursued by the company in order to reach the break event point and the proper profit planning based on cost-volume-profit analysis. The object of this research was PT. Panca Rasa Pratama Group that works on tea industry. This research used qualitative research methods. This research used secondary data such as incurred costs data and the sales during the period of 2013-2017. This research had succeeded in producing a break even point every year, and in 2018 the researcher succeeded in planning a profit and expecting the sales target of 20%.

The similarities between the research of Aznedra & Dewi (2019) with this research now are in:

a. The research approach was using desciptive method and the research method was using qualitative research method.
b. Data collection techniques using interviews and documentation.
c. Data analysis using cost-volume-profit analysis.

The difference between this researchers and previous researchers lies in:

a. The subject of previous research was to PT Panca Risa Pratama Group, while this research used UD DIOR "77", Surabaya.
b. The research object of previous research was planning for accurating the earnings, while current research was not only for profit planning, but also evaluation of sales improvement strategies.
c. The implementation period of the previous research was 2013 – 2017 while the period of this research was from June to November 2020.

4. Lasimun, Riska Apriani, dan Rony Setiawan (2019)

Calculating the income statement according principal of accounting, calculating the minimum sales so the company does not suffer losses, and evaluating the profit target of Amanila Housing Residence Depok by using cost-volume-profit analysis are the aims of this research. The research method used in this research is by using a mathematical method that focuses on determining profit and other matters related to profit planning such as break-even points, margin of safety, and company minimum sales. This research used PT Nauman Landmark Group as research subject and used descriptive qualitative approach. The results of the research show PT Nauman Landmark Group in 2017 received a profit of Rp. 14,996,255,337.50 if there were no change in selling price and there was no increase in costs. PT Nauman Landmark Group Jakarta must pay attention and take action according to estimation where the total cost of Rp. 5,393,444,663.00 with variable costs of Rp. 4,443,202,163.00 and fixed costs of Rp. 950,242,500.00.

Similarities between Lasimun, et al. (2019) with researcher now are on:

a. The research approach was using a qualitative descriptive method.
b. Data collection techniques was using interviews and documentation.
c. The research object was the company's minimum sales using cost-volume-profit analysis.

The differencse between current researchers and previous researchers lies on:

a. Previous research subjects were PT Nauman Landmark Group, while this research is UD DIOR “77”, Surabaya.
b. The implementation period of the previous research was in 2017 while the period of this research was from June to December 2020.

c. The previous research was using research method that focusing on a mathematical method.

d. The current research object was not only the company's minimum sales using cost-volume-profit analysis, but also evaluation of sales improvement strategies.

5. Indriati Sumarni (2019)

This research aims to plan company’s profit by using cost-volume profit analysis to find out the break-even point, and the number of sales that must be maintained so MSME Sugar Habang Taratau would not suffer losses. This research used descriptive quantitative method. The results showed that the contribution margin of the business was Rp. 32,820,000.00 with a contribution margin ratio of 57.58%. The number of units that must be sold in order to reach the break-even point (BEP) is 1,261 units or IDR 25,220,562.00. The maximum number of the decrease in the sales target that did not cause the company to suffer a loss was IDR 31,779,438.00. Every 10% change in sales would change revenue by 17.9%. If sales are below the closing point of the business which is Rp. 25,220,562.00 or 1,261 units, the business will no longer be able to cover up the costs.

The similarities between current research and researcher lies in the similarities:

a. Data collection techniques using interviews and documentation

b. The object of research was the company's minimum sales using cost-volume profit analysis.

The differences between current researcher and previous researcher lies on:

a. The research method of previous researchers used a quantitative descriptive method while current research uses a qualitative descriptive method.
b. The subjects of previous research were MSME Habang Tabalong Sugar, while this research was UD DIOR "77", Surabaya.
c. The previous research implementation period was June 2019, while the research period was June - December 2020.

6. Sadiq R. Abdullahi, Bello A. Sulaimon, Ibrahim S. Mukhtar, Muhammed H. Musa (2017)

This research aims to figure out cost-volume-profit (CVP) analysis as a management tool for decision-making process for MSME. The population in this study is the entire small business enterprises within Bayero University, Kano. This research used structured questionnaires as the data source. This research was using quantitative method with Pearson correlation as the research's technique analysis. The study concludes that small business enterprises ignored the CVP analysis, and it is recommended that the CVP analysis and another management accounting tools must be introduced to small business enterprises so that productivity can be improved.

The current research and previous research lies in the similarities:

a. The research object was cost-profit-volume analysis
b. The research was using small business enterprises as research's subject.

The differences between this researcher and current researcher lies on:

a. The research that be done by the previous research was to test the hypoteses, the correlation between having the knowledge of a management accounting tools and its application, while the current research focus on study case research to find out the answer correlated with the theme arranged.
b. The current research object was not only cost-profit-volume analysis, but also evaluation of sales improvement strategies as main object.
c. The previous research used quantitative research method with structured questionnaires as source of data, while this research used qualitative descriptive data with interview, observation, and documentation as data collection techniques.
d. The study population of the research was made up of the entire small business enterprises within Bayero University, Kano, while the current research used only one SMES that was UD DIOR “77”, Surabaya.
e. The current research used qualitative data technique as data analysis technique while the previous research used Pearson correlation.

7. Ratno (2016)

The research objectives were to determine the cost behavior of the company, understand the value of BEP and margin of safety, and also plan profit target in Devansa Advertising using cost-volume-profit analysis. The data used are primary and secondary data obtained through observation and interviews. The research method uses descriptive analytical data analysis using the least squares regression method, the BEP method to determine the firm's break-even point value, profit planning analysis, analysis margin of safety. The result of this research is the company's break-even point on the basis of rupiah is Rp. 129,483,325 while the profit earned was Rp. 53,611,750. Furthermore, the calculation results of the margin of safety of 45% or Rp. 104,300,425.

The similarities between Ratno's research and current researcher lie on:

a. The research method was using descriptive analytical with method, profit planning analysis, analysis margin of safety.
b. The object of research data is the break-even point value or BEP and profit planning.
c. Data collection techniques was by interview and documentation.

The differences between current researcher and previous researcher lie in:

a. The data analysis method used by previous studies was least squares regression method, while the current research did not use the data analysis method.
b. The research subject of previous research was Devansa Advertising, while the current research is UD DIOR "77", Surabaya.
c. The previous research period was carried out in 2016 while the current research uses the period June - December 2020.

8. Saparida S., Marheni, Lona M. (2015)

The purpose of this research was to find out how much the changes of the volume of sales that must be met so CV. Mentari Dempo Indah might survive . The determined profit targets can be obtained by calculating operating leverage of

2009-2013. The type of data used were primary data and secondary data. The result of this research showed that by the calculation of cost-volume-profit analysis showed the amount from contribution margin, break even point, profit target, margin of safety, and operating leverage for the year 2009-2013.

The similarities between previous research and current researchers lie in:

a. The object of research data is the break-even point value or BEP and profit planning.
b. Data collection techniques was by interview, observation, and documentation.

The differences between previous research and current research lie in:

a. The data analysis method used by previous research was quantitative analysis method, while the current research used qualitative analysis method.
b. The research subject of previous research was CV. Mentari Dempo Indah, while the current research is UD DIOR "77", Surabaya.
c. The previous research period was 2009-2013 while the current research uses the period June - December 2020.

9. Melda Darika Dua, Sri Mangesti Rahayu, Zahroh Z., A (2014)

This study aims to determine the application of cost-volume-profit analysis at CV ETERNA Mergosono Malang in 2014 as a basis for sales planning in 2015. Data analysis are done by identifying all costs incurred, calculating the BEP value, and conducting profit planning analysis. The technique of collecting data is carried out by documentating company's financial reports. The results of this study are based on the BEP value obtained by CV ETERNA in 2014 amounting to 27,617 m^2 with an income of IDR 1,374,226,818.00, then CV ETERNA set an increase in profits for 2015 of 18%. To achieve this level of profit, the company must be able to achieve sales of 45,111.40 m^2 or IDR 2,244,750,683.00, with a margin of safety of 17,494.40 m2 or IDR 870,523,865.00.

The similarities between this study and current research lie in:

a. The data analysis used is cost-volume profit Analysis with BEP analysis method, analysis margin of safety, and profit planning.
b. The object of research is to use BEP to determine the value of sales profit.
c. Data collection techniques was by interview and documentation.

The difference between current researchers and previous researchers lies in:

a. The subject of the previous research was CV ETERNA Mergosono, while the current research was UD DIOR "77", Surabaya.
b. The previous research period was conducted in 2014 while the current research uses the period June - December 2020.

10. Nabil A, Osama S. S., Ziad A.Z. (2014)

The research of "The Effect of Using Break-Even-Point in Planning, Controlling, and Decision Making in the Industrial Jordanian Companies" aimed to show the effect of using break-even point in planning, controlling, and in the decision-making process. The sample of the research was formed out 54 employees in the accounting departments in Jordanian Industrial Companies. The results showed that most of companies are using break-even point in the planning, controlling, and decision-making, and there is a significant relationship between use of the break-even point and successful planning, control and decision-making.

The similiriaties between this research with the current research were:

a. The use of break-even point to analyze. Eventhough the previous research only used break-even point than other four tools analysis of cost-volume-profit analysis those are contribution margin, profit target, margin of safety, and operating leverage, but it can be concluded break-even point is still the part of the cost-volume-profit analysis.

b. The data was used in previous research and current reserach were primary data and secondary data.

The difference between current researchers and previous researchers lies on:

a. Type of research method used in the previous research was quantiatitve method to figure out the effect of using of using break-even point in planning, controlling, and in the decision-making process, while the current research used a qualitative descriptive method to describe the condition faced by the research subject.

b. The previous research used 54 sample in Industrial Jordanian Companies in doing its research, while the current research used UD DIOR "77", Surabaya.

c. The previous research used The Statictical Package for Social Sciences (SPSS) as the data analysis techniques, while the current research used qualitative data analysis techniques with its steps.

2.2 Theoretical Basis

The theoretical basis of research describes the theories used in this study to support the analysis of the research and become the basis for thinking the problem formulation. These theories are described as follows:

2.2.1 Resources Based-View Theory

According to Barney (2001), resource based view theory explains the concept of competitive advantage that is maintained through company resources, which are all things that are valued as strengths and weaknesses of the company including all assets, attributes and capabilities, knowledge and information, and organizational processes. This concept will be useful for companies that aim to maintain the continuity of their business by mobilizing all available resources from tangible assets to intangible assets such as capabilities, knowledge, and organizational processes.

Related to research, the theory of resources-based view can be used to analyze the competitive advantage of the companies or in this case MSME, through business resources with the help of cost-volume profit analysis and deper sales strategy analysis in order to maintain business continuity.

2.2.2 Micro, Small, and Medium Enterprises (MSME)

The definition of MSME is regulated in the Law of the Republic of Indonesia (UU Republik Indonesia) Number 20 of 2008 concerning UMKM. In

Pasal 1 *Ayat* 1, productive businesses owned by individuals and / or individual business entities and not branches of other companies. The classification of MSME in Indonesia is regulated in Article / *Ayat* 6 which regulates the criteria for businesses at each micro, small and medium level, which are as follows:

d. A micro business is a business unit that has net assets of up to IDR 50 million (excluding land and buildings for business premises) and annual sales of IDR 300 million.

e. A small business is a business unit with an asset value of Rp. 50 million to Rp 500 million (excluding land and buildings for business premises) and annual sales of Rp 300 million to Rp 2,5 billion.

f. Medium-sized enterprises are companies with a net worth of Rp 500 million to Rp 100 billion and annual sales of more than Rp 2.5 billion to Rp 50 billion.

Anoraga (2002) describes the general characteristics of MSME by describing them as follows:

e. The bookkeeping system is carried out simply independently and is not in accordance with established accounting principles.

f. The profit rate tends to be small due to the intense competition between businesses.

g. Capital is not too big or limited.

h. Managerial understanding of a business organization is limited.

The description above can be used as a reference for determining businesses, including MSME. Based on the MSME classification and also the characteristics possessed by UD DIOR “77”, it can be concluded that UD DIOR “77” is a type of micro, small, and medium business in Surabaya.

2.2.3 The Concept of Cost and Cost of Goods Sold

Costs are cash or cash equivalents spent in order to obtain goods or services that are expected to provide benefits for the company in the future (Hansen, et al., 2012: 28). Costs are called cash equivalents because non-cash assets can be exchanged for goods and the desired service. The Financial Accounting Standard Board (FASB) defines expenses as outflows of assets, use of assets or the emergence of liabilities or a combination of both during a period caused by delivery of goods, production of products, charging of services, or the implementation of other activities that are the company's main activities. Costs arise as a result of the use of the organization's assets or resources for revenue.

Cost behavior can be interpreted as a reaction to changes in costs for changes in business activities (Hansen, et al., 2012: 68). When business activities experience an increase or decrease, there are certain costs that may also go up and down or can be fixed. In planning business activities, managers must be able to anticipate changes in costs that may occur and their impact, managers must know the extent to which changes will affect the production process and income. This is particularly influential during the current pandemic.

The cost of goods sold is all types of costs incurred in processing raw materials into a finished product (Hansen, et al., 2012: 34). These costs are all types of production costs incurred in a production cycle from raw materials to ready-to-sell finished products which include raw material costs, direct labor, and overhead costs. According to Hansen, et al. (2012: 33) cost of goods sold are representing the cost of goods that were sold during the period and transferred from finished goods inventory to the balance sheet to cost of goods sold on the income statement.

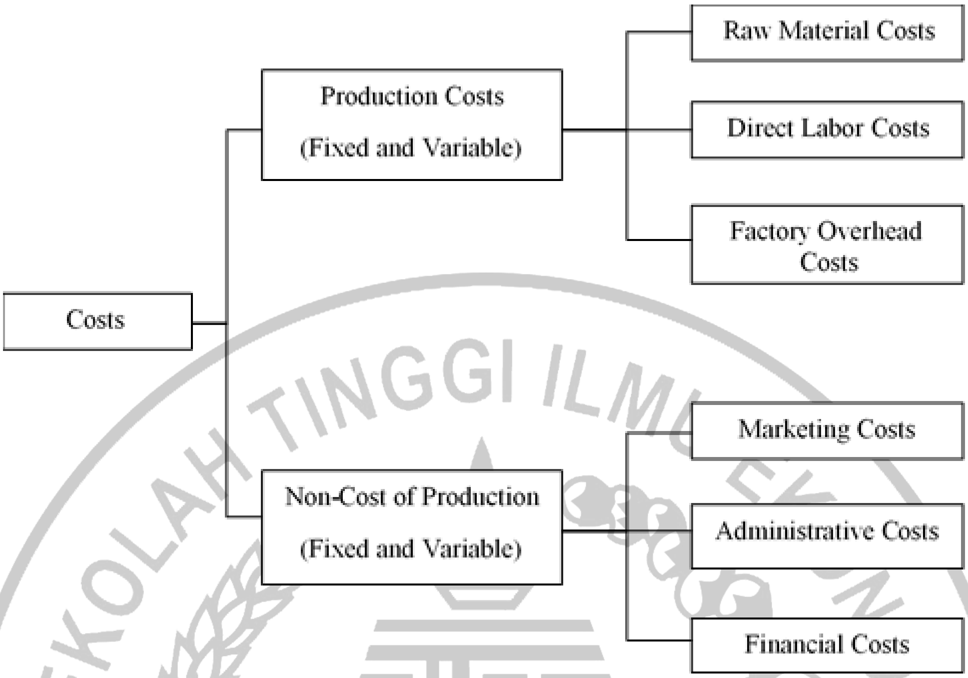
2.2.4 Cost Classification

Based on the behavior, costs generally can be grouped into two, namely (Hansen et al., 2012: 70 – 72).

1. Variable costs are costs that increase in total when output increases and decreases in total as output decreases. This means that variable costs will continue to change according to the amount of output produced.
2. Fixed costs are costs that do not increase in total as increases output and do not decrease in total as output decreases. This means that fixed costs will continue to be the same or not change regardless of the amount of output produced up to a certain cost range.

Based on the production process, costs are divided into 2, namely (Mulyadi, 2014):

1. Production costs include costs for processing into finished products that are ready for sale such as raw material costs, direct labor costs, factory overhead costs.
2. Non-production costs include all non-processing costs such as general administration costs, financial costs and marketing costs.



Source : Mulyadi (2014)

Figure 2.1
Cost Classificiation

2.2.5 Determiation of Cost of Goods Sold (COGS)

The cost of goods sold can be determined by two methods (Hansen, et al., 2012: 344), namely:

1. Absorption Costing Method, a method of determining the cost of goods manufactured which takes into account all the elements of production costs into the cost of production, which consists of raw material costs, direct labor costs, and overhead costs.
2. Variable Costing Method, a method of determining the cost of goods manufactured that takes into account production costs that behave variable, into the cost of goods manufactured, which consists of raw material costs, direct labor costs, and variable overhead cost.

The main difference between the two methods above lies in the treatment of fixed overhead costs. In determining the cost of goods sold, management generally analyzes using the method of full costing. However, in special conditions such as when making certain operational decisions, the method of variable costing is more likely to be used.

2.2.6 Managerial Accounting

Managerial accounting is the process of identifying, collecting, measuring, classifying and reporting useful information for internal users in planning, controlling and making decisions (Hansen, et al., 2012: 4). Based on this understanding, it can be concluded that management accounting is an organizational information processing process that is useful for meeting managerial needs related to management functions, namely planning, implementing, and evaluating business activities.

Managerial accounting has four objectives, namely to (Supriyono, 2011: 3):

1. Provides information for internal decision making in a particular organization.
2. Make it easy for internal parties to make decisions.
3. Motivate company actions and behavior in a desired direction.
4. Improve organizational efficiency.

This accounting concentration generally focuses on planning activities carried out in a management. Management accounting has a function in preparing various internal company reports in accordance with internal management needs in solving a problem at hand, for example, a decrease in profits or an increase in costs in the future.

Techniques in management accounting assist management in carrying out its functions. For example, budgeting techniques (budget), cost-volume-profit analysis (CVP), analysis of variance, and calculation of the proper costing method for determining the selling price. The choice of this method will affect the accuracy of the costing to the product so that managers can precisely determine the selling price. In every company management, planning always becomes the foundation for the implementation of business activities including all activities to identify all available alternatives and choose the best alternative to meet organizational goals, for example in the short-term profit planning process management requires differential accounting information to consider the impact of changes in sales volume, selling price & cost to company profit.

2.2.7 Profit Planning

Profit planning is the process of formulating a work plan for the purpose of a one-year period to be expressed in monetary and quantitative units (Mulyadi, 2014). From this understanding, it can be concluded that the company's profit planning describes, calculates, and processes quantitative budgeting data in the form of temporary financial reports for reference or guidelines for operational activities.

Factors that should be considered by the company in determining profit goals or objectives, namely, such as: (1) Profit or loss in a certain sales volume, (2) The volume of sales needed to cover all costs and generate sufficient profit and the needs of future activities, (3) Break-even point, (4) Sales volume that can be achieved with current operating capacity, (5) Operating capacity needed to achieve profit goals.

The benefits of the existence of profit planning such as management can conclude a directed approach to a problem solving by understanding the problems that are being faced from an early age before making a decision and which can then trigger participation and coordinate the operating plans of various segments of the entire management organization so that the final decisions and plans are interrelatedness can lead to a common and comprehensive goal (Usry & Maltz, 2003).

The problem that is being faced by UD DIOR "77" is the slowing down of the sales level that occurred during the COVID-19 Pandemic which is felt as a result of this situation. With integrated profit planning into all business operations, UD DIOR "77" can make decisions on how many sales targets must be achieved as break-even in profit planning and can coordinate all operating plans from all business segments in an integrated strategy of this one goal. In achieving the company's goals, there is a relationship between marketing costs, sales volume and profit.

According to Martusa & Wijaya (2011), profit planning for a trading company is very important. Trading companies must strive to reduce all costs, purchasing costs and marketing costs without disrupting the company's sales activities, so that it is expected to obtain optimal profits.

2.2.8 Cost-Volume-Profit Analysis (CVPA)

Hansen, et al. (2012: 118) describes the concept of Cost-Volume-Profit Analysis (CVPA) and defines CVP as a useful tool for planning and decision making. This analysis combines all of the company's financial information. Determining the right strategy or steps by management will be easy to do in order to maximize the company's profit. This concept is one of the areas in management accounting that is closely related to the behavior of managers in carrying out their duties.

Cost-volume-profit analysis (CVPA) is also a tool used to provide useful commands to understand the conditions of the relationship between costs, volume and company profits that focus on:

1. Product Price
2. Volume or activity level
3. Variable cost
4. Total fixed costs
5. Mix or products sold

2.2.9 Cost-Volume-Profit Analysis (CVPA) Approach

The analysis approach in cost-volume-profit (CVP) is described as follows:

1. Break-even, aims to provide a profit rate of sales is equal to zero. The information provided is related to the budgeted sales revenue target, the minimum sales revenue achieved so that the business does not suffer a loss.

2. Contribution Margin, aims to provide information related to the ability of a product to use resources to contribute by covering fixed costs and generating profits.
3. Margin of Safety, aims to provide information related to budgeted sales volume or sales revenue to the maximum so that businesses do not suffer losses.
4. Operating Leverage, aims to provide information related to the percentage change in sales revenue that would have an impact on the change in net income.

2.2.8.1 Break-Even Analysis

Break-even is a state company revenue sales equal to the total amount of the costs or the profits of the contribution equal to the total fixed costs, in other words, the company does not earn a profit, but also did not suffer a loss or loss of profits amounted to zero (Hansen et al., 2012: 121).

The methods that can be used to calculate this value are the equation method (equation method) or the contribution margin method. The two methods are described and illustrated as follows:

1. Method of equation (*equation method*), the concept of this method is to focus on the contribution approach to the income statement. The costs used are fixed costs and variable costs. The equation for the equation method is described as follows (in rupiah units):

$$Sales = Expenses + Profit$$

$$Sales = (Fixed\ Cost + Variable\ Cost) + Profit$$

From the above equation it can be concluded that the condition of the sales value occupies the same point as the total variable and fixed costs. So, it can be concluded that profit is equal to zero. The following is an illustration of the equation:

$$Income = 0$$

$$Sales = (Fixed\ Cost + Variable\ Cost) + 0$$

$$Sales = Fixed\ Cost + Variable\ Cost$$

Illustration:

"X" Company manufactures and sold the product at Rp150.000,- with the variable cost is Rp50.000,- per unit and the fixed cost is Rp25.000.000,-. Break-even poin in units can be calculated as follow:

X (in unit) = Number of unit sold

$$Income = 0$$

$$Sales = (Fixed\ Cost + Variable\ Cost) + 0$$

150.000 x = 50.000 x + 25.000.000 + 0

100.000 x = 25.000.000

x = 25.000.000 : 100.000

x = 250 units

It can be conclude that if the company sold the 250 units, the company will be in the break-even condition with sales Rp37.500.000,-.

2. The Contribution margin method, the concept of this method, is that each unit sold will provide a certain amount of contribution margin and will immediately cover fixed costs. The equation for the equation method is described as follows (in rupiah units):

$$\textit{Contribution Margin (per unit)}$$

$$= Selling\ Price - Variable\ Cost\ (per\ unit)$$

$$\textit{Break-even (unit sold)} = \frac{Fixed\ Cost}{Contribution\ Margin\ per\ unit}$$

$$\textit{Contribution Margin Ratio} = \frac{Contribution\ Margin}{Sales} \times 100\%$$

$$\textit{Break-even (in rupiah)} = \frac{Fixed\ Cost}{Contribution\ Margin\ Ratio}$$

The calculation if "X" company used the contribution margin method will be as follow:

$$\textit{Contribution Margin} = Selling\ Price - Variable\ Cost\ (per\ unit)$$

Contribution margin (per unit) = 150.000 – 50.000

Contribution margin (per unit) = 100.000

$$\textit{Break-even (unit sold)} = \frac{Fixed\ Cost}{Contribution\ Margin\ per\ unit}$$

Break-even (unit sold) = $\frac{25.000.000}{100.000}$

Break-even (unit sold) = 250 units

The benefit for management by knowing the break-even of a product sold, the management can form a budget, increase sales, analyze the impact of sales volume, analyze selling prices and impact of changing costs, negotiating wages and analyzing the product mix.

2.2.8.2 Analysis of Contribution Margin

Contribution margin is the result of sales less all identified variable costs or the difference between sales and variable expense (Hansen et al., 2012: 123). The amount available to cover all fixed costs is shown in the interpretation of contribution income. The state of loss is interpreted if the contribution profit is not able to cover all fixed costs. And vice versa, if the contribution profit earned in that period is greater than the company's fixed costs, the company will get the net profit for that period. If sales are above the break-even point, the company will make a profit. Contribution margin is stated in Contribution Margin Ratio (LK Ratio) which is determined from the contribution margin divided by the sales value. The following is an illustration of the equation:

$$Contribution\ Margin = Sales - Variable\ Cost$$

$$Contribution\ Margin\ Ratio = \frac{Contribution\ Margin}{Sales} \times 100\%$$

Illustration:

"X" Company manufactures and sold the product at Rp150.000,- with the variable cost is Rp50.000,- per unit and the fixed cost is Rp25.000.000,-. The company sold 1.000 units. Contribution margin ratio can be calculated as follow:

$$Contribution\ Margin = Sales - Variable\ Cost$$

Contribution margin = 150.000.000 – 50.000.000

Contribution margin = 100.000.000

$$Contribution\ Margin\ Ratio = \frac{Contribution\ Margin}{Sales} \times 100\%$$

Contribution margin ratio = $\frac{100.000.000}{150.000.000} \times 100\%$

Contribution margin ratio = 66,67 %

The benefit of knowing the contribution margin ratio for the business is that management can know and anticipate changes and can conclude good decisions on the ratio of contribution margin per unit, especially in businesses that sell several types of products.

2.2.8.3 Margin of Safety Analysis

The concept of margin of safety or the level of security that limits the occurrence of the top security companies in the sales decline, this provides relevant information can or are allowed sales volume dropped from budgeted but the company did not suffer losses.

The margin of safety is the units sold or expected unit sold or the revenue eraned above the break-even volume (Hansen et al., 2012: 143). The following is an illustration of the equation:

$$\textit{Margin of Safety} = \mathit{Total\ Sales} - \mathit{Breakeven\ Sales}$$

$$\textit{Percentage of Margin of Safety} = \frac{\mathit{Margin\ of\ Safety}}{\mathit{Budgeted\ Total\ Sales}} \times 100\%$$

Illustration:

"X" Company manufactures and sold the product at Rp150.000, - with the variable cost is Rp50.000, - per unit and the fixed cost is Rp25.000.000,-. The company expected the product to be sold as 400 units. Margin of safety and the percentage of margin of safety can be calculated as follow:

$$\textit{Margin of Safety} = \mathit{Total\ Sales} - \mathit{Breakeven\ Sales}$$

Margin of safety = Rp60.000.000 – Rp37.500.000 (as the computation in break-even point)

Margin of safety = Rp22.500.000

$$\textit{Percentage of Margin of Safety} = \frac{\mathit{Margin\ of\ Safety}}{\mathit{Budgeted\ Total\ Sales}} \times 100\%$$

Percentage of margin of safety = $\frac{22.500.000}{60.000.000} \times 100\%$

Percentage of margin of safety = 0,375 × 100%

Percentage of margin of safety = 37,5%

The calculation above showed that with the declining of saled as 37,5% or Rp22.500.000,- means that the company will be in the break-even point or condition. In this context, the manager can consider strategies to increase sales volume or reduce costs to reduce the risk of loss.

2.2.8.4 Operating Leverage

The concept of operating leverage describes the size of net income against changes in sales volume. The level of operating leverage is a measure of the percentage level of sales volume that will affect profit (Hansen et al., 2012: 145). The size of operating leverage is influenced by the company's cost structure. The following is an illustration of the operating leverage equation:

$$\textit{Operating Leverage Level} = \frac{\textit{Total Contribution Margin}}{\textit{Operating Income}}$$

Operating leverage can be illustrated by returning to previously provided data regarding “X” Inc., and “Y” Inc., Previously it was shown that a 30% increase in sales (from Rp1.000.000 to Rp1.300,000 for each company) yields 120% increase in operating income of “Y” Inc., (from Rp200.000 to Rp440.000) and 60% increase in operating income of “X” Inc., (from Rp200.000 to Rp320.000). So you can it is concluded that “Y” Inc., has a greater operating leverage than “X” Inc.,

The calculation of the operating leverage where the sales company as Rp1.000.000, - as follow:

$$\textit{Operating Leverage Level} = \frac{\textit{Total Contribution Margin}}{\textit{Operating Income}}$$

$$\text{Operating Leverage Level} = \frac{\text{Rp}400.000}{\text{Rp}200.000} = 2$$

$$\text{Operating Leverage Level} = \frac{\text{Rp}800.000}{\text{Rp}200.000} = 4$$

The calculation above showed that, if X's operating leverage level is 2 then 30% increase in sales will be increase the income by 60%. Meanwhile, if the operating leverage level of PT. X is 4 then a 30% increase in sales will increase profits by 120%.

2.2.10 Target Income

The concept of profit as described by the Committee on Terminology is the amount that comes from reducing the cost of goods manufactured, other costs, and losses from operating income or income. In addition, the Accounting Principles Board (APB) explains that profit is the excess of income over expenses during an accounting period. And the Financial Accounting Standard Board (FASB) explains that profit or accounting income is a change in the equity (net assets) of an entity during a certain period caused by transactions and events or events that are not from the owner.

Profit planning is used by companies to earn profits by targeting the amount of profit expected in the period ahead. All organizations during this pandemic have a target for the continuity of their business to survive and be at the break-even point. Therefore, this CVP analysis is a solution for businesses to determine how many units must be sold to obtain a target profit under these conditions. With the CVP analysis approach, this can be used as a guide for business actors to determine the selling price, so that sales targets will be obtained, and will result in cost budgeting in accordance with these conditions.

According to Amin Wijaja Tunggal (2014), there are three procedures that can be followed by company management in setting target income between others as follows:

a. Priori. In this procedure, management determines the rate of return certain to be achieved in the long term and then make a plan to reach that level.

b. Posteriori. Management made plans and then set the rate of return generated by the plan.

c. Pregmatic. Management uses a target standard advantages that have been empirically tested and supported by experience.

2.2.11 Concept of Strategy

The concept of strategy is a very important thing in a business organization or company in running its business. Strategy is the process of determining the top leaders' plans that focus on the long-term goals of the organization, accompanied by shrinking a way or efforts to achieve these goals (Marrus, 2001):

> "*Strategic planning is the top management decision prosess that focuses on the longer range direction of the company and establishes the means by which that direction is reached*"

Strategy is a comprehensive corporate plan that is very much needed to achieve company goals. The main key in developing a strategy is to connect the overall environment of the company which will determine the strengths and weaknesses of the company (Mulyadi, 2014).

2.2.12 Sales Strategy Based on Cost-Volume-Profit

Cost-volume-profit analysis (CVP) is a useful tool for planning and decision making (Hansen et al., (2012: 118). Determining the right strategy or steps by management will be easy to do in order to maximize the company's profit by using this CVPA as a tool. Sales strategy based on CVPA can be described to each approaches those are break-even, contribution margin, margin of safe, and operating leverage.

2.2.12.1 Break-Even Point

Break-even is a state company revenue sales equal to the total amount of the costs or the profits of the contribution equal to the total fixed costs, in other words, the company does not earn a profit, but also did not suffer a loss or loss of profits amounted to zero (Hansen et al., 2012: 120). Break-even analysis is used as a tool to make decisions in financial planning, sales, and production. According to Kasmir (2013: 333), there are some objectives to be achieved from break-even analysis based on the strategies applied. The strategies are described as follows:

a. Designing product specifications. Break-even analysis provides a comparison between costs and prices for various designs before product specifications are established.

b. Determine the selling price per unit. Besides consideration of costs to be incurred, the selling price too related to competitors who have products that are of a kind.

c. Determine the minimum amount of production or sales in order do not suffer a loss. The point is in order company is able to determine the limit of the amount of production in conditions of no loss and no profit from its production capacity.

d. Maximizing the amount of production. The point is in order do not let there be idle production capacity. Then the company is also able to keep it in production efficiently.

e. Planning the desired profit. The amount of profit can be we measure from the minimum limit of the product or from the total rupiah produced. Then able to plan or determine the amount of profit per unit of that production on sale. The breakeven analysis also has several drawbacks that is certain and cannot be avoided.

2.2.12.2 Contribution Margin

Kamaruddin Ahmad (2013) mentioned that the decisions or the problems that can be solved by using contribution margin with the strategies as follows:

a. Close or continue certain segments or sections. By looking at the contributin margin, a decision could be made first, a positive contribution margin will benefit the company overall, if the fixed costs are borne along.

b. If the alternative closure of a segment or part of it done and carried out another alternative, then its decision only comparing contribution margin only.

c. In the analysis of joint costs with joint products, the decision is only to compare the new sale price minus the old selling price with contribution margin (i.e. processing costs continued) a decision has been made.

d. It does not require a complicated calcuations, and it makes be more efficient, especially in the analysis of the break-even point.

2.2.12.3 Margin of Safety

The margin of safety is the units sold or expected unit sold or the revenue eraned above the break-even volume (Hansen et al., 2012: 143). Samryn (2012) mentioned that the margin of safety ia “excess sales budgeted or realized above break-even”. The result of the calculation shows the amount to how big the sale can be down to break-even.

The function of knowing the margin of safety by management means that management can find out the amount of risk involved in sales planning. When a company's margin of safety is large (with sales figures expected in the coming year), then risk to suffer losses that have to take sales of a downward turn will be increasingly less than a small margin of safety.

2.2.12.4 Operating Leverage

The concept of operating leverage describes the size of net income against changes in sales volume. The level of operating leverage is a measure of the percentage level of sales volume that will affect profit (Hansen et al., 2012: 145). The high and low level of operating leverage has an effect on the cost structure and is in line with the fixed costs in a company so that the function or benefit from knowledge of the operating leverage level can be used as a measure of the level of fixed costs.

The benefit is companies can quickly estimate the rate at which the effect of various percentage changes in sales on profit will serve to optimize profit without having to prepare a complete income statement in advance.

2.2.13 Sales Strategy Evaluation Based on CVP Result Analysis

Cost-volume-profit analysis is a useful tool for management to carry out its functions on planning or formulating a work plan for the purpose of monetary and quantitative units in profit planning process. In the fact, CVP is one of the most versatile and widely aplicable tools used by managerial accountants to help managers make better decisions on the strategy they made on increasing the sales (Hansen et al., 2012: 118). There are several factors in profit planning process on making sales strategy, they are: (1) Profit or loss in a certain sales volume, (2) The volume of sales needed to cover all costs and generate sufficient profit and the needs of future activities, (3) Break-even point, (4) Sales volume that can be achieved with current operating capacity, (5) Operating capacity needed to achieve profit goals. These five kind of factors are be able to be analyzed with cost-volume-profit as the tool which help the manager on understanding the correlation of cost, volume, profit of the organization by focusing of five elements namely product price, volume or level of activity, variable costs, total fixed costs and mix of the products sold.

According to Samryn (2012), an understanding of the application of the concepts of cost, volume, and profit can be used by management as a basis for planning a profitable composition of cost, volume and profit levels. As an interconnected component the composition must be at an optimal point. The limitations of the Cost-Volume-Profit analysis are as follows:

a. The concept of variable cost is acceptable, therefore costs must be realistically classified as variable and fixed cost.
b. The relevant ranges at all stages of the analysis must be determined.
c. The selling price per unit does not change if there is a change volume.
d. The price is sold for one type of product (single product).
e. Product combination (product mix), the sales mix must be fixed or if the analysis is used for various products or constant.
f. Management discretion on company operations does not change materially in the short term.
g. The general price level is stable in the short term.
h. Synchronization between sales and production, which means inventory level must be constant or empty (zero).
i. Efficiency and productivity do not change, especially in the short term.

Saparida et al., (2015) explained that the understanding on cost-volume-profit analysis can be used to find out and making the profit planning by manager. And the application of cost-volume-profit anlaysis as a tool in profit planning provides information regarding sales strategy on the planning process to be carried out.

2.3 Research Framework

Research framework used in this research is as follows:

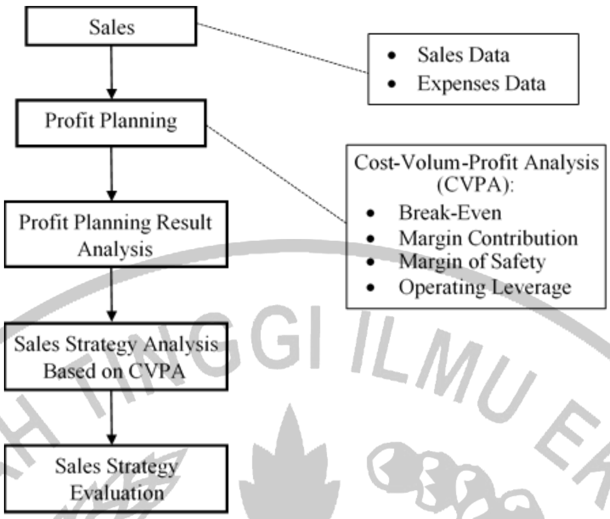


Figure 2.2
Research Framework

The schematic above is a description of the research framework to be carried out by the researcher. This research cannot be separated from a theoretical review in the form of references and also an empirical review of previous studies. The general research question will be based on the selling condition of UD DIOR "77" in this pandemic, analyze profit planning using cost volume profit analysis and then analyze of the appropriate strategy evaluation to be applied during a pandemic to increase sales.

The analysis model used in this study is reflected in the researcher's frame of mind, starting from collecting the necessary data to drawing conclusions. The steps in the analysis model are as follows:

1. Analyze sales condition of UD DIOR "77"
2. Identify and collect of sales and expenses data

3. Analyze the profit planning and the sales strategies based on cost-volume-profit results
4. Evaluate sales strategy to increase income in accordance with the determined profit planning results (CVPA)
5. Suggestions and conclusions

The initial step taken is to identify and collect data and documents needed for research. Furthermore, conducting a profit planning analysis using Cost-Volume-Profit at UD DIOR “77” to determine the level of sales at break-even. After getting the results of the calculations, then evaluate the results of the analysis of future profit planning. The next stage is to analyze the sales strategy that has been used by UD DIOR “77”. And then perform an analysis of profit improvements using cost volume profit and sales strategies to increase profits in the future, so that conclusions and suggestions are drawn on corrective steps on UD DIOR “77”’s sales.