

Financial Accounting
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Lecture - 107
8.1 Need of Break Even Analysis

Hello, and welcome to a new topic of discussion, Break Even Analysis. Till now we have discussed how data in the financial statements is arrived at, and how this data can be converted into information using some of the analysis techniques.

In this topic, we are going to make use of the financial data – the internal financial data, and we are going to answer some questions with respect to new business opportunities arising in the course of business. Whenever a company, a business is deciding on investing in a new project there are various questions that have to be answered.


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The slide is titled "8.1.1 Need for BEA" and features three bullet points: "When will investment be recovered?", "What has to be the minimum level of output/sale?", and "At what point will you start making profits?". The third point has a handwritten box around "making profits?". The slide also includes logos for the Indian Institute of Technology Mandi and NPTEL. A video feed of a man with a beard and glasses is visible in the bottom right corner.

The management grapples with issues like following. When will the investment be recovered? Whenever you are investing in a business opportunity, there is some cost which has to be spent upfront. Depending upon the size of business opportunity, the money involved the investment involved could be small or large. Also, sometimes the management needs to decide the minimum level of output, minimum level of sales which is required, which is ideal for you, to operate the business. If you operate below that sales level, it is not profitable for the company to stay in that line of business. Therefore, you are basically interested in understanding when

it is going to start making profit. Any business, be it a small or large company form of business, is interested in knowing when it is going to make profits. The profits are made when costs are recovered. And in this topic, we are going to discuss some techniques which are going to help the management in taking these decisions.

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The slide is titled "8.1.2 Application of BEA" in red text. It features a list of three bullet points, each with a red underline: "New product /New business/Replacement decisions", "Price and costs decisions / profitability", and "Raising bank loan". In the top right corner, there are two logos: the Indian Institute of Technology Mandi logo and the NPTEL logo. In the bottom right corner, there is a video inset showing a man with a beard and glasses wearing a white turban and a dark blue shirt, speaking.

So, the application of break even analysis is across all the businesses – small or large; it is relevant for all the business sizes. Typically, the use cases of break even analysis are as follows. Whenever you want to launch a new product, you have to do the economics of the new product, how much are you going to earn out of it, what are the cost and so on. If you are starting a brand new business altogether, you can use the technique. If you have to replace any existing asset which can be a product, it can be a machinery or a plant, a new effort is replacing an old effort, again you have to do these kinds of analysis.

Also, even the pricing decisions are to large extent based upon break even analysis. If looking at the scale of the business you might need to move the prices, so that you are able to reach the break even point; when you start making profit earlier by increasing the price a little bit more you would do that. So, such kinds of decisions need data support, need some analysis to back up the data. and that is where break even analysis comes handy.

Raising bank loans, well not even bank loans, but you are going to any investor, any stakeholder and you are asking for resources, not only money, you have to convince them of the profitability of the business. So, in this case, if you go to a bank, even if you are a small business, the bank

asks for a project report. In the project report, you have to show the break even point. So, if the project is 5 years long, after how many years are you going to start making profit and how much profit? So, the bank can be assured that the money will be paid back.

So, break even analysis is going to answer all these questions for different stakeholders of business, particularly the management of the business, particularly people who start the business, people who are in charge of making decisions for new business opportunities in a company.

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8.1.3 Cost Volume Profit Analysis

• Cost

• Volume

• Profit

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Break even analysis is also called cost, volume and profit analysis. These three words are the key and I will start with the word in the middle which is volume. Volume is something which drives the cost and profit. The more you want to produce, the more money has to be spent, but within the cost there are two types of components, and we will discuss that in the following videos. Because of the different nature of those components, you could know there is a specific dynamic related to the cost side of the whole thing.

And the profits are affected due to the nature of the cost. Therefore, you want to know what are those dynamics in a given business opportunity, how are costs behaving and how should I price my product so as to earn profit as soon as possible.

So, that is a quick introduction to the topic of break even analysis. In the following videos, we will deep dive into cost, volume, and profit, and the combination in the dynamics involved there.

I will see you in the next video.