



Using Break-Even Analysis to Determine Your Company's Financial Health

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Determining the break-even point is crucial to determining margins, which, in turn, aid in financial planning for the next year. Break-even analysis determines both the minimum amount of sales required to avoid a loss or to "break-even" at the end of the fiscal year and permits you to adjust sales estimates accordingly.

While there are a number of different variations on break-even analysis, they are all useful in determining the lower limits of profits for calculating margins. These variations are all dependent on a number of cost factors, which should be determined before attempting any kind of break-even analysis.

Cost Components of Break-Even Analysis

Break-even analysis is primarily dependent on a few key factors. First and foremost, it is necessary to have the capacity to accurately forecast your company's costs and sales. The result will then be dependent on fixed costs, average per-unit variable costs, and per-unit revenue as allocated across the whole business. With these numbers, break-even analysis becomes a matter of simple math: Break-Even Point = Fixed Costs / (Unit Selling Price - Variable Costs).

As mentioned, there are several types of costs that must be considered when conducting break-even analysis. Among these, the most relevant are fixed costs, which are those expenses that are the same regardless of the number of items sold. Fixed costs also generally would remain the same, even if the company discontinued all sales. The most common fixed costs are rent and insurance. The cost of maintaining corporate property would be the same, no matter the amount of product sold. However, labor should also be considered as a fixed cost, since replacing a skilled labor force is extremely difficult to do. In-place labor will usually not vary with moderate changes in volume.

The other main category of cost to be considered while conducting break-even analysis is variable costs. These are expenses that are based on the number of units processed. As such, they will fluctuate depending on the volume of the business. As the business and sales grow, variable costs will also increase. The most common variable costs are those pertaining to raw materials necessary for manufacturing products.

The Margin of Safety

The margin of safety is a notable outcome of break-even analysis as it is indicative of the strength of the business. For any level of sales, the margin of safety indicates specifically the amount of sales dollars above or below the break-even point. In essence, this number makes it possible for the company to determine the exact amount of money it may have gained or lost during the period in question.

When sales are above the break-even point, then the margin of safety is positive, typically indicating overall gains. However, when sales are below the break-even point, then the margin of safety is considered negative, which indicates an overall loss for the period.

Contribution Margin Analysis

When conducting a break-even analysis, it is helpful to keep in mind the concept of Contribution Margin, which is defined as revenue less variable costs. Contribution margin differs from gross profit, as only variable costs are taken into account, whereas in gross profit analysis all costs of sales are considered.

Typically a company's optimal output lies where the contribution margin exceeds variable marginal cost, meaning that the revenue from selling a product exceeds the variable cost of production. However, if a lower price than normal is offered, all other factors being equal, that offer ought to be considered so long as the price still exceeds variable costs. Such a price, which still covers all variable costs, may yet be considered profitable since it will help to absorb any fixed costs. Only when the contribution margin is positive will any losses imbued through the acceptance of a lower offer be compensated through increases in the volume of sales.

In Summary

Break-even analysis is an exceptionally useful tool for assessing the state of the company's finances. However, in order to successfully conduct break-even analysis, there are a few figures that must first be ascertained:

- Fixed costs are those expenses that remain the same regardless of company success. They must be factored in when determining overall gains or losses.
- Variable costs are also important to consider during break-even analysis. These are expenses that will fluctuate in accordance with company sales figures, such as primarily raw materials.
- The margin of safety is a useful tool in the analysis process as it supports assessment of long-term investments.
- Contribution margin analysis is an indispensable part of price setting, as it allows setting lower than normal price, especially when volume considerations are taken into account.

The break-even process is invaluable in assessing the financial health of your company. Los Angeles CEOs and CFOs who feel that they do not have the internal expertise or bandwidth to conduct a break-even analysis can benefit significantly from consulting with an outsourced CFO services firm. A professional services firm of this nature can lend their expertise to your financial analysis and provide an objective report for your use.

References and Further Reading

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