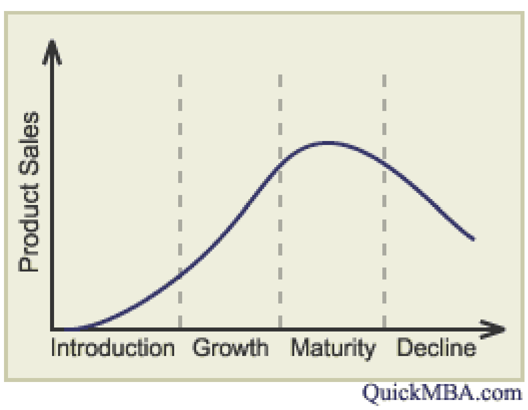
SUBJECT – MARKETING MANAGEMENT
UNIT II – PRODUCT AND PRICING DECISIONS (PART – IV)

PRODUCT LIFE CYCLE (PLC)

Definition:

- The theory of a product life cycle was first introduced in the 1950s to explain the expected life cycle of a typical product from design to obsolescence, a period divided into the phases of product introduction, product growth, maturity, and decline.
- The goal of managing a product's life cycle is to maximize its value and profitability at each stage.
- Life cycle is primarily associated with marketing theory.
- A new **product** progresses through a sequence of stages from introduction to growth, maturity, and decline. This sequence is known as the **product life cycle** and is associated with changes in the marketing situation, thus impacting the marketing strategy and the marketing mix.
- The **product life cycle** is an important concept in marketing.
- It describes the stages a product goes through from when it was first thought of until it finally is removed from the market.
- Not all products reach this final stage. Some continue to grow and others rise and fall.



Characteristics of PLC Stages

There are the following major Product life cycle stages, which are defined as under:

<table>
<tr><th>Stage</th><th>Characteristics</th></tr>
<tr><td>1. Market introduction stage</td><td>
This is the stage in which the product has been introduced first time in the market and the sales of the product starts to grow slowly and gradually and the profit received from the product is nominal and non-attained.
The market for the product is not competitive initially and also the company spends initially on the advertisement and uses various other tools for promotion in order to motivate and produce awareness among the consumers, therefore generating discerning demands for particular brand.
The products start to gain distribution as the product is initially new in the market and in this stage the quality of the product is not assured and the price of the product will also be determined as low or high.

costs are very high
slow sales volumes to start
little or no competition
demand has to be created
customers have to be prompted to try the product
makes little money at this stage
</td></tr>
<tr><td>2. Growth stage</td><td>
In the Growth stage, the product is present already in the market and the consumers of the products are habitual of the product
There is quick growth in the product sales as more new and new customers are using and trying and are becoming aware of the product.
The customers are becoming satisfied from the product and they bought it again and again.
The ratio of the product repetition for the trial procurement risen and also at this level, the competitors have started to overflow the market with more appealing and attractive inventions.
This helps in creating increased competition in the market and also results in decreasing the product price.

costs reduced due to economies of scale
sales volume increases significantly
</td></tr>
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<table>
<tr><td></td><td>3. profitability begins to rise
4. public awareness increases
5. competition begins to increase with a few new players in establishing market
6. increased competition leads to price decreases</td></tr>
<tr><td>3. Maturity stage</td><td>• In maturity stage, the cost of the product has been decreased because of the increased volume of the product
• The product started to experience the curve effects.
• Also, more and more competitors have seen to be leaving the market.
• In this way very few buyers have been left for the product and this results in less sales of the product.
• The decline of the product and cost of attaining new buyers in this level is more as compare to the resulted profit.
• The brand or the product differentiation via rebating and discounts in price supports in recalling the outlet distribution.
• Also, there is a decline in the entire cost of marketing through enhancing the distribution and promotional efficiency with switching brand and segmentation.

1. costs are decreased as a result of production volumes increasing and experience curve effects
2. sales volume peaks and market saturation is reached
3. increase in competitors entering the market
4. prices tend to drop due to the proliferation of competing products
5. brand differentiation and feature diversification is emphasized to maintain or increase market share
6. industrial profits go down</td></tr>
<tr><td>4. Saturation and decline stage</td><td>• In this stage, the profit as well as the sales of the product has started to decline because of the deletion of the product from the market.
• The market for the product in this stage, started to show negative rate of growth and corroding cash flows.
• The product, at this stage may be kept but there should be less adverts.

1. costs become counter-optimal
2. sales volume decline</td></tr>
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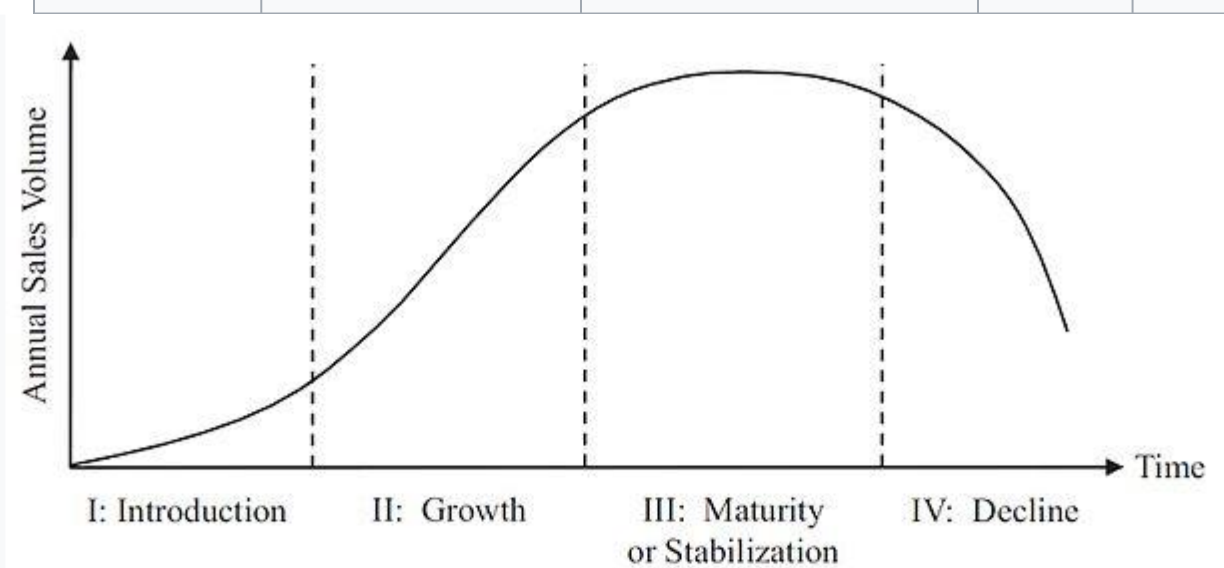
	3. prices, profitability diminish 4. profit becomes more a challenge of production/distribution efficiency than increased sales Note: Product termination is usually not the end of the business cycle, only the end of a single entrant within the larger scope of an ongoing business program.

Identifying PLC Stages

Identifying features	STAGES			
	Introduction	**Growth**	**Maturity**	**Decline**
Sales	Low	High	High	Low
Investment cost	Very high	High (lower than intro stage)	Low	Low
Competition	Low or no competition	High	Very high	Very High
Profit	Low	High	High	Low



Limitations

- It is important for marketing managers to understand the limitations of the PLC model.
- It is difficult for marketing management to gauge accurately where a product is on its life cycle.
- A rise in sales itself is not necessarily evidence of growth, a fall in sales itself does not typify decline and some products, e.g. Coca-Cola and Pepsi, may not experience a decline.
- Differing products possess different PLC "shapes".
- A fad product develops as a steep sloped growth stage, a short maturity stage, and a steep sloped decline stage.
- Products such as Coca-Cola and Pepsi experience growth, but also a constant level of sales over a number of decades.
- A given product (or products collectively within an industry) may hold a unique PLC shape such that use of typical PLC models are only useful as a rough guide for marketing management.
- For specific products, the duration of each PLC stage is unpredictable and it's difficult to detect when maturity or decline has begun.
- Because of these limitations, strict adherence to PLC can lead a company to misleading objectives and strategy prescriptions.

Marketing Strategies for Different PLC Stages:

- Product passes through four stages of its life cycle.
- Every stage poses different opportunities and challenges to the marketer.
- Each of stages demands the unique or distinguished set of marketing strategies.
- A marketer should watch on its sales and market situations to identify the stage in which the product is passing through, and accordingly, he should design appropriate marketing strategies.
- Here, strategy basically involves four elements – product, price, promotion, and distribution.
- By appropriate combination of these four elements, the strategy can be formulated for each stage of the PLC.
- Every stage gives varying importance to these elements of marketing mix. Let us analyze basic strategies used in each of the stages of the PLC, as described by Philip Kotler.

I. Marketing Strategies for Introduction Stage:

- Introduction stage is marked with slow growth in sales and a very little or no profit.
- Note that product has been newly introduced, and a sales volume is limited; product and distribution are not given more emphasis.
- Basic constituents of marketing strategies for the stage include price and promotion.

- Price, promotion or both may be kept high or low depending upon market situation and management approach.

Following are the possible strategies during the first stage:

1. Rapid Skimming Strategy:

- This strategy consists of introducing a new product at high price and high promotional expenses. The purpose of high price is to recover profit per unit as much as possible.
- The high promotional expenses are aimed at convincing the market the product merits even at a high price.
- High promotion accelerates the rate of market penetration, in all; the strategy is preferred to skim the cream (high profits) from market.

This strategy makes a sense in following assumptions:

(a) Major part of market is not aware of the product.

(b) Customers are ready to pay the asking price.

(c) There possibility of competition and the firm wants to build up the brand preference.

(d) Market is limited in size.

2. Slow Skimming Strategy:

- This strategy involves launching a product at a high price and low promotion.
- The purpose of high price is to recover as much as gross profit as possible.
- And, low promotion keeps marketing expenses low. This combination enables to skim the maximum profit from the market.

This strategy can be used under following assumptions:

(a) Market is limited in size.

(b) Most of consumers are aware of product.

(c) Consumers are ready to pay high price.

(d) There is less possibility of competition.

3. Rapid Penetration:

- The strategy consists of launching the product at a low price and high promotion.
- The purpose is the faster market penetration to get larger market share. Marketer tries to expand market by increasing the number of buyers.

It is based on following assumptions:

(a) Market is large.

(b) Most buyers are price-sensitive. They prefer the low-priced products.

(c) There is strong potential for competition.

(d) Market is not much aware of the product. They need to be informed and convinced.

(e) Per unit cost can be reduced due to more production, and possibly more profits at low price.

4. Slow Penetration:

- The strategy consists of introducing a product with low price and low-level promotion.
- Low price will encourage product acceptance, and low promotion can help realization of more profits, even at a low price.

Assumptions of this strategy:

(a) Market is large.

(b) Market is aware of product.

(c) Possibility of competition is low.

(d) Buyers are price-sensitive or price-elastic, and not promotion-elastic.

II. Marketing Strategies for Growth Stage:

- This is the stage of rapid market acceptance.
- The strategies are aimed at sustaining market growth as long as possible.
- Here, the aim is not to increases awareness, but to get trial of the product.
- Company tries to enter the new segments. Competitors have entered the market.
- The company tries to strengthen competitive position in the market.
- It may forgo maximum current profits to earn still greater profits in the future.

Several possible strategies for the stage are as under:

1. Product qualities and features improvement
2. Adding new models and improving styling
3. Entering new market segments
4. Designing, improving and widening distribution network
5. Shifting advertising and other promotional efforts from increasing product awareness to product conviction
6. Reducing price at the right time to attract price-sensitive consumers
7. Preventing competitors to enter the market by low price and high promotional efforts

III. Marketing Strategies for Maturity Stage:

- In this stage, competitors have entered the market.

- There is severe fight among them for more market share.
- The company adopts offensive/aggressive marketing strategies to defeat the competitors.

<u>Following possible strategies are followed:</u>

<u>1. To Do Nothing:</u>

- To do nothing can be an effective marketing strategy in the maturity stage.
- New strategies are not formulated.
- Company believes it is advisable to do nothing.
- Earlier or later, the decline in the sales is certain.
- Marketer tries to conserve money, which can be later on invested in new profitable products. It continues only routine efforts, and starts planning for new products.

<u>2. Market Modification:</u>

- This strategy is aimed at increasing sales by raising the number of brand users and the usage rate per user.
- Sales volume is the product (or outcome) of number of users and usage rate per users.
- So, sales can be increased either by increasing the number of users or by increasing the usage rate per user or by both.
- Number of users can be increased by variety of ways.

<u>There are three ways to expand the number of users:</u>

i. Convert non-users into users by convincing them regarding uses of products

ii. Entering new market segments

iii. Winning competitors' consumers

- Sales volume can also be increased by increasing the usage rate per user.

<u>This is possible by following ways:</u>

i. More frequent use of product

ii. More usage per occasion

iii. New and more varied uses of product

<u>3. Product Modification:</u>

Product modification involves improving product qualities and modifying product characteristics to attract new users and/or more usage rate per user.

Product modification can take several forms:

i. Strategy for Quality Improvement:

Quality improvement includes improving safety, efficiency, reliability, durability, speed, taste, and other qualities. Quality improvement can offer more satisfaction.

ii. Strategy for Feature Improvement:

This includes improving features, such as size, colour, weight, accessories, form, get-up, materials, and so forth. Feature improvement leads to convenience, versatility, and attractiveness. Many firms opt for product improvement to sustain maturity stage.

Product improvement is beneficial in several ways like:

(1) It builds company's image as progressiveness, dynamic, and leadership,

(2) Product modification can be made at very little expense,

(3) It can win loyalty of certain segments of the market,

(4) It is also a source of free publicity, and

(5) It encourages sales force and distributors.

4. Marketing Mix Modification:

- This is the last optional strategy for the maturity stage.
- Modification of marketing mix involves changing the elements of marketing mix.
- This may stimulate sales.
- Company should reasonably modify one or more elements of marketing mix (4P's) to attract buyers and to fight with competitors.
- Marketing mix modification should be made carefully as it is easily imitated.

IV. Marketing Strategies for Decline Stage:

- Company formulates various strategies to manage the decline stage.
- The first important task is to detect the poor products. After detecting the poor products, a company should decide whether poor products should be dropped.
- Some companies formulate a special committee for the task known as Product Review Committee.
- The committee collects data from internal and external sources and evaluates products.
- On the basis the report submitted by the committee, suitable decisions are taken.

Company may follow any of the following strategies:

1. Continue with the Original Products:

- This strategy is followed with the expectations that competitors will leave the market.
- Selling and promotional costs are reduced.
- Many times, a company continues its products only in effective segments and from remaining segments they are dropped.
- Such products are continued as long as they are profitable.

2. Continue Products with Improvements:

Qualities and features are improved to accelerate sales. Products undergo minor changes to attract buyers.

3. Drop the Product:

When it is not possible to continue the products either in original form or with improvement, the company finally decides to drop the products.

Product may be dropped in following ways:

i. Sell the production and sales to other companies

ii. Stop production gradually to divert resources to other products

iii. Drop product immediately.

Product Life-Cycle Management (PLM)

- **Product life-cycle management** (**PLM**) is the succession of strategies by business management as a product goes through its life-cycle.
- The conditions in which a product is sold (advertising, saturation) changes over time and must be managed as it moves through its succession of stages.

Goals

- The goals of Product Life Cycle management (PLM) are to reduce time to market, improve product quality, reduce prototyping costs, identify potential sales opportunities and revenue contributions, and reduce environmental impacts at end-of-life.
- To create successful new products the company must understand its customers, markets and competitors.
- Product Lifecycle Management (PLM) integrates people, data, processes and business systems.
- It provides product information for companies and their extended supply chain enterprise.
- PLM solutions help organizations overcome the increased complexity and engineering challenges of developing new products for the global competitive markets.

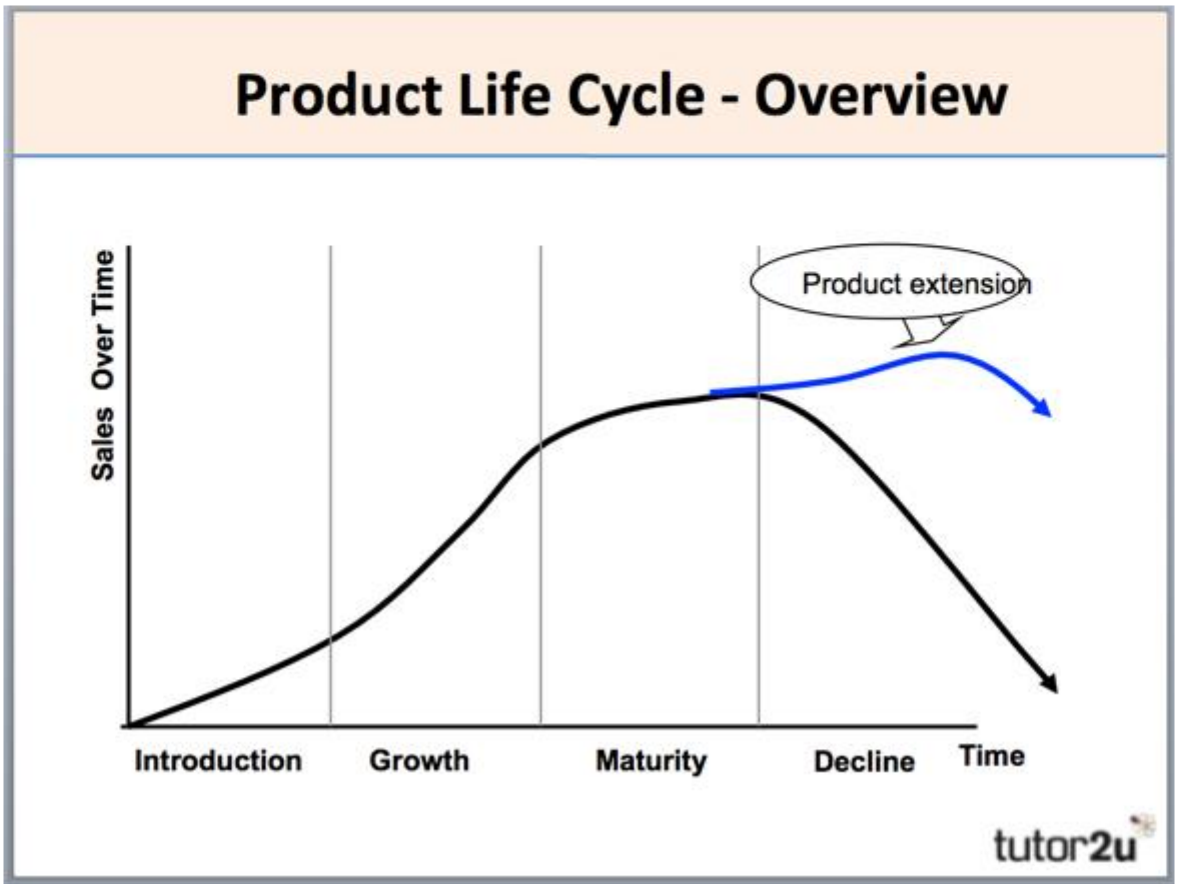
PLC management makes the following three assumptions:

- Products have a limited life and thus every product has a life cycle.
- Product sales pass through distinct stages, each posing different challenges, opportunities, and problems to the seller.
- Products require different marketing, financing, manufacturing, purchasing, and human resource strategies in each life cycle stage.

- Once the product is designed and put into the market, the offering should be managed efficiently for the buyers to get value from it.

- Before entering into any market complete analysis is carried out by the industry for both external and internal factors including the laws and regulations, environment, economics, cultural values and market needs.
- Product life cycle is guanine concept and this term 'product life cycle' is associated with every product that exists, however, due to a limited shelf life the product has to expire.
- From the business perspective, as a good business, the product needs to be sold before it finishes its life.
- In terms of profitability, expiry may jolt the overall profitability of the business therefore there are few strategies, which are practiced to ensure that the product is sold within the defined period of maturity.

Extending the Product Life Cycle



Extension strategies extend the life of the product before it goes into decline. Again businesses use marketing techniques to improve sales. Examples of the techniques are:

Advertising – try to gain a new audience or remind the current audience

Price Reduction – more attractive to customers

<u>Adding Value</u> – add new features to the current product, e.g. improving the specifications on a smartphone

<u>Explore New Markets</u> – selling the product into new geographical areas or creating a version targeted at different segments

<u>New Packaging</u> – brightening up old packaging or subtle changes

Changing customer consumption- By appreciating more frequent use showing their own benefit.

Heightening interest- Raising interest by offering Jackpot and other offers.