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## Study on Stages of Product Life Cycle - Review paper

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**Abstract:** - The main of this paper is to understand the basis stages of Product life cycle. Product life cycle (PLC) is the cycle through which every product goes through from introduction to withdrawal or eventual demise. The application of the LC concept to the development of industrial products is an important element in the administration of technological innovation. The applications of various forecasting techniques across the PLC have met with merely moderate success. The main conclusion is that additional research-more diversified and extensive in nature-is needed on many PLC topics.

**Key words:** (PLC ) Product Life Cycle, Stages

### I. INTRODUCTION

A product life cycle is the length of time from a product first being introduced to consumers until it is removed from the market. Once a product has been developed, it begins the introduction stage of the PLC. In this stage, the product is released into the market for the first time. The release of a product is often a high-stakes time in the product's life cycle, although it does not necessarily make or break the product's eventual success. During the introduction stage, marketing and promotion are at a high, and the company often invests quite a bit of effort and capital in promoting the product and getting it into the hands of consumers. It is in this stage that the company is first able to get a sense of how consumers respond to the product, whether they like it, and how successful it may be. However, it is also often a heavy-spending period for the company with no guarantee that the product will pay for itself through sales. Costs are generally very high during this stage, and there is typically little competition. The principal goals of the introduction stage are to build demand for the product and get it into the hands of consumers, hoping to later cash in on its growing popularity.

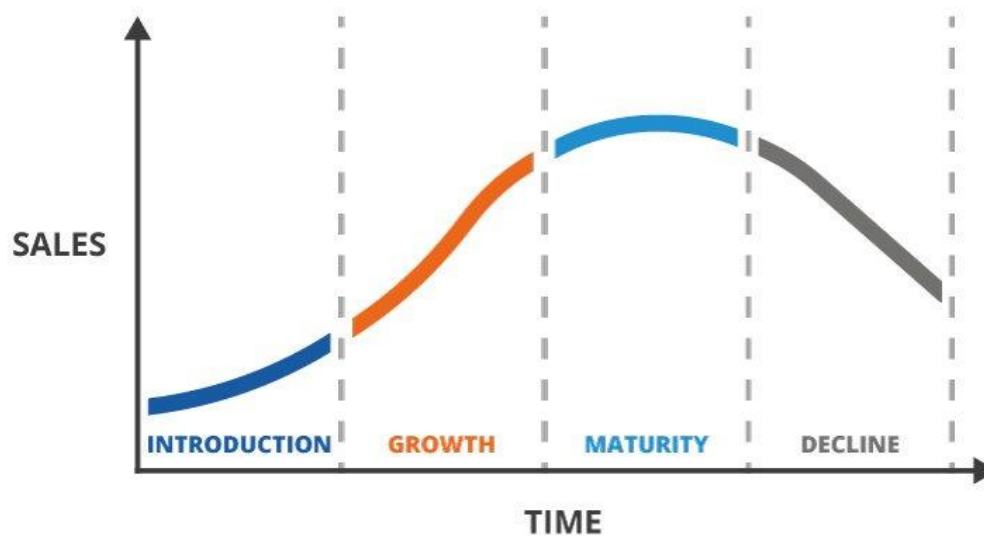
### 2. Growth

During the growth stage, consumers start taking to the product and buying it. The product concept is proven as it becomes more popular, and sales increase. Other companies become aware of the product and its space in the market as it begins to draw more attention and pull in more revenue. If competition for the product is especially high, the company may still heavily invest in advertising and promotion of the product to beat out competitors. As a result of the product growing, the market itself tends to expand. Products are often tweaked during the growth stage to improve their functions and features. Here the competition is not so stiff and, therefore, the firm keeps a moderate price of its product and enjoys the increasing demand. More distribution channels are added to the network as more and more customers are to be reached. Since the customer base is widespread, the broader promotional tool is required and hence the advertising is likely to be more effective.

### 3. Maturity

When a product reaches maturity, its sales tend to slow, signaling a largely saturated market. At this point, sales may start to drop. Pricing at this stage tends to get competitive, so profit margins shrink as prices begin to fall due to the weight of outside pressures like increased competition and lower demand. Marketing at this point is targeted at fending off competition, and companies often develop new or altered products to reach different market segments. Here, the distribution becomes more intense, and the channel partners are often given the incentives to gain more preference over the competitor's products. The sales promotion and personal selling play a vital role at this stage. The short-term incentives are given to the public in the form of gifts, vouchers, discounts, rebates with the intent to boost temporary sales.

## PRODUCT LIFE CYCLE



### 4. Decline

Although companies generally attempt to keep their product alive in the maturity stage as long as possible, eventual decline is inevitable for virtually every product. In the decline stage, product sales drop significantly, and consumer behaviour changes, as there is less demand for the product. The company's product loses more and more market share, and competition tends to cause sales to deteriorate. These disparities show that the end of the PLC curve may take on a variety of forms. This could be seen as the beginning of the end of the product. At this phase, costs see a further reduction, demand reduces, the market starts to decline as competitors gradually withdraw, sales volumes drop, profits are seriously affected and the product is ultimately withdrawn from the market. Maintain the product by adding new features or discovering its new usages. Harvest the product by reducing the cost of production and selling to the niche market segment. Abandon the product i.e. discontinues or withdraw the product from the market or liquidating inventory to another firm that is ready to continue with the product. Thus, these are the stages which every product passes through, and the company should plan its marketing strategy keeping in mind the life stage of a product in which it falls.

### Conclusion

According to this paper most successful products in the market passed through four recognizable phases: development, growth, maturity, and decline. PLC analysis is the process of purposefully examine a product and making strategic design, pricing, and marketing decisions to optimize the product for each stage of its life cycle. Conducting PLC analysis can help companies determine if their products are servicing the market they target efficiently so that they can get a clearer idea of when they might need to shift focus. It is very essential for the marketers to understand the product life cycle so as to provide/design effective marketing strategies for each phase of PLC. An effective management of PLC will probably extend its life and gain growth in the competitive market.

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