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**Lecture – 113**  
**8.7 Tutorial – Break Even Point**

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**8.7 Tutorial**


- Aman is an online florist. He has a small warehouse in Delhi that costs INR 40000 per month. He has hired an individual for INR 10000 a month. A bouquet is sold for 500 each. Postage and packaging is borne by Aman. A bouquet costs INR 200 per unit. Packaging and posting costs another INR 100 per bouquet.
- How many bouquets a month should Aman sell to break even?

$$FC = \frac{50,000}{500 - 200} = \frac{50,000}{300} = 166.67 \text{ units}$$



P 500 p.u.  
 VC 200 p.u.  
 other VC 100 p.u.

Rent 40000 p.m  
 Salary 10000 p.m  
 50000



One more tutorial to explain the Break Even Analysis, with some more details here. So, Aman is an online florist. You place an order on his application and he delivers it to you. He has a small warehouse in Delhi at 40,000 per month. So, this is the rent that he pays which is 40,000 and it is paid every month. He has hired an individual for 10,000 a month. So, there is a salary component to it: 10,000 per month.

A bouquet is sold for 500 each, this is P, price, let me write it here, P is 500 per unit. Postage and package is borne by him and a bouquet costs 200 per unit; this is the variable cost and this is 200 per unit, the packaging and posting cost this is additional. So, let me say other variable costs are 100 per unit. How many bouquets a month should Aman sell to break even?

Now, the dynamics are slightly different, you are saying bouquets within a month. You have to figure out what the break even point is. This is true for small value items and also true for businesses where sales move very quickly you have to move the stock very quickly.

So, on a monthly basis, let us say in the month, what are the expenses? So, all the numbers that we use now are going to be monthly. So, the fixed cost in the month, how much is that? The fixed cost in the month is the rent and the salary. Now, any name can be given to the fixed cost. You have to have the clarity to know which ones are fixed in that duration of time.

So, in this duration of time rent and salary are fixed. More important point is that these things should not vary with respect to the quantity. If you want to sell more bouquets of flowers, will you have to pay more rent? No. If you have to sell less bouquets, will you pay less money to the person that you have hired? No, you will still continue to pay him 10,000, it is a salary, it is a fixed incentive that you give.

If this salary was per delivery, per bouquet sold, then you would count it as a variable cost. So, that is what is new in this tutorial, I am trying to indicate to you that I am emphasizing that the variable cost varies with the units of the quantity of the production the quantity of sales, not with the month or by the name of an expense, name of the cost.

So, the fixed cost comes out to be 50,000 for that month. So, in a month, at minimum you have to spend 50,000 whether you do any business or do not do any business does not matter; divide this by contribution per unit. What is the contribution per unit?  $P$  minus  $VC$ , price is 500 minus the variable cost.

There are two components of variable cost; the first one is the material of the bouquet which is 200 per unit. But there is also packaging and posting cost which you have to bear which increases the per unit cost of the bouquet. So, 300 comes out to be your variable cost. So, this gives you 50,000 minus 200. So, this is 250 units, you have to sell 250 units in a month.

Now, if you had more information on what the rate of sales is on a daily basis, how many do you send, you could figure out in how many days will he be able to break even, but that aside. So, in a month he should be able to sell 250 bouquets in order to break even. That's it! If you have yearly costs you could go yearly and say what is my break even point.

In this case we were talking about monthly basis. If I have to break even, my costs should be recovered. Likewise, you can break down the period and think about the costs which do not vary and figure out the break even point. That's it. I will see you in the next video.