The merits of venture team are that the venture team manager has the authority to make major decisions unlike all earlier forms. The team continues to exist until the goal is achieved. On the other hand, the disadvantages are that of unwillingness of the departmental managers to cooperate and feeling of wastage of time on venture team than working in the department.

In conclusion it, can be said that the type of organisation selected is largely a function of the size of the firm and its resources and objectives within the context of its product and market.

4.17 THE CONSUMER ADOPTION PROCESS

Once a product is introduced in the market, the major challenge rests with the marketing function. The product so introduced is to be 'adopted' *i.e.*, purchased and diffused *i.e.*, percolated through out the markets. Any new idea or brand catches on through a gradual process which starts with some adopting it easily and others doing so only after the so-called 'opinion leaders' have satisfied themselves and set an example. The faster it happens, the better it is for the firm. Adoption is the decision of an individual to use the product ; while, difusion is the collective spread of individual adoption decisions through out a market. Thus, adoption process is concerned with the individual whereas the diffusion process is concerned with the aggregate behaviour.

The fundamental reason for studying the diffusion and adoption processes is to increase the level of understanding of how ? when ? and why ? new products are accepted or rejected. Naturally a more comprehensive understanding of this process will enhance the success of future new product introductions.

STAGES IN ADOPTION PROCESS

The adoption process is believed to follow a five-stage sequential process beginning with actual awareness of a product's existence and ending with adoption or commitment to the product.

From the point in time when an individual first hears of an innovation to the point in time when adoption occurs has been recognised as consisting of five logical stages namely, awareness—interest —evaluation—trial and adoption.

1. **Awareness stage :** Here the individual is exposed to the innovation but lacks complete information about it. That is, the individual is aware of the innovation but is not yet motivated to seek further information. He knows of product existence.

2. **Interest stage :** The individual becomes interested in the new idea and seeks additional information about it. The innovation is favoured in a general way but is not yet judged in terms of its utility to a specific situation. He seeks further information.

3. **Evaluation stage :** The individual applies his mental faculty to the innovation to compare present and anticipated situation and then decides to whether or not to try it. It is to do with careful weighing as to whether or not to try it.

4. **Trial stage :** The individual uses the innovation on a small-scale in order to determine its utility in his own situation. That is, he tries it once or twice to confirm its utility.

5. **Adoption stage :** The individual decides to continue the full use of the innovation. That is he purchases and repurchases.

It is worth emphasizing here that any innovation may be rejected at any stage of adoption process. Even rejection can take place after adoption which is called as discontinuance. Further, a consumer may move through several of these stages simultaneously as it happens in case of impulse buying.

However, understanding of the sequence of these stages of adoption and types of communication effectiveness in each stage will enable the firm to develop a promotional campaign consistent with behaviour of consumer particularly in case of a firm attempting to market a new product. Initially more mass media should be employed to relay product awareness and information on product utility. As time passes, the appeal should be moulded to include more personal appeal, as consumer is keen on evaluating, trying and adopting the new product. The strategy employed, of course, must give some consideration to the nature of the new product. The new product characteristics affect the adoption process. actors such as the relative advantage, compatability, complexity, divisibility and communicability normally determine the ease with which consumers accept a new product.

ADOPTOR CATEGORIES

Companies are finally interested in the level and rate of diffusion because, the ultimate level of diffusion is a limit on the total sales of the company, while the rate of diffusion affects how quickly the company covers its costs and begins to make a profit. The notion of diffusion suggests that some people adopt a new product well before others. That is, people vary in their degree of innovativeness. One means of classifying people according to their innovativeness is based on the normal distribution curve as developed by **Mr. E. Rogers** and **Mr. Shoemaker** in 1971. Using the mean and standard deviations, it is possible to categorise the adopters into five main classes as given in the **Fig. 4.13.**

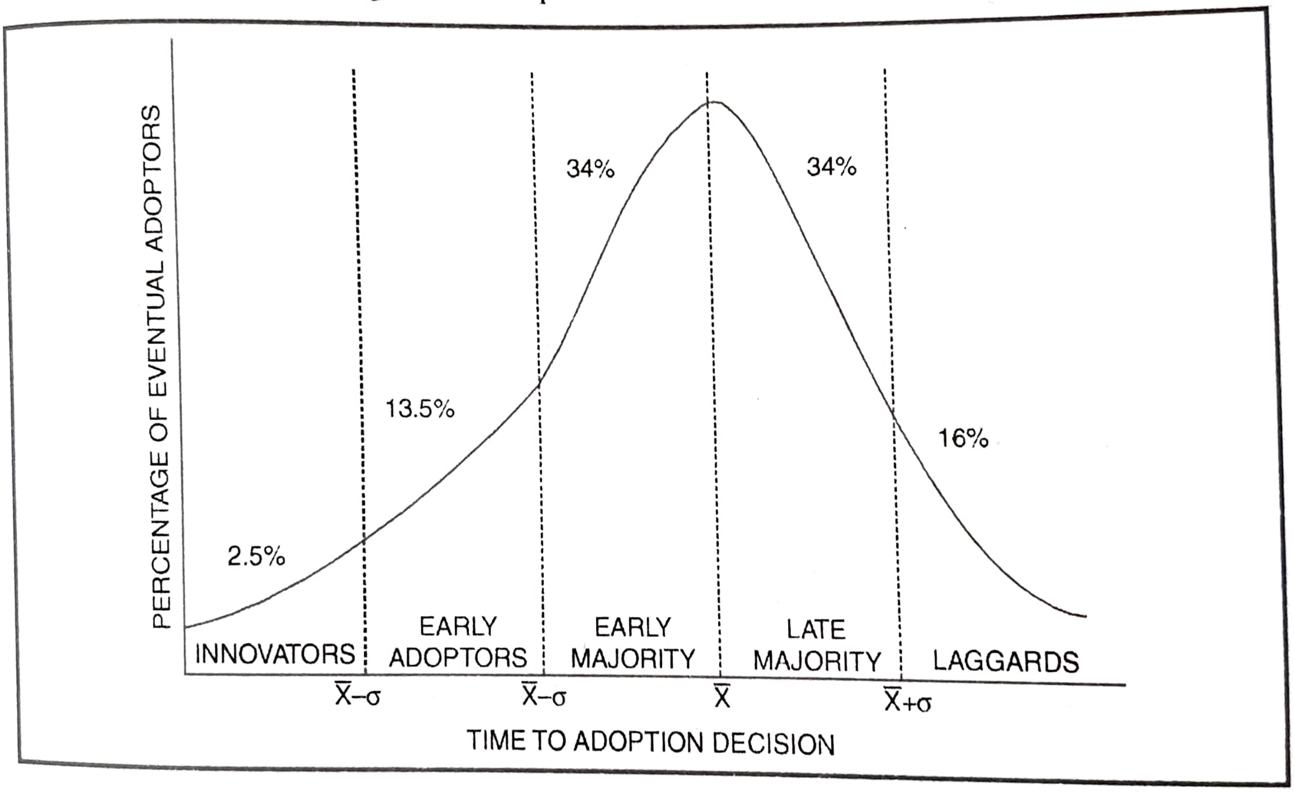

Fig. 4.13. Consumer adoptor categories.

These are ; innovators—early adopters—early majority—late majority and laggards.

1. Innovators : These represent the first 2.5 per cent of the total adoptors. They are young risk runners, rich, better educated, more cosmopolitan, but less integrated with local groups. They are the forerunners and important to the victory of new product so introduced.

2. Early adoptors : These represent the next 13.5 per cent of the total adoptors. These adopt in the per groups act as taste-makers or opinion leaders in their local groups. These are wealthier and better educated and have greater technical knowledge of the innovation. As they are integrated with the community, they exert influence. Others turn to them for their advice the moment they come in contact with these persons.

3. Early majority : This group accounts for the next 34 per cent of the total adoptors. These are average people in terms of income, education, age and occupations. These tend to be more cautious before adopting normally waiting until its benefits and other features have been clearly demonstrated well before adoption.

4. Late majority : This group represents the next 34 per cent of the total adoptors. These are more conservative, less educated and older with limited purchasing power. The reason for their adoption is that majority of the people have adopted or the product is within their purchasing power now.

5. Laggards : This last chunk accounts for remaining 16 per cent of the total adoptors. This group considers adopting as the last resort as there is no alternative. The features of this group are not available because, very less is known about this group.

At this point of discussion it is worth emphasizing that these five categories are 'ideal types'. It may be difficult to identify individuals with these exact specifications in actual practice.

4.18 PRODUCT LIFE-CYCLE, MEANING AND MARKETING STRATEGIES

The product life cycle or PLC model is one of the most frequently encountered concepts in marketing management. **Professor Theodore Levitt** popularised the concept and others like **C.R.Wassen, B. Carty, M.Chevalier, D.J.Luck, D.T. Kollat, R.D. Blackwell, J.F. Robenson** and others furthered the very original concept. It is that recent introduction to the marketing inventory which acts as the key to successful product management right from its introduction to the obsolescence.

What is product life-cycle ?

The product life-cycle is a conceptual representation. It is a product aging process. Just as human-beings have a typical life-cycle going from childhood, adolescence, youth and old-age, so also products follow a similar route. Product life-cycle is simply graphic portrayal of the sales history of a product from the time it is introduced to the time when it is withdrawn.

"An attempt to recognise distinct stages in the sales history of the product".

—Professor Philip Kotler

"Generalised model of sales and profits trends for a product class or category over a period of time"

—Mr. Kollat D.T., Mr. Blackwell R.D. and Robenson J.F.

As a concept, it means three things :

1. Products move through the cycle of Introduction—Growth—Maturity and Decline at different speeds.
2. Both sales volumes and unit profits rise correspondingly till the growth stage. However, in the period of maturity stage, sales volume rises but profits fall.
3. The successful product management needs dynamic functional approach to meet the unique situations of sales and profitability.

Important implications : There are some mis-conceptions regarding this simple concept of product life-cycle. These are dismissed if one has the clear-cut understanding about the implications of this useful concept.

These are :

First, though most of the literature on product life-cycle states that each and every product follows through this four-phase life-cycle, not all products introduced in the market essentially follow through all these four states. It is quite possible that a product might cross the first and at the most second stage and die a premature death just as many human beings do.

Secondly, one cannot have a definite line of demarcation between one and the subsequent stage. The succession is one of merging and not of finite calculation.

Thirdly, no two products have identical life-cycles. The length of each phase varies from product to product depending on the nature of product, the marketing policies adopted, changes in technology, competition and the laws of the land.

Fourthly, at a given point of time, or moment, the same product might reach different stages in different market segments. In segment one, it might have touched the peak-height of maturity, in segment two it may be in growth stage, in segment three, it may be heading towards the decline.

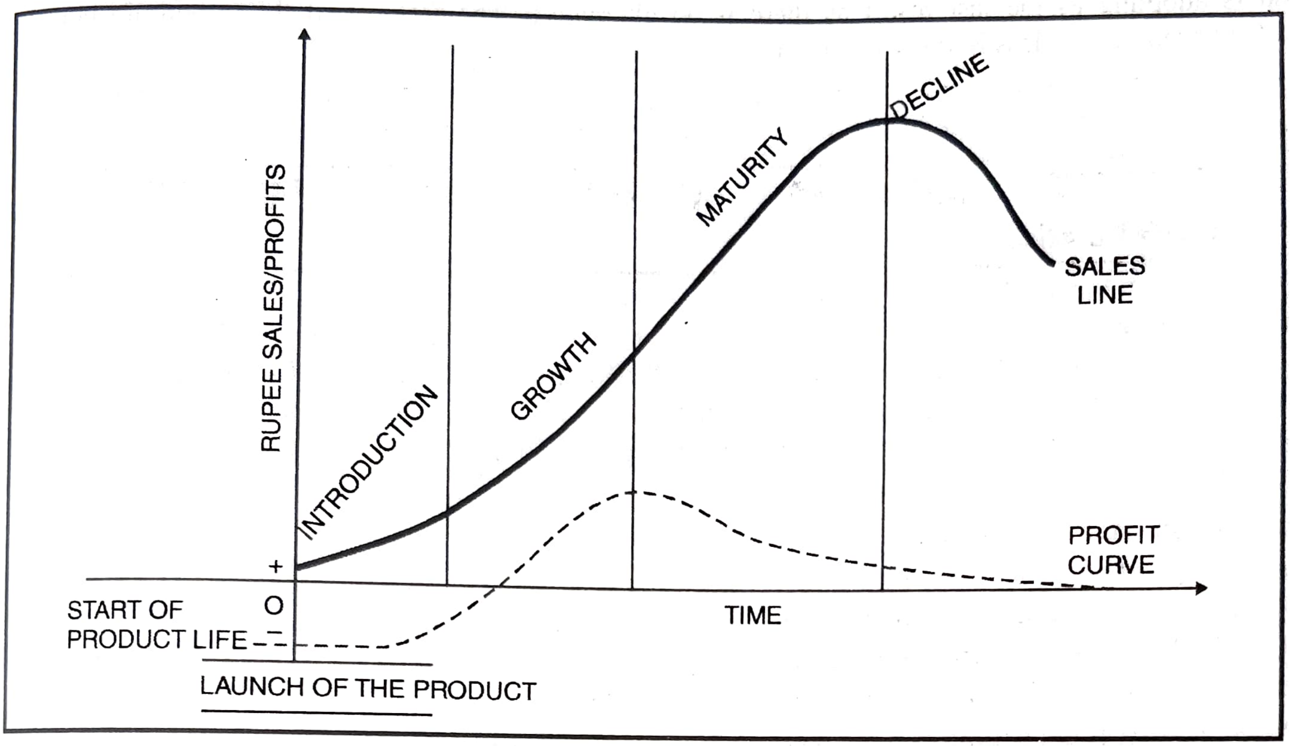

Fig. 4.14. Product Life Cycle.

STAGES OF PRODUCT LIFE-CYCLE AND MARKETING STRATEGIES :

The product aging process has four stages as depicted in the Fig. namely, Introduction, Growth—Maturity and Decline. A detailed analysis of each stage is a must in terms of basic features and implications.

It is really interesting and thought provoking exercise of logic to travel through the stages of product life-cycle.

I. Introduction :

Whenever a new product is introduced, it has only a proved demand and not the effective demand. That is why, sales are low and creeping very slowly. It may be the case with a product like instant coffee, frozen orange juice or a powdered coffee cream.

This first stage of product life-cycle is characterised by :

1. **Low and slow sales :** The product sales are the lowest and move up very slowly at snail's pace.

The basic reasons for this are :

(a) Delays in expansion of production capacity.

(b) Delays in making available the product to consumers due to lack of retail outlets which are acceptable and adequate.

(c) Consumer resistance to change over from the established consumption behavioural patterns.

2. **Highest promotional expenses :** During this period of introduction or the development, the promotional expenses bear the highest proportion of sales. It is so because, the sales are of smaller volume on one side and high level promotion efforts to create demand on the other.

Demand creation is not an easy task as it is a matter of breaking the barriers and breaking new ice which is done by :

(a) Informing potential and present consumers of the new and unknown product,

(b) Inducing a trial of the product, and

(c) Screening distribution net-work.

3. Highest product prices :

The prices charged at the beginning are the highest possible because of :

(a) Lower output and sales absorbing fixed costs.

(b) Technological problems might not have been mastered fully.

(c) Higher margin to support higher doses of promotional expenses—a must for growth.

(d) Very few competitors or no competitors.

(e) Sales to higher income groups in a limited area for cultivating the effective demand.

II. Growth :

Once the market has accepted the product, sales begin to rise. The prices may remain high to recover some of the development costs. With high sales and prices, profits rise sharply. This encourages competition leading to possible product improvement. Although the contribution to sales is sizeable from the high income group buyers, middle income group buyers do not contribute towards sales.

The basic characteristics of this stage of product life-cycle are :

1. Sales rise faster : The sales start climbing up at faster rate because of :

(a) Killing the consumer resistance to the product,

(b) The distribution network—retail outlets is built to the needs and

(c) Production facilities are streamlined to meet the fast moving sales. Thus, sales increase at an increasing rate over the period of time.

2. Higher promotional expenses : During the period of growth, the promotional strategy changes. The problem is no longer one of persuading the market to buy the product, but rather to make it to buy a particular brand. The question is one of creating and maintaining and extending selective demand. The advertising moves towards brand identification, awareness to have the effects of a brand image. Special offers, concessions, allowances to stockists and dealers are given to push a particular brand or brand group.

3. Product improvements : With the high sales and prices, profits rise sharply and because of this, there is greater incentive for the companies to enter the market. Competitors have the advantage of entering the market because, research and development have already been completed by innovating firm at its costs. Once the originator has paved the pattern of market, competitors can become stronger by coming out with modified products. Along with product modification, they may reduce prices too. This makes the originators to further improve the product and bring down the price to nab competition.

III. Maturity :

Eventually, market becomes saturated because, the house-hold demand is satisfied and distribution channels are full. Sales level off and over capacity in production becomes apparent. Competition intensifies as each manufacturer wants to ensure that he can maintain production at a level which gives him low unit costs. The greater the cost of production and the initial investment, the more important it is to maintain high output so as to cover fixed costs at lower rates of revenue. Lower prices are essential to stave off the competition. Though production costs are reduced, the margin of distributors may not taper off. The efforts are made to extend the maturity stage. That is why, this period is much longer than the growth stage.

The features of this stage of life-cycle are :

1. Sales increase at decreasing rate : As most of the customers are knowing the uses of the product, the sales grow at falling rates giving an overall picture of "off level' situation. It shows that there is apparent gap in production level and sales level. This intensifies competition. Efforts are made to level or the sales curve by extension strategies as shown in Fig. 4.15.

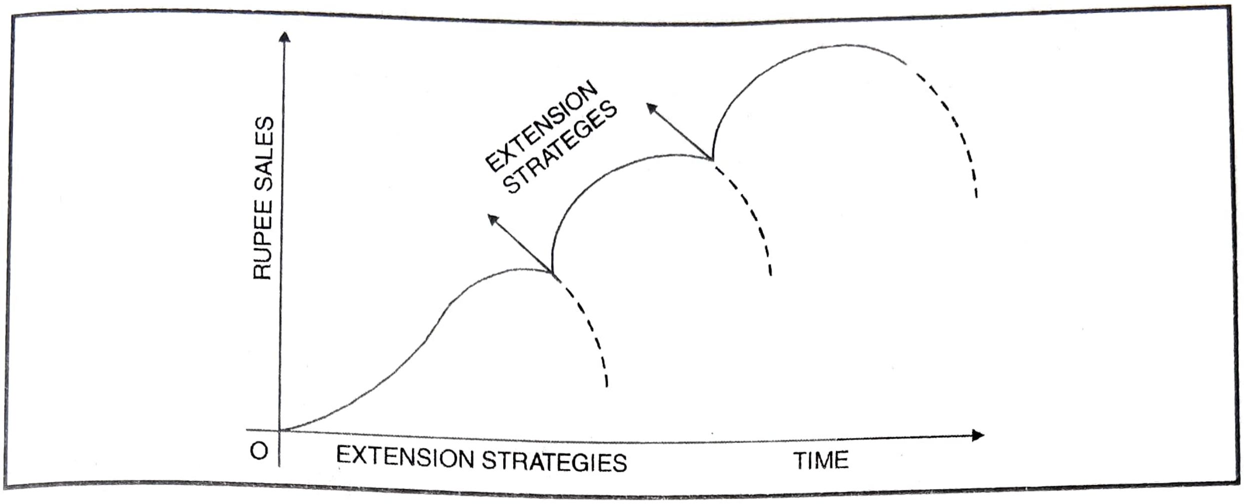

Fig. 4.15 Extention Strategies

There is little growth in the market as there is decleration in sales growth leading to market saturation. Therefore, demand mostly consists of repeat sales. Consequently competition intensifies, prices tend to fall and selling effort becomes aggressive. Profits, then, are squeezed. That is why, the firms employ extension strategies to retain their market share. There can be atleast five such extension strategies.

These are briefly outlined below.

(*a*) *Development of new markets* : The first possibility is the development of new markets for existing products by isolating areas where the product is not used and modifying it to suit to those particular segment requirements. For instance, battery shavers were introduced to fulfill the need for electric shavers when the users are away from electricity supply. There has been a considerable efforts to expand the usage of computers to meet the needs and budgets of small firms.

(*b*) *Development of new uses* : The second possibility is the development of new.uses for the existing products such as the application or red l.c.d. (Liquid Crystal Displays) used for example, in calculators and watches. Nylon is another example, a product which has gone through many expansions. Originally introduced for military purposes in the manufacture of parachutes and rope, it is now developed as a fibre, fabric in knit and woven form and gone into tyre manufacture.

(*c*) *Development of more frequent use* : This can be achieved either by altering its image or by emphasizing special characteristics like convenience and quality. Thus, turkeys which have changed from 'Christmas Treat' in to 'all year round food'. Popularising vitamin B capsules as a regular intake than as a curative dose.

(*d*) *Development of wider range of products* : This is another viable strategy. Today, we see practically an explosion in the flavours of ice-cream available in the market. To-day, we get different classes of ice-cream, ranging from inexpensive everyday brands to very costly brands with unusual exotic combinations of flavours and colours.

(*e*) *Development of style change* : These style changes demonstrate the newness of the most recent product. Most of the consumer durable item manufacturers such as cars, sound gadgets, cameras, watches and the like go in for this strategy of creating new designs and models making the consumers to discard the earlier ones. Thus, Sony Corporation of Japan has been introducing new and latest models of television sets as ME-2026, ME-2036, ME-2066, ME-2096 and so on. Even Ambassador Mark I, Mark II, Mark III speak of technical improvements, reduction in prices to suit the needs of consumers.

2. Normal promotional expenses : During this period of maturity, the promotional expenses reach a normal ratio to sales. Most of the competitors spend very normal amount on promotion. Efforts are made to rationalise the existing budget. Though total expenditure does not expand, major share of the expenditure goes to distribution and brand promotion to keep the dealers' loyalty intact.

Advertising emphasizes the difference between one brand and those of competitors. As a result, weaker competitors leave the market only to the larger and stronger manufacturers.

3. Uniform and lower prices : The prices charged by the producers are quite lower and uniform with a very narrow difference except for the real product differentiation. The strength and vitality of higher prices fade. That is why, extension strategies are followed. The price charged just to cover special costs in addition to the usual manufacturing expenses plus a low margin for the investment. It has an advantage of low margin over broadbased turnover.

IV. Decline :

In this terminal stage, sooner or later actual sales begin to fall under the impact of new product competition and changing consumer tastes and preferences. Prices and, hence, profits decline. It is a stage where the market for the product has been superseded by a technological or style change which replaces the existing demand altogether. That is, the old products are rendered obsolete. For instance, the development of tough—water based paint 'oil-bond' has made significant inroads into the traditional market for oil-based varnish enamel paints. That is, alternatively, interest in the product may fade, leading to a rapid reduction in sales.

The outstanding features of this stage of product life-cycle are :

1. Rapid fall in sales : As the product is pretty old, and new one are available, there is a change in the trend. People are interested in buying something new. The sales, therefore, fall sharply. Over production appears to be the major problem. This induces firms to close down as competitors have to leave or is left to them. The total number of firms in the arena comes down. For instance, the number of companies manufacturing calculators is much less than what it was in 1960s and 1970s.

2. Further fall in prices : Rapid reduction in sales creates a fear and there will be intense competition to liquidate the stock at the earliest. There would be a new kind of competition to have enlarged share in such a decline stage to have maximum benefit at least profit margin.

3. No promotional expenses : Expenditure in support of product falls sharply as prices become kener for fast stock liquidation. Distribution network is reduced to the minimum with thorough rationalisation. This is an advantage as product is known for good many years. It may enable the manufacturer to milk the product with profit though sales are scanty.

PROSPECTS AND PROBLEMS OF PRODUCT LIFE-CYCLE CONCEPTS

This concept of product life-cycle is so significant that it can be used as a major tool by marketing manager in market forecasting, planning and control.

Though it helps us in having highly competitive marketing strategies, its specific uses can be seen in its application in the following areas.

PROSPECTS

1. In sales forecasting : One of the most dramatic uses of product life-cycle in sales forecasting is its application to explain the violent rise and fall of sales in case of a given product. A sales forecaster, having perfect knowledge about the product life-cycle, will be able to establish cause and effect relations and helps to arrive at concrete conclusions. Under changing business conditions with changing life-cycle, some definite solutions can be suggested, as sales forecasting essentially a problem solving area of managerial process.

2. In product planning : A product is the outcome of the research and development. At what stage it is to be improved, remodelled or discarded is dependent on product life-cycle. It is very clear that during the infancy period, original issue works, during growth, defects are rectified, during maturity, sophistication comes in and at last the product is discarded.

3. In product pricing : Through the manufacturer is to decide at the very outset, whether he is to go in for 'high price' and skim the market with the risk of attaching too much competition or to go in for 'low price' and to aim at greater and more rapid market penetration, he is to do it in consonance with the changes in product life-cycle stages. If he follows lower prices, he has the advantage of keeping away the competitors; however, the profit may not allow him to go in for the extension strategies during the period of maturity. That is why, he is to start with high prices so that he can reduce in course of time to take advantage of price competition, in addition to non-price competition such as branding.

4. In product control : Product life-cycle concept is an effective control tool in case of those firms which have multi- product base. Such a firm when it offers simultaneously number of products in a market, it is but natural that all products so offered may have same degree of success. Some might be doing exceedingly well, others so, and still others below expectations. It is product life-cycle that can be used to monitor the product position so that the nature and extent of change required in marketing strategy can be sought to exploit the product potentially in enjoying maximum possible market share.

5. In advertising : The process of persuasion is known as advertising if done in impersonal way. The major aim of advertising is to create, maintain and extend demand for a product or a service or an idea. The same policy followed in the different stages of product life-cycle may not fetch rich dividends. The role of advertising must change phasewise to get the best rewards for the efforts put in terms of talent, time and treasure in advertising. Thus, the role of advertising is to kill the consumer resistance in the introduction stage, extending the demand for the product in growth stage, maintaining the demand in the period of maturity. The role of advertising is dormant in the last stage of decline. In other words, in the first stage it speaks of product availability, in the second stage product differentiation, in the third stage product improvement and in the fourth stage grand clearance sale.

While assessing the strengths of product life-cycle as a marketing tools, one should not turn deaf ears to the problems because, some very serious doubts and problems are raised about the relevance and the use of this concept.

PROBLEMS

1. Absence of absolute conformity : Though we are informed, in general, that every product conforms to the traditional life-cycle pattern, it is not so always that all products have this conformity. Thus, products like steel, coal, cement, gold, silver, aluminium, patent medicines, bicycles and the like have economic fluctuations rather than pattern fluctuations.

2. Stage span fluctuates : Length and pattern of product life-cycles can vary significantly from product to product. There is no reason to believe that all products inevitably pass through all the four stages; some might proceed, for example, straight from growth into decline because of, say, the introduction of some superior new product. Other products may have a prolonged introduction stage before coming into wide acceptance. That is, real product histories do not go hand in hand with the statement that products pass from one to the successive stages as a matter of course.

In conclusion, it can be said that though this product life-cycle is best with certain doubts as its relevance and practical issues faced in its use, it is a useful concept that serves as a managerial tool of planning and controlling. It is a reliable aid in modifying the marketing strategies. However, good deal of caution and judgement are to be exercised to get the best out of it.

CHAPTER BASED QUESTIONS

A. SHORT ANSWER QUESTIONS (Answer in not more than four sentences.)

1. What is a market segment ?
2. What is marketing segmenting ?
3. Is it same as product differentiation ?
4. What are benefits of segmentation ?
5. What costs are involved in segmentation ?