



PRODUCT LIFECYCLE & BOSTON CONSULTING GROUP GROWTH SHARE MATRIX-VIVID RELATIONSHIP

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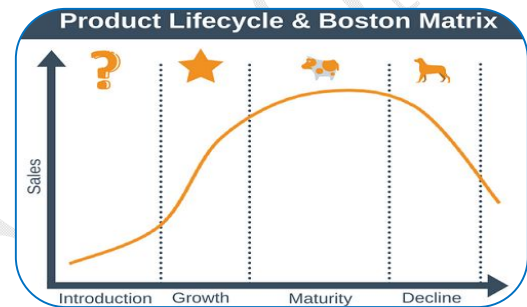
ABSTRACT :

This paper is designed to show the direct relationship between Boston Consulting Group Growth Share matrix (BCG) and The Product Lifecycle (PLC). The connection between BCG matrix and PLC delivers a vivid strategic picture of product life stage. In every stage of product life cycle the proper strategy which the business unit will take or should take can be well determined by BCG. Even when the BCG is a technique of 1970's and having certain limitations, still its simplicity brings a vivid idea of market condition.

The relative market share and growth rate are the two important factors for determining the product condition. BCG uses it as the determinants of decision making. In modern business world where the market is complex, more competitive and volatile, tracking the market condition and analyzing every situation is necessary, here PLC act as a tracking and alarming tool.

Positive funding, proper utilization of resources are the most important factors of systematic production process. PLC trace out the time and BCG provides the strategic support. Moreover to gain the competitive advantages, product requires innovations and uniqueness. The proper time to emphasis more on research and development is well calculated by the combination of BCG and PLC.

Hence the relationship between the Boston Consulting Group Growth Share matrix (BCG) and the Product Lifecycle (PLC) in the final run with all its capacity bring out the mode of profitability for business units.



KEYWORDS : *The Boston Consulting Group Growth Share matrix (BCG), Product Lifecycle (PLC), Relative market share, Growth rate, Tracking system, Economic model, Cash Trap.*

INTRODUCTION

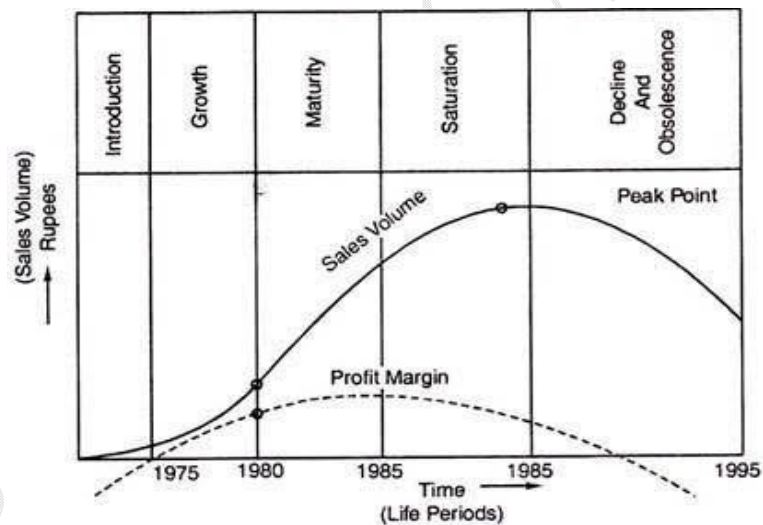
The Boston Consulting Group Growth Share matrix (BCG) is a model of portfolio planning developed by Bruce Henderson of Boston Consulting Group in 1970's. Although this model has been the subject of many critiques but still it has a considerable effectiveness in various researches. Neelson and Winter (1982), recommended BCG as a revolutionary economic model used for testing various results of the matrix's investments rules. Kotler (1997) considered Boston Group Portfolio Matrix model as the noted business portfolio model. Phelan (2004) believed that the BCG matrix is adapted to the exploratory policy model. BCG is profound for managers to use the valuable information engendering from BCG matrix as the foundation for strategic decision on which business should draw the further investments, shaping the fraction of resource distribution strategy. Based on the BCG observation Company's business units can be classified into four categories, with a combination of two

dimensions market share relative to competition and market growth describes by Burgelman, Modesto, Steven (2000) . The Growth Share acts as a proxy for industry attractiveness whereas on the other hand market share serve as a proxy for competitive advantage. The growth share matrix act as a tracking system, which maps the business unit’s position within two important determinants of profitability.

Relative Market share: it is the ratio of market share a business has (in terms of unit volume) compared to its largest rival. An increase in the relative market share will result in increase in growth generation. Increase in relative market share depicts that the firm is moving forward in the experience curve relative to its competitor.

Market Growth Rate: it is the relative growth compared to the previous year in economy as a whole. The growing market requires investments in assets to the increase in capacity and therefore results in the cash consumption.

The Product Lifecycle (PLC): According to John Stark, (2004); Michael Grieves, (2005) and Wheelan and Hunger,(2006) considered the product life cycle as a curve chart that shows the stages product go through from introduction to decline. When a product idea is commercialized by a company, the product enters the market and competitors with existing products to secure maximum share of consumer’s income. It brings in sales and generate profit has a life span at the aspiration of which it is a dead. It is based in term of its capacity to generate sales and profits of its perishable distinctiveness. Tom, (2009) provides a diagrammatic indication of this cycle (Fig.No-1). The product too have their childhood, youth, old age and obsolescence. This has been described as life cycle in human being, when applied to product; it is termed as product life cycle.



The PLC concept is a single one. It has three key elements:

- 1) Product move through the cycle of introduction, growth, maturity, saturation and decline or obsolescence at different speeds.
- 2) Both sales volumes and unit profits rise correspondingly till growth stage and fall correspondingly after the maturity stage. However, during the maturity stage sales volume rise but unit profit falls.
- 3) The functions emphasis required for successful product management changes from stage to stage on account of changes in the economics of profitability.

Relationship between PLC and BCG:

According to Steve Johnson (Product Management Process Coach, Author, July 2017) BCG matrix is a great mutual model, particularly when overlaid with a typical PLC. To achieve the usage, he rotates the grid to align better with the life cycle (Fig.No-2). In this view the vertical is the share of the market and horizontal is the growth of the market (growth from high to low). The arrow represents the

typical life cycle of a product from idea to growth to maturity and ultimately to retirement. Hiram C.Barksdale (Professor Marketing- University of Georgia) and Clye E.Harris Jr (Associate Professor Marketing- University of Georgia) on their paper explains how the PLC and BCG portfolio matrix can be combined to provide a more comprehensive framework for strategic analysis. The integrated model (Fig.No-3) is more powerful than either concept taken separately because it provides an exhaustive system for classifying a diverse assortment of business unit or product and market categories.

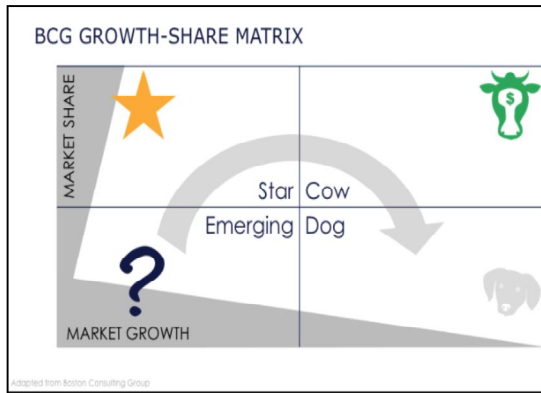


Fig.No-2

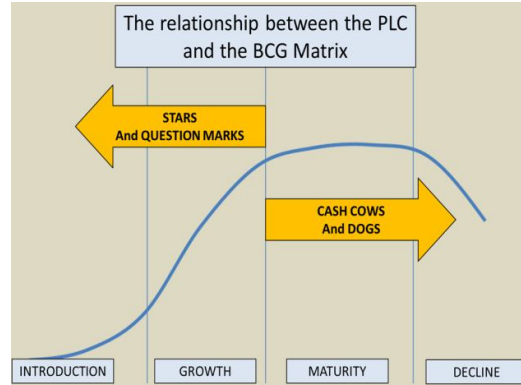


Fig.No-3

INTRODUCTION STAGE:

- Product is new and distinctive.
- Slow rise in sales.
- Slow rise in profit margin.
- High income group buyer.
- Narrow product line.
- High price.
- Limited distribution.
- Primary demand cultivation.
- Low relative market share.
- Slow forward movement through the experience curve.
- Less investment, hence less consumption on asset and capacity.
- Slow movement through growth curve relative to competitors.

It comprises mostly the "Question mark" and part of "Star" in certain situations. Here new innovative products can soon be out completed by new technology advancement. In the introduction stage the product can hold low market and act as a Question mark or Problem Child but with unique advancement it can soon move to Star and gather potential market share. Hence we can say that in this stage the relative market share is low and low cash return as the production rate is also low. It is worth to note that some firm may experience higher profit with lower production output and lower market share.

Strategic choices: Vertical integration, Horizontal integration, Market penetration, Product development.

Growth Stage:

- Considerable and wide spread approval in market.
- Sales sharply increase in increasing rate.
- First major product improvement.

- Contribution to sales is maximum from higher income group.
- Widely spread distribution.
- Multiple product line.
- Profit margin continues to rise.
- Growing strong market share.
- Large amount of cash generation.
- Large amount of cash consumption.
- High growth rate, therefore cash in each direction approximately met out.

The growth stage is the condition of “Star” and its high potential of growth rate moving it towards “Cash Cows”. There is also a probability of “Dogs” as growing market consumes large amount of cash and can also incur losses. If the product gain a large volume of market share as it has the potential to high growth rate and investment provision then the product can be market leader. Gaining of market share incurs revenue which will support the future growth.

Strategic choices: Product development, Product diversification

Maturity Stage:

- Sales rise in a slow decreasing rate.
- Profit margin slowly declines.
- Mass market gathered.
- Product improvement also takes place.
- Consumption of large cash.
- Growth rate is high.
- Market share is slowly increasing.

The maturity stage is a situation under “Cash Cows”. The product already has well volume of market share and generating cash with it. The growth rate is declining; hence the growth rate investment is necessary. Innovation, product diversification takes place in this stage but every time these may not be successful. If the product generates low or negative cash return, it can turn into “Dogs”.

Strategic choices: Product diversification, Addition of new qualities in the product, Innovation, Positive Investments.

Saturation Stage:

- Market is saturated with the product.
- Either a market leader or losing market share.
- Replacement sales of the first time purchases of the product by the buyers.
- Rise and fall of sales depends on basic economic factors i.e. demand and supply
- Number of competitor also stabilizes
- Profit achieves its peak point and then moves toward declination.
- Sales volume also achieves its peak and gradually declines.
- Return on asset that is greater than market growth rate.
- Relatively stable cash flow but limited space for cash consumption.
- Funding is done on research and development and paying dividends.

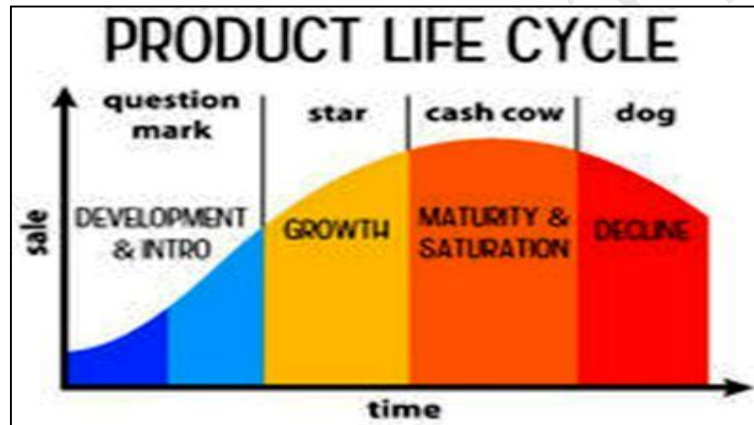
After the maturity stage the saturation stage is the combination of the “Cash Cows” and “Dogs”, but the impact of “Cash Cows” is more than “Dogs”. The rise and fall of the sales depends on the basic economic factor in this highly segmented market. As the competitor are stabilized profit margin also declines. Return from asset is stable but the market growth rate is less.

Strategic choices: Introduction of new variety of product, Product diversification, Product differentiation, Concentration on research and development.

Obsolescence Stage:

- Product loses its distinctiveness.
- Both profit and sales generation is low and is decreasing rapidly.
- Product travels back to the core market.
- Product line gets narrow and requires primary demand cultivation.
- Low or decreasing growth rate.
- Neither generation nor consumption of large volume of cash.
- Cash trap due to money tied up in a business with low potential.
- Limited or no such market share.

It is the last stage of the product life cycle, where the product retires from the market. The product faces the condition of “Dogs”. The product loses its distinctiveness and dies out in term of both sales and profit margin. Declination of sales is continuous which result in losing of market share. Growth rate is obviously nil or negative. No cash generation with no space for cash consumption hence a cash trap situation arises. Product line is narrow and primary demand condition becomes important.

Final Graphical Derivation :**DISCUSSION AND CONCLUSION:**

The Boston Consulting group growth share matrix provides a smooth strategic way but the problem mainly arises with the stage of “Dogs”. This stage is offering no such strategic choice for investing funds in the business. Many critiques will questioned that, “why BCG, an age old 1970’s technique in this 21st century ?” The answer is the simplicity of BCG model. The BCG matrix proved itself a significant and well acknowledged technique since the starting era of globalization. In Product life cycle, we find this model is the base of every product. The PLC delivers a vivid idea of the length and rate of change of product life. Relating the BCG matrix and PLC model, we can blend the most important step of indentifying the product life stage and choosing the proper strategy for the stage. In conclusion we can say anticipating the problem, threats and forecasting opportunities for changing and expanding the product life cycle is most important for every product to sustain.

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