E-Content (M.Com Sem 2) : Marketing

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PRODUCT LIFE-CYCLE

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 a 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is simply a graphic portrayal of the sales history of a product from the time it is introduced to the time when it is withdrawn. According to Professor Philip Kotler, it is "an attempt to recognise distinct stages in the sales history of the product". To borrow the words of Mr. Kollat D.T., Mr. Blackwell R.D. and Robenson J.F. it is a "generalised model of sales and profit trends for a product class or category over a period of time". 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 stages, 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 usefull concept. These are :

First, thought 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 stages. 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-cycle. 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.

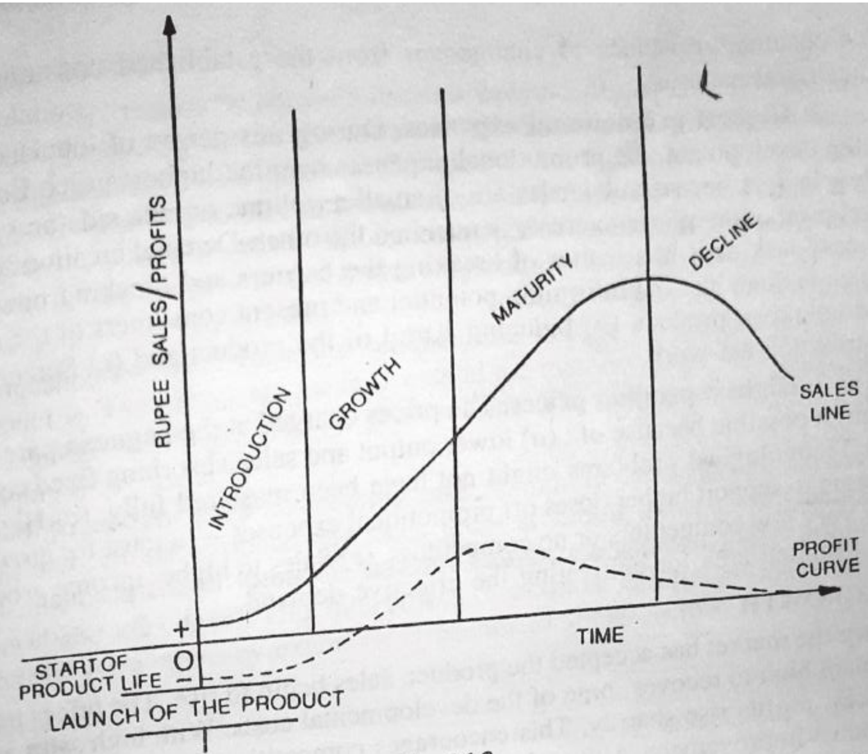

Fig. 16.3

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.

STAGES OF PRODUCT LIFE-CYCLE

The product aging process has four stages as depicted in the diagram 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.

1. 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 changeover 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 trail 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 off 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 developmental 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 net-work — 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 new 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 on the sales curve by extension strategies as shown below.

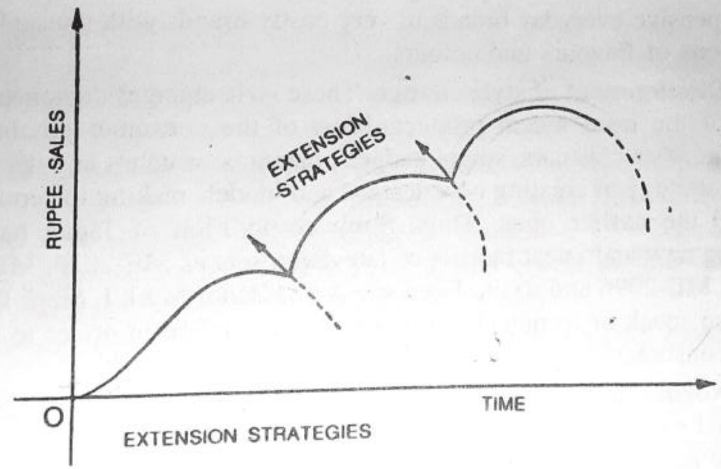

Fig. 16.4

There is little growth in the market as there is deceleration 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 fulfil 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. To-day, 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 say Ambassador Mark I, Mark II, Mark III all these 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 distributors 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 warnish 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 keener 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.