

An Determinant Analysis of Cost Volume Profit of E.I.D-Parry (India) Limited Pugalur

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ABSTRACT

Cost Volume Profit Analysis (CVPA) has become a most powerful tool to maximize profits in today's turbulent competitive market scenario. CVP analysis immensely helps the company to make vital decisions to boost up the sales and to earn profit. CVP analysis demonstrates the association among various elements in planning of profit, in particular, variable cost, sales volume, sales mix and product cost. CVP examination is the reason for understanding in commitment of marginal pricing, related short run choices, target costing and exchange value. Cost Volume Profit analysis has incredible breadth in different administrative decision making. It helps the administration in deciding the nature of products to be created to accomplish required benefits, the amount of items to be delivered at any rate limit level, achieving required benefits under various cost and volume relationship. This study has an objective to measure the profitability position of the factory. To satisfy the targets, the five year financial information from the time frame 2016 to 2020 in the form of secondary data. The data are then analyzed and suggestions are given. It is inferred that CVP analysis is utilized to raise production limit and use trend setting technology to diminish the cost of manufacturing and to take right decisions and to gain profit. Cost Volume Profit analysis inspects the conduct of changes in the yield level, selling value, variable expense and fixed cost of a product. This study assists to know about the financial strengths and shortcoming of the factory into.

KEYWORDS

CVP Analysis, Cost, Decision Making, Sales, Price, Profit.

Introduction

Cost Volume Profit analysis has become an incredible asset in any organization to boost the benefit. The concept of cost volume profit analysis is employed to work out however the changes in prices and volume have an effect on a company in getting financial gain and profit. It is characterized as an arranging device by which the directors can assess the impact of changes in value, volume, variable expense or fixed expense on benefit. Profit depends on an outsized range of things the value of producing and volume of sales. The main factor which impacts the procuring of benefit is the degree of production. Boosting the benefit is a definitive objective of any organization. The volume of deals relies on the volume of creation and market influences which thus identified with cost. Yet, the worry the board has no power over the market. To accomplish the productivity, the administration needs to exercise to control the costs principally variable cost. The organization should plan and decide a good strategy to gain profit and to maximize it. These choices incorporate the evaluating strategies, rethinking contracts, inactive plant utilization and other significant contemplations in the arranging interaction. The expense volume benefit investigation outfits the total and proper image of the benefit structure. The cost volume profit analysis is an administration bookkeeping device that communicates the connection between deals, volume, cost and benefit. Each company's definitive and prime thought process isn't just to acquire a benefit yet in addition to maximize it. Cost Volume Profit analysis is an essential tool to get the benefit. Cost volume benefit examination is created to comprehend the connection between the volume of deals, volume of creation and cost. Cost volume profit analysis is a significant benefit planning tool and is the most important tool to measure the company's performance in the market economy. It helps in setting flexible budgets that indicates cost at various levels of activity in the organization. It also helps to assist performance evaluation for the purpose of cost control. Cost Volume Profit analysis is a technique used to establish the amount of operating activity required to avoid losses, to attain target profits, coming up with future operations and monitor organizational performance and analyzing the risk at every level of operations. Cost volume benefit analysis is the reason for understanding contribution margin pricing identified with short run choices, target costing and transfer pricing. Cost Volume Profit analysis is useful in creating sales planning and cost assessment. It is a key for understanding the cost behavior in the organization. Cost Volume Profit examination is a material for non-benefit making associations which allot alarm financial assets most viably among the contending options. Allocation of scarce resources among different areas is the main issue of preparation. The insightful method used to contemplate the conduct of benefit in response to the charges in volume expenses and costs is Cost Volume Profit Analysis.

Basic Elements of CVP Analysis

The fundamental components of CVP examination are cost, volume and profit. These are the three essential components that decide the incentive for the business in a long run. A good and clear comprehension of cost and volume assists the association with dealing with its benefit productively.

▪ Cost

The main thing in any business is cost. Cost signifies the measure of cash that an organization spends on the creation or production of goods and services. Each business brings about certain expense at first and furthermore it does its business.

▪ Volume

Volume is the second significant component of the business. It shows how much an organization will produce and sell. One should realize how much will sell to realize the amount to deliver.

▪ Profit

The last and most significant component is the benefit of a business. While doing a business one should know how much a benefit it has created by conveying a specific number of product and services to the customers.

Scope of the Study

The study on cost volume profit analysis of E.I.D-Parry (India) Limited helps to know about the profitability of the factory. It also provides clear-cut picture about the performance of the factory.

Need of the Study

This study helps in planning and forecasting profit at various level of activity. It is helpful in preparing flexible budget for cost control purpose. It helps the management in making good decisions.

Objectives of the Study

Primary Objective

- To find out the Cost Volume and Profitability of E.I.D.-Parry Limited.

Secondary Objective

- To find out the Break Even Point analysis of E.I.D Parry Limited.
- To find out the profitability position of E.I.D-Parry (India) Limited.

Review of Literature

Kenneth Enooch Okpala, ChimsunumOsanebi (2020) has conducted a survey on cost volume profit analysis and profit planning. The investigation analyzes that the use of cost volume profit method on benefit arranging in manufacturing SMEs as a way to tackle the issue. The information was gathered through surveys. Descriptive analysis, Pearson correlation and regression analysis methods were used for data analysis. The investigation reasoned that cost volume profit examination fundamentally affects profit planning. The investigation suggests that the administration on manufacturing SMEs should utilize and hold bookkeepers and rebuild their supervisory group for effectiveness.

Dr. R. Kavitha (2018) has conducted a study on cost volume profit analysis with the objectives to find out the

company's profitability based on their cost volume of the production. The effective cost volume profit analysis will lead to make how much expense to be spent to create the necessary number of volume of goods expected to accomplish the ideal profit goal. The tools used by the researcher are ratio analysis and break even analysis to know the profitable position of the firm. The researcher concludes that administration may utilize cost volume productivity analysis to compute the benefit yield by a given measure of selling merchandise. It assists with forestalling the future dangers of the business.

Enkeleda Lulaj, Etem Iseni (2018) conduct the research with a intention to know how much the cost volume profit analysis is used to planning and making business environment. The research has been done in manufacturing and service enterprises and with customers. The statistical tools used were mann-whitney U test, burnier munzel test, degree of freedom, bootstrap including dependent and independent variables. The outcomes are useful for planning and viable in deciding. The researcher presumes that CVP analysis should be applied much more in all organizations. The examination found that CVP analysis is thought of and assumes a significant part in dynamic cycle in the production environment which impacts changes made by the administration for the products to be delivered, expenses and sales.

B. Naveneetha, K. Punitha, Raichu Mercy Joseph, S. Rashmi, T Sai Aishwariya (2017) has conducted research on cost volume profit analysis with the objective to ascertain the contribution and profit volume ratio of the firm and also to analyze the break-even point of the firm. The researcher used the tool, ratio and break even analysis. Cost volume profit examines the connection between changes in action and changes in all out sales income, cost and benefit. Cost volume profit examination decides the number of units of a product should be sold that the business arrives at its equal the initial investment point. The researcher reasons that cost volume profit analysis looks at the conduct of changes in the output level, selling value, variable cost per unit and fixed expense of a product or administration.

R. Punniyamoorthy (2017) conducted a study on examining the cost volume profit and decision tree analysis with an objective to understand the level of sales needed to achieve a desired profit. The study assists with distinguishing the association's development and opportunity. The research is based on secondary data. The research design used for this study is analytical and descriptive research design. The financial tools used were break-even point, PV ratio, margin of safety and contribution. Cost volume profit analysis is utilized as an instrument in planning process that organization uses to expect the future volume of development, costs gained and profits.

Vedat EKERGIL (2017) conducted a study on the use of cost volume profit analysis technique with the objective to understand the cost behavior. Managers of any firm utilize cost volume profit analysis to drive their choices and they are altogether essential thoughts in the business. The speculations made for non-profitable client's declines the benefit and the proficiency of the organization by expanding the expenses. Now, it turns out to be more imperative to gauge the productivity of the clients. The researcher distinguished the contrasts between business productivity and screens the expense conduct by utilizing the incitement model. In this investigation, firstly, multi-product based cost volume profit analysis and later client based cost volume profit analysis are inspected.

Sadiq Rabiul Abdullahi, Bello Abiodun Sulaimon, Ibrahim Salihu Mukhtar, Muhammed Hardy Musa (2017) has undertaken the research on cost volume profit analysis to figure out if small business enterprises utilize CVP analysis as a management tool for decision making process. The study was conducted by using the survey approach. The primary source of data was utilized using structured questionnaires in Bayero University Kano. The tools used by the researcher are Mann-Whitney U test and Pearson correlation coefficient. The investigation infers that cost volume profit examination and other administration accounting tools ought to be acquainted with private company endeavor to improve their profitability.

Ana Paula Beck da Silva Etges, Rafael Calegari, Marisa Ignez dos Santos Rhoden, Marcelo Nogueira Cortimiglia (2016) conducted a study on cost volume profit analysis to assess the viability of establishing a new distribution centers by a company that manufactures radiopharmaceutical products. The analysts gathered and dissected point by point primary data from the organization and contrasted the current situation and potential future situations utilizing cost volume profit strategy. The information was gathered somewhat through interviews and furthermore through organization's documents and records. The examination especially outlined what the development of calculated framework means for fixed expense which gives a superior situation to diminish variable expenses. The investigation featured the significance of utilizing cost breaking down procedures to examine the

monetary effects of strategic choices.

Halil Akmese, Ahmet Buyuksalvarci, Kadriye Akmese (2016) conducted the research on the use of cost volume profit analysis. Cost volume profit analysis is one of the major administrative tool which is utilized for predictive purposes and uncovers demonstrative outcomes for a definite arranging inside the administration interaction. Research data gathered by means of a survey questionnaire. The information investigated and discoveries are exhibited by methods for fundamental factual procedures. The examination reasons that CVP analysis may add to the business to blade upper hand related to different techniques for investigation when contrasted with use alone. CVP analysis is generally utilized by the organizations while taking decisions.

Dr. Seung Hwan Kim (2015) has conducted a study on cost volume profit analysis for a multi-product company. This examination epitomizes how the created approach finds to nearer solutions to a make back the initial investment point and an objective benefit point than a current methodology. For the instance of a multi-product organization having a business blend proportion among their products, this examination built up a micro way to deal with the treatment of decimals when the organization finds their make back the breakeven point and target benefit point. The CVP examination for a multi item organization fundamentally finds an additional way to show it. The specialist infers that the micro approach is created and acquainted to discover nearer replies to find closer answers to the breakeven point and target benefit in a cost volume profit analysis.

Research Implications

Research Design

The study is to analyze the cost volume and profitability position at various levels in the factory. So, the researcher adopted "Descriptive research design". It describes the state of affair as it exists at present situation.

Method of Data Collection

The research is entirely relying on secondary data. Secondary data is a data which have been already collected by collected by someone else.

1. Financial reports of the Industry.
2. Company's Website.
3. Journals.

Tools for Data Analysis

CVP analysis and Break-Even analysis.

Limitations of the Study

1. The financial data required for the study has been obtained from the secondary source or data i.e., Profit and Loss Account and Balance sheet.
2. The study is limited to available accounts and books of accounts which are given by the industry.
3. The study is limited to the five year financial statement of the industry.

Data Analysis and Interpretation

Contribution

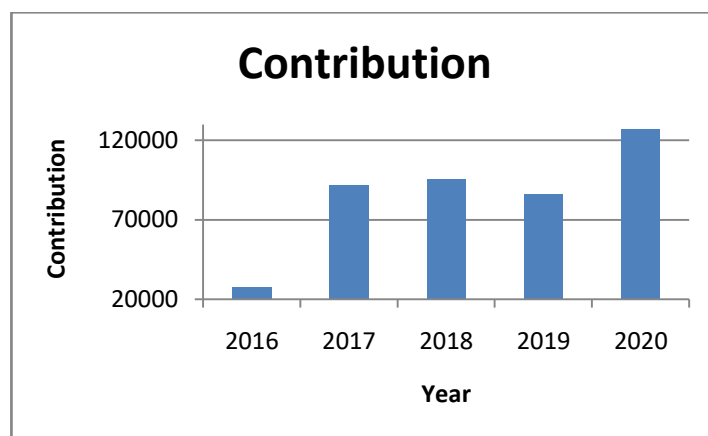
Contribution is the measure of income remaining after all immediate expenses have been deducted from income. It is the difference between sales and variable cost.

Contribution = Sales - Variable Cost**Table 4.1.** Contributions

Year	Sales	Variable Cost	Contribution
2016	1551506	1416596	134910
2017	1482570	1343129	139441
2018	1561099	1459882	101217
2019	1651782	1598963	52819
2020	1714780	1502402	212378

Source: Secondary data

The above table shows that the contribution is lowest in the year 2016 and it is highest in the year 2020. It shows that the factory's contribution is fluctuates year by year.

**Figure 1****Profit Volume Ratio**

The Profit Volume Ratio is also known as Marginal Income Ratio or Contribution ratio. It demonstrates the relationship between contribution and sales.

$$\text{P/V Ratio} = \frac{\text{Contribution} \times 100}{\text{Sales}}$$

Table: 4.2 Profit Volume Ratio

Year	Contribution	Sales	P/V Ratio
2016	1349441	1551506	8.70
2017	139441	1482570	9.14
2018	101217	1561099	6.48
2019	52819	1651782	3.20
2020	212378	1714780	12.39

Source: Secondary data

It is noted that from the table 2, the profit volume ratio is lower in the year 2016 and it gradually increased and higher in the year 2020. Therefore it is stated that the factory is in its better position.

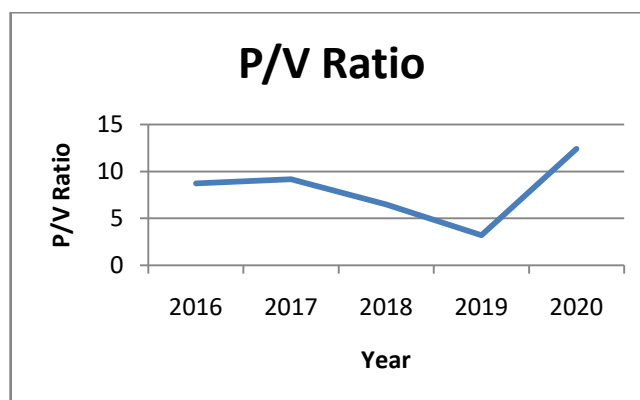


Figure 2

Break Even Point

Break Even analysis is a technique of contemplating the relationship between sales income, variable expense and fixed expense to decide the degree of operation at the processing plant. The breakeven point is no net deficit or gain.

$$\text{Break Even Point} = \frac{\text{Fixed Cost}}{\text{P/V Ratio}}$$

Table 4.3. Break-Even Point

Year	Fixed Cost	P/V Ratio	Break-even Point
2016	421600	8.70	48459.77
2017	397156	9.41	42205.74
2018	385910	6.48	59554.01
2019	398654	3.20	124579.38
2020	457623	12.39	36934.87

From the table it is noted that there is changes from year to year which is from highest to lowest. The factory should concentrate on it to maintain the stability of breakeven point.

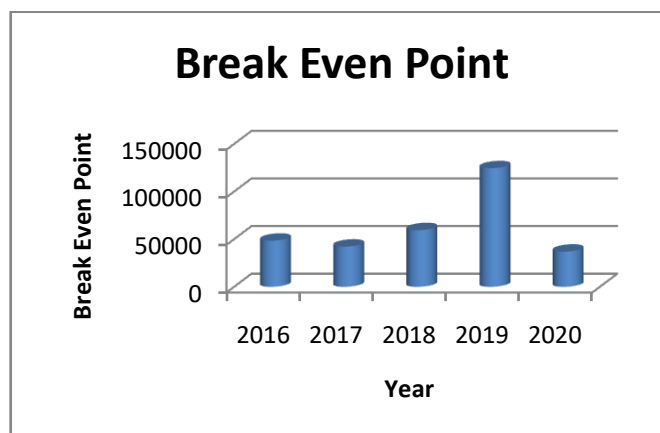


Figure 3

Break Even Ratio

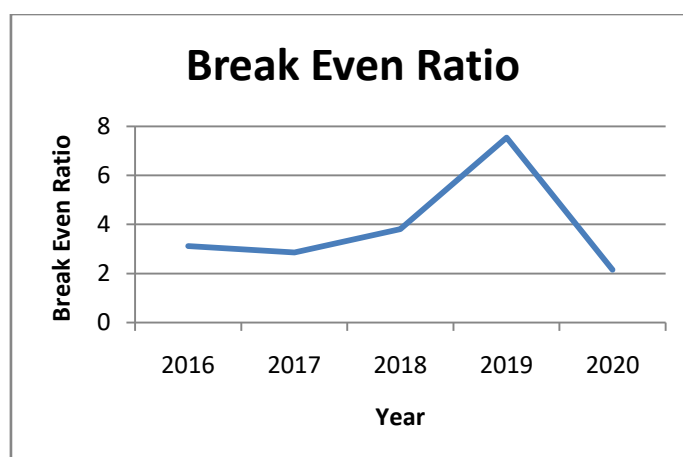
Break Even Ratio is the relationship between break-even sales and sales of an organization. Break Even Ratio is analyzed by the formula,

$$\text{Break Even Ratio} = \frac{\text{Break Even Point} \times 100}{\text{Actual Sales}}$$

Table 4.4.Break Even Ratio

Year	Break-Even Point	Actual Sales	Break-Even Ratio
2016	48459.77	1551506	3.12
2017	42205.74	1482570	2.85
2018	59554.01	1561099	3.81
2019	124579.38	1651782	7.54
2020	36934.87	1714780	2.15

It is inferred from the table 4 that break even ratio is not increasing, it is changing year to year. Break Even Point only determines Break Even Ratio, it is crucial to improve break-even point to enhance the break even ratio in the firm is inevitable.

**Figure 4**

Findings and Recommendations

- During the 2016-2020 time period, the sales of the company were fluctuating. Hence, sales have to be improvised to increase the contribution.
- P/V Ratio is high in the year 2016 and decreases in 2018 and the same is increased during the year 2020. This indicates that contribution and sales shows a fluctuating pattern which is the justification for the instability of P/V ratio.
- Break-Even Point is changing from year to year which shows the instability. It is essential to increase the sales and contribution to maintain the stability of Break-Even Point.
- Break-Even Ratio also fluctuating year to year. Therefore it is essential to improve break-even point to upgrade the break even ratio in the firm is unavoidable.

Conclusion

It is concluded that the management may use cost volume profit analysis to identify the profitability position of the concern. After analyzing the various data related to the factory, it is concluded that the cost volume profitability analysis more or less depends upon the optimum utilization of available resources, mitigate the expenses and goodwill and strengthening the market share. The financial strengths of the factory were analyzed through cost volume profit analysis. Cost Volume Profit analysis is helpful to analyze the profitability position according to the cost and sales volume to prevent the forthcoming risks of the business venture.

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