

# Analysis of Product Life Cycle and Management Strategies: A Case Study on Patanjali Products

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**Abstract:** *Product life cycle (PLC) is categorization of a product in various phases of its life cycle. Starting from its introduction, to growth, maturity, and lastly decline stage. The research investigates the key internal contributors for each stage of the PLC, their significance as well as the relevant strategies that should be used at each stage of PLC. The purpose of this research was to investigate and record the current life cycle stages of some products of the Patanjali Ayurveda Limited (PAL) utilizing Boston Consulting Group (BCG) matrix of the product life cycle theory. In addition, an analysis was conducted of the management strategies used by the Patanjali Ayurveda Limited (PAL) for its different products in the different stages of the life cycle. The research was conducted by collection of the sales data of the patanjali group products of a particular region and with the help of the BCG matrix the results were obtained. The recommendations and suggestions were given to the distributors of products of Patanjali for further improvement in sales.*

**Keywords:** Product life cycle (PLC), BCG Matrix, Management Strategies, Patanjali Ayurved Limited (PAL), Patanjali products

## 1. Introduction

When a new product is being introduced in to a market, it normally undergoes a series of stages in the market; these stages are introduction, growth, maturity and lastly the decline stage. These steps follow each other chronologically and thus referred to as the product life cycle (PLC). The product can be defined as goods, services or both; in other words it's anything that satisfies customer need. Each product has its own duration of life, however it shares the same aspect and we define the period which the product goes through as the "Product Life Cycle".

The PLC sequence is closely linked with the dynamics in the market environment and has subsequent effects on the product marketing mix and marketing strategies. Marketing is about creating markets by satisfying target customer needs and wants better than other competitors in the market. Marketing is all about product, the product is a bundle of satisfaction that a customer buys. The marketing definition of a product is more than just what the manufacturer apprehends it to be.

## 2. Literature Review

The product life cycle concept represents a core element of marketing theory and has been so for the past 40 years. According to Kotler (2000: 315), Walker, Boyd & Larréché (1999: 146) and Churchill & Peter (1998: 234) every product or service has, by definition, a life cycle and how this is managed is the key to survival in business. The product life cycle has represented a central element of marketing theory for four decades, from its development in the 1950s, and its subsequent popularization in the 1960s. The product life cycle concept has remained a stable feature of marketing teaching, despite evidence of its limited applicability.

Mercer (1993: 269) states that the product life cycle theory has been subjected to relatively little public criticism and only 20 percent of 271 papers published on this subject between 1971 and 1991 undertook further research into this subject and challenged its basic assumptions. Grantham (1999: 4) posits that attempts to validate the life cycle concept on an empirical basis have been restricted by the lack of definition as to which life is being examined, since different authors have different understandings of the product life cycle concept.

## 3. Research Objectives

- To study the product life cycle of the Patanjali products and determine its stage with the implementation of BCG matrix.
- To study the management strategies of the product implemented by the company.
- To identify the future prospects of the company in comparison to other leading MNCs.

## 4. Theoretical Framework

### 4.1 Product Life Cycle

The traditional PLC theory is defined by the pattern of sales or revenues against time, which is generally assumed to adopt a bell-like shaped curve, developed by Steffens & Kaya in 2008. The PLC can be divided into four key life stages, which are: introduction, growth, maturity, and decline, each representing a different level of sales volume as shown in figure 1

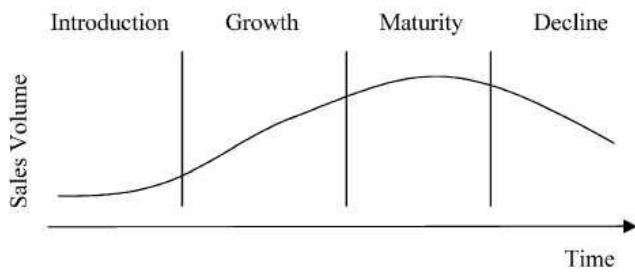


Figure 1: The traditional product life cycle model (Steffens & Kaya, 2008)

• **Introduction Stage**

In this stage, the company builds product awareness and develops market for the product, and launches the product into the market. The size of the market for the product is small, which means sales are low, though the sales will be increasing. On the other hand, the cost of things like research and development, consumer testing, and the marketing needed to introduce the product can be very high, especially if it's a competitive market.

• **Growth Stage**

The growth stage is usually characterized by a strong growth in sales and profits, and because the company can start to benefit from economies of scale in production, the profit margins, as well as the overall amount of profit, will increase. In this stage company build brand preference and increase market share.

• **Maturity Stage**

During the maturity stage, the product is established in the market and now the manufacturer aims to maintain the market share they have built up. This is probably the most competitive time for most products and businesses as they need to invest wisely in any marketing they undertake.

• **Decline Stage**

In this stage sales decline. This shrinkage may be because of various factors like, due to the market becoming saturated or because the consumers are switching to a different type of product. To overcome this, the firms either reduce the cost to continue or quit from the market.

**4.2 Boston Consulting Group (BCG) Matrix**

The growth–share matrix (BCG-matrix, Boston matrix, Boston Consulting Group analysis, portfolio diagram) is a chart that was created by Bruce D. Henderson for the Boston Consulting Group in 1970 to help corporations to analyze their business units. The **Boston Matrix** is a business model which analyses the goods or services of a business in terms of their share of the market, which also takes into account the rate of growth the market is currently experiencing. Using this method, a business can quickly evaluate where each of their individual products lies in their own market.

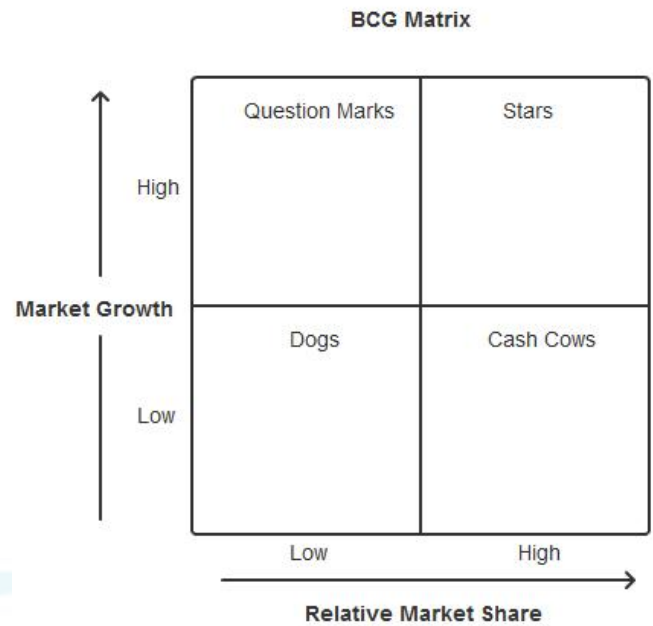


Figure 2: BCG Matrix

a) A **star** (named after “rising star”) has both high market share and high market growth. A star product enjoys increasing sales revenue, but because it’s a growing market, competitors are attracted to it. This result in the company spending a great deal on promotional spending, and might involve the business in high capital investment to increase the capacity.

b) **Cash cows** (with high market share in a low market growth) often exist in established markets that have reached maturity stage. The low rate of market growth reduces competition, so it is possible to spend less on advertising. A high proportion of cash cows are ideal for companies seeking high profits, but firms with cash cows will try to develop new products in order to enter high-growth markets.

c) **Question marks** (or **problem children**) are competing in a competitive market, with a low market share and high market growth. Because the market is growing, there is possibility of increase in sales in future, even if the product does not increase its market share. Many new products are problem children at first, as they tend to need large amounts of market research and promotion in order to succeed. If successful, they become stars or cash cows.

d) A **dog** has a low market share and is in a low-growth market. Businesses need to think carefully about retaining such products in the market, as they offer little scope for profit-making. During recession, these products will be dropped. However, these products should not be so simply written off.

**4.3 Relation between Product life cycle and BCG matrix**

a) There exists a relationship between product life cycle of a product and BCG matrix:

- If a product falls in the category of question mark in the BCG matrix than the product is in its introduction stage of the PLC.

- If a product falls in the category of Star in the BCG matrix than the product is in its growth stage of the PLC.
- If a product falls in the category of Cash Cow in the BCG matrix than the product is in its mature stage of the PLC.
- If a product falls in the category of Dog in the BCG matrix than the product is in its decline stage of the PLC.

### BCG Positions Throughout the Product Lifecycle

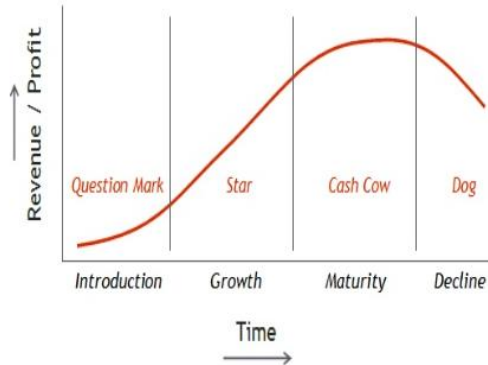


Figure 3: Relationship b/w PLC and BCG Matrix

### 5. Data Analysis and Interpretation

The Patanjali products which have been considered for study are;

- DANTKANTI
- GHEE
- ATTA NOODLES

Sales Data was collected from the distributor of the study region (INDORE) of the above patanjali products with the help of the questionnaire. Sales Data of other rival companies from the market was also collected from the above category of the product i.e. toothpaste, ghee and Atta noodles respectively by preparing questionnaire.

#### 5.1 Formula

Following formula is used for the calculation purposes:

- Relative Market Share(RMS)

$$RMS = \frac{\text{Business Unit Sales this year}}{\text{Leading rival sales this year}}$$

- Market Growth Rate (MGR)

$$MGR = \frac{\text{Individual Sales this year} - \text{Individual sales last year}}{\text{Individual Sales last year}}$$

#### 5.2 Dantkanti

Table 1: Sales data of Dantkanti

| Year    | Sales (In Units) |
|---------|------------------|
| 2015-16 | 1200000          |
| 2016-17 | 1300000          |

$$MGR = \frac{1300000 - 1200000}{1200000} = 7.6\%$$

Table 2: Calculation of relative market share for Dantkanti

| Brand     | Sales (In Lakhs) | Market Share | Relative Market Share |
|-----------|------------------|--------------|-----------------------|
| Colgate   | 17               | .25          | 1.19                  |
| Close-up  | 14               | .21          | 0.81                  |
| Dabur     | 13.6             | .20          | 0.80                  |
| Dantkanti | 13               | .19          | 0.76                  |
| Others    | 8                | .15          | 0.60                  |
| TOTAL     | 65.6             |              |                       |

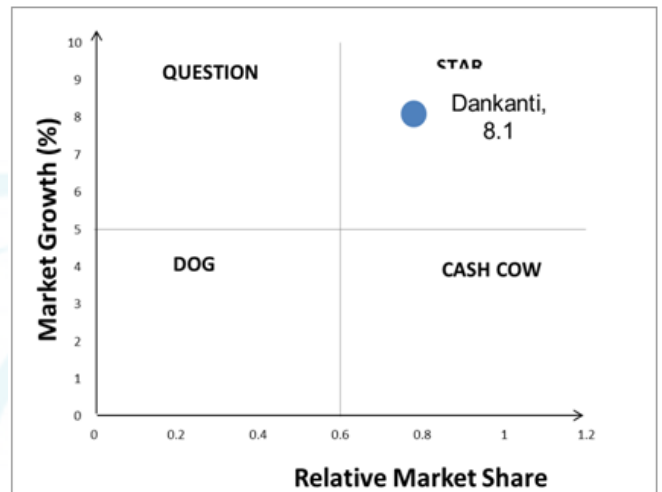


Figure 4: Graph Obtained from Above Data

#### 5.3 GHEE

Table 3: Sales data of Patanjali Ghee

| Year    | Sales (In Units) |
|---------|------------------|
| 2015-16 | 6800000          |
| 2016-17 | 7400000          |

$$MGR = \frac{7400000 - 6800000}{6800000} = 8.1\%$$

Table 4: Calculation of relative market share for Patanjali ghee

| Brand     | Sales (In Lakhs) | Market Share | Relative Market Share |
|-----------|------------------|--------------|-----------------------|
| Amul      | 95               | 0.39         | 1.30                  |
| Sanchi    | 50               | 0.20         | 0.51                  |
| Patanjali | 74               | 0.30         | 0.78                  |
| Others    | 20               | 0.11         | 0.28                  |
| Total     | 239              |              |                       |

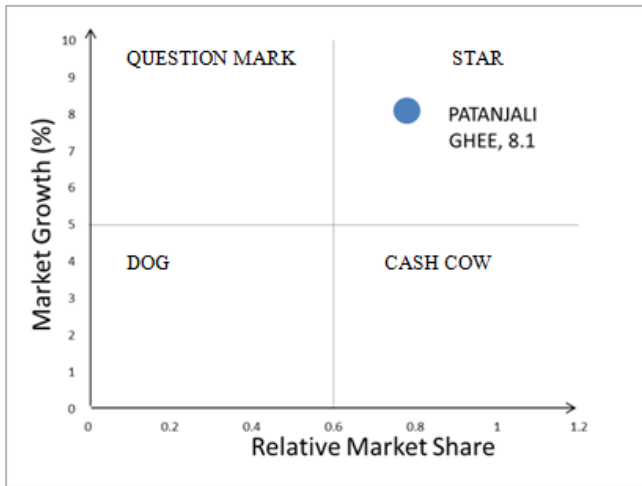


Figure 5: Graph Obtained from Above Data

5.4 ATTA Noodles

Table 5: Sales data of Atta Noodles

| Year    | Sales (In Units) |
|---------|------------------|
| 2015-16 | 126000           |
| 2016-17 | 134000           |

$$MGR = \frac{134000 - 126000}{134000} = 6.6\%$$

Table 6: Calculation of relative market share for Patanjali Atta Noodles

| Brand     | Sales (In Lakhs) | Market Share | Relative Market Share |
|-----------|------------------|--------------|-----------------------|
| Maggi     | 290              | 0.48         | 2.07                  |
| Yippee    | 134              | 0.22         | 0.45                  |
| Patanjali | 140              | 0.23         | 0.48                  |
| Others    | 40               | 0.06         | 0.12                  |
| TOTAL     | 604              |              |                       |

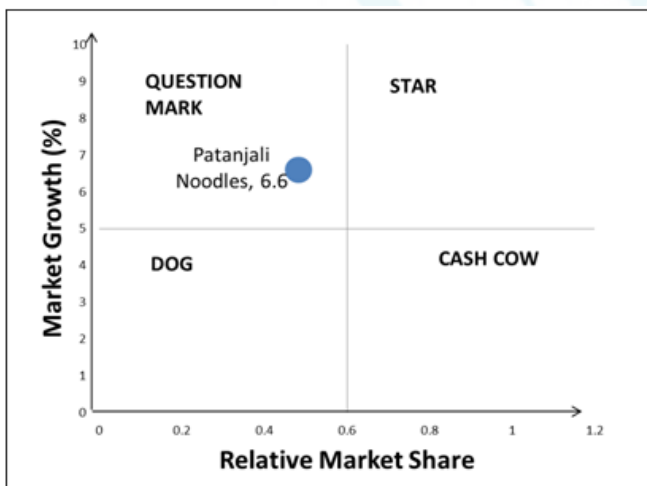


Figure 6: Graph Obtained from Above Data

5.5 Results

The results of all of the three products are obtained from the data analysis and graph. Result obtained is as follows

Table 7: Results obtained from analysis

| Product        | Stage              |
|----------------|--------------------|
| Dantkanti      | Growth Stage       |
| Patanjali ghee | Growth Stage       |
| Atta noodles   | Introduction Stage |

6. Management Strategies of Patanjali Group

➤ Promotional Strategies

- Baba Ramdev himself as the brand ambassador of PAL highly affects the advertisement sector as he has huge following in all sectors of media.
- Yoga shows all over the country helps in promoting patanjali products.

➤ Product strategies

- Brand Image- Ayurvedic and herbal product that has no harmful chemicals.
- 100% natural and herbal products.
- Swadeshi Products- One of the key factors for the success of patanjali products.
- It also strengthen Indian Economy by replacing foreign product with Indian product.
- Promoting “MAKE IN INDIA” campaign.

➤ Pricing Strategies

- Patanjali products are 10-15% cheaper than other FMCG products.

Table 8: Price comparison

| PRODUCT      | PATANJALI | OTHER BRAND  |
|--------------|-----------|--------------|
| CHYAWANPRASH | 115       | 160(Dabur)   |
| HONEY        | 135       | 200(Dabur)   |
| NEEM SOAP    | 15        | 24(Himalaya) |
| TOOTHPASTE   | 35        | 48(Colgate)  |
| ATTANOODLES  | 10        | 15(Maggi)    |

7. Suggestive Strategies for Future

- Improvement in packaging of the products as they lack attractiveness in case of many patanjali products. Packaging does not attract materialistic people.
- More outlet stores should be opened as products are not easily available to the consumer.
- Focus on Exports; Patanjali has largely focused to cater to the domestic market. Exports thus remain to be a very low fraction of the total sales. It is thus imperative to focus on exporting products using Indian operations as sourcing hub for the same
- Most of the revenues generated by the Patanjali group are from some of its mainline products such as ghee, honey, Dantkanti etc., so it should also focus more on the other

products so as to generate maximum revenue for the company.

e. Product availability must also be improved, as shortage of products is many times indicated by the customers.

## 8. Conclusion

From the analysis, it has been finally concluded that Dantkanti and Patanjali Ghee are at the growth stage while Patanjali Atta noodles is at the introductory stage of its launch. Suggested strategy can be implemented so that these products can proceed to their individual next stages. PAL is one of the fastest growing FMCG in our country .In the last fiscal year it generated a 100% increase in revenue and they are expecting 100% increase in its revenue this year also.

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## Author Profile



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