Managerial Economics

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Lecture - 77
Product Pricing (Contd…)

We will continue our discussion on product pricing in this session also. So, if you remember, last time, last session we discussed about the product pricing and what is the need of product pricing; when the firm generally go for a pricing strategy altogether; whether about launching a new product, whether there is improvement in the improvement in the existing product and also getting into a strategy where getting into a different market altogether or different market segment.

So, in that context, we discussed about the cost based pricing, typically the cost based pricing and the markup pricing. Then on that, the basis of the cost what is the whether it is a full cost, whether it is the variable cost. Then, we discussed about the target price; then, we discussed about the pricing on the base of competition; then, we discussed it is on the basis of the firm's objective; if the firm's objective is profit maximization, what strategy to be followed, and if the firm's objective is for the sales maximization, what strategy to be followed.

So, on that basis, we discussed three types of product pricing in the last session: one on the basis of the goal of the firm or the objective of the firm, second is on the basis of the competition, and third is on the basis of the cost.

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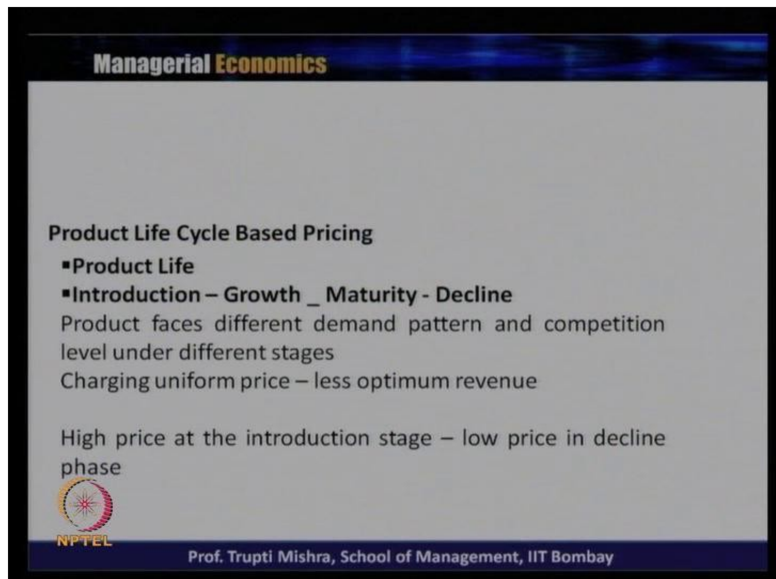

So, today we will continue our discussion on product pricing and the first type of product pricing we are going to discuss today is product lifecycle based pricing. Here, the pricing is based on the product life. So, typically, if you look at, the product life is divided into four stages: The first stage is introduction, second stage is growth, third stage is maturity and fourth stage is decline.

And generally, the product faces different demand pattern and the competition level under the different stages. So, charging uniform price at the different stages generally gives less optimum revenue to the firm because each stages, they have a different demand pattern and the different kind of competition under the different stages. So, that is the reason, if you are charging or if the firm is charging the uniform price, the possibility is that that it will give us less optimum revenue.

So, it is preferable or it is advisable that there should be high price at the introduction stage and low price in the decline phase. So, before going into the different techniques of the product life or different strategy on the product life based pricing, we will understand what is the nature of all these four stages of the product life, like starting from introduction, to the growth, to the maturity, to the decline.

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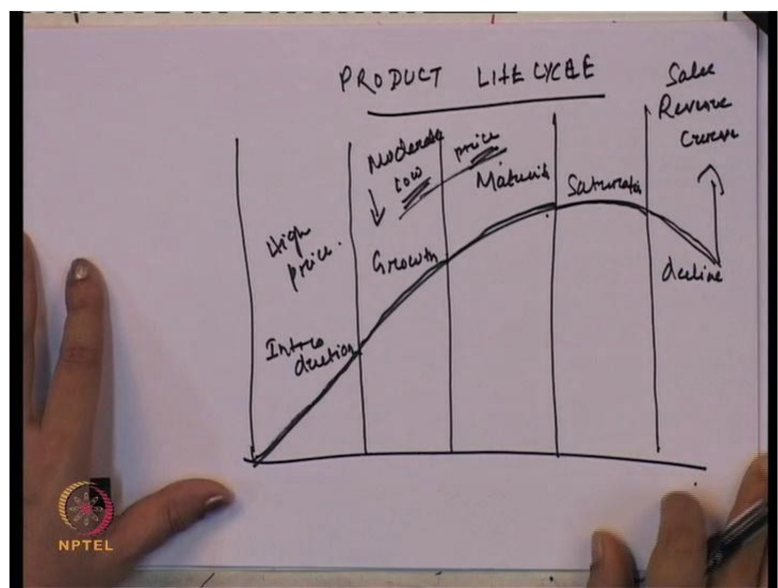

So, we will first understand these four stages of the product lifecycle and then we will see how the sales generally increases or decreases in all these four stages of production. So, to start with, we will just draw a graph to understand these four stages of production. So, this is our sales revenue curve; this is the sales revenue curve. This is the introduction stage; this is the introduction stage, then we will get the growth stage; then we will get the maturity stage and then we will get the maturity; then we will get the saturation, and finally, we will get the decline.

So, when it comes to a product lifecycle, so it when it comes to a product lifecycle the first stage is introduction. And if you look at, here generally the product is introduced and the sales increases, because this is a new product in the market. Then the sales pickup because consumer, they were aware of this product. And finally, the growth happens in this stage. Then the the product become generic in the case of, in the case of maturity stage and still there is an increase in the sales force because this is considered to be the generic. Then people, they become saturated at this stage and after this decline continue.

So, if you look at, generally, always the high price is charged in case of introduction stage. And why high price is charged because the product is new and people are ready to pay for it, and here the sales force, here the priority is to it is reaching to the consumer and there they have to increase the sales with the high price or increase the sales revenue with the high price. But in the case of growth and maturity, generally they charge a low price because the product has already reached to a stage, where people, they, know about this product and that

is why this low price is being charged in case of the growth and maturity, and also that continues in case of the saturation and decline stage. So, rather than saying low, we can say this is the value for maybe this is the moderate moderate price. This is the value for this product in case of growth and maturity.

So, generally, if you take an example of suppose the television, when this LED, LCD television came, initially it was such a high price and who who are the customer segment or who are the group of consumer they are going to buy the LCD TV? who attach high value to it, who consider this is a status symbol, and they are less bothered about that whatever the price is being charged because they are in that customer segment whatever is new in the market, they should use it, and they are not responsive to the price, whatever, whether it is high price or whether it is low price.

So, in that case, generally high price is charged in the introduction stage, but later on if you look at, now the price has come down for LCD TV. Now, it is in the growth and if you look at, it is also matured because it is now from LCD we are moving to the LED TV. And now, at this stage, the typical that color TV television or may be the so called flat television, that has already reached maturity or the saturation, or we can say, the typical black and white, they have already reached the saturation or they are in the decline phase. But in this case, that flat TV or the color TV is still in the maturity. Those who cannot afford the LCD, LED TV, they are just taking that flat screen TV because it is in the maturity stage and the price is moderate.

So, if you look at, now you can bring the LED TV here, which is high price; LCD TV here which has already reached the growth stage, that is the moderate price. Maturity, again it is the price considered to be these two products; it is low price and then again to the saturation typically and decline for the black and white TV. So, practically where the price is? Almost in the bottom side.

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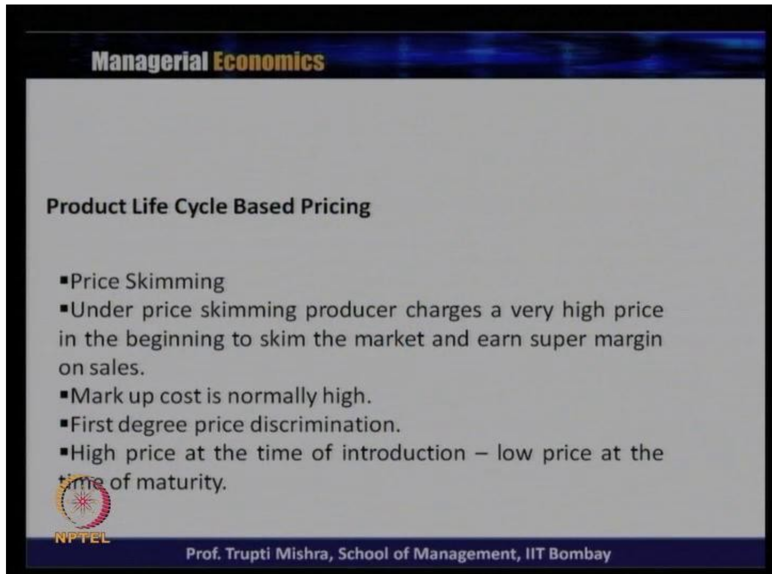

So, on that basis, on the product life cycle based pricing, there are three kind of pricing technique; the first one is price skimming. And what is price skimming? Under this price skimming, producer charges a very high price in the beginning to skim the market and earn super margin on sale.

So, if you remember your first degree price discrimination, the monopolists try to identify the consumer group who is ready to pay more and generally charge a higher price to them. So, in this case also, the producer tries to skim the market and earn the super margin on the sales and here the markup cost is normally high; the margin whatever, that is normally high. This is the typical example of a first degree price discrimination; high price at the time of it introduction and low price at the time of the maturity.

Now, here, we can take the example of, may be here we can take the example of, suppose every Friday we get a new movie get released. And to the consumer group, now those who watches the movie on the first day first show, they pay a higher price and those who are watching that movie at a later time, when the demand is saturated, then they give a they generally they generally pay a lower price. So, the first day first show when you are trying to watch a movie, your focus is not on the price; you focus is that because you want to watch the movie, and here the producer tries to skim the market and they exercise the first degree price discrimination and they charge us a higher price because here the consumers, they are not ready for or they are not responsive for the price rather they are responsive for the product.

So, in this case the producer will charge a higher price and in this case there will be a price differential who on the basis of the time period; who is watching the movie and the first instance the first day first show and who is watching the movie at a later stage because the first day first show consumer group, they are paying a higher price as compared to the people those who are watching out a later day.

So, we will just take a graphical explanation to understand both the cases; this first day first show and watching the movie at a later stage, and we will see how on the basis of the demand curve, the consumer is paying a higher price in the first case and they are paying a lower price in the second case.

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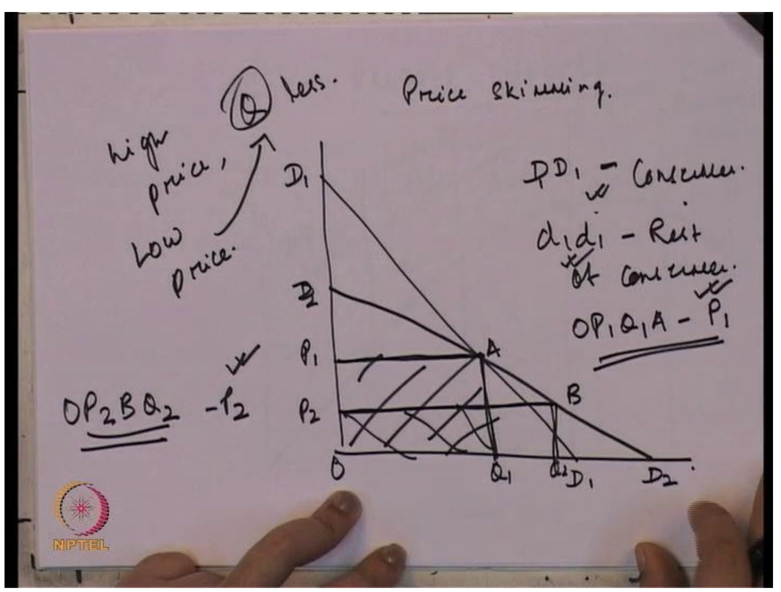

So, we have two demand curves: $D_1 D_1$, then we have D_2. This is the $P_1 P_2$. So, the the demand curve $D_1 D_1$ is demand curve for those consumers who must watch the show on the first day irrespective of the price and $D_1 D_1$is the demand curve for the rest of the consumer who generally watches the movie after the craze is gone or may be after the demand comes to a moderate level.

So, on that basis, we get two demand curves: the first demand curve is $D_1 D_1$ that is for those of group of consumer who must watch the movie on the very first day. $D_1 D_1$ is for the demand curve for the rest of the consumer. So, P_1 will be charged for consumer who is who is watching the movie on the first day and P_2 will be charged for this group of consumer who are who is who are watching the movie at a later day. So, in the first case, this is the revenue

and second case this is the revenue. So, revenue in the first case is $OP_1, OP_1 \vee P_1OQ_1A$. This is the revenue when the price is P_1 and in the second case when the price is P 2, this is the revenue that is OP_2BQ_2 (Refer Slide Time: 12:20).

So, now if you analyze this from the producer point of view, in both these cases, the producer is getting the revenue; whether the price is P_1 or whether the price is P_2, but when he is charging the the revenue model is different in both these cases. In the first case, it is high price and second case it is low price. If he alter the pricing technique, may be he is not maximizing revenue because initially the group of consumer who will be watching on the first day, the Q is less; if Q is less and if he is charging a low price, he is not maximizing the revenue.

And second case, if he is going to charge higher price at a later date also, if the movie is released and after may be two weeks, three weeks, still he is charging a high price, still the queue is going to be less, and in this case, again the maximization of revenue is not possible. So, the point here is - when consumer is not responsive to price, that time generally the higher price is charged from the by the producer and if the responsive to price generally the lower price is being charged, and that is the reason. This is the strategy under the price skimming. In the time of introduction, generally, high price is being followed and in the later date, generally, the low price is being followed; that is typically in the maturity saturation or the decline phase of the product. So, here, the basis is product lifecycle. On the basis of the different stage, the prices are going to be charged.

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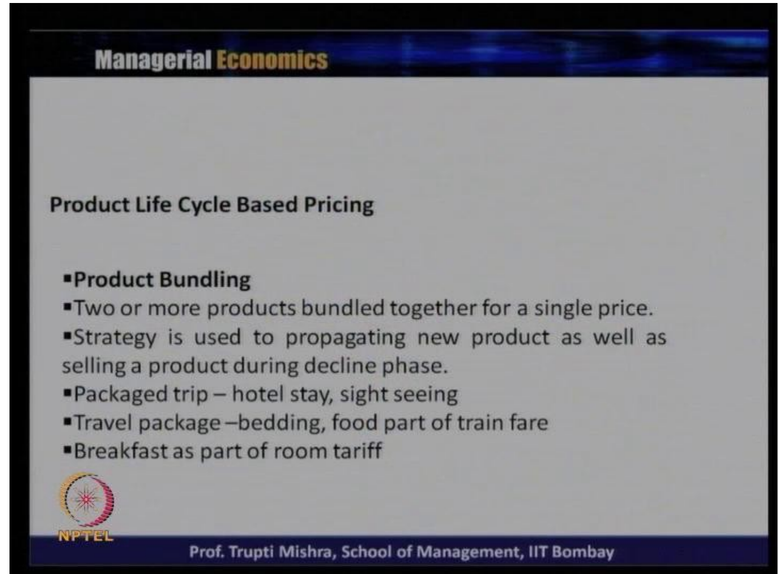

Then, the second category here is product bundling. And here, if you look at, two or more products are bundled together for a single price. So, here, what is the strategy? The strategy is used to propagate new product as well as selling a product during the decline phase. So, when you buy something, you find find there is another product free with that product. So, this is the typical example of the product bundling. And why the other product is free? Either the other product is new; that is why, it should reach to the consumer and that is why that comes as free with the other product, or the product has already reached the decline phase. And if the product has already reached the decline phase, then in order to again revive the sales of the product, that generally comes as a free so that people again get back to the product and they buy the product also in the individual sense.

So, in this case, product bundling, generally two or more product is bundled together for a single price. And in this case, the motivation is to either to do marketing for a new product or to help in reviving reviving a product, who is at the decline phase. The typical example is here. If you will find this package trip, they will say, in this ticket price, we will take care of your stay, we will take care of your sightseeing, and also it is a part of your travel expenses; Or typically, the travel package if you look at, now, there is a option that if you want food during your travel, that is added and they will charge a price. Like initially, when this AC class was introduced in the train, if you you have to pay a price to get the bedding, but later on if you look at, price has increased many fold, but at least this bedding part is included in the ticket fare.

Similarly, if you are travelling by Rajdhani, generally the food is free because that food price is added in your ticket fare in case of the Rajdhani express. Similarly, suppose if you are travelling, if you are staying in a hotel, many of this hotel they give the breakfast as free as complimentary, but it is not complimentary and it is not entirely free; the charges for the breakfast is considered under the tariff charges for the room and you get this as the free.

So, in this case, the product is bundled together. So, if you are staying in a hotel, you are not going anywhere out for the breakfast. You are taking generally breakfast in that hotel itself because it is added together to your room tariff. So, product bundling is generally a strategy used to either to launch a new product or to revive a product which is already in the decline phase, and here we get two products in one single price. So, that generally gives us a feel good factor also for the product, for the consumer because they are getting two products in one single price.

Then, the third kind of product lifecycle based pricing is perceived value pricing. Now, what is perceived value? Perceived value is the consumer, the different consumer group, they assign the value to the product on the basis that what kind of what kind of perceived benefit they are getting out of it. So, the value of the good for different consumer depends upon their perception of utility of that good.

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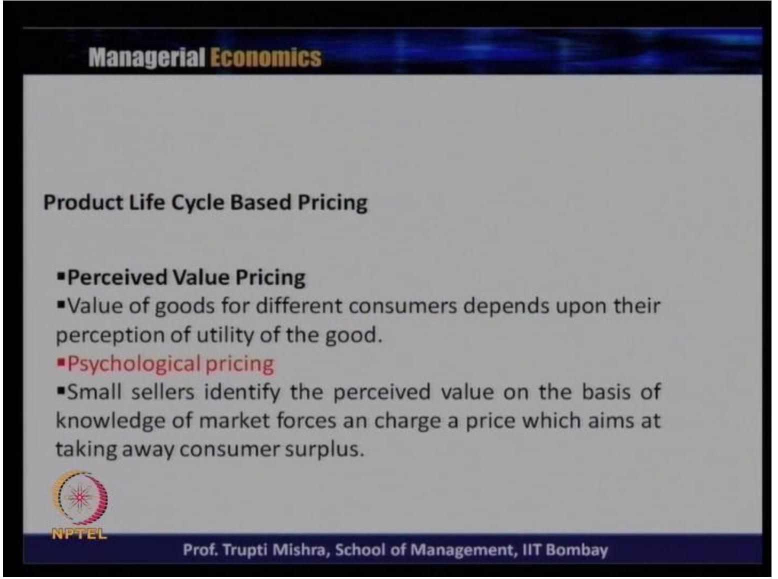

So, if it is is for for one consumer group, may be they typical product if it is a higher value, so, they usually give a higher value to the product, but for the other consumer group may be the perception of utility is less and that is why they give a low value to the product.

So, if you look at, here in this case, this is a psychological pricing because here the producer identifies what is the psychology of the consumer with respect to the value of the product or the utility of the product, and then on that basis they have to charge a price. So, small sellers identify the perceived value on the basis of the knowledge of the market forces and change in the price which aims taking away the consumer surplus.

So, here, they try to analyze how much this consumer is ready to pay for this specific product. And on that basis, they generally try to charge a higher price so that they can take away the consumer surplus because if the consumer is considering that this is a high value product or the perceived benefit is many, he is ready to pay a higher price. So, they will charge a higher price from that typical consumer and again they will analyze what is the for the same product, what is the perceived value from the other consumer. And on that basis, generally, they again

charge a price on the basis of the perceived value of that typical consumer. So, here also the basic aim is to take away the consumer surplus.

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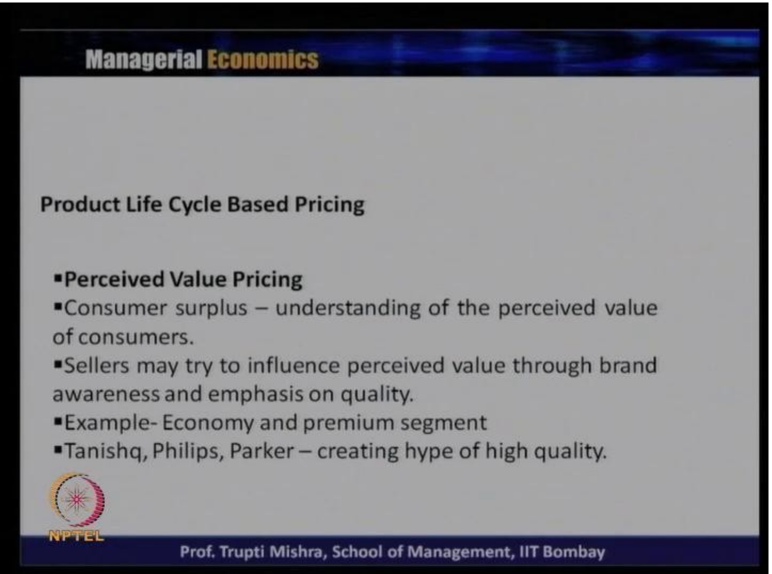

Now, to now to take the consumer surplus from the consumer, what is needed? The seller has to understand the perceived value of the consumer. So, if the knowledge about that, what the consumer perceive about the value of the product, that is the prerequisite to charge the price which will give us the which will give give the consumer surplus to the seller.

So, here if you look at, the difficulty is also to understand what is the perceived value of consumer regarding a specific product? Sellers may try to influence perceived value through the brand awareness and also they emphasize on the quality. So, sometimes, sellers they try to influence the people. This is the product; it is very high value product, and there, generally they create a brand awareness because the consumer in that way the consumer will try to give a high value for it. And if they are giving a high value for it, generally they can charge a higher price for it.

Typically if you look at the example or economy and premium segment for different product, if you will find one comes under the economy segment and other comes under the premium segment. So, always the high value, if it is a premium segment, high value is being charged and if it comes under the economy segment, generally the low price is being charged. So, if you can take the example of typically Tanishq, they are known as they are they are from the

Tata group; they are known as their their quality of the gold what they give or their specific design, what is not being offered in the general market.

So, they create a brand that they are different from the others, and on that way, if you find if you talk to the people, they will always say that it is Tanishq; they charge a high making charges, but their product is good; their design is good. So, they endorse for the making charge with that, that their design is good or their product is good.

Similarly, it is Philips or you take the Parker pen. Generally, they create the hype in the quality and that quality, the hype in the quality may be through the creating a brand awareness through the celebrity, through the quality or through the different media, generally they create a hype about it. And when it comes to buying that product, the perceived value is very high from this for this product and that is why they charge a higher price. When you go for shopping, whether it is Tanishq, whether it is Philips, whether it is Parker, if high price is being charged, you say the product has to be good because this is from Philips; the design has to be good because this is from Tanishq or this pen has to be good because this is Parker, and that is why the consumer is ready to pay higher price. And this is how, typically the seller, they take away the consumer surplus from the consumers by charging a high price.

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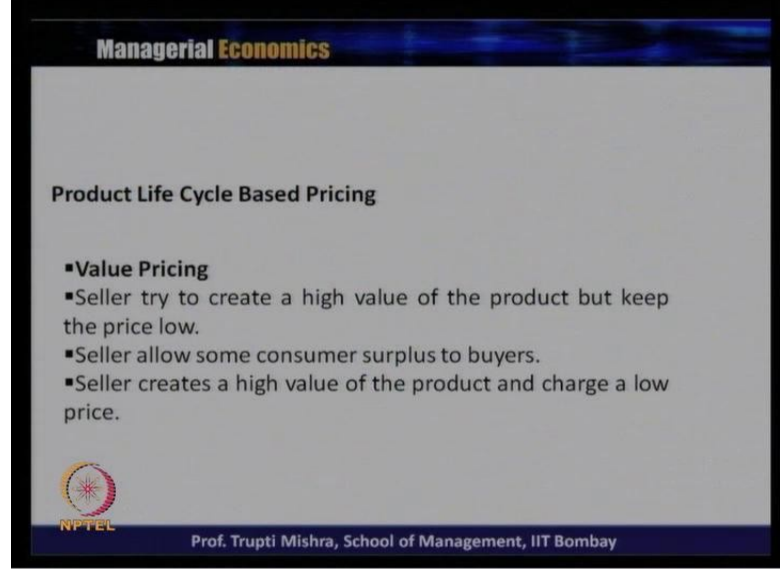

Then the other category in case of product lifecycle base pricing is value pricing and what is value pricing? Value pricing, Here, sellers try to create a high value of the product, but keep the price low. They will say - this is the high value product, but generally keeps the price low and here seller allows some consumer surplus to the buyers. It creates a high value of the product; it charges a low price.

So, if you look at, there are few stores in the market and throughout the year, you have some discount on it; whether it is a second shop, it is a it is a factory outlet or in general also, few brands if you look at every Wednesday, you get some discount; every Friday you get some discount; every festive season you get the discount. So, that is that is typically the value pricing. The consumer knows that the product is of high value, but he is getting a discount. So, the pricing is generally given at a higher note, but every time some discount is given, keeping it is not that the margin is not got by the sellers; they are getting the margin, but after giving discount also. They are giving a profit margin whatever the price they are charging during the discount.

So, generally, here seller creates a high value of product and charges a low price. So, typically, if you go to the garments, some of the garment shop, every time you find some offer is going on. So, they create a hype that this is a very high value product, but they are giving you some discount and typically this is known as the value pricing.

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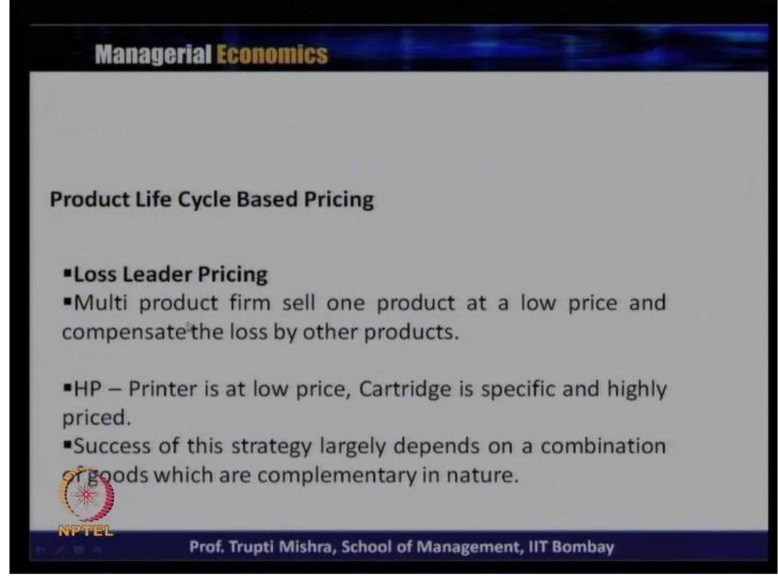

Then one more category is loss leader pricing and what is loss leader pricing? Here the multiproduct firms sell one product at a low price and compensate the loss by the other product. So, combining together whatever the prices of the two products that has to be same, but when they are offering it, they always charge us a lower price, but they compensate the loss by charging the prices of the other product.

Typically, it happens in case of the complementary product, and how it happens? If if you have seen, typically HP does that. And what HP does? Through this loss leader pricing, they offer the printer at a lower price. And for all of their printers, the cartridge is very specific and the cartridge is very highly priced. So, in this case, even if they are offering the printer at a lower price, since the cartridge is high value, the value of the printer and the cartridge is covered through combining combining the price of the printer and the cartridge.

So, generally, they are offering the product at a low price, but whatever the requirement the complementary products that is on a high price and that is very specific, and the consumer cannot try to substitute whatever the complementary product. And in that case, the prices of the high value and the low value product both get covered in the combined price.

However, the success of these strategies always depends on the combination of an output which are complementary in nature or the company has to produce also the complementary goods. Then only they can do practice this loss leader pricing.