## Management of New Products and Services (MNPS) Prof. Jayanta Chatterjee Department of Industrial & Management Engineering Indian Institute of Technology, Kanpur

## Lecture-05 Theoretical Foundation IV Product Life Cycle (PLC) and Chasm

Hello, I am Jayanta Chatterjee from IIT, Kanpur and as you know we are discussing for the next few weeks, various topics related to new product, new service management. We were discussing yesterday about generic strategies. I introduced this slide to you which you see on your screen that there are 3 generic strategies.

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Basic Winning Competitive Strategies: Porter

 Overall cost leadership
 Lowest production and distribution costs

 Differentiation
 Creating a highly differentiated product line and marketing program

 Focus
 Effort is focused on serving a few market segments

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Overall cost leadership, differentiation and focus and yesterday I discussed briefly what each one of these terms signify. Today my first point will be to relate these with product design strategy and which one is a better product strategy when.

Now, when an industry is at its early stage, when an industry. So, these basic winning strategies have a relationship with the product lifecycle. If we look at differentiation to start with. So, when a new product is introduced, a new class of products come into the market. If you think about say for example, mobile phones, when they were first introduced into the market. At that stage different companies adopted different technologies to offer different sets of advantages to the customer. At that time there were mobile phones based on what it was called TDMA or CDMA, different technologies or

GSM or even we had an Indian development call a dect, core dect which is digitally enhanced cordless technology.

So, the earlier cordless phones that was enhanced. So, this CDMA, TDMA, GSM, core dect, each one of these technologies were packaged into a mobile phone and offered different sets of advantages. Differentiation, so at this stage features and attributes of the product become the core competitive strategy. So, in other words, I think, we will discuss a certain market discipline a little later, where you will see how we can think of these same generic strategies, but in terms of a little bit more product management orientation.

But what happens is as this product becomes popular and more and more competitors come in, customers become tired of these large number of variants and they start exercising some preference. it is a process of how preferences influence others preferences, word of mouth and customers internal horizontal communication customer to customer and a certain tempo builds up and a particular design becomes the top favorite and then what happens is what we call a dominant design emerges and the other name of dominant design which you we all know is standards. So, standards emerge at the when the initial growth is peaking, standards emerge. Once the standards emerge customer competitors cannot actually create large number of variants right. So, when the mobile phones standard became GSM technology and at that stage the leader like Nokia before that actually most mobile phones had a flap design.

Because, they were trying to emulate the older wired phones where actually you had a earpiece and you had a mouthpiece. So, this phones had a cover which you had to open, the keyboard was behind it many of you might not have even seen, but if you searched for Motorola phones of earlier design you will see this flip cover phones.

Then came Nokia and Nokia actually created a way to lock the keyboard. So, you do not need did not need a cover and the keyboard was actually made much more rugged. So, it did not need the cover and they created a phone which was easy to hold, was very ergonomic and they called it the candy bar design. That candy bar design became the standard and in fact, even today in the smart phones also, we have made it larger screen and other many things have happened, but that basic candy bar approach has remained. That is the power of standards or dominant design.

So, at the dominant design stage, the standards when they have introduced, you can no longer compete based on features, you can no longer compete based on bundles of attributes, because you have to conform to the core standards. You can have some cosmetic differentiation, but that is not so important. The most important at that stage is to become the cost leader, because if you are the cost leader, then you will have different types of pricing capability and when all phones they are more or less the same. You can easily understand that the customer will give preference to the phone that is more economic better priced.

I mean some people may continue to go for some exotic variant, but otherwise most people will go for the best cost alternative offering all the standard features. This trend continues for some time and as we discussed briefly the product life cycle earlier. So, as the product life matures, at that stage even this low cost strategy is not enough. At that stage, some shakeout start happening because not everybody can be the lowest cost. The people who are on the lower side of the cost spectrum they survive and people who cannot gear up in their operational excellence to that level they drop out.

When this shakeout happens, at that stage the market starts getting again dominated by some feature oriented aspects and at that stage you cannot be everything to everybody. You have to try to become everything to somebody and that is the stage when the focused strategy comes into the picture. We will discuss this maybe more a little later. So, at this moment please try to understand therefore, that product life stages are highly correlated to the kind of strategy that you should pursue. So, generic strategies and product life cycles are closely related and you cannot go wrong if you actually therefore, think of your designs based on the competition map. Not only competition in terms of companies, but competition in terms of alternative technologies, alternative product technologies, alternative process technologies with the aim of being top of the heap at the early stage when you compete based on features and attributes, at the next stage when you compete on the basis of lowest cost, at the next stage when you focus on a particular segment of customers.

We will discuss in the next set of discussion, how competitive strategies will also differ from one type of competitive situation to the other type of competitive situation. How competitive strategy should differ when you are the market leader and how competitive strategy should be when you are a follower or a challenger. I will give a brief introduction to these different situations to start with and maybe we will take it up in more detail later on.

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You see on the left hand side, you have these competitive positions. the competitive positions are market leader, market challenger, market follower and market Nicher or nature you can pronounce it in either way.

So, the market leader, a clear concept; a market leader is a particular organization which has the highest market share or maybe one or two companies may share this stop percentage. So, often you will find that in the growth stage of the market there will be 2 or 3 companies, in economics we call that an oligopolistic structure. 2 or 3 companies may have or 4 companies may have 70 80 percent of the market, all others are small small players.

So, as I said in this market leader is leaders emerge or form when the market is actually expanding and; obviously, therefore, if you are 1 of the 3 and suppose you have 30 percent share you have, there is another company which has 20 percent share, there is another company which has 25 percent share. So, together you form about seventy five percent of the market, you have to first protect your market which means you have to form close relations with your customer. So, customer retention at this stage becomes far more important than customer acquisition because the cost of acquisition can be very high because the market develops certain kind of dynamic stability at this stage. So, there

is some amount of loyalty already developed. So, if you want to poach a customer away from your competitor, you may enter into some kind of a price war which is not healthy the market itself may collapse or can go in a very deep trough.

In fact, you can see as it is happening right now that in the mobile service. There was a disruption created by one service provider by offering voice calls free for six months at the initial stage. They created a disruptive storm and the prices of all service providers came down sharply, their revenues fell sharply. So, they were in trying to protect their market share, they all reduce their prices, they all try to match this disruptor. Now it is we will see over the next months and years how that particular event will shape the mobile telephony service industry in India, but you can easily see that if you are currently the market leader, your focus is on protecting the market share, but expanding the market share a challenge to profitability, but you cannot be sort of complacent if you are a market leader because as you see the example in case of mobile telephony service in India there were 3 or 4 companies who dominated the mobile telephony service.

A new company came in 2016-17 and they took the market by storm towards the second half of 2017 and the whole market structure changed. So, market leaders strategy is to retain market share, is to retain customers, is to protect the turf as we call it. Unless you are constantly watching out for new product evolutions new technology evolutions you might sometimes be caught on the wrong foot in this particular situation. Otherwise in a standard stable state the market leader protects market share, continues to penetrate deeply into its dominant customer segment.

That is what you see happened in the mobile phone that companies like Nokia, companies like Samsung, companies like several other Korean manufacturers LG and Japanese manufacturer, they I think 5 or 6 of them dominated the market, but somebody from completely outside who was a computer manufacturer apple came with i-phone and created a complete different dimension. We will discuss in the next session that these interactions and how they create advantages for the customer. So, this pursuit for the superior value offering to the customer is the primary driver for technology evolutions and market evolutions and strategy evolutions. We will take it up in the next session.

Thank you.