

Description of Resources for Calculating Costs

These are a helpful tools for those who may be struggling on determining units to sell or estimating costs.

The included Excel File contains a Spreadsheet that calculates the potential Breakeven Point of Units for a new Product. The included Power Point provides you with a simple explanation of the proposal developed by the creator of the spreadsheet.

The Breakeven Point refers to the number of units that you need to sell over particular period of time to compensate your overall costs (Variables and Fixed).

For example, the Breakeven Point formula is the following

$P*Q = VC*Q + FC$ - where P=price per unit, Q=Quantity of units, VC=Variable Cost per unit, FC=Fixed Costs

If you already know the Price, the Variable cost and the Fixed costs, the Quantity (Q) is equal to: $FC / (P-VC)$

So for example, if you set the price at \$10 per unit, and you have estimated production costs per unit of \$4 and distribution costs per unit of \$1, your total variable cost per unit is \$5. Then, let us assume that you are projecting total fixed costs of \$10,000 a year. In that manner, you will need to sell: $\$10,000 / (\$10-\$4-\$1) = \$10,000/\$5 = 2,000$ units per year.

In that regard you will have the following balance in the equation: $\$10 * 2,000 = 20,000 = (\$4+\$1)*2000 + 10,000$ and your profit will be \$0 because Sales - Total Costs will be $\$20,000 - \$20,000 = 0$.

When do you expect to have profits?

Well, if you sell 2001 units per year, you will have: $\$10*2001 = (4+1)*2001+\$10000 + \text{profit}$ so Profit = $\$10*2001 - (\$4+\$1)*2001 - \$10000 = \$20,010 - \$10,005 - \$10,000 = \5

Now, do you need this for the proposal?

Not really but you will need to know exactly what you want to pitch because knowing costs and revenues can keep you aligned with the potential start up investment that you can propose. Especially, as you need to have some numbers to back up your Video Elevator Pitch at the end of the semester (plus providing information on the Lean Canvas).

Also, remember that as a new business with no history, it is not possible that you can achieve Breakeven point in the first year of operations - for example Twitter has been losing money and it is listed in the Stock Exchange and Amazon took several years to become profitable.

In addition, once you start submitting decisions on the Entrepreneur Simulation, you will find out that it is not easy to make money (even selling Pants and Tops) so try to learn from the simulation as you will be able to see simulated results to the decisions that you will be entering.