Product Life Cycle (PLC)

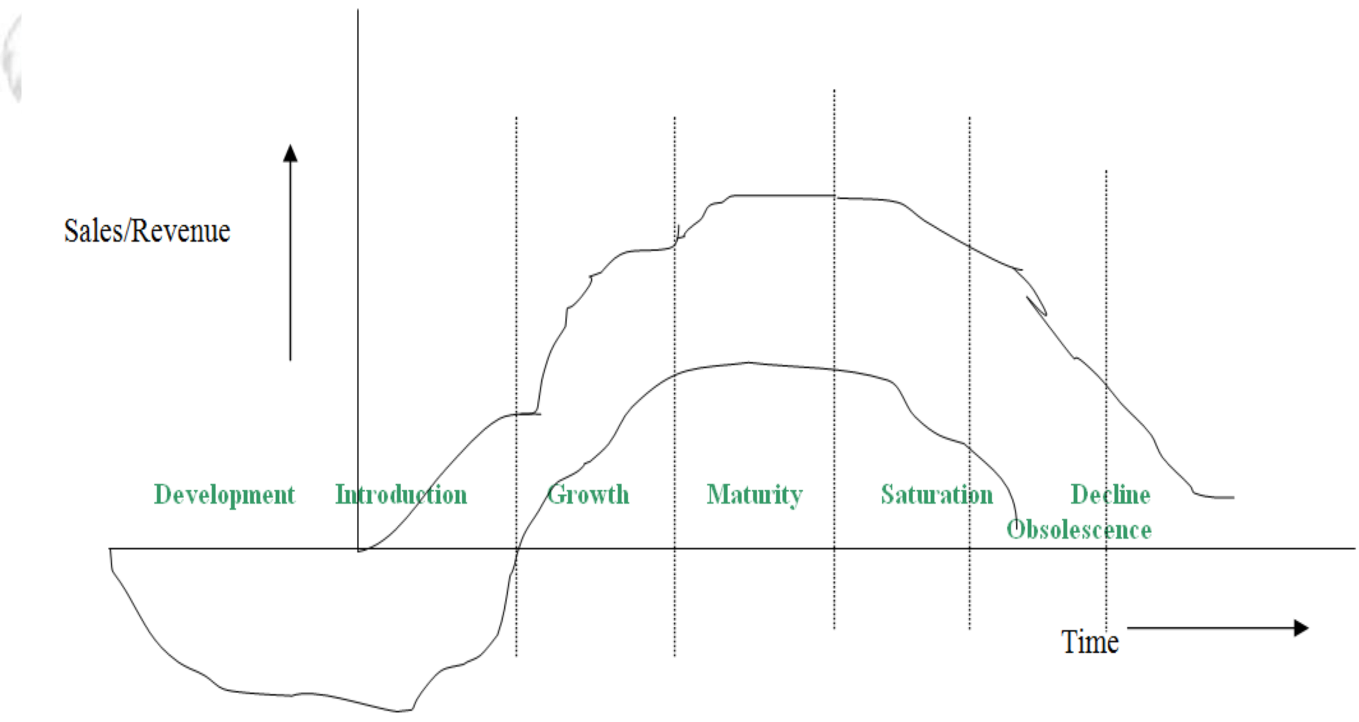
A product has a life cycle in much the same way a living organism does. We are born, then we grow and become matured and at last we die. In the same way, a new product is introduced to consumers, it grows and matures and when it loses appeal, it declines and eventually is taken off the market. Product life cycles can be modified and extended by marketers.

A product life cycle has multiple stages: (1) Development (2) Introduction (3) Growth, (4) Maturity and 5) Decline.

In maturity and decline stages, another two stages of saturation and obsolescence may occur respectively.

It can also be shown graphically. The graph often has two lines - one to show the level of profit, and one to show the level of sales:

Diagram of PLC



Understanding the typical life cycle pattern helps business to manage profitable products and to know when it is time to terminate unprofitable ones. As a product moves through its life cycle, the strategies for promotion, pricing, distribution and competition must be regularly evaluated and adjusted. Perceptive marketing managers try to ensure that the introduction, modification and termination of a product are timely and executed properly. Firms will often try to use extension strategies. These are techniques to try to delay the decline stage of the product life cycle. The maturity stage is a good stage for the company in terms of generating cash. The costs of developing the product and establishing it in the market are paid and it tends to then be at a profitable stage. The longer the company can extend this stage the better it will be for them.

Real Life Case Scenario

Barbie

Mattel, Inc.'s Barbie doll was introduced on March 9, 1959 at the New York Toy Fair. That year 351,000 dolls were purchased. On average, 172,800 Barbie dolls are sold worldwide every day. Barbie products make up 40 percent of Mattel, Inc. annual sales. An estimated 90 percent of American girls have owned at least one Barbie doll over the last 40 years.

Let us talk about various stages of PLC.

Development Stage:

This is the stage when the product is going through the pre-launch stages known as New Product Development. Costs will reach their cumulative maximum before the product is introduced to the marketplace when revenues start to flow. At this stage, marketing research should be involved, in terms of placement tests and testing the product notion the techniques such as focus groups, a test market might be the final culmination of this activity and the trade will be informed prior to its launch.

Introduction or Launch Stage:

In the introduction stage of the life cycle, the product is first presented to consumers. A period of slow sales growth is experienced after the launch of the product in the market. There are several reasons for slow growth:

- Delays in the expansion of production capacity
- Technical problems
- Delays in arranging proper distribution network
- Customer reluctance to change established behaviours

The other important characteristic of introduction stage is that profits are non-existent in this stage. The reasons are:

- Low sales
- Heavy distribution set up cost
- High promotional expenses to:
  - Inform potential customers
  - Induce product trial and
  - Secure distribution in retail outlets

The prices are high in introduction stage because of:

1. High R&D cost
2. Low output rate
3. Technological problems in production
4. High margins required to support the heavy promotional expenditures

Considering price and promotion, management can take any one of the following 4 strategies:

Price-promotion strategies

		Price: Low	Price: High
Promotion	High	Rapid Penetration	Rapid Skimming
	Low	Slow Penetration	Slow Skimming

1. Rapid skimming: This is required in following cases:

- A large part of the potential market is unaware of the product
- Those who are aware of the product are so eager to pay the high asking price
- The company faces potential competition and wants to build brand preference

2. Slow skimming: It is necessary when:

- The market is limited in size
- Most of the market is aware of the product
- Buyers are willing to pay the higher price
- Competition is non-existent

3. Rapid penetration: This is to be implemented when:

- The market is large
- The market is unaware of the product
- Most buyers are price sensitive
- The market is aware of the product
- There is strong potential competition
- The manufacturing cost falls within the company's scale of production and accumulated manufacturing experience

4. Slow penetration: It is required when:

- Market is large
- Potential consumers are aware of the product
- They are price sensitive
- There is some potential competition

In the introduction stage, the company must communicate the products feature uses, and advantages to potential buyers, often through advertisements.

The pioneer advantage

Companies should analyse properly the time to introduce the product. The early entry is desired but also involves the high expense of launching and the risk of being copied. The late entry is necessary when the firm can mobilise superior technology, quality, brand equity and financial strength. Most companies gain the most advantage like Amazon.com, Coca-Cola, Eastman Kodak and Xerox. Market pioneers generally enjoy a substantially higher market share than do early followers and late entrants. A study found out that second and third entrant obtained only 71% and 58% of the pioneer's market share respectively. 19 out of 25 companies who were US market leaders in 1923 were still market leaders 60 years later. The research also has shown that consumers often prefer pioneering brands. The advantages of pioneering brands are:

- Economies of scale
- Technological leadership
- Ownership of scarce assets
- They establish the attributes of the product class

But, there are several weaknesses of pioneering which are as follows:

- Too crude new products
- Improper positioning
- Wrong time of launching

- A lack of resources to compete against entering larger companies
- Managerial incompetence
- Unhealthy complacency
- Successful imitators can thrive by offering low prices, improving the product more continuously or can use market power and acumen to overtake the pioneer

But pioneering does not necessarily guarantee success. In relation to this, let us try to distinguish between 3 types:

- Inventor: First to develop patents in a new product category
- Product pioneer: First to develop a working model
- Market pioneer: First to sell in the new product category

Many market pioneers failed whereas a large number of early market leaders succeed through proper, decisive entry strategy and deployment of substantial resources. The examples of late entrants overtaking market pioneers are IBM over Sperry (mainframe computers), Matsushita over Sony (VCRs), Texas Instruments over Bowmar (hand calculators) and GE over EMI (CAT scan equipment)

Hence, pioneers should apply various strategies to prevent late entrants from snatching away the leadership. The best way to do this is to apply a long-range product market expansion strategy. The pioneer should decide on which of the product market/s it could initially enter for the reason that it is not wise to enter all market segments at once. The pioneer should analyse the profit potential of each product market singly and in combination and then decide on a market expansion path. Let us think of a computer manufacturer wishing to enter into a market comprising of high end, mid-range and SOHO (small office home office) segments with new products. The company can introduce a new model X with additional features for SOHO segment followed by mid-range segment. It can then introduce model Y for mid-range followed by SOHO. Having established two products in two markets, it can go for model Z for high-end. Following figure can make you understand what have been said.

Growth Stage:

In this stage, sales rise rapidly and profits peak. The early adopters like the product and additional consumers start buying it. New competitors enter, attracted by the opportunities and they introduce new product features and expand distribution. Competitors' reactions to the products success in this stage will affect its life expectancy. At this point, the typical marketing strategy focuses on encouraging strong brand loyalty and competing with aggressive imitators of the product. The company tries to develop a competitive niche in the growth stage by emphasising the products benefits. Organizations typically resort the aggressive promotional pricing, including price reductions, during the growth stage.

In this stage, the company uses several strategies to sustain rapid market growth:

- Improving product quality
- Adding new product features
- New models
- Introducing flanker products i.e. in different sizes, flavours etc.
- Entering into new market segment
- Increasing its distribution coverage
- Entering into new distribution channels
- Shifting from product-awareness advertising to product-preference advertising
- Lowering price to attract the next layer of price-sensitive buyers

Other characteristics of this stage are:

- Prices remain same or fall slightly depending on how fast demand increases
- Sales rise much faster than promotional expenditures resulting in decline in promotion-sales ratio
- Companies maintain their promotional expenses at same or slightly increased level to educate potential customers and combat competition
- Companies earn higher profits. The reasons for profit increase are:

- The promotional expenditures are spread over a larger sales volume
- Unit manufacturing costs fall faster than price declines due to producer learning effect

Maturity and Saturation Stage:

The growth stage is followed by maturity stage, where the sales of the product level off. This stage is divided into 3 phases:

a) Growth phase: The sales growth rate starts to decline. There are no new distribution channels to fill.

b) Stable phase: Sales flatten on a per capita basis because of market saturation

c) Decaying maturity: The absolute level of sales starts to decline and customers begin switching to other products and substitutes.

The characteristics of this stage are:

- The sales slowdown creates overcapacity in the industry leading to intensified competition
- The competitors try to find out the niches or engage in frequent price-cuts.
- The competitors increase advertising, trade promotion and consumer promotion
- Organizations develop new promotional and distributor efforts
- A fresh advertising campaign, new packaging or incentives directed al channel members are often employed.
- Each competitor highlights differences and improvements in its versions of the product
- The product begins to lose its distinctiveness.
- They increase R&D budgets to develop product improvements and line extensions
- A shakeout may occur, as a result of which the weak competitors perish.
- The well-resourced and performed companies can only survive in the market that may be:
    - Quality leader

- Service leader or
- Cost leader

Surrounding these dominant firms, there are a multitude of market nichers that decide to operate at lower volume and higher margin. They can be of following types:

a) Market specialist: In this case, the company operates in a certain market only. The fashion companies like D&G, Calvin Klein and Versace specialised in fashion market only offering various fashion accessories like designer clothes, watches, perfumes etc.

b) Product specialist: In this case, the companies specialise in products. For example, electric appliance companies like Samsung, Videocon and Onida offer the special type of products (electric appliances like TV, refrigerator, washing machine) or different types of markets like premium, up-market, economy segment etc.

c) Customising firms: These companies only specialise in a particular product for a particular market. For example, watch companies like Rolex. Cartier market only fashionable, expensive watches for premium segment.

In the maturity stage, the companies can take following strategies individually or in combination in order to stimulate sales.

A. Market modification
B. Product modification
C. Marketing-mix modification

A. Market modification

The company may try to expand the market for its mature brand by taking following 2 factors that make up sales volume:

Volume = number of brand users X usage rate per user

The company can expand the number of brand users in 3 ways:

a) Converts nonusers: The Company can target the nonusers and persuade them to use their products. A study by Media Research Users Council shows that 68% of the users of fairness creams are men; dark-circle remover creams are favourites among Indian men.

b) Enter new market segments: The Company can enter a new unexplored market segment. For example, Johnson & Johnson successfully launched its baby shampoo in adult users segment.

c) Snatch competitors' customers: The companies always try to lure the customers form their competitors. This is mostly evident in case of FMCG and soft drinks sector where brand switching is a very common phenomenon.

The company can increase usage rate in 3 ways:

a) More frequent use: The companies can increase usage rate by persuading customers to use the products more frequently. Toothpaste companies have actively endorsed the concept of brushing before sleep.

b) More usage per occasion: The companies can also increase usage rate by compelling customers to use the products more on each occasion. One classic way to do this has been adopted by a toothpaste company a few years ago by increasing nozzle size of toothpaste tube so that customers unknowingly use more paste on each occasion of use.

c) New product use: The companies can increase usage rate by informing the customers about the new uses of products. The mobile companies everyday are adding new value-added services like games, ringtones or cricket match updates in order to increase the mobile use. Some interesting alternative product usages are described below:

   - In areas like Raichur, buffalos are coated with black hair dye of Godrej in order to make them more presentable
   - In Bihar, cows and cattle are fed with health beverages like Horlicks to fatten them up

- In parts of Punjab, washing machines are used to make lassi while old Godrej refrigerators are used as cupboards
- In Madhya Pradesh, farmers rub Iodex on the skins of their cattle after a hard day's work
- Corex is used as an intoxicant in many small Northeast India.

B. Product modification

Managers should also try to stimulate sales by modifying the product's characteristics. This can be done in 3 following ways:

a) Quality improvement: It aims at increasing the product's functional performance. That can be of many forms like improving:

- *Durability*: Asian Paints launched special kind of paint that can withstand environmental hazards.
- *Reliability*: Microsoft modified its Windows Operating System and launched Windows XP, which they claim more reliable
- *Speed*: Intel continuously upgrade its microprocessor chips from Celeron to Pentium 1,2,3,4 in order to provide faster computer operations.
- *Taste*: Coca-Cola introduced new Vanilla Coke. Kwality Wall's launched various types of ice creams of different tastes like Cornetto, Feast, Viennetta (premium) and Max range for children with 3 variations viz. Sunshine Zing, Sparkle Zap and Twister Zoom.

b) Feature improvement: It aims at adding new features that expand product's safety, convenience or versatility. This involve addition of various:

- *Sizes*: The mobile companies like Nokia, Sony Ericsson or LG have introduced small fashionable models.
- *Weights*: The shampoos from Sunsilk or Head & Shoulder are available in various weights

- *Materials*: The cement and steel companies improve the performance of products by incorporating new materials that provide features like higher tensile strength
- *Additives or accessories*: BenQ has added morphing facility with its camera in-built cell phones.

c) Style improvement: It aims at increasing the product's aesthetic appeal. Various car companies periodically introduce new car models with new, distinctive styles.

C. Marketing-mix modification

The companies also should try to stimulate sales by modifying following marketing-mix elements:

- Price
- Distribution
- Advertising
- Sales promotion
- Personal selling
- Services

Decline and Obsolescence Stage:

The sales of most products will decline which can be slow or rapid. Sales decline happens because of:

- Technological advances
- Shifts in consumer tastes
- Increased competition

Management in most of the cases fails to develop a well-thought-out policy for handling their aging products. The reasons are:

i. Sentiments: The sadness of stopping an old brand creates a mental agony of losing an old friend that may sometimes prompt companies in not implementing timely

ii. Perceived logics: The management may have following logics of improving sales for which it may not like to take the harsh decision:

- The economy will improve
- The revised marketing strategy when implemented will be a success
- Product improvement will have a positive impact
- Contribution of ailing products to the sales of company's other products

But, retaining a non-mover product may create harm in the bottom-line of company. The reasons are:

- Uncovered overhead
- Lack of profitability
- Wastage of managerial resources in terms of time, energy or cost, which could have been used for healthy products
- Frequent price and inventory adjustments
- Short production time in spite of expensive setup times
- Failure to conform to a standard customer satisfaction level may tarnish the company's image
- Delay or lack of activity to search and introduce replacement products

Hence, the company must take a set of tasks to handle the aging products more judiciously. The steps are:

i. Establishing a system for identifying weak products

ii. Data gathering of each product showing trends in market size, market share, prices, costs and profits

iii. Analysing the information
iv. The feedback from sales managers regarding future projection sales, profitability and marketing strategy
v. Final decision for each dubious product whether to leave it alone, modify its marketing strategy or drop it

There are 5 decline strategies, which the companies can take:

i. Increasing the firm's investment in order to dominate or strengthen its competitive position
ii. Maintaining the firm's investment level until the uncertainties about the industry are resolved
iii. Decreasing the firm's investment level selectively by dropping unprofitable groups while simultaneously strengthening the firm's investment in lucrative niches
iv. Harvesting or "milking" the firm's investment to recover cash quickly
v. Divesting the business quickly by disposing of its assets as advantageously as possible

Most of the organizations have more than one product in their product mix so that the decline of one product does not cause a company to fail. Various products in an organizational mix are at different stages in the PLC. Thus, even if one product declines, other products are in the introduction, growth or maturity stage. Hence, business must simultaneously handle new product introductions and manage existing products in their various life cycle stages.

Planned Obsolescence

The purpose of planned obsolescence is to make an existing product out of date and thus increase the market for replacement products. Technological or functional obsolescence results from significant technical improvements that result in a more effective product. An example could be audiotapes that replaced playing records and compact discs (CDs) that replaced audiotapes. Planned obsolescence that is technologically based can be beneficial when a more effective product is developed. Style obsolescence occurs when superficial characteristics of a product are altered so that the new product is easily differentiated from the previous product.

The PLC concept can be applicable for product category, product form, product or a brand. The differences between these four can be understood by this example. Product category can be transportation devices; product form can be 4-wheelers or 2-wheelers; product can be bike, moped or scooter (all correspond to 2-wheeler product form) and brand may be Bajaj Pulsar, Hero Honda Splendor+ or LML Graptor. Let us examine following examples:

- **Product category**: These correspond to the basic product types. The examples are electric appliances, transportation devices etc. Normally the product categories have the longest life cycles. Many basic product categories stay in the mature stage indefinitely and only grow as the population grows. The examples are bathing soaps, cleaning detergents etc. Some product categories are in the growth stage such as mobile phones, UV water purifiers etc. But there are some product categories that are in decline stage such as print medium (newspaper, magazine, and book) that has begun to be substituted by on-line medium like Internet, CD-ROM etc.
- **Product form**: This is the subset of product category. A product form can decline although the product category to which it belongs may not decline. For example, although the audible music product category is in maturity stage, the cassettes are in decline stage.
- **Product**: The product's PLC has already been discussed.
- **Brand**: This can have very short to very long PLC. Many brands died at very early age whereas brands like IBM, Tata, GM, McDonald's are continuing for so long and have been maintaining its maturity stage. Whenever they see that their brands are bound to decline, they make some improvement and rejuvenate the brand. The brands like Microsoft or Nokia is enjoying its growth stage whereas brands like Pantaloons, Café Coffee Day or Barista are in introduction stage.

Strategies for different stages of PLC

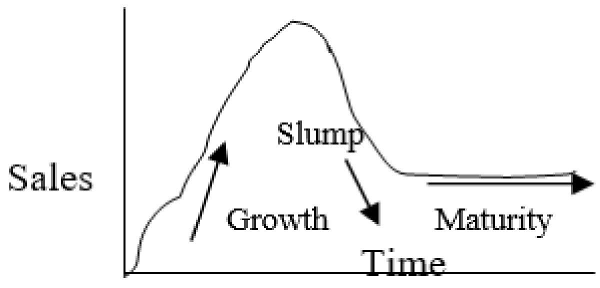
The following table shows various characteristics of different stages of PLC:

Characteristics	Introduction	Growth	Maturity	Decline
Sales	Low	Rapidly rising	Peak	Declining
Cost per customer	High	Average	Low	Low
Profits	Negative	Rising	High	Declining
Customers	Innovators	Early adopters	Early & Late Majority	Laggards
Competitors	Few	Growing no.	Stable no; beginning to decline	Declining no.
Marketing Objectives	Product awareness and trial	Maximize market share	Maximize profit Defend market share	Reduce cost Milk the brand
Product Strategies	Basic	Extensions	Diversify	Phase out
Price Strategies	Cost-plus	Penetration price	Best matching price	Cut price
Distribution Strategies	Selective	Intensive	More intensive	Selective
Advertising Strategies	Build awareness for early adopters and trade	Build awareness in mass market	Brand differences and benefits	Reduce to level needed to retain loyal
Sales promotion Strategies	Heavy to entice trial	Reduce to meet high demand	Increase to encourage brand switching	Reduce to minimum level

In addition to the normal S-shaped curve that has been shown earlier, it can also take other shapes. These are described below:

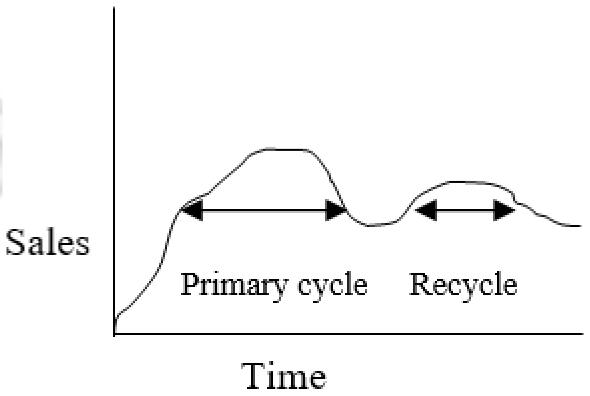
Growth-slump-maturity pattern:

In this case, the product begins to decline. But at certain point it attains a maturity level and continues. The examples are regional film industries like Marathi, Oriya or Bengali that have lost significant popularity due to Hindi and English films. But even after steep decline from their heydays, they are maintaining an average performance curve and still some of the movies are becoming major hits.



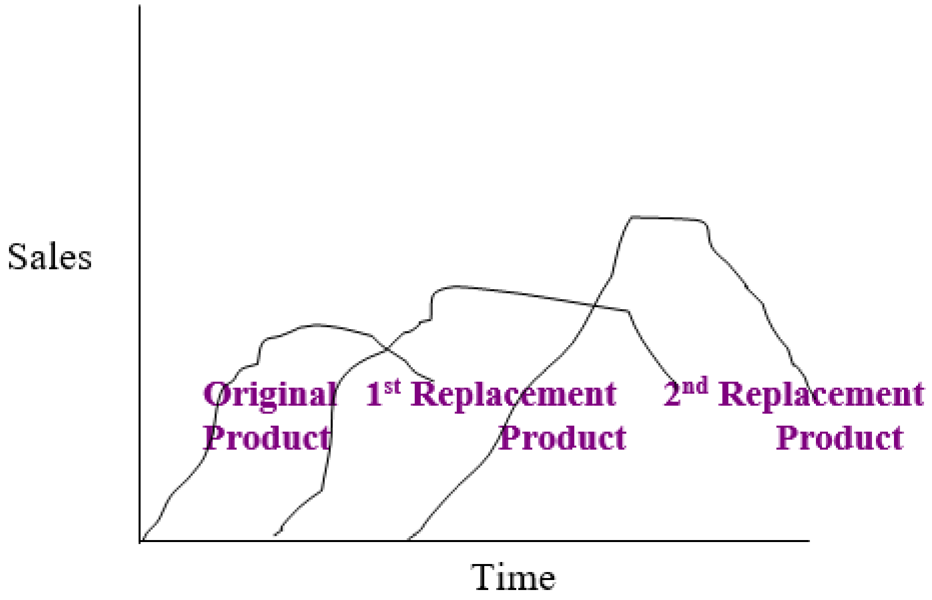
Cycle-recycle pattern:

This type is evident for the products whose sales declined and then revived again. For example, the sale of radio has declined. But after the launch of popular private FMs like Radio Mirchi, Red FM, etc., the radio sale is again picking up.



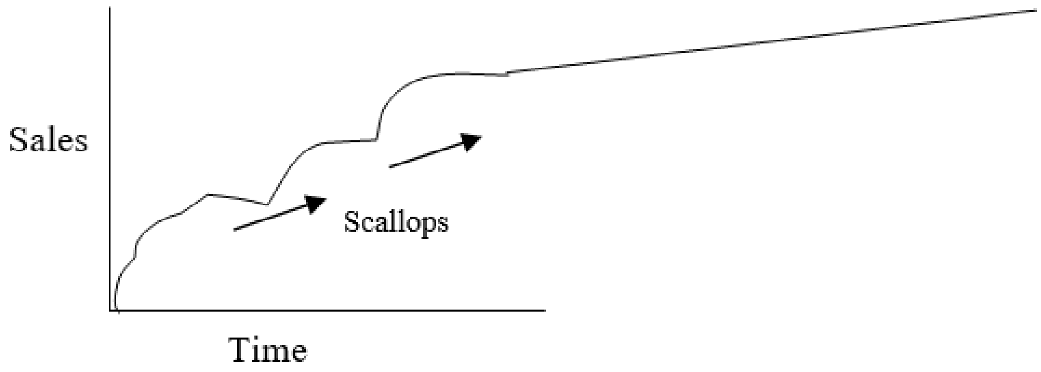
Leapfrogging:

In this type, replacement products become available when the original begins to decline. It is a very common pattern in case of durable goods, where rapid change in fashion trends and technology results in limited life span of a particular product or its model. Present Indian mobile scenario may be an example of leapfrogging. The mobile companies like Nokia, LG, and Panasonic are replacing their traditional mobile handsets with trendy camera-enabled ones and more recently with WAP-enabled mobiles with facility of downloading Excel and Power Point files. As the lead times involved in developing replacement models are very high, the decline phase may begin before the replacement is ready. Under such circumstances, in order to prevent customers from switching to up-to-date products of rival companies, the companies may relaunch their product by introducing some cosmetic changes as a stopgap measure. For example, in order to combat the morphing enabled BenQ camera-in-built mobile phones, Nokia introduced its 8230 model that offers facilities like 10 minute video recording with blue-tooth technology.



Scalloped PLC or Staircasing

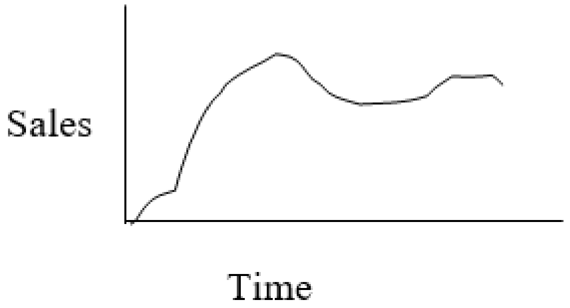
Sales pass through a succession of life cycles based on the discovery of new-product characteristics, users or uses. Through this process of continuous product improvement, the organization tries to avoid its product entering the decline phase of the PLC by stimulating further growth after a period of apparent maturity. The mobile phones have somewhat were approaching to decline stage. But before the downward decline stage could start, the companies have introduced GPRS facilities by which you can avail many value-added facilities. When that feature is getting old, the companies introduced camera facilities along with the mobile set. Some more features like on-line banking, e-mail check, cricket replay, exciting gaming facility, screensavers, polyphonic ring tones and image morphing have been added so that mobile is getting more and more advanced and its PLC is being modified every day.



We can find some special types of PLCs for 3 types of product trends viz. style, fashion and fad.

Style:

A style is a distinctive manner of construction or presentation in any art, product, or endeavour. Styles are more individualistic and can continue for generations. The traditional living of rural people with distinctive dresses, rituals and foods is an excellent example of ethnic style. A typical style has following PLC.



Fashion:

A fashion is any style that is popularly accepted and purchased by successive groups of people over a reasonably long period of time. The fashion adoption process explains how fashion travels through the socioeconomic classes. There can be 3 ways:

- <u>Trickle-down</u>: This occurs when a fashion travels downward through several socioeconomic levels. The example is birthday cake at birthday party, which once a fashion of upper class now became quite fashionable even among the middle class.
- <u>Trickle-up</u>: This is seen when a fashion travels from lower socioeconomic levels upward to higher levels. The relevant example is hukka (a predominantly fashion of lower economic class) bar in 5-star hotels.
- <u>Trickle-across</u>: This occurs when a fashion travels horizontally and simultaneously within several socioeconomic levels. The prime example is the trend of blue denim jeans, which gained popularity among all sections of people.

Consumer products where fashion and style are most noticeable include perfumes, for accurate household items, linens, and gift items. This is of much shorter duration and less individualistic than style. It may pass through 4 stages:

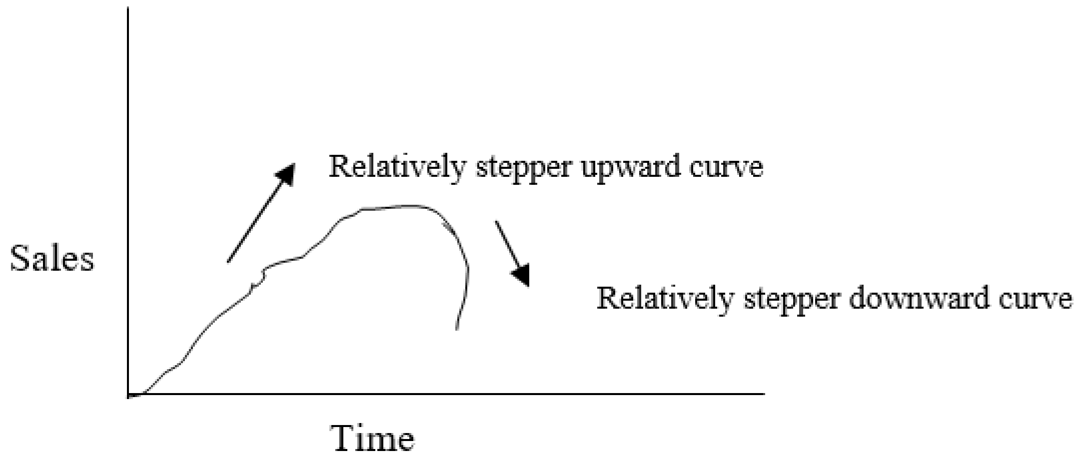
- <u>Distinctiveness</u>: Hindi movie stars create the fashion trends in India. For example, in Kaho Na Pyar Hai, Hrithik Roshan wore a special kind of specs. The distinctiveness of the design of specs has started a new fashion trend.
- <u>Emulation</u>: The ardent followers of Hrithik have started purchasing that special kind of specs in order to emulate him.
- <u>Mass fashion</u>: The craze of Hrithik reached at such a level that he became a mass heartthrob and his fashion became a mass one.
- <u>Decline</u>: As soon as wearing special specs has become mass fashion, the Hrithik followers began to abandon that fashion, as they did not find it any more attractive to show their passion for their idol and hence fashion began to decline.

So we see that fashions end because they represent a purchase compromise and consumers start looking for missing attributes. For example, as cars become smaller, they become less comfortable and then fashion of having small car will decline and they again prefer for the larger cars. The length of a particular fashion cycle depends on the following factors:

- The extent to which the fashion meets a genuine need
- It is consistent with other trends in the society

- It satisfies social norms and values
- It does not exceed the technological limits as it develops

The PLC of fashion looks like a curve that goes to peak rather fast and declines also much faster:

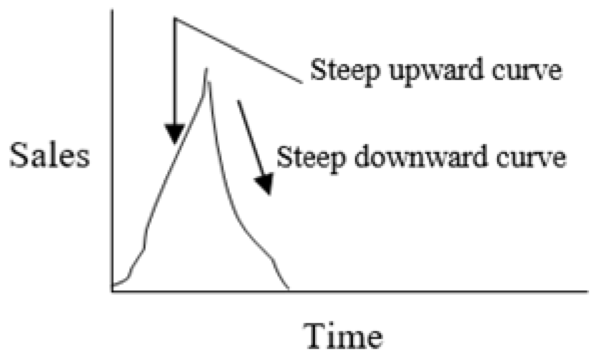


Fads:

These are fashions that exhibit following patterns:

- It comes quickly into public view
- It is adopted with great enthusiasm
- It peaks in demand very early
- It declines very fast
- The acceptance cycle is very short
- It tends to attract those who are searching for excitement or want to be distinguishable from others
- It may have some queer, bizarre or abnormal aspects as its features

Fads do not survive because they do not normally satisfy strong need. Body piercing and tattooing have become a latest fad among Indian urban youths. The PLC of fad goes to its peak very fast and declines very fast thus making the curve look a steep upward curve followed by another steep downward curve.



Technological Life Cycle

The technological life cycle is the critical factor affecting fluctuations overtime in a given business product category. The cutting-edge stage refers to that level of technology development that is ahead of even the most sophisticated applications in the marketplace. Markets for cutting-edge technology tend to be small and sophisticated. Firms that specialise in adapting developed cutting-edge techniques to market needs and applications are known as state of the art. They either integrate the cutting-edge product into their own offerings or use the cutting-edge technology to discover new market applications. In the advanced stage, there is increased competition and a less sophisticated customer base. First-to-clone companies beat competitors to an improved or lower cost alternative while avoiding the development and market risks of first-to-market companies. Market size increases and substantial profits emerge. The company shifts from a technology-driven to a market-driven company. The firm's product is no longer technologically different from its competition. The firm with the lowest marginal cost can become a market leader and make profits while eliminating competition. However, market segmentation is a viable strategy and a safer alternative to price competition. In the mainstream stage the market is fully developed. Products are standardised and the firm's focus must shift to low-cost production. The mature stage is characterised by its lack of strategic production advantages. Competition shifts to customer service as prices stable lives. The product approaches an undifferentiated "commodity" status. In the decline stage, new technologies replace the dying technology. The old technology survives by pricing itself substantially below the new technology.

Dhall and Yuseph dismiss the idea of PLC as being conceptually attractive but pragmatically worthless. In an article named 'Forget the Product Life Cycle' they argued that PLC is conceptually and operationally flawed. The bases of their arguments were:

- The biological metaphors used to suggest that products are living entities is misleading
- Attempts to match empirical sales data to life-cycle curves have proved difficult and the results are largely meaningless
- The life cycle of a product and hence the shape of the curve is determined by how the product is managed over the time. It is not an independent variable as is suggested by traditional PLC theory
- The PLC is not equally valid for product class, product form and brands
- The stages of the life cycle are difficult to define
- Identifying where on the life cycle a product is at any particular time is difficult to determine
- The scope for using the concept as a planning tool is limited
- Evidence exists to suggest that where organisations have tried to use the PLC as a planning tool, opportunities were missed and costly mistakes were made.

Market Evolution

As you have seen so far that PLC focuses on what is happening to a particular product or brand rather than on what is happening to the overall market and hence, PLC is product-centric approach. But, the companies also have to consider the market evolutionary path as it is affected by new needs, competitors, technology, channels and other developments. Hence they have to follow the evolution of market where they are operating in. Markets evolve through 4 stages viz.

- Emergence
- Growth
- Maturity

- Decline

Emergence:

Before a market materialises, it exists as a latent market. For example, an entrepreneur recognises the need of calculation and imagines a technological solution in the form of electronic calculator. Now as he is market oriented, he interviews the potential buyers in order to determine the product attributes. If the customer preferences scatter evenly, it is called diffused-preference market. The manufacturer has 3 options:

- Single-niche strategy: The new product can be designed to meet the preferences of one of the corner of the market
- Multiple-niche strategy: Two or more products can be simultaneously launched to capture two or more parts of the market
- Mass-market strategy: The new product can be designed for the middle of the market

Growth:

If sales of the new product are good, new companies will enter the market. A new entrant can adopt 3 strategies:

- Single-niche: It can position its product in one of the corners of the market
- Multiple niche: It can launch two or more products in different unoccupied corners
- Mass-market strategy: It can position its product against the existing product

Maturity:

The competitors cover and serve all the major segments. Then they go for invasion of each other's segments thus reducing each other's profitability. The 2 stages can occur:

- Market fragmentation: As market growth slows down, the market splits into finer segments and high market fragmentation occurs. The mobile phone industry has been fragmented between GRPS, WLL (or CDMA) and GPS segments.

- Market consolidation: Market fragmentation is often followed by market consolidation caused by the emergence of a new attribute that has strong appeal. The example is camera attached with mobile

Decline:

Eventually, demand for present products begins to decline. This can happen for 2 reasons:

- Society's total need level declines: After the invasion of Cable and Satellite channels (C&S), the consumers no longer prefer to listen to radio thus resulting in decline of sale of radio sets.
- New technology replaces the older one: Some year back, pagers have become a new way of communicating with people when they are travelling. But the advent of new technology of mobile telephony has made pager redundant and pager industry has declined.