

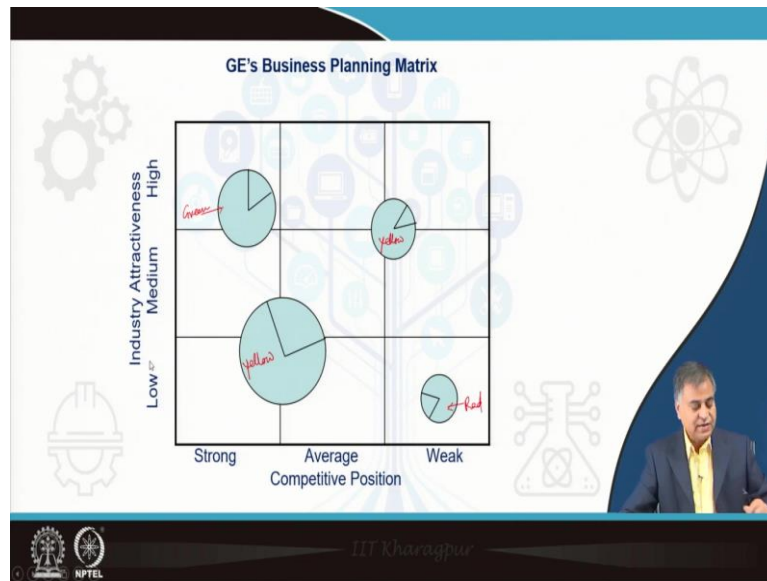
Strategic Management for Competitive Advantage
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Lecture - 20
Portfolio Analysis and Display Matrices - II

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Welcome to the course strategic management for competitive advantage. We were discussing in the last lecture portfolio analysis and display matrices. We will continue with that; we have covered in the last lecture the BCG matrices. Now further to the BCG matrix, first we will talk about General Electric's stoplight matrix, then the profit impact market strategy, then we will discuss Shell's directional policy matrix and Arthur D's little company matrix.

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Similar, to the BCG matrix General Electric with the help of the consultant Mackenzie, developed this business planning matrix. This is a 3 by 3 matrix, and here, what is there? There is a competitive position, in the BCG matrix, it was the relative market share that has been replaced by the competitive positions of the organizations, and this is nothing but a composite index, it consists of a number of factors we will be discussing a little later.

Then similarly, in the y-axis of the BCG matrix, it was business growth rate, it is industry attractiveness which is a composite of different factors that we will be discussing. So, on the x-axis, these are the three grids that have been divided into three parts strong, average and weak, as competitive positioning is concerned. And industry attractiveness has been divided into low attractive, medium attractive and high attractive. And these bubbles show the volume of the business and the pie, this pie represents GE's market shares in that business.

Now, if the competitive position of the business GE is weak and industry attractiveness is low, what will they do with this business? So, this is what these businesses are similar to BCG's dog businesses. So, these are the for the divest. So, what does General Electric do? They generally want to mark these businesses as red; they mark it as red. So, that means investing in this business is a stoplight, a red stoplight, no further investment. So, the businesses which are weak, competitive positions are weak, and industry attractiveness is low, these businesses are to be divested.

Similarly, if the competitive position is strong, and industry attractiveness is high, what are these businesses? These are promising businesses; this is similar to your star businesses in BCG. So, these are the growth, these businesses are in the growth businesses. So, they put a

green light on it, they mark it with a green light, which means you invest in these businesses, these are the growth businesses, and these are the declining stage businesses.

Now, this is which businesses? These competitive positions are high here, and industry attractiveness is low to medium, what are these businesses? These are cash cows. So, here they mark it as this business as G-mark, as yellow. So, these are your yellow marks meaning you hold and continue. And this business is weak in competitive positions, and industry attractiveness is from medium to high. So, these businesses are what? These businesses are similar to your question mark businesses. So, here they also put it yellow, you judiciously you invest in this, if it has potential to go to this, you go for it. So, you can see is similar the concept is similar to BCG.

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6-A Multi-business strategy: Portfolio Analysis & Display Matrices
GE's Strategic Business Planning Grid

- Factors determining Industry attractiveness

	Typical weightage
1 Size of market	10%
2 Rate of growth of sales and cyclic nature of business	15%
3 Nature of competition including vulnerability to foreign competition	15%
4 Susceptibility to technological obsolescence and new products	10%
5 Entry conditions and social factors	10%
6 Profitability	40%
	100%
- Typical scoring of Co.'s Competitive position

Factor	weightage	rating (1 to 10)	score
1 Market Share & Capacity	20%	7	1.4
2 Growth Rate	10%	7	0.7
3 Location & Distribution	10%	5	0.5
4 Management Skill	15%	6	0.9
5 Workforce Harmony	20%	7	1.4
6 Technical Excellence including Product & Process Engg.	20%	8	1.6
7 Company Image	5%	8	0.4
	100%		6.9

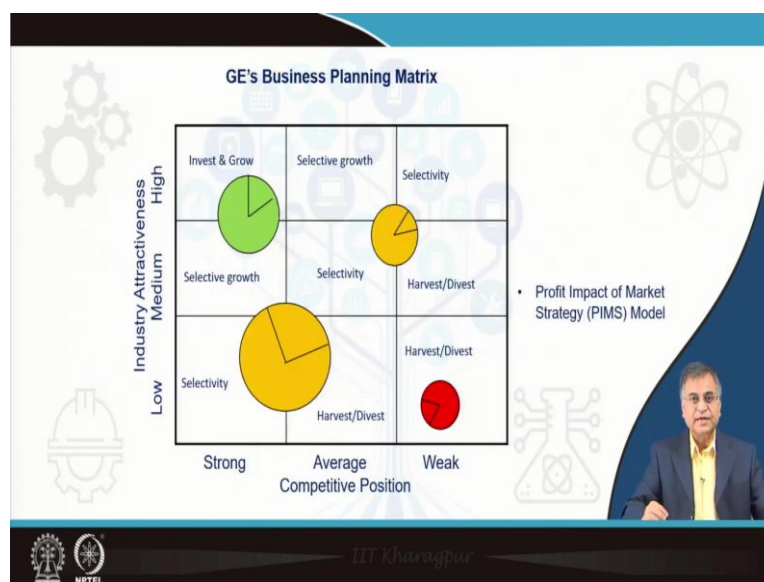
Now talking about what is competitive position and industry attractiveness. This is better than the BCG-related market share and business growth rate. Here factors that determine the industry attractiveness is a composite index these are (say) what are the factors it comes from? The factors that determine industry attractiveness are the size of the market, rate of growth of sales, nature of competition, then threat to technological obsolescence and new products, entry conditions, social factors and profitability, it is not only that but their business growth rate was looked after by the judgement.

So, here it is subdivided into six factors and each factor is given a certain weightage, these factors then are rated on a scale of 1 to 10, after the rating of 1 to 10, these ratings and the typical weightage you arrive at a composite number or the composite index for determining

attractiveness. Similarly, for competitive positions, how to make it? There are seven factors, market share and capacity, then growth rate then, locations and distributions management skills, workforce harmony, technical excellence, including process and product engineering, and company image.

So, these are the weightage you give for these factors, then your rate on a scale of 1 to 10, then you get the score, and you find out the composite score. So, this way, what do you do? You minimize the subjectivity of this and try to bring objectivity to this. So, this way, it is a step better than the BCG matrix. So, this is how you get the competitive position of the organisations and the industry attractiveness, so it is much more composite.

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Now, as I told you so, these are the weak and low, weak competitive positions and low attractiveness. So, what decision do you take? There is a red stoplight. So, you take the decisions of high harvest and then divest these businesses, these are the star businesses, so, highly competitive positions and industry attractiveness are also medium and high. So, you invest the green thing is the stoplight, is you invest and grow further, and these are all selectivity you go this quadrant if it follows it, is selective growth. These are the quadrant, you harvest and divest, this way this GE matrix is used at different levels of managerial levels, but the final decisions are taken at the CEO and Senior Vice Presidents level, that is all for the GE's planning matrix.

Now, I will discuss the Profit Impact of Market Strategy, this is the (PIMS) model, this model is GE in the 1970s, the GE managers wanted to know that they have a very diversified

portfolio and diversified business units. So, they wanted to know why some of their businesses do make very high profits, and some businesses do not earn that high profit.

So, what are the reasons, they wanted to study? So, they hired one professor of economics. So, he had with him first developed this Profit Impact of Market Strategy model. In that what they did? They collected information from 1970 to 1983 from around 2600 SBUs, covering 200 companies, and that is a lot many strategic matrices such as say market share, product quality, service quality, and investment intensity.

So, they collected data, and they made a regression analysis of all these strategic parameters with the return on investment (ROI) and return on sales on sales, they made some regression analyses of these companies from the cross-sectional of different industries and then multi-disciplined sectors. So, they did it and make out some correlations between market share and profitability and many other things.

But in course of time, it has many critics, they say this data is comprised of a heterogeneous industry, and at a different period of time, so it will not reflect the particular industry. But the PIMS model also has been looked after by the Harvard Business schools and universities, and, till now, they have collected the data for 12,570 observations collected from 4200 business SBUs. And in total, they have 25000's years of experience.

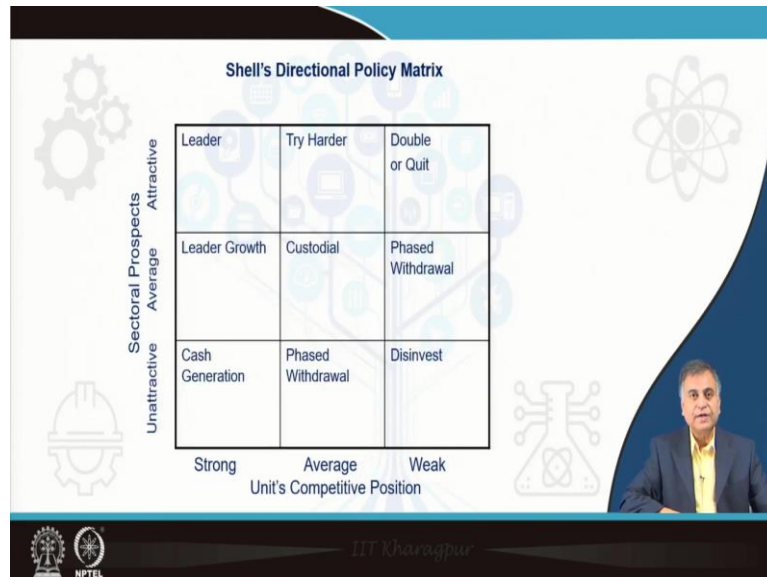
And what they say like irrespective of different industries, they have produced a time series analysis from the 1970s to till date, and if they say irrespective of the types of industries, there are some matrices which remain sold. Say, they found, let us (say) market share, if the market share increases, usually the profitability increases, and they found the positive correlations.

Similarly, most importantly is the quality of the product or quality of the service that gives you the profitability that has a very strong impact. One more thing they found is that investment intensity, does not increase profitability, it lowers profitability. So, what is it? It says irrespective of the industry if you those parameters if you compare your own industry, your compare with those you will find some correlation.

And why do they do it? Because in these correlations and regression analyses, you get rid of doing the judgmental things like competitive position or market share or industry attractiveness, you have to rate it, you have to give you a judgmental value, the rating is a

judgmental value even for BCG matrix, your market shares and all you are judging it. So, those things you can eliminate, in a nutshell, it is the Profit Impact of Market Strategy model.

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So, next, we will be going to Shell's directional policy matrix, what is this matrix? This is similar to General Electric. Shell oil company, they have developed this for their organizations, what do they do? Here it is also a three-by-three matrix here x-axis is the unit's competitive position, and the y-axis is sectoral prospects, i.e., say unattractive average and attractive and this side is strong average and weak competitive positions and based on this now where their businesses fall.

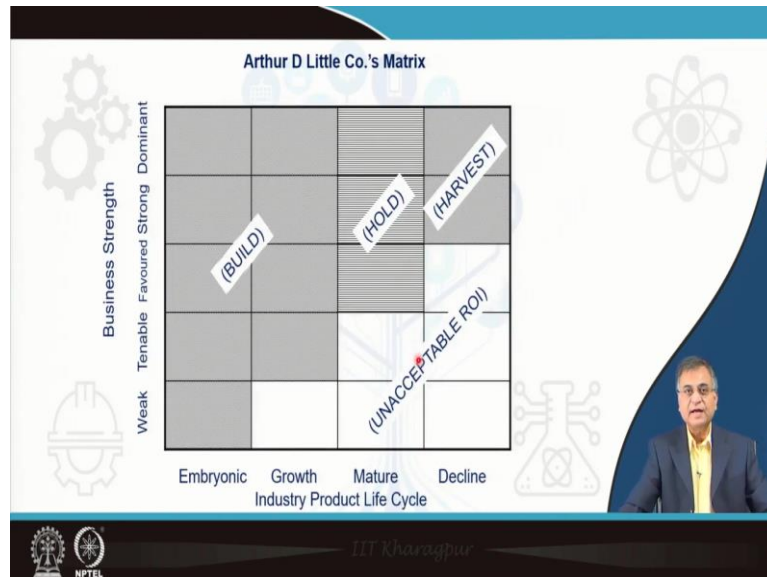
If your competitive position is strong and sectoral prospect is attractive, that is similar to star business. So, you are the market leader here and if it is false the average and strong it is you leader growth you take that decision. And strong competitive position and unattractive prospects, meaning it is a mature stage like cash cow.

So, it is this business is generations of cash maturity businesses. And when it is weak, that competitive position is weak and sectoral prospects unattractive, you disinvest those businesses, these are the dogs and these are the average unattractive and average weak, these are the finished withdrawn you divest in a phased manner, so this is the question marks.

Similarly, if your competitive position is weak and sectoral prospects are attractive, you double, or you disinvest, or you double up your investment here. So, that it can come to the higher competitive position this is you try harder to become a leader, and this is the medium-

medium is the custodian, you hold and go on and take decisions. So this is also similar to GE's stoplight matrix and BCG's matrix. So, this is called Shell's directional matrix.

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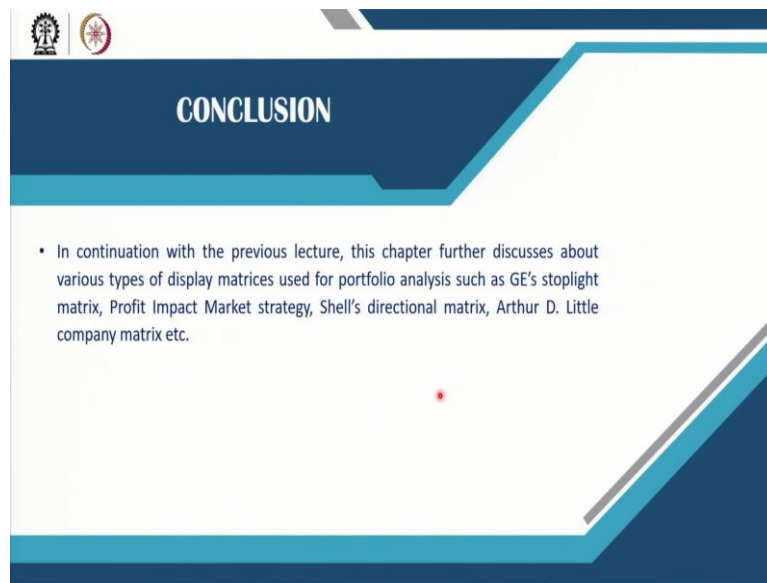
Next, a similar matrix was done by the Arthur D little company. So, Arthur D little the consultants they have developed it. Here it is a 5 by 4 matrix. What is their industry product lifecycle? We know product life cycles are Embryonic, Growth, Mature and Decline. We have seen it, and, business strength is divided into 5 ways which are dominant, strong, favoured, tenable and weak.

So, what happens now, if your product lifecycle, product stage, if you are in the stage of embryonic and growth strategy says, you follow a build strategy, except when your growth is weak, except this, you follow it build strategy.

Now, when you are in a mature stage, for your business, you will follow a hold strategy when your business strength is dominant, strong and favored. Then, if your product lifecycle is in a decline stage, then and if your business strengths are dominant and strong, you follow a harvest strategy that means as much as you can squeeze as much as you can milk you do that.

And when your product lifecycle is mature, and the decline stage and your business strengths are, say, weak, tenable, favored and unacceptable ROI, you just try to do is invest. So, basically, what we see is similar to the BCG matrix and different consultants. Different companies are using their own way pertaining to their situation, business situation, pertaining to their business context. This is Arthur D little.

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So, to summarise what we have done today, in this chapter, we have discussed various types of display matrix used for portfolio analysis. And we have discussed GE's stoplight matrix, Profit Impact Market Strategy, Shell's directional matrix, Arthur D's little company matrix and all those in detail.

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Furthermore, these are some of the reference books, you should go through and can enrich yourself further. So, thank you very much for attending.