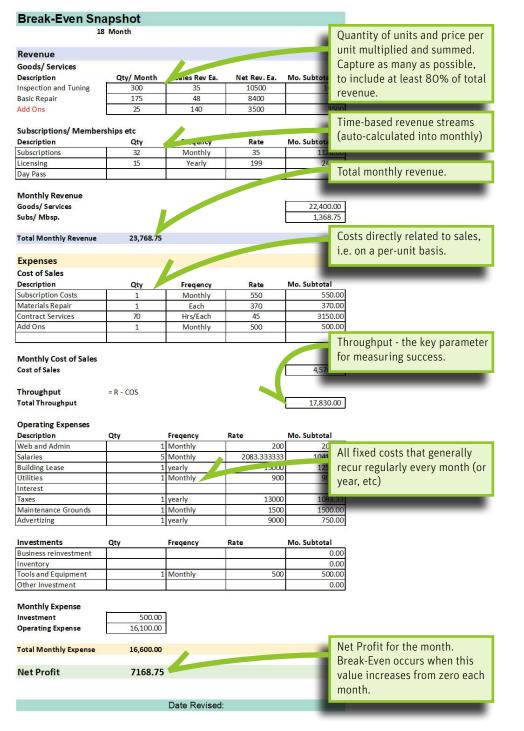
Introducing the Break-Even Sheet





How To Apply The Tool

The Break-Even calculation is usually done for a specific product or service. The Break-Even Snapshot (see Appendix) gives a starting point for this. The Break-Even analysis for a business would necessarily include all products or services together, and the Break-Even for a business department would necessarily include all services for all products or services within that department.

These are the steps to determine Break-Even:

- 1. Determine Cost of Sales (actual variable unit costs): Determine the costs of producing one unit of the product. Variable unit costs are only those one-for-one costs to make the product or buying it wholesale. For example, if you are printing books, your variable unit costs are paper, binding, and glue, and other costs related to one book. Labor costs are generally not included, unless using per-part contract labor or similar. For a service industry, cost of sales are incremental costs incurred by providing the service, including travel and material costs, rented facilities to deliver a unit of service, contract service costs, and so forth. Such costs will usually be minimal compared to salaries and wages.
- 2. Determine Operating Expenses (fixed costs): These are costs to keep the business operating, even when no products are produced. These costs would include rent or mortgage, utilities, insurance, salaries of employees (including production personnel), and all other recurring costs. Other costs include designing the product and packaging, prototyping, and patenting your product. It is most useful to isolate overhead costs to the lowest possible level of the business in order to make decisions at that level, e.g. for a department, a specific plant or a product line, if possible.
- 3. Determine unit Selling Price per Unit: Estimate the unit selling price for your product based on the Cost of Sales (not including any Operating Expenses) and the market conditions, customer behavior and product positioning. This price may change as you see where the break-even point is.
- 4. Determine an estimated sales volume for the estimated unit price: Estimate the quantity of units that will be sold given the known customer demand and for the maximum addressable market for the company. This need not be exact, but it will provide a "window of opportunity" to focus the analysis.
- 5. Run the calculation: To do a break-even calculation, use a spreadsheet to calculate Cost of Sales, Operating Expense and Selling Price. A simple formula is: Break-Even Quantity = Operating Expenses/(Selling Price – Cost of Sales). This calculation is already in the tool spreadsheet.
- 6. Review the graph. This will demonstrate the Break-Even Point, where Sales Revenue intersects Total Expense. To look at it differently, a second plot can be reviewed, using Throughput (Sales Revenue minus Cost of Sales). The Break-Even Point will be shown as the intersection of Throughput and Operating Expense.
- Vary the numbers Now the Selling Price can be varied to show the shift in the Break-Even Point and demonstrate the sensitivity of Selling Price to Break-Even Point Volume. Additionally, changes in variable cost can be examined to demonstrate changes in the Break-Even Point.

"The only way to be secure is to make money and generate cash. Everything else is a means to that end." - Jack Stack, *founder and CEO of SRC Holdings*