A Study on Bea of SIGNODE Private Ltd

V Venkat ¹, Sampath Kumar², and Sushma Premkalal³ ¹student, BITM, BALLARI ²Assistant Professor, BITM, BALLARI ³Assistant Professor, BITM, BALLARI

INTRODUCTION

The moment at which a product achieves its breakeven point is the point at which all of the expenditures that are spent in the process of selling the product are equal. A break-even point calculation is often used by businesses in order to determine whether or not the sale of a proposed product would be feasible. This is in contrast to the practice of attempting to make an existing product more lucrative. It is also possible to use break even analysis to analyze the potential profitability of an expenditure in a company that derives its revenue from sales.

The break-even analysis is a piece of software that is often used by management accountants and production managers. The split of production costs into "variable" and "fixed" categories serves as its basis. The former category represents expenditures that fluctuate in reaction to variations in production output, while the latter category represents costs that are unrelated to production volume. When all variable and fixed expenditures are compared with sales revenue, the "break-even point" is found. This point is the amount of sales volume, sales value, or production at which the company produces neither a profit nor a loss.

REVIEW OF LITERATURE

Over 20 studies collectively emphasize the importance of Cost-Volume-Profit (CVP) analysis in business decision-making and planning. They highlight its application in optimizing expenses, budgets, managing and understanding relationship between production, profitability across industries like manufacturing, packaging, and distribution. Key insights include the role of breakeven analysis, contribution margins, and cost changes in evaluating product lines, pricing strategies, and profit objectives. CVP analysis is shown to be critical for performance monitoring, scenario planning, and improving responses to economic shifts. Additionally, frameworks for standard input costs and budget-output alignment are

presented as tools for effective management and decision-making.

OBJECTIVE OF THE STUDY

To study level of sales need to achieve a desired target profit & identify Margin of safety and it's significance.

RESEARCH METHODOLOGY

Descriptive research is used for study using previous 3 years of data.

Data analysis and interpretation

CONTRIBUTION-MARGIN RATIO

1. Table demonstrating the Contribution-Margin Ration of Radial Drills:

Particulars	2021	2022	2023
Sales	2,41,702	2,61,115	2,35,175
(-) Variable Cost	1,27,168	1,46,892	1,28,760
Contribution	1,14,534	1,14,223	1,06,415
Contribution- Margin Ratio	47.4	43.8	45.24

FINDINGS:

It is found that a sale reduces from 2021 to 2022 in Radial Drills Contribution-Margin Ratio in the year 2021 - 47.4%, 2022 - 43.8%, 2023 - 45.24%.

INFERENCE:

Contribution-Margin of the Radial Drills has increased to 45.24 compared to the previous year.

2. Table showing Contribution-Margin

Particulars	2020-21	2021-22	2022-23

Sales	2,79,615	2,74,715	2,41,795
(-) Variable Cost	1,37,439	1,38,558	1,25,000
Contribution	- 1,42,176	1,36,176	1,16,795
Contribution Margin	50.8	49.56	48.3
Ratio			

FINDINGS:

It is found that sales reduce from 2020-21 to 2021-22 in Rotary Levers Contribution-Margin Ratio in the year 2020-21-50.8%, 2021-22-49.56%, 2022-23-48.3%.

INFERENCE:

Previous year, the Contribution-Margin Ratio has declined in 2022 - 49.56% and also shown negative trend in 2022-23 – 48.3% of Rotary Levers.

BREAKEVEN SALES: (in Revenue)

1. Table showing Breakeven Sales of Radial Drills:

Year	Fixed Cost	Contribution- Margin Ratio	Breakeven sales (Rs)
2020- 2021	53,038	47.4	1118.9
2021	55,276	43.8	1262
2022	52,970	45.24	1170.86
2022- 2023			

FINDINGS:

It is found that the Breakeven-Sales Value of Radial drills are 1118.9 for 2020–2021; 1262 for 2021–2022, and 1170.86 for 2022-2023.

INFERENCE:

The Breakeven-Sales values of the radial drills are now worth Rs. 1170.86 MT instead of Rs. 1262. It has a downward trend.

2. Table showing Breakeven-Sales of Rotary levers:

Year	Fixed- Cost	Contribution- Margin Ratio	Breakeven- sales (Rs)
2020-	62,003	50.8	1220.5
2021	02,003	49.56	1230.5
2021- 2022	60,986	48.3	1210.86
	58,485		
2022- 2023			

FINDINGS:

It is found that the Breakeven-Sales Value of the 2020-2021, 2021-2022, and 2022-2023 Rotary Levers are 1220.5, 1230.5, and 1210.86, respectively.

INFERENCE:

The Breakeven-Sales values of Rotating Lever is now just Rs. 1210.86 MT instead of Rs. 1230.5 MT. It has a downward trend.

BREAKEVEN-POINT:(in Units)

1. Table showing Breakeven-Point of Radial Drills:

Year	Fixed Cost	Contribution	Breakeven Point (units)
2020- 2021	53,038	11.4	4652
	55,276	11.4	4849
2021-2022	52,970	10.6	4997
2022- 2023			

FINDINGS:

In 2020-2021, the key threshold of no profit/loss will be reached when production hits 4652 units and revenue equals cost. There will be no loss for the corporation as sales of Radial Drills reach a certain level. Breakeven-Points are expected to rise in 2021-2022 and reflect a positive trend. In 2022-2023, they will also rise, indicating that the firm will make a profit.

INFERENCE:

The breakeven-Points in which in units for Radial drills have grown and are trending positively in 2021-22 and 2022-23.

2. Table showing Breakeven-Points of Rotary levers:

Year	Fixed Cost	Contribution	Breakeven- Points (units)
2020- 2021	62,003	14.2	4366
	60,986	13.6	4484
2021- 2022	58,485	11.6	5042
2022- 2023			

FINDINGS: At 4366 units produced in 2020-2021, the income will equal the cost, marking the moment at which there will be no profit or loss. As long as sales of Rotary-Levers remain stable, the corporation will not suffer a loss. The breakeven-points are going up and showing a positive trend in 2021-2022, and they're going up in 2022-2023, therefore the business will make money.

INFERENCE:

The breakeven-Points in This shows a favorable trend and a rise in Rotary Levers units between 2021-22 and 2022-23.

FINDINGS

- Contribution-Margin of the Radial Drills and Rotary Lever has shown Positive Trend.
- For the three years 2020-21 to 2022-23 the Best Product is the Rotary Lever category. The Profit volume ratio is strong when this product is compared to radial drills.
- Selling 5012 units and reaching sales of Rs. 1174.27 lakhs would be necessary to Reach the target profit of Rs. 162.27 lakhs.
- It is proposed that the expenses of M/s SIGNODE INDIA LIMITED will increase Noticeably. The company chooses to cut down on expenses.

SUGGESTION

- Growth of a corporation depends on its capacity to maintain break-even values Across a range of products.
- Trend studies show that costs will most likely increase over the next several years. Should this state continue, costs might exceed, making the company Unprofitable. As such, the company has to monitor its expenditure more closely.
- The fixed expenses may be kept as long as they provide the company some return.

CONCLUSION

The firm must prioritize cost-cutting measures. The gap will get greater in the next years. Furthermore, if the company can maintain its breakeven point across several products, this Will be beneficial to its growth. Since revenue is increasing, significant operational Leverage is a good indicator. A lack of financial leverage indicates that the company should Emphasize the effective use of its assets. The firm may keep the fixed cost as long as it Earns a profit. At the end of the day, this research informs company owners and managers on How much money they can anticipate to generate by charging various prices for their Products. The analysis facilitates management decision-making by illustrating in its reports How the usage of available capacity will increase profit.

REFERENCES

SOURCES:

- [1] V.K SAXENA and C.D.VARSHID Basic of Cost and Management Accounting, Sultan Chand & Son, 3rd Edition New Delhi-2005.
- [2] BHABATOR and BANERJEE Cost Accounting Theory & Practice, Prentice Hell Of India Private Ltd, 12th Edition New Delhi -2006.
- [3] M Y KHAN and P K JAIN Basic Financial Management, Tata Me Graw Hill Publishing Company Ltd, 2nd Edition New Delhi -2005
- [4] G C BERI Statistics for Management, Tata Me Graw Hill Publishing Company Ltd, 2nd Edition New Delhi -2003
- [5] C R KOTHARI Research Methodology & Techniques, Wishwa Prakash an, 2Nd Edition New Delhi -2002

JOURNALS:

- Journals of the financial Management [6] Association International, Volume - 43, No.4 December 2022. Published by the University of Washington.
- Journals of Financial and Quantitative [7] Analysis, Volume – 37, Issue 4 winter 2022. Sponsors: Vanderbilt University University of South Florida.

WEBSITE:

Website: www.businessfinancemag.com