



**Product and Brand Management**  
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**Lecture: 14**  
**Product Life Cycle - II**

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**Product Life Cycle**

Levitt, T. (1965). *Exploit the* [http://repository.dinus.ac.id/docs/ajar/Exploit\\_the\\_Product\\_Life\\_Cycle.pdf](http://repository.dinus.ac.id/docs/ajar/Exploit_the_Product_Life_Cycle.pdf)  
(Vol. 43).  
Graduate School of Business Administration, Harvard University.

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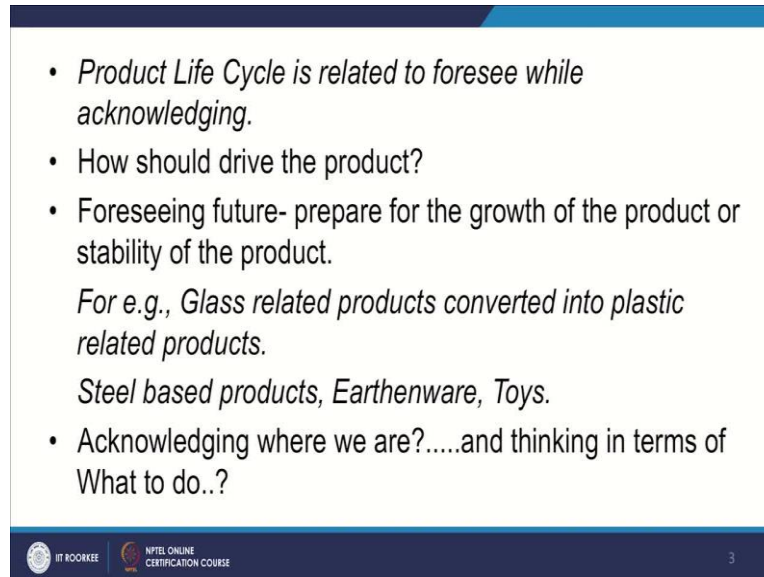
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Welcome back, friends. Carrying forward with the discussion on product lifecycle and the associated aspects, let me draw your attention towards Levitt's paper, Exploit the Product Life Cycle. The reference is given here, and I have given the link also. This has been a pivotal kind of paper written by Levitt in 1965. It is a very structured description of how a product may traverse, and what a product manager might do. He has actually focused upon elements of decision-making associated with the understanding of product life cycle.

I would recommend you read this paper and think in terms of what we are going through as far as the discussion goes. Definitely, there is a wonderful chapter written by Professor Philip Kotler in his book Marketing Management on this.

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- *Product Life Cycle is related to foresee while acknowledging.*
- *How should drive the product?*
- *Foreseeing future- prepare for the growth of the product or stability of the product.*  
*For e.g., Glass related products converted into plastic related products.*  
*Steel based products, Earthenware, Toys.*
- *Acknowledging where we are?.....and thinking in terms of What to do..?*

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PLC (Product Life Cycle) is related to foreseeing while acknowledging. I am saying this with reference to the discussion we have had in the last session. If you want to revisit that video, please do that. Once you watch that video, reiterate those things in your mind when we discussed different scenarios.

A product manager is looking at his product with the intensity of the name associated with that. I remember mentioning that, but I will come to this point later on when we talk about a brand, but a product manager thinking about his product, for example, a car, or a tea and then that tea can be a highly renowned name. The tea can be from a highly renowned coffee brand or a locally sold tea for example, but I will not go into the discussion of that. What is his target segment and how many people know about him and what is the intensity of their awareness of the brand?

Let us not go into that right now, but just focus on the product he wants to foresee, where it is placed, that is, where it would go. He wants to acknowledge where it stands in terms of sales volume, and the number of customers, for that matter, if you want to convert it that way. Then he wants to foresee where the product would be taken, how he should drive the product, I should say, the decision-making perspective.

When you say foreseeing the future, we have to prepare for the growth of the product or let us say stability of the product. If it is stagnating somewhere in terms of the number of customers or sales volume, for example, glass-related products, glass bottles and several other things, that product got converted into plastic-based products.

If a product manager is actually driving glass-based products, especially in terms of water bottles or let us say glasses or packaging material in terms of, packaging several kinds of liquids. If he is into industrial sales, B2B marketing or B2C marketing or direct selling to consumers, he is wondering where would he be taking this kind of product at this stage. Almost two and a half or three decades back, a product manager thinking in terms of glass base products would have imagined that this is going downwards, and I should be thinking in terms of converting it into a plastic-based packaging product or plastic-based water bottles. That is what the product manager's dilemma is about, where to take it, how to take it and then he takes a call.

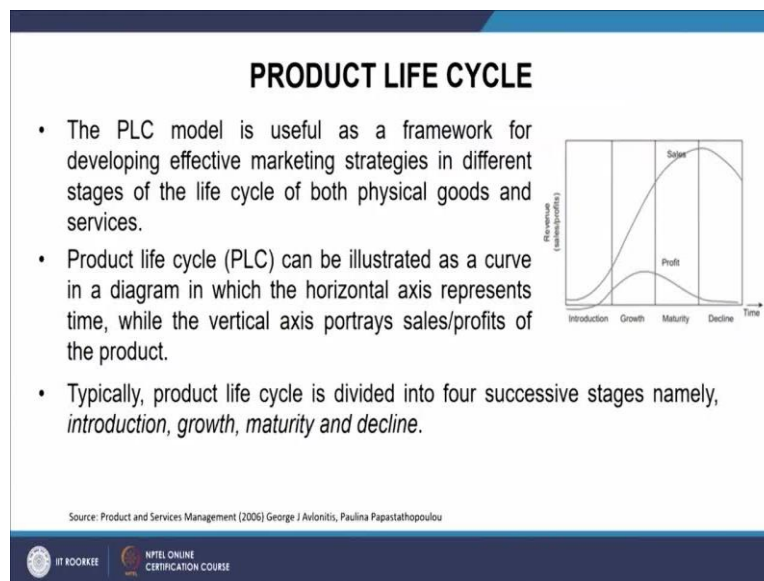
For example, steel-based products are not fully vanished, but still are there. Some product managers are doing wonders on that, I will be talking about it, how it goes and why it happens and how it happens, because there is a stage we can bring on, as far as rejuvenating things basically, despite the decline.

Then toys, several kinds of toys. The material has changed, and the perspective has changed. The story narrative around the toys is changing, and several kinds of characters are coming up in due course of time. There was a course called Master of Computer Applications, a fundamental course which is no longer there now. It was a very high-selling program, 2 years degree program. I am not saying computer application skills are no more there. They have travelled into several kinds of courses and very important courses have been launched instead of Master of Computer Applications, but MCA as a product is no longer there. Hence foreseeing the future, so as to prepare, acknowledge where we are, and think in terms of what to do. If I find that MCA is declining as a program, what should I do?

Should I be putting off the institute as well? No, I should be thinking in terms of converting that syllabus with present or contemporary relevance. Taking it towards being a different kind of a program, probably targeting the same kind of customer or bringing on board the newer kinds of customers. I reiterate the fact that I do not wish to call students customers, but when we are talking of MCA as a program, then this is a compulsion.

Just take it that way, although I have always taken students as products rather than customers. When we say what to do, the answer is product strategy and management. That is what product managers do, they strategize and manage. Then the subsequent question is, how and that we will try to understand in due course of time. But before that, let us come back to the main subject, which we have been discussing and pursuing- trying to understand the product lifecycle.

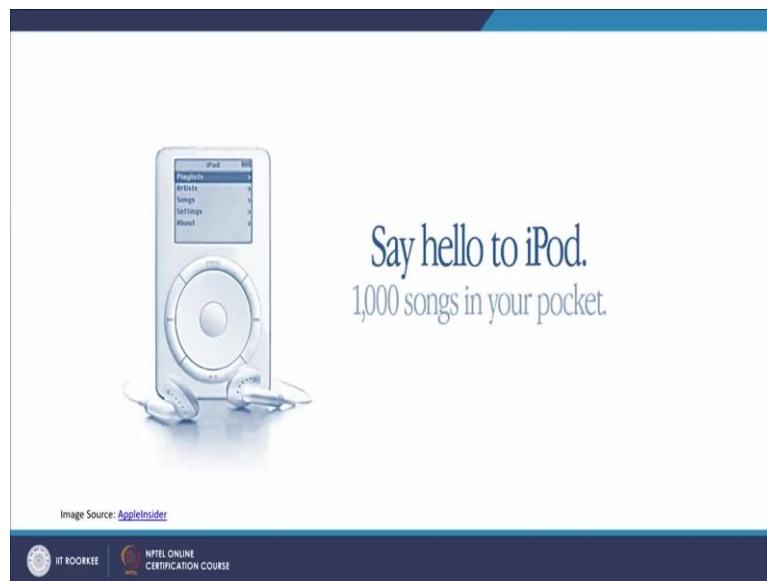
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The PLC model is useful as a framework for developing effective marketing strategies in different stages of the lifecycle of both physical goods and services. That is the point precisely which we discussed just a while ago i.e. effective marketing strategies and development of effective marketing strategies. The product lifecycle can be illustrated as a curve in a diagram in which the horizontal axis represents time while the vertical axis portrays sales/profits. It can be seen in terms of the number of customers as well, although the number of customers is not used often because the number of customers does not always justify itself in terms of profits.

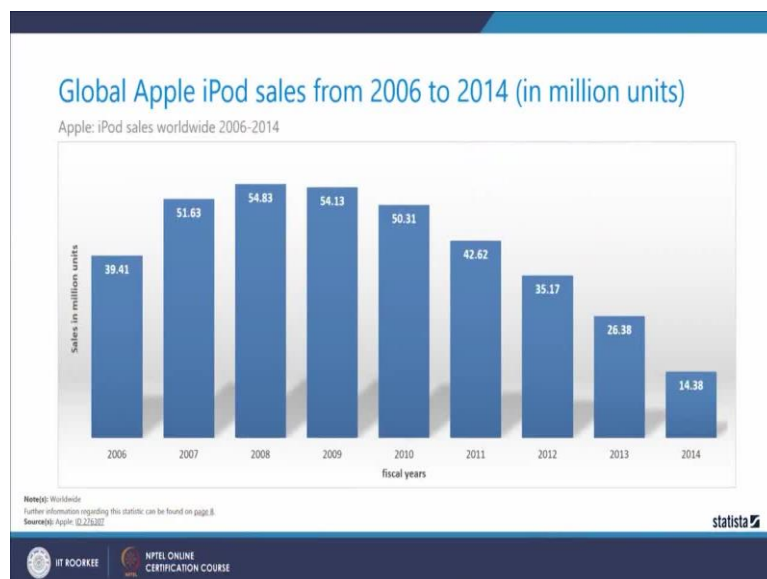
There are typical stages associated with a product's lifecycle. We have divided it that way. These stages are introduction, growth, maturity, and decline. We will be talking about these stages subsequently. In the meanwhile, look at this.

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This was a beautiful product, iPod, with 1000 songs in your pocket. This was a later version of the iPod. I remember the best version, which I liked, the smallest one-stamp sized kind of an equipment, which if you are just holding it in your hand like this (I mentioned that earlier, somewhere in our discussions, if I remember correctly, probably in some of the courses. I think integrated marketing communication if I am not wrong) so and then just put it in the pocket and then you keep on changing the songs and listening to those and so on. A beautiful product, a wonderful product and I still have one.

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Given above is the global Apple iPod sales from 2006 to 2014 in million units. Just look at the bars here. It was launched in 2000 if I am not wrong and you can check it on the sources.

We could only fetch the data from 2006. If you look at the graph from 2001 onwards, there will be almost a PLC graph available for you. As far as this particular product goes, Apple exited that product in due course of time, because they wanted downloadable music probably on mobile phones and that was a much more feasible thing for them to infuse the capability of an iPod into their mobile phones.

Probably that was the reason, but if you will look at the trajectory of this product from 2001 to 2014, 14 years. It went quite well suitably and then slowly got exited and so on. The graph justifies and this you can find in terms of data about all the other products and this would give you an insight on how and what on especially, what happened in terms of the products.

Now, let us go to the stages one by one. First is the introduction stage and as the text says, as the book says, the introduction stage or any stage for that matter, can be seen with the perspective of categories. For example, how to look at the introduction stage with reference to sales.

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Introduction Stage	
Categories	Description
Sales	Sales growth tends to be slow because it takes time to roll out a new product and gain consumer acceptance.
Profits	Profits are negative or low.
Price	Prices tend to be higher because costs are high, and firms focus on buyers who are the readiest to buy.
Promotion	Promotional expenditures are at their highest ratio to sales because of the need to <ul style="list-style-type: none"> <li>• Inform potential consumers</li> <li>• Induce product trial</li> <li>• Secure distribution in retail outlets</li> </ul>
Examples	Self driving cars, AI powered drones, 3D printing etc.,

Source: Philip Kotler, and Kevin Lane Keller, Marketing Management 15th edition, Pearson, 2016 Indian Edition Published by Pearson India Education Services Pvt. Ltd 2016

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Sales growth tends to be slow because it takes time to roll out a new product and gain consumer acceptance, but it is not a universal kind of thing. Here it is a broader outlook given by authors, which is commonly found. I will not say this because you will find many products which immediately pick up and there is much less difference in terms of their introduction and growth stages.

They might immediately take a sharp rise in terms of sales and talking of Apple, Apple iPhones had a different kind of model. You will find that immediate pick up in terms of sales.

Profits, in most cases, are negative, because the product has yet to pick up. Profits are low because costs are very high and there is the cost of marketing which is the highest at this particular stage because you are putting up a lot many campaigns, you are organizing events, and you are going through so much in due course of time. For this description, just watch my videos on the integrated marketing communication course and you will realize how cost works and how things are.

Then comes, the price. Prices tend to be higher, because costs are high, and firms focus on buyers who are within the radius to buy. Again, it is always not the universal thing and prices might be low and you have introductory prices many times. You might put up high prices always all the time. This is a different kind of strategic perspective pursued by different kinds of organizations looking at the competitive scenario, for example, competition is high. You cannot just put up the high price basically. But if you are sure of your brand value, as you said Apple or Samsung, they definitely put up a different kind of price bracket for many of their products, and it is not common in every product actually. There are different kinds of products in lines and we have talked about lines and those kinds of discussions earlier as well.

Then promotion; Promotional expenditure is at its highest ratio to sales, because of the need to inform potential consumers. We have just mentioned or talked about this induced product trial, distribution, retail outlets, and so on. There are several examples here, I would urge you and request you to start listing down different kinds of examples you can think of. Start working on those, because that will enable you further to develop your understanding of what we are talking of. I can give you a countable number of examples, but you can go for innumerable examples. For example, self-driving cars. Apple is also launching one, Google is working on that if I am not wrong, Tesla is working on that, and several larger organizations are focusing on that kind of thing. A whole lot of technological backups are there. So, they are still, and some are testing those parts on road basically. We would not say that those are in the introductory stage, but they are in the pre-introductory stage. We can always put up a stage before the introduction stage as well. The graph which, I showed you mentions the product development stage. Until and unless it becomes commercially viable it is actually projected on with reference to the usage of the customer, it is somewhere between the development and introductory stage. In the last discussion, I remember, I mentioned about AIBO, Sony's robot. So, that is also, that kind of an example.

AI-powered drones, to me, are moving from introduction towards growth now, as that is actually somewhat working well. For example, 3D printing has grown and now it is traversing into 4D printing actually and it is very interesting. Just go to certain websites, and you would find that they have printed a complete bridge in the Netherlands.

It is very interesting. Basically, several kinds of technologies are enabling several kinds of products. Technology itself is a product because it is sold to some producer or manufacturer or user who further uses it for the development of products for further users and so on. We have talked about that when we talked about industry classification and consumer classification of products.

Online platforms have been here for a long, long time. They have been in the introductory stage for quite some time. If I am not wrong, probably zoom has been here for 7, or 8 years. WebEx as a platform has been here for quite some time. I am not sure about the time period, but during the past 2 years, when we have gone through this devastating interaction with the COVID-19 virus, all these platforms became the requirement of the day and growth came in. I will not say that it should be called happy growth, but growth still is there. Somehow these platforms played a very important role in all of us remaining connected. Otherwise, things would not have been that way. But as a product, these interactive platforms have grown.

Now come to the growth stage. Again, the categories are the same, and I will start retreating in front of you. I will be talking about the strategic orientation of a product manager while looking at his products, in terms of stages. From the decision-making perspective, I will be referring to this later on, but at this moment, I will just be sailing you through different stages.



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Growth Stage	
Categories	Description
Sales	Rapid climb in sales because early adopters like the product, and additional consumers start buying it.
Competitors	New competitors enter, attracted by the opportunities.
Profits	Profits increase as marketing costs are spread over a larger volume, and unit manufacturing costs fall faster than price declines, owing to the producer-learning effect.
Price	Prices stabilize or fall slightly, depending on how fast demand increases.
Promotion	Companies maintain marketing expenditures or raise them slightly to meet competition and continue to educate the market. Sales rise much faster than marketing expenditures, causing a welcome decline in the marketing-to-sales ratio.
Examples	Electric Vehicles, Smart Phones

Source: Philip Kotler, and Kevin Lane Keller, Marketing Management 15th edition, Pearson, 2016 Indian Edition Published by Pearson India Education Services Pvt. Ltd 2016

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Then in the growth stage, sales climbs because early adopters, the customers, start purchasing that and it starts picking up. The additional consumer starts buying it and brand awareness starts building itself up because you have put in lots of money in as far as suitable proportional money in terms of cost of marketing, advertising, integrated marketing communication and retail and distribution and so, on.

Competitors; new competitors start entering or people who have been waiting for you to try the waters enter. They have been also looking, staying at the bay and then they jump into the fray, because, they never wanted to interact with that kind of a cost in relation to the introduction of the product. They thought that once the market starts building up they would come in. Hence the competition comes in from all sides and starts pouring in. Many times many products are pioneers in their categories and at that time, many people start entering the fray. Deliberately many times products are not pioneers. The same category exists but the product is new. At that time, you will not find so many new entrants coming into the fray, but the existing competition is very strong. They push it from all sides to retain their customers and push you outside as an entrant. This kind of thing has been discussed by Michael Porter in his five forces model and it is also a very important contribution. It can be referred to while talking about new entrants or substitutes and those kinds of elements, which he has categorically mentioned.

Now profits; profits increase as marketing costs is spread over a larger volume. Unit manufacturing costs fall faster and then price declines, owing to the producer learning effect.

It starts getting in favor of the manufacturer or the producer, and prices stabilize or fall slightly. Again, I say that it is not universal. Many producers take advantage of the growth because they are the category drivers. We have talked about categories. They have their category drivers and many times they take advantage of the situation and they go for charging a premium on that or many times they bring in associated products and they build up, a kind of package for the customer in terms of associated products, further driving benefits. This depends upon what situation you are in and that is why I talked about acknowledging and foreseeing in terms of a product manager's task.

Then comes promotion. Companies maintain marketing expenditure or raise it slightly or even reduce it if they are doing very well to meet competition and continue to educate the market. Many times, they go for different kinds of strategies like flighting or those kinds of campaigns wherein they go for a spurt and then they reduce it and then they go for a spurt once again and so, on. Sales rise is much faster than market expenditure causing a welcome decline in the marketing-to-sales ratio. For example, electric vehicles, are in the early growth phases for sure, and smartphones are in the higher growth phases.

Here again, I would give you important input, because many times in cases of different products and product categories, you would find that the length of a particular phase is, extremely different. For example, in the case of smartphones, you would realize that the length of the growth phase might be slightly longer as a product and a product category. It depends upon, where to put that as far as that length or period goes and that actually depends upon our own insight, our own understanding and data and research, which we have gone through and data we have.

Now comes the third stage: the maturity stage.

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Maturity Stage	
Categories	Description
Sales	The rate of sales growth will slow in earliest phase. Afterwards, sales per capita flatten because of market saturation as most potential consumers have tried the product, and future sales depend on population growth and replacement demand and ultimately the sales slowdown creating overcapacity in the industry.
Competitors	New competitive forces emerge, and weaker competitors withdraw. A few giants dominate, and they profit mainly through high volume and lower costs. Surrounding them is a multitude of market nichers, including market specialists, product specialists, and customizing firms.
Profits	Profits starts declining.
Cost	Low cost per customer.
Promotion	Companies starts decreasing their promotion expenditure.
Examples	Televisions, Computers
<small>Source: Philip Kotler, and Kevin Lane Keller, Marketing Management 15th edition, Pearson, 2016 Indian Edition Published by Pearson India Education Services Pvt. Ltd 2016</small>	
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Sales, the rate of sales growth will slow down in the earliest phase. It is an uphill kind of situation, competition is very strong, and many times the customer is tired of buying the same kind of a product. They want something new and are fulfilling their needs from several kinds of options. There can be many reasons. Afterwards sales per capita flattens, because of market saturation as most potential consumers have tried the product. Future sales depend upon population growth and replacement demand and ultimately the sales slowdown thus creating overcapacity in the industry.

There can be several other reasons. However, remember one thing here, these several kinds of reasons become the basis for the decision-making of product managers. A very important input at this stage. Product managers if acting reactively, which means, looking at or passing through the stages if they take decisions on these kinds of elements, might not be such a successful move.

The most important thing for a product manager is to foresee and I am repeating this word foreseeing because forecasting is something different. Forecasting is a methodological perspective, wherein you put up some data and then you look into variables and then you look into dependence and independence of variables and then you forecast that this is how things are going to be. It is a very scientific exercise people have been doing on the basis of lots of data and data insights and inputs and so on. But foreseeing is an art. Many times despite having all the statistical capabilities, artificial intelligence associated with what you can think of and the data science supporting you, having all those elements along with you many times decisions do not fall into the right categories. I have not been, favouring the

usage of the word failure, but then I would say that in those products foreseeing has not been done so well. They are not usually accepted so well.

Then come competitors. New competitive forces emerge from all sides because along with substitutes, alternatives are also being brought in. Technological changes are going on, environmental changes are going on and weaker competitors- they start to withdraw. Many times, competition is very important for the health of the complete industry. If competition is withdrawing, one should be careful. A few giants dominate and they profit mainly through high volume and lower costs surrounding them in a multitude of market niches, including market specialists, product specialists and customizing firms. I can elaborate on all these elements from the perspective of decision-making, which I would refrain from doing at this moment, because I want you to think in terms of all these elements, with the perspective of the question I shared with you about what to do. All along the course, I will be continuously talking about the decision-making perspective of product managers and the basis would remain the same or similar.

Then in this stage profits start declining, and there is a low cost per customer because you eliminate some procedures and so on. We have talked about reverse positioning and those kinds of aspects also and here recall those.

Companies start decreasing their promotion. Now, at this moment, sometimes logic says that promotion should be increased, but then your profits are declining and you cannot compensate for the cost of promotion. So you reduce the promotion. Now, this is a very paradoxical kind of thing many times. What should be done is again a question mark. Note it down, think of this. We may address this in due course of time.

Examples can be televisions and computers. They can be put here somewhere in the maturity stage. Think of it, it can be somehow because if you will notice your habits, especially when the user is getting transformed in terms of software availability and different kinds of software coming into the fray, then definitely computing or usage of computers, has been traversing to a different kind of levels.

Decline a final stage should I say. To me, it is not the final stage, because I wish to remain hopeful, and I will tell you why.

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Decline Stage	
Categories	Description
Sales	Sales may decline for several reasons, including technological advances, shifts in consumer tastes, and increased domestic and foreign competition. The decline might be slow, as for <b>sewing machines and newspapers</b> , or rapid, as it was for 5.25 floppy disks and eight track cartridges. Sales may plunge to zero or petrify at a low level.
Competitors	Declining number.
Profits	As profits decline, some firms withdraw.
Price	Some may resort to price reductions to remain in the market.
Promotion	Marketing budgets are cut.
Example	CDs, Hard book Encyclopedias, Cable TV Services etc.

Source: Philip Kotler, and Kevin Lane Keller, Marketing Management 15th edition, Pearson, 2016 Indian Edition Published by Pearson India Education Services Pvt. Ltd 2016

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Look at the decline stage, wherein sales may decline for several reasons, including technological advances, shifts in consumer tastes and increased domestic and foreign competition. The decline might be slow, as for swing machines and newspapers. Here again, I would suggest that it is also a relative kind of thing. For many markets, for many customers, and for many producers, sewing machines would have vanished. But still, there are 1 or 2 organizations and we have talked about that maturity stage, which is actually continuously producing sewing machines and there are buyers who are continuously buying those. Probably in different forms, but independent individual buyers are also buying those newspapers.

Just a while ago, I told you that Dainik Jagran is one of the largest-read newspapers in the world. Newspapers as a product are marked on that trajectory somewhere between maturity and decline, but many newspapers as products are still in growth. That is the point, which we have to think of. I definitely admire the intelligence of product and brand managers of newspapers like Dainik Jagran. Again mentioning of decline, this might be slow or rapid as it was for 5.25 floppy disk and eight-track cartridges, sales may plunge to 0 or a very, very low level basically.

Competitors, there is a lot of decline in number because ultimately the product is vanishing. Again it is relative in character. Profits decline as it forces some firms to withdraw. In price, some may resort to price reductions to remain in the market, but again that is not a profit-making kind of thing. Promotions are almost nonexistent. Everything goes on by its own brand value in due course of time. Several examples are there: CDs and cable TV services are

going through. Again decline has a timespan, some might be at the later end, some might be at the earlier stages, and so on.

Just remember the discussion we have just had on different stages. I will be coming back to you with insights on that. What should a product manager think, in terms of when he foresees and understands that? For example, under the sales category, he might face x situation, what should he do? How should he go about it?

While talking of those kinds of elements, I will be talking of one or two more stages, one which can be seen as an intermediary stage and the other stage which can be seen as again post decline stage. That can be an interesting discussion for us to build upon the concept of the product life cycle. I will be seeing you next time. Till then, goodbye.