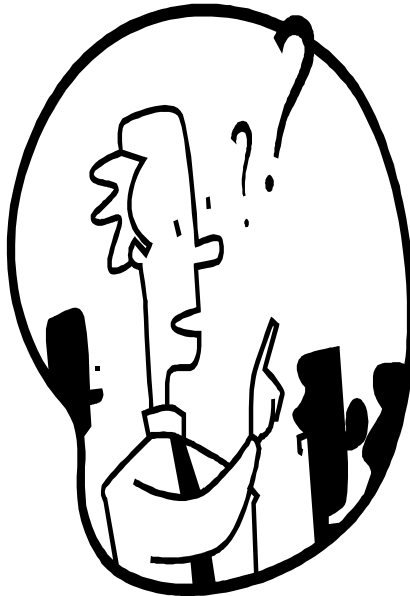


Business studies course work



We needed to find out a suitable product that we could make for are business studies project so we have made a questionnaire with seven questions asking the consumer what they would be interested in buying.

I will now explain for each question what we asked and why.

Questions & Answers

Question 1: What year group are you in?

We asked this question to give us an idea of what age group has been an identified making sure that each year group is identified.

Question 2: Would you be interested in buying a school game?

-This question was to indicate the number of the products we were going to sell and the amount of products we were going to have to make.

Question 3: What features should the game have?

-This was asked for the basic reason that we would not make something that was inappropriate to our customers.

Question 4: How much would you be willing to pay?

-This is to help us indicate what quality it should be and to estimate the total income of the product to tell us if it was going to be a make a profit.

Question 5: Where do you think it should be sold?

-This was to give us a good idea of where the product would do well and where it would be likely to sell the most

Question 6: when do you think it should be sold?

-This was to tell us when it would be the best time to sell it and when the consumers would be more likely to be able to buy the product.

Question 7: How should we promote it?

-This was to tell us what method of advertising we should use and which methods would be the most effective in promoting the game.

This survey was carried out randomly and was completed in by 55 different pupils and with the results we will be able to make a product the will sell well and also be of benefit to the consumers

Description of results on Survey

I am now going to explain for each question what result I have found for each question on the questionnaire.

Question one 'What year are you in'? For that question the results say that out of the five year groups that the best year to target would be third year as they got 32.73% and that the one not to focus all your attention at would be fifth year as they only had 9.09%.

Question two 'Would you be interested in buying a school game?' For this question there were four different fields for very interested there was 26.67% this was the highest score. Interested had a score of 21.67% and for not sure 21.67%. The lowest was 18.33% with not interested this one gives us an indication that the product will do well when selling as there is almost 82% of the pupils interested in buying the game

Question three 'What features should the school game have?' From six options the one we will go with is a competition as it achieved 30.19% and the one that we will not do was sports as it only scored 9.43 %.

Question four 'How much would you be willing to pay?' This one will indicate what price range I will have to set out the game survey the one to go with would be £1.50/£2.00 as it got 38.98%.

Question five 'Where do you think it should be sold?' This will tell me where to sell the product and where not to. The place where it will get the most attention this would be at canteen as it achieved 30,90%. And the next one was for room with 31.51% so these would be the most likely places to sell are product as it would be the most efficient.

Question six 'When do you think it should be sold?' from my results its that the best time to sell the product at would be lunch time were it got 32.81% this tells me when people would be prepared to buy the product

and it also gives me a time that would be a waste of time selling it as people would not be prepared to buy it this time was registration.

Question seven 'How should we promote it?' this just tells us the best type of advertising campaign I should try and in the survey it shows that the best way would be registration were it got 28.00% and that the worst type of advertising would be intercom as it got 16.00% and would not be effective. And I would promote the product with the registration idea as it would be the best place to advertise your product as you would get your message across to a bigger number of possible consumers .

Break even forecast

Why do we need to forecast?

We need forecast so that it will help us decide what product are selling it gives us indication on what the targets will be and what the profits are likely to be like. Using this it mean that we do not end up making a product that is going to be a loss. I am now going to explain what fixed costs, variable costs, total costs and revenue is.

Fixed costs

A fixed cost is the cost of an input whose quantity does not rise when output goes up. Fixed costs are required to produce any output at all. The total fixed cost curve is horizontal, while the average fixed cost curve declines, getting closer and closer to, but never touching, the horizontal axis.

Variable costs

Variable costs are those costs related to sales. They include: Cost of Goods Sold, Variable Labour Costs, Sales Commissions, Delivery Expenses, Packaging, Boxes, etc.

Total costs

Total cost can be calculated by adding the fixed costs to the variable costs. It is the cost of producing at a level of output. If output rises then total cost must rise because you are using more materials in production.

Fixed costs remain constant, the rent on your factory for example.

Variable costs rise as output rises.

Total revenue

This is how much revenue the company makes from sales.

To calculate TR, multiply price x output

This will give you the TR at a particular level of output

What a break even chart is

To make a break-even chart from this data, we need to write the TOTAL REVENUE EQUATION and the TOTAL COST EQUATION.

The general form of the TOTAL REVENUE EQUATION is $TR = P(x)$.

In this example that becomes $TR = 25(x)$.

The general form of the TOTAL COST EQUATION is $TC = FC + VC(x)$.

In this case, this becomes $TC = 900 + 10(x)$.

Next we create a "table of values" for each equation to get points for the chart. The table below was generated by substituting for x...then working out the value of TR and TC for each x value.

| | | | | | | |
|--|--|---|----|----|----|----|
| | | x | 20 | 40 | 60 | 80 |
|--|--|---|----|----|----|----|

| | | | | | | |
|------------------|--------------------|----|------|------|------|------|
| REVENUE FUNCTION | $TR = 25(x)$ | TR | 500 | 1000 | 1500 | 2000 |
| COST FUNCTION | $TC = 900 + 10(x)$ | TC | 1100 | 1300 | 1500 | 1700 |

Finally, the points are plotted and connected as shown below.

Fixed Cost will always be represented by a horizontal line (in green).

The Break-Even Point is at the intersection of the TOTAL COST line and the TOTAL REVENUE line. Remember, by definition, break-even

means $COSTS = REVENUE$.

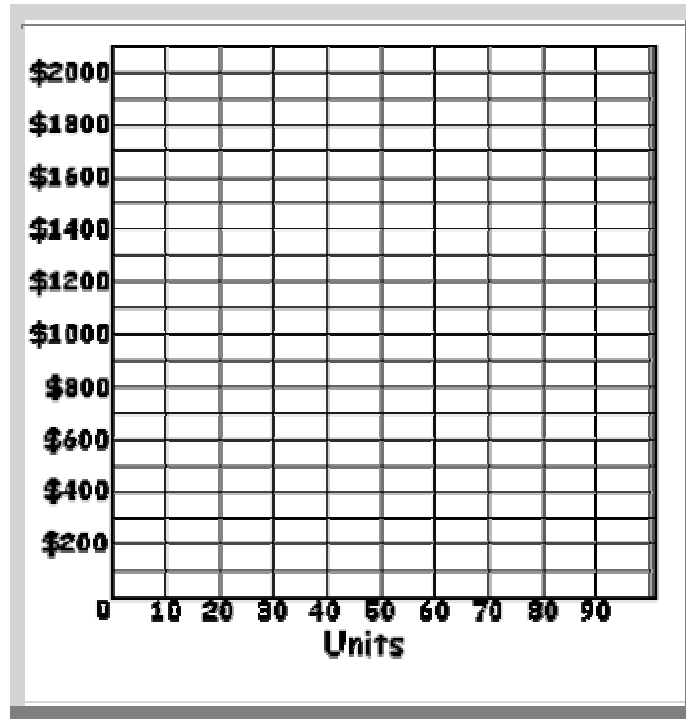
Here is an algebraic solution which verifies the break-even point

as found on the chart below...

$$CM = P - VC = 25 - 10 = \$15.$$

Break-Even Volume = $FC / CM = 900 / 15 = 60$ units as below.

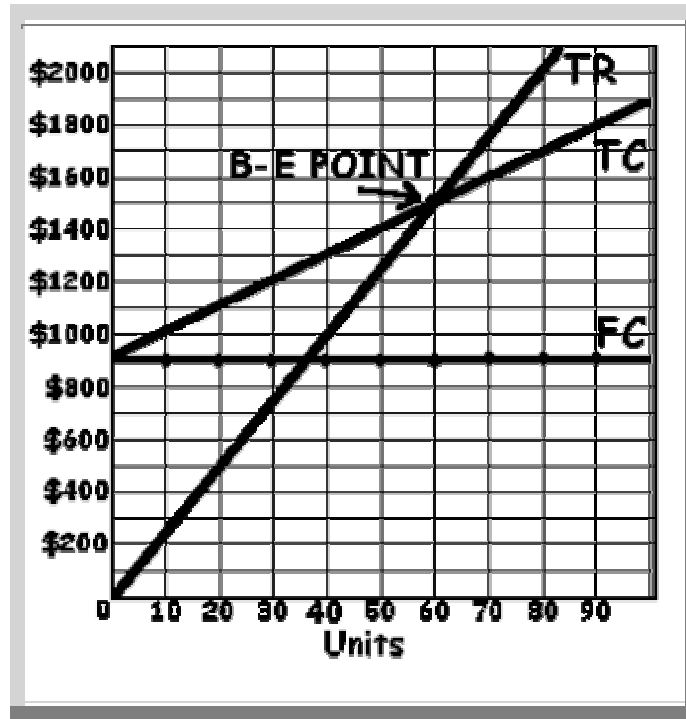
The break-even revenue, \$1500, can also be gleaned from the chart.



Unit sales to the left of the B-E point
 (<60) would result in a loss whereas unit sales
 to the right of the B-E point (>60)
 would produce a profit.

The chart makes it easy to find the profit or loss for any volume in units.
 Draw a vertical line between the TC and TR lines above the desired volume.
 The length of this vertical line is the profit or loss at that unit volume.

In the next graphic, the loss at 40 units is $1300 - 1000 = \$300$.
 40 units is 20 less than the break-even volume of 60 units.
 A loss of 20 "CMs" = $20 \times \$15 = \300 ...verifying the chart answer.



Similarly, the graphic below shows a profit of \$300 at a volume of 80 units.

80 units are 20 more than the break-even volume of 60 units.

A profit of 20 "CMs" = $20 \times \$15 = \300 ...again verifying the chart.

