Welcome students in today's class we will try to comprehend on the concept of profit value, analyzes meaning chart and assumption of Unit 2 profit analysis model number 15 I'm stricken Mother assistant professor in economics with their Vickers models Shrida mother. College of Commerce and economics. Margo and go up the flow of the flow of this outline as follows, meaning of profit. Volume analyzes break even chart for profit volume analysis. Assumptions of profit volume analysis. After successful completion of this, a model, you're able to explain the meaning of profit, volume analysis. You're able to draw break even chart for profit, volume analysis, and you're also able to understand the

assumption of profit value analysis.

Meaning of profit volume analyzers.

Profit volume analyses,

which is also known as cost, volume.

Profit analyzers.

Profit volume analysis depicts the

relationship between contribution

and sales of this sector,

usually expressed in percentage form.

Profit volume analysis indicates the

contribution for a rupee of a sale.

It is used to measure the profitability.

Of each product or a group of products.

It is also used to measure

The profitability of each.

Production sector operation or.

Processes.

Profit volume analysis is also.

used to determine the break

Even analysis for the sector.

It is also used to calculate.

It is also used to calculate the rate of change in profit due to change in the volume of the sales According to palmetta profit. Volume analysis is the result of the attempts to apply the break even analysis to a situations of multi product firms where breaking charts are constructed separately for the different divisions. Or the products of the firm. The individual division, department or the product is called a sector. There are basic terminology that I used in profit volume analysis. These are profit, volume, income, profit, volume ratio, an specific program that cost the profit volume, income, which is the differences between

the sale proceeds that is denoted as SP and the variable cost of the sector that is denoted as we see. The next basic terminology is profit volume ratio. It is the value of profit volume income divided by the unit price of the sector and the last terminology is specific program. The cost, which is the cost incurred on production of goods and services as well as promotional costs. Moving on to the next subtopic, constructions of profit graph. There are different methods or steps that need to be followed while we prepare a profit graph step. One profit contribution equation must be prepared by finding TR that is total revenue TC that is total

cost and specific program cost. Step 2 considering the X axis as a null contribution line, which is which is the sales line. Step 3 draw the Prophet volume line beginning from a null output or sales level. Step four vertical distance between profit volume line and the zero contribution line depicts the profit contribution to the sector at different levels of sales step five before the break. Even point. The sales are too low to make profits while beyond break even point the sector makes profits. Now let us try to. Understand the profit graph with a numerical example for a single product. From the following data. Now let us try to prepare a profit volume graph.

We have the data for a total fixed cost is 25,000 variable cost is 70,000. Average variable cost is 7 per unit. Unit produce that is 10,000 selling price one Lac. Rupees 10 per unit? With this given information first, before we try to plot the profit graph, first we need to find out the amount of the profit that the sector earns. Before we find the profit, first we need to find out the total contribution. The total contribution can be found out by taking the differences between total sales and total variable cost. The total sales, which is which is already given in the question, that is one Lac and the total variable cost is 70,000. So the difference between these two value we get the 30,000 as a total contribution value.

With this total contribution value. Now it is very easy to find the profit the profit can be found out by taking the differences between total contribution and total fixed cost. Here the total contribution we already found as 30,000 and the total fixed cost is 25,000. So the difference between these two values we get the profit as 5000. After calculating the profit. Now the next step is to calculate the break even. Point sales in terms of a money by applying a formula that is TFC divided by 1 minus in a bracket AVC divided by P where TFC is total fixed cost. Where AVC is average variable cost, P is price students. We have the values of all of these that is TFC that is 25,000 ABC 7 and the P is 10. So we substitute the values in the form in the formula that is 25,000 / 1 in a bracket, 7 / 1025 thousand divided by one that is 1 - 0.7. So we got 0.7 by taking the average variable cost divided by price 7 / 10, we get seven point 0.7. 25,000 / 0.3. We got this value by taking. The difference is between 1 -- 0.7. So when we divide this total fixed cost and the value that we got that is 0.3 we get the break one point sales as eighty 3333. So now let us plot in this graph. On the horizontal axis, we measure sales in 1000. On the vertical axis we have the profit and the other side. We have a fixed costs which are again measured in 1000.

So firstly we need to draw this sales line in a such a way that it should be in a middle portion of the graph where upper side of the sales line should be profit where the below side of the sales line should be the fixed cost or a specific program, the cost so we can scale up. I've scaled here as further data that is. Available to me. So I've taken a sales value as 25, fifty, 75 and 100 students. One one thing you need to note is that here all the values are measured in 1000. So since here the expected sales is 1 like so, I've taken the values up to one leg, so the profits that we have calculated by applying the formula we got as a 5000 and the fixed cost, we already know that that is 25,000.

So when you when you plot this profit contribution, you need to mark the fixed the amount of fixed cost on the on the below side of the. Sales line that that is in FC in thousand. OK, so the break even point sales is 83 point eighty 3333. This is our break even point and beyond this break even point the sector earns the profit below this break even point the sector runs the loss so this the highlighted black line is nothing. It is the profit contributions of that particular. Set up. Assumptions of profit volume analysis. There are certain assumptions need to be kept in mind while we analyze the profit volume one is, it is possible to ascertain fixed and variable costs. Second fixed and variable cost of the

sector remains constant and the third is price of the sector remain constant. For this sales mix is given. Fifth one is efficiency of the sector also remains constant and the loss assumptions or profit volume analyzes. Is that the corporate policies of the company do not change. So these are my references for further studies. Thank you student.