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# **Innovative Report on PRODUCT LIFE CYCLE**

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# PRODUCT LIFE CYCLE

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# MEANING

- + A Product Life Cycle (PLC) is the amount of time a product goes from being introduced into the market until its taken off the shelves. All products have certain length of life during which they pass through certain identifiable stages. The PLC is the conceptual representation of product ageing process. Like your life is divided into stages, same is with the life of a product.
- + A product begins with an idea, and within the confines of modern business, it isn't likely to go further until it undergoes Research and Development (R&D) and is found to be feasible and potentially profitable.
- + The demand of that product is gradually increased in the market and it reaches to its maximum, from where it starts to decline. It is the effective lifespan of a product. Newer, more successful products push older ones out of the market. The concept of Product Life Cycle helps to make informed business decisions, from pricing and promotion to expansion or cost cutting.

# DEFINITIONS

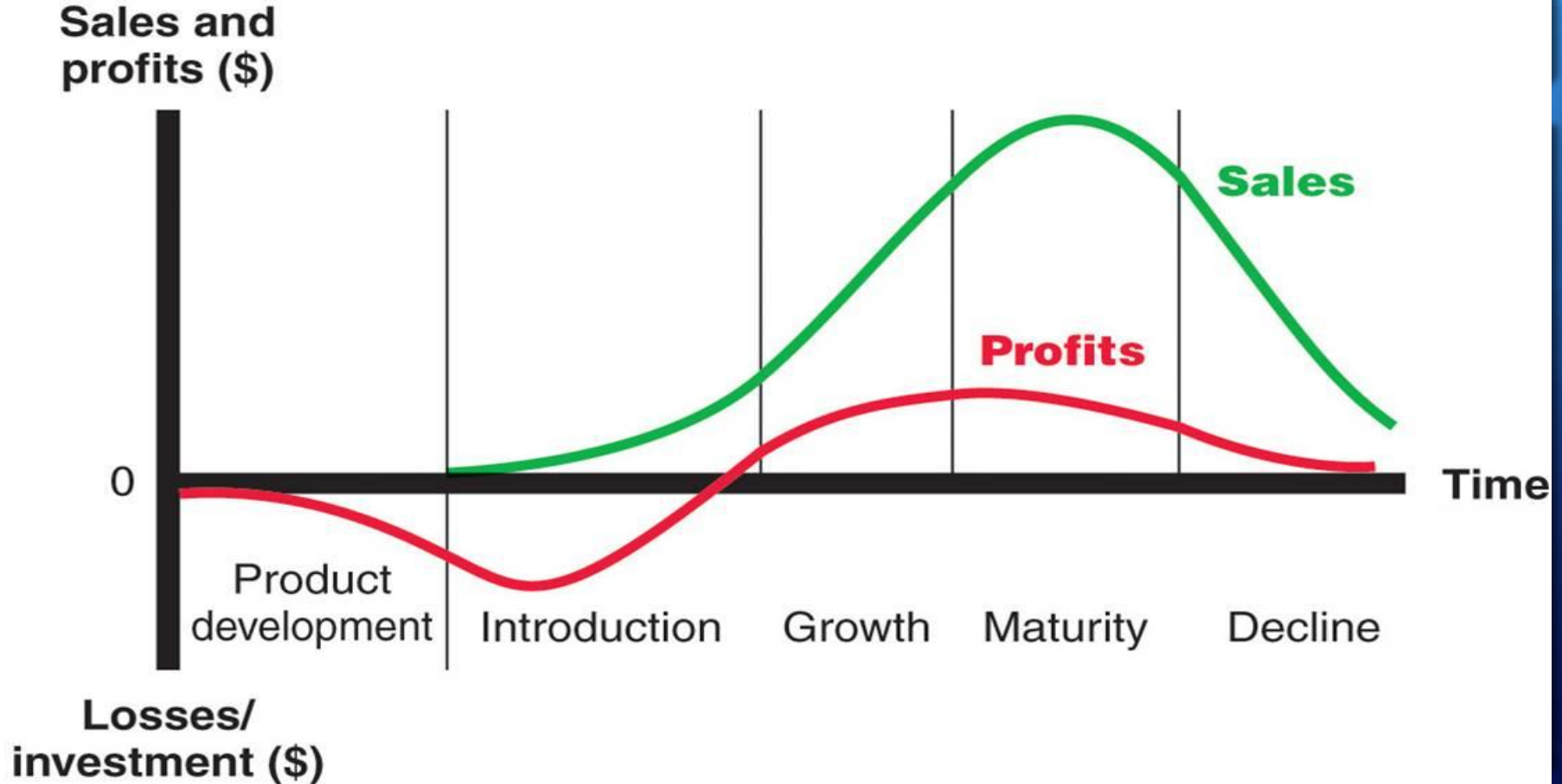
- + Acc. to Philip Kotler:

“The Plc is an attempt to recognize the distinct stages in the sales history of the product.”

- + Acc. to William J. Stanton:

“The Product life cycle concept is the explanation of the product from its birth to death as a product exists in different stages and in different competitive environments.”

## STAGES OF PRODUCT LIFE CYCLE



# INTRODUCTION STAGE

- + It is the first stage, wherein the product is launched in the market with full scale production and marketing program. The Company tries to build awareness about the product or service in a market where there is less or no competition.
- + The highlighting factor of this stage is that the product is a new one. It means "A product that opens up an entirely new market, replaces an existing product or significantly broadens the market for an existing product."
- + In this stage, sales grow at a very lower rate because it is not an effective demand. To push the product higher, the company has to incur heavy expenditure on advertisement to make it appealing to customers.
- + **Example:** *Self-driving cars*. Self-driving cars are still at the testing stage, but firms hope to be able to sell to early adopters relatively soon.

# CHARACTERISTICS

- + Low and Slow Sales.
- + High Product Price.
- + Heavy Promotional Expenses.
- + Lack of Knowledge.
- + Low Profits.
- + Narrow Product Lines.

# GROWTH STAGE

- + Once the market has accepted the product, sales begins to rise and product enter its second stage.
- + The product achieves considerable and widespread approval in the market. During this stage, the product or the innovation becomes accepted in the market, and as a result sales and revenues start to increase at an accelerated rate.
- + In this effective distribution, advertising and sales promotion are considered as the key factors.
- + **Example:** *Electric cars*. Electric cars still need to convince people that it will work and be practical. As there are more electric charging points and more people adopt, it becomes easier to sell to those who are more skeptical of new technology. The Tesla Model S is one such example which is in its growth phase.



# CHARACTERISTICS

- + Rapid Increase in Sales.
- + Product Improvements.
- + Increase in Competition.
- + Increase in Profits.
- + Reduction in Price.
- + Strengthening the Distribution Channel.

# MATURITY STAGE

- + During this stage, the market becomes saturated because the household demand is satisfied and distribution channels are full as the product has already reached widespread acceptance in the market, in relative terms.
- + The product has to face keen competition which brings pressure on prices. Though the sales of the product rises but at a lower rate. Profit margin however decline due to keen competition.
- + **Example:** *Many fast-moving consumer goods such as food.* The turnover from this is high, there is a lot of competition, which means that margins are limited and so are the marketing expenses.

# CHARACTERISTICS

- + Sales increases at decreasing rate.
- + Normal Promotional Expenses.
- + Uniform and Lower Prices.
- + Product Modifications.
- + Dealer's Support.
- + Profit Margin Decreases.

# DECLINE STAGE

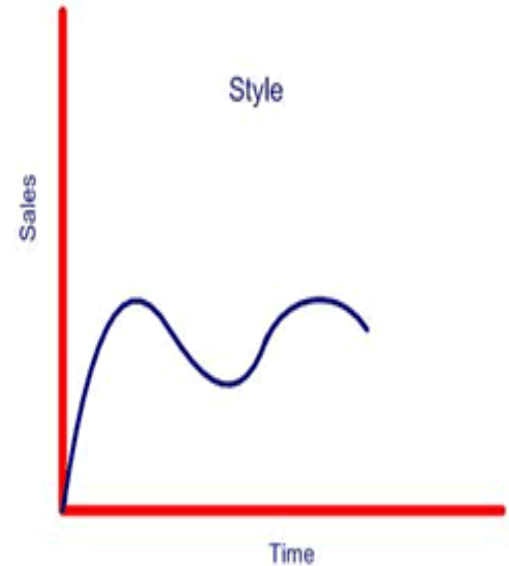
- + This is the final and crucial stage of Product Life Cycle. Sooner or later actual sales begin to fall under the impact of new product competition and changing consumer behaviour.
- + It is mainly caused by obsolescence, changes in customer preferences, technological advances, new regulatory requirements, such as environmental protection laws, global competition, etc.
- + The sales and profits fall down sharply and the promotional expenditure has to be cut down drastically.
- + **Example:** Sony VCRs are an example of a product in the decline stage. The demand for VCRs has now been surpassed by the demand for DVDs and online streaming of content.

# CHARACTERISTICS

- + Rapid Decreases in Sales.
- + Further Decrease in Prices.
- + No Promotional Expenses.
- + Suspension of Production Work.
- + Better Alternatives in the Market.

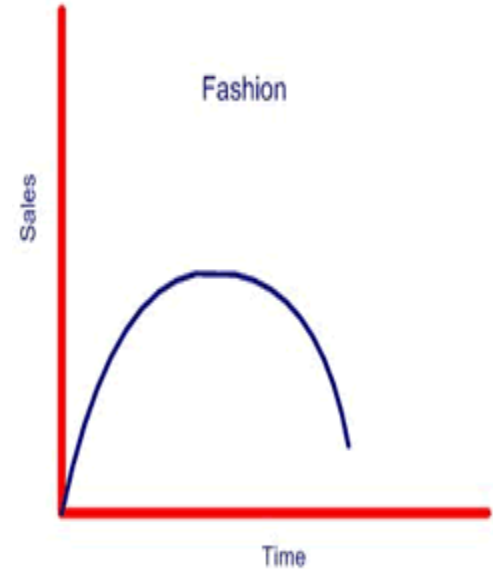
# PRODUCT LIFE CYCLE FOR STYLISH PRODUCTS

- + A style is the manner in which a product is presented and certain styles come and go.
- + Acc. to Kotler:  
"A style is a basic and distinctive mode of expression."
- + E.g. Furniture, Automobile, Clothing and shoes.
- + The current style for mobile phone is touch screen and this style will last until a new technology style appears. So, the shape of a style life cycle is like a wave, as one style fades out, another appears.



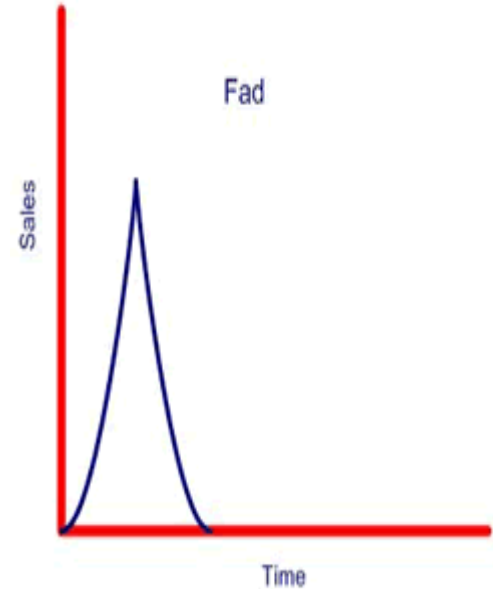
# PRODUCT LIFE CYCLE FOR FASHION PRODUCTS

- + A fashion refers to a currently accepted style in a specific field. It is a current trend which can have a long or short life cycle.
- + Fashion tends to grow slowly, remain popular for a while, then decline slowly.
- + The demand for the product increases at a faster rate, reaches to its top and with the change in fashion the product life enters the decline stage.
- + E.g. Readymade Garments, Purses, Bangles and Shoes.



# PRODUCT LIFE CYCLE FOR FAD PRODUCTS

- + FADS are fashions that enter quickly with great zeal, peak early and decline very quickly.
- + A FAD is a product that is around for a short period.
- + The demand for product initially increases very rapidly and then suddenly, starts to decrease at a similar rate.
- + E.g. Garments, Caps, Hair Style, Music Albums, Films and other fashion products.





# EXAMPLES OF PLC

*The life cycle of any product always carries it from its introduction to an inevitable decline.*

*Here are some examples.*

## + **Typewriter**

When typewriter was first introduced in the late 19th century, it grew in popularity as a technology that improved the ease and efficiency of writing. However, new electronic technology like computers, laptops and even smartphones have quickly replaced typewriters - causing their revenues and demand to drop off. Overtaken by the likes of companies like Microsoft, typewriters could be considered at the very tail end of their decline phase - with minimal (if existent) sales and drastically decreased demand.

## + **VCR**

Many of us probably grew up watching or using VCRs, but you would likely be hard pressed to find one in anyone's home these days. With the rise of streaming services like Netflix (NFLX) - Get Report and Amazon (AMZN) - Get Report (not to mention the interlude phase of DVDs), VCRs have been effectively phased out and are deep in their decline stage. Once groundbreaking technology, VCRs are now in very low demand (if any) and are assuredly not bringing in the sales they once did.

# CONT'D

## + **Electric Vehicles**

The rise of electric vehicles shows more of a growth stage of the product life cycle. Companies like Tesla (TSLA) - Get Report have been capitalizing on the growing product for years, although recent challenges may signal changes for the particular company. Still, while the electric car isn't necessarily new, the innovations that companies like Tesla have made in recent years are consistently adapting to new changes in the electric car market, signaling its growth phase.

## + **AI Products**

While AI (Artificial Intelligence) has been in development for years, it is continually pushing boundaries and developing new products that are in the introduction stage of the PLC. Amid dozens of new products, even AI-infused robots or autonomous vehicles are very much in a developmental (or introductory) stage in the market, as their products are still being tested and adopted in the market by consumers.

# FEATURES OF PRODUCT LIFE CYCLE

- + Every product has the life cycle just like every human being.
- + Every product cycle starts from an introduction of the product in the market and it is ceased after passing through the market growth and market stages.
- + It denotes that the product passes from different stages at different speed in course of completing the whole life cycle.
- + The profit of business firm grow rapidly in the stage of growth and starts declining due to competitive conditions at the stage of maturity. However, the sales volumes go on increasing.

# CONT'D

- + No two products have identical life cycle.
- + The duration of each stage is different for different products. It depends upon factors (nature of product, technological advancements, competition pressure, etc.)
- + It is not necessary that all products go through all stages, some fail at the initial stage, other may reach maturity stage after a long time.
- + It provides a useful framework for developing effective marketing strategies in different stages of the product life cycle.

# FACTORS AFFECTING THE PRODUCT LIFE CYCLE

- + Rate of technological change.
- + Rate of market acceptance.
- + Competitor's entry.
- + Economic and Managerial Forces.
- + Risk Bearing Capacity.
- + Government Policy.

# EXTENSION OF PRODUCT LIFE CYCLE

- + Product Modification.
- + Entry in the new market.
- + Promotion for frequent use.
- + Developing different usage.
- + Finding new uses.
- + Use of modern advertising and sales promotion techniques.

# IMPORTANCE OF PRODUCT LIFE CYCLE

- + Helpful in sales forecasting.
- + Helpful as a predictive tool.
- + Helpful as a planning tool.
- + Helpful as a control tool.
- + Helpful in framing marketing programme.
- + Helpful in price determination.
- + Development of new product.
- + Comparison of different products.

# USES OF PLC ANALYSIS

- + Conducting PLC analysis can help companies determine if their products are servicing the market they target efficiently, and when they might need to shift focus.
- + By examining their product in relation to the market on the whole, their competitors, sales and expenses, companies can better decide how to pivot and develop their product for longevity in the marketplace.
- + Examining their product's life cycle, specifically paying attention to where their products are in the cycle, can help companies determine if they need to develop new products to continue generating sales - especially if the majority of their products are in the maturity or decline stages of the product life cycle.



# MARKETING STRATEGIES DURING PLC

Every marketer tries that his product should stay in the market for the longest period, thus he has to take up various strategies at the different stages of the Product Life Cycle.

The four stages of PLC include:

1. Introduction stage
2. Growth stage
3. Maturity stage
4. Declining stage



# INTRODUCTION STAGE

- + The introduction stage starts with the launching of a new product by the marketer. The product is new one, so sales level is low and profits are negative.
- + It is very crucial stage for the marketer because the success or failure of the product is very much determined in this stage.

- Maruti 800 was cheapest car in the market.
- It was first imported in 1983.
- There was a huge gap in demand and supply.
- This was the introduction stage.



# STRATEGIES

- + Make proper advertising before the product is launched in the market.
- + Shorten the period of introduction as far as possible.
- + Heavy advertising and promotional expenses (attractive gifts).
- + Selective distribution and attractive discount to dealers.
- + If product is technical then adopt skimming pricing policy and if product is simple then adopt penetration pricing policy.

# GROWTH STAGE

- + If the new product satisfy the market, it will enter a growth stage in which sales increase at a faster rate.
- + The high profits attract the competitors to enter the market with improved alternate products.
- + Price remains the same or decreases slightly.

- Maruti 800 was under its growth stage when it ensured about people's expectations and matched their promises.
- It substantially increased in its production and sales.
- It also increased its profits.
- There wasn't any threats in the competition as it was the cheapest car.




# STRATEGIES

- + Improve the product quality.
- + Add new product features and improve the product style.
- + Enter into new market areas.
- + Reduce the price to attract more number of buyers.
- + Increase in promotional activities.
- + Strengthen the distribution channels by increasing the number of retailers.
- + New versions, in different sizes and price range are introduced to cater the requirements of types of buyers.
- + Create brand image of the product through promotional activities.
- + Emphasis on customer satisfaction.

# MATURITY STAGE

- + It has a longer duration than other stages. The sales increase at a very low rate. The product has to face keen competition. Competitors lower down the price, increase their advertising and sales promotion. It increases the profit.
- + A firm can improve the sales by changing one or more elements of marketing mix. It can reduce the price to attract new users and competitor's.

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- Maruti 800's Sales touched 200,000 in 1999.
  - This was the time when there was a reposition in Maruti products too.
  - There were 40 million 2-wheeler owners who were targeted.
  - Also, competitors like General Motors, Ford, and Tata entered the market.

# STRATEGIES

- + Improve the quality of the product and introduce some new models.
- + Give proper attention to increase the usage among the current customers and also pursue some new uses of the product.
- + Try to convert non-users into users of the product.
- + Introduce new packaging and wrapper change policy.
- + Lowering the price to attract more consumer.
- + Middlemen's margin is increased, to create the interest.
- + Give proper emphasis on advertising and promotional programmes.
- + Changes in the style and design of the product.

# DECLINING STAGE

- + In this stage, sales begin to fall and the product is gradually replaced by new innovation.
- + This stage is encountered because of technical advancements, change in consumer preference, increased competition.
- + For every marketer this stage is very crucial.

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- Maruti 800 faced serious competition from i10, Spark.
  - There was a drastic decrease in sales when only 33038 units were sold in 2009-2010



# STRATEGIES

- + Improve the product in a functional sense.
- + Review the marketing and production programs.
- + Emphasis on cost control techniques to generate profit.
- + Economy packs may be introduced to revive the market.
- + Adopt selective promotion of product to reduce distribution costs.
- + Packaging may be made more attractive and reusable packages.
- + R&D efforts are increased to innovate the new product.
- + Sales incentive schemes are introduced to get dealer's support.

# CASE STUDY ON PEPSI

In 1898, pharmacist Caleb Bradham developed Brads Drink, a formula designed to aid digestion. After strong interest from consumers in his pharmacy, Brad renames the drink “**Pepsi-Cola**” for \$100. The origins of Pepsi are very similar to that of *lucozada*, which was also first produced for medicinal purposes.

**Introduction Stage (1902):** Brad aimed to generate initial awareness and trial of his product. Only a basic product was launched: Pepsi-Cola was initially sold even without bottles. Instead the product was sold through soda fountains located in Brad’s pharmacies.



# CONT'D

**Growth Stage (1930-1970):** During growth, gaining market share is critical. Hence, Pepsi-Cola was marketed aggressively against Coca-Cola to encourage consumers to deflect. As the market becomes increasingly competitive, it is important to continually improve the product. Hence, Pepsi-Cola now came in bottles, rather than just soda fountain.

**Maturity Stage (1980-present day):** At this stage product are most profitable, which is why PepsiCo are likely to consider Pepsi as a cash cow and aim to make as much profit as possible from the brand.

**Declining Stage (Sometime In Future):** Cost reduction is key at this stage to help the brand remain profitable despite generating fewer sales. The range should become rationalized, and may be reduced to just Pepsi to leverage economies of scale and minimize costs.

**THANK YOU**