PRODUCT LIFE CYCLE STRATEGIES IN EMERGING MARKETS – A CASE STUDY FROM PAKISTAN

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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 eventually decline stage (Wood, 1990). This article investigates the key internal contributors for each stage of the PLC, their level of importance as well as the relevant strategies that should be used at each stage of PLC. For purpose of this research article, detailed interviews have been conducted with corporate managers of consumer goods companies in Pakistan (Billah, 2012). The findings of this study shall help managers to understand the reasons for performance or non performance of their products brands in the consumer market and will serve as a useful guideline on how to improve the success of their products and sustain growth in market for a longer period of time. From research end, this study shall open opportunities for scholars and academicians to conduct further research studies in this area.

Summary statement of contribution: In Pakistan, till date no study has been conducted on product performance in various stages of PLC. This research presents a practical implementation of PLC concept in Pakistan and presents a guideline to business decision makers regarding which strategies to use at various stages of PLC.

Key Words: Brand image, brand loyalty, consumer goods, contributors, Pakistan, product life cycle (PLC), strategies

Introduction

The PLC stages establish the relevance of a product's importance in the consumer world (Tyler, 2008). Currently, there are a large number of consumer goods companies offering a variety of products in Pakistan. However, no adequate research is available which studies the relation of causes (contributors) for various stages of the PLC in Pakistan and the strategies that should be used for each stage.

With the above context in mind, a literature review has been conducted for the purpose of this research. This review takes a look into the characteristics of various stages and how each

stage can be identified. More importantly, the literature review also identifies the internal contributors (independent variables) for each stage of the PLC.

These contributors are the causes or factors (internal to the organization) which have an impact on the stage of the product in the PLC (Hindle, 2008). The direction of relation between the independent variables and the dependent variable (Billah, 2012) (stage of PLC) has also been established at this stage. The literature also indicates the various strategies for stages of the product life cycle.

Based on the literature review, a primary research has been conducted through direct face-to-face interviews with corporate managers in consumer goods companies (Billah, 2012). The research findings determine if there is a significant relationship between identified internal contributors for different stages of the PLC and actual stage of the product in the PLC. This has been done through multiple regression analysis. The findings also present the strategies for various stages of the PLC and study their level of importance.

Justification and likely benefits

This study is the first one conducted on this topic in Pakistan. It represents a practical implementation of the PLC concept in Pakistan and explains how brands/products are performing in the current scenario. This study shall help managers to understand the reasons for performance or non performance of their products brands in the consumer market. Further, it will serve as a useful guideline to the industry practitioners on how to improve the success of their product brands and sustain growth in the market for a longer period of time. The descriptive analysis and strategies portion presents insightful findings, learning & implications for practitioners in the business arena.

From the research end, this study shall open opportunities for scholars and academicians to conduct further research studies in this area. For instance, the study can be replicated for industrial products or business to business modes of operation. Similarly, an analysis of relation between external contributors and stages of the PLC can also be added.

Brief literature review

All products (goods and/or services) produced or provided by any industry or business follow a life cycle. This is the time that runs from the first idea and development of a product to its removal from the market and beyond (Wood, 1990). To comprehend more about the levels of sales generated at various stages of a product's life cycle, refer to the PLC curve given below.

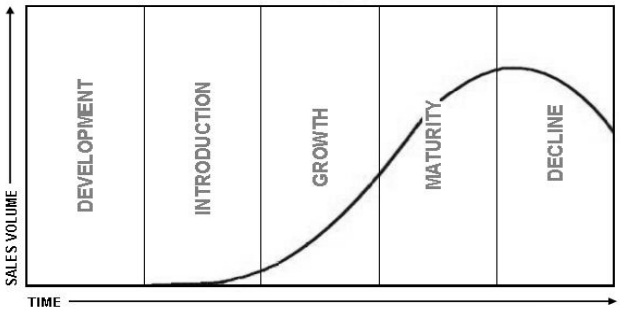

Figure 1

(Wood, 1990)

The product life cycle is an extensive process and refers to the life of a product in the business market with respect to sales strategies, costs and investments. Product life cycle in the same way as business model undergoes ***four*** separate stages and need the expertise of many different divisions or managers of a business concern (Cox, 1967). The stages of the PLC are: Introduction, Growth, Maturity and Decline (Tyler, 2008).

Concept & characteristics of PLC stages

Introduction stage: At the time of introduction of a product, return on investment tends to be low, and it is not possible to identify any type of increasing patterns in offtake and demand (Shankar, Carpenter, & Krishnamurthi, 1999). Based on how the goods or services are launched, marketing investments might be high and the profits would be low. The objective at this level is to generate trials and increase awareness of the goods or services (Kotler, 1992). If the introduction stage persists for too long and does not progress to the growth stage, it can be harmful for the product.

Growth stage: The growth stage shows a high increase in both profits and sales, and this is the period when businesses try to increase the market share of the product. By now the manager should know where the sales are coming from and in which direction to invest further in terms of time, cost and energy (Kotler, 1992). At this level, quality of the product is emphasized and costs may be condensed to the economies of scale. The relative sales should enhance significantly, as well as the bottom line profits. A higher level of prices may be established as the company notices an increasing demand in the product. The competition at this stage tends to be low. As distribution channels are enhanced, consumers begin to relate to the product and the sales continue to grow.

Maturity stage: The growth stage is directly followed by the maturity stage, often termed as the 'most common' stage for most goods or services. The objective of a business in the maturity stage is to increase profits to a maximum level and protect market share of the product (Kotler, 1992). Competition begins to increase and marketing becomes the main ingredient for the product's growth. In this period, increasing the market share is an expensive proposition;

growth at this stage may be limited due to external factors beyond the control of the business managers (Tellis & Fornell, 1988).

Decline stage: The last stage in the product life cycle is decline. This does not imply that the product should be abandoned; however new strategies for revival would be required (Shankar, et al., 1999). These could include new models & versions, price reductions, exploring new distribution channels and new target markets. One of the main objectives in decline is to decrease the related costs of the product.

Identification of PLC stage: A business manager must know how to recognize the phase of life cycle through which a product is passing (Komninos & Thessaloniki, 2002). The stage of the product life cycle can be identified based on performance of a product with respect to its profits, costs and sales as well as number of competitors in the respective industry (Tellis & Fornell, 1988).

For identification, an adequate method is the one, recommended by Donald Clifford in 1965, which is given as follows.

- Collection of data about the product's performance over a minimum period of 3 – 5 years (information can include price, profit margins, return on investment, units sold and value) (Komninos & Thessaloniki, 2002)
- Comparison of short-term strategies of different competitors (analysis of new products entering the market and intelligence on competitor's plans for plant up-gradation, production increments, marketing campaigns and promotional activities) (Komninos & Thessaloniki, 2002)
- Analysis of number of competitors in respect of market share (Komninos & Thessaloniki, 2002).
- Compiling information on the life cycle of comparable products that can also help to forecast the life cycle of a new product (Komninos & Thessaloniki, 2002)
- Forecasting sales volume for 3 – 5 years from launch of the product (Komninos & Thessaloniki, 2002)
- Assessment of the total expenses and costs compared to the sales revenue for 3 – 5 years since launch of the product (Research and development, marketing, operational, and promotional costs). The forecast should be in the scope of 4:1 at the start to 7:1 at the level when the product reaches the maturity stage (Komninos & Thessaloniki, 2002)

External contributors

External contributors are those factors which exist in the general or specific environment of a company and directly or indirectly affect the stage of a product in the PLC (Day, 1981).

There are a large number of external factors that affect the stage of a product in the PLC (Lambkin & George, 1989). Several analysis tools are used to assess these external contributors. These include the assessment of the opportunities and threats (external factor evaluation), the PEST analysis; analysis of political, economic, social and technological factors and the Porter's

5 forces model. All of these are effective techniques for studying an organization with respect to its external environment (Day, 1981).

The competitive scenario, entry/exit barriers, prices of raw materials, consumer purchase habits, market trends, changes in technology, tax regulations and legal framework all effect the product's performance in the PLC (Day, 1981). This research will however, consider the internal contributors only.

Internal contributors

Internal contributors are those factors, decisions or reasons (within a company) that directly or indirectly contribute to the stage of the product in the PLC. Internal contributors also imply those factors which are in control of a product's manufacturer/business team.

By reviewing the life cycle of goods or services, a business can pre-empt circumstances that arise at various times in the market. Being prepared and equipped for each stage gives the chance to generate maximum demand for the product (Corporate author, 2012).

Following is a list of internal contributors to the PLC. As identified in the existing literature and research articles, these internal contributors have a direct relation with the performance of a product in the PLC:

- Consistent product quality that is assured at all times. (Shankar, et al., 1999; Tellis & Fornell, 1988; Anderson & Zeithaml, 1984; Thietart & Vivas, 1984; Thorelli & Burnett, 1981; Hofer, 1975)
- Effective marketing campaigns & advertising that are conducted to retain interest of target consumers (Tellis & Fornell, 1988; Anderson & Zeithaml, 1984; Thietart & Vivas, 1984; Thorelli & Burnett, 1981; Kazanjian, 1988)
- Continuous Product Differentiation & innovation (Anderson & Zeithaml, 1984; Thietart & Vivas 1984; Thorelli & Burnett, 1981; Klepper, 1996; Kotler, 1965)
- Effective distribution/availability is ensured at all times (Thietart & Vivas 1984; Thorelli & Burnett, 1981; Hofer, 1975)

Identified strategies for various PLC stages

Introduction stage: During the introduction phase of a product's life cycle a business manager can establish an awareness of the goods or services in a few markets and initially focus on specific markets (Corporate author, 2012). Once the product or service is launched into the market, comprehensive marketing efforts can commence in order to establish a clear identity and develop the product.

At the introduction stage, focus should be on the following marketing factors:

- At the introduction stage, pricing can be at the highest level which is viable for the consumers (Corporate author, 2012). A skimming price strategy can also be opted and charging a comparatively elevated price for a limited time when a new, pioneering or innovated product is brought to the market. The purpose of adopting skimming price strategy is to capture those consumers who are keen to pay additional price, to be those of

the first ones who get their hands on the new product. Prices can be reduced later when requirement from the early acquirers decreases. A penetration pricing strategy may also work best for businesses coming into a new market or relying on a comparatively limited market share. It includes the incorporation of reduced, rather than increased prices in order to gain a substantially large, if not major share of the market (Corporate author, 2012).

- Distribution should be selective and channeled according to type of customer, until the product is established in the market (Corporate author, 2012). Also, various distribution strategies should be evaluated during changing periods of the product life cycle, for e.g. season-wise new products for various seasons of the year (Corporate author, 2012).
- Focus should be on creating awareness of the brand at an early stage. It is advised to acquire services of a communications or advertising agency in order to develop the product into a strong brand (Parker & Neelamegham, 1992).
- Giving free samples and taste trial activities should be conducted to capture early adopters of the goods or services (Hofer, 1975). Launch promotions also support potential resellers to trade and carry the product lines (Corporate author, 2012).
- Devising a strategy to focus the goods or services to a certain category of customers - being focused and selective about target market can elevate market demand (Corporate author, 2012).

It is probable that during the introduction phase, sales will be low until customers become familiar with the goods' or services' unique features. Due to the high marketing cost and low sales, the product may generate negative profits in this phase. However this would be compensated by the enhanced revenue earned during the growth and maturity stages of the PLC (Corporate author, 2012).

Growth stage: At this stage of the life cycle of the product, focus should be on enhancing the market share and generating a purchase preference from the consumers (Corporate author, 2012).

This should be a time of swift development in sales volume, revenue as well as profits for the goods or services. The profits should increase through an enhancement in overall output and change in pricing strategy.

Following are some of the suggested strategies:

- Retaining good quality of the product and adding new features or value added services (Hofer, 1975).
- Keeping the price level as high as possible to retain demand and high profits.
- Enhancing distribution channels to keep pace with growing demand for the product (Kotler, 1992).
- Increasing marketing campaigns and promotions to cater to a wider audience (Corporate author, 2012).

- Considering skimming product prices if the bottom line is not high enough (Kotler, 1992).
- If the profits are still not high, it can be considered to decrease the goods or services price in order to enhance the volume of sales.

Maturity stage: If the goods or services reach the maturity level, this usually would be the lengthiest portion of its product life cycle.

At this stage, the market has usually reached a saturation point as a consequence of competition launching its own version or brand of the product. It can be seen that the goods or services witness a reduced level of sales, which stabilizes after some time (Corporate author, 2012).

The goal should be to distinguish the goods or services from the competition. This can be achieved by emphasizing and focusing on any specific brand elements, e.g. logo, trademarks or consumer testimonials that may provide a competitive edge (Corporate author, 2012).

Literature suggests the following strategies for maturity stage:

- Product features or benefits may have to be increased to make the product more tempting than competitors (Kotler, 1992).
- Innovation or changes would have to be made to the product (Thietart & Vivas 1984).
- Upgrading the original version of the goods or services to re-attract existing consumers and entice new ones (Corporate author, 2012).
- Considering decreasing prices to capture consumers who use the competitor's products.
- Using the positive difference between own products and competitors' products as a means of promotion (Thietart & Vivas 1984).
- Pricing may need to be lowered due to increasing competition (Kotler, 1992).
- Distribution becomes more diverse and trade margins may have to be increased (Kotler, 1992).

Decline stage: Due to reasons such as changes in technology, consumer trends, purchase preferences, fashion & innovation, the sales of most products start to decline at some stage. It can be assumed that a product has reached in decline stage of its life cycle when there is a significant reduction in the revenue it earns (Corporate author, 2012).

Literature presents the following strategies for the decline stage:

- Retaining the goods or services and wait for competitors to exit from the market first (Kotler, 1992).
- Phase out the goods or services when the profit is finished (Corporate author, 2012).
- Decreasing costs and finding an alternate use for the product – exploring a new niche area could enhance sales (Kotler, 1992).
- Decrease marketing investment and harvest the product; wait for profits to disappear and then phase out the product (Corporate author, 2012)

Many of these techniques can form an 'extension strategy' that enhances the life of the goods or services in the PLC. This may give the product significant time to transform by a new adaptation, or a totally new product (Corporate author, 2012).

Objectives of the research

Objectives

Main objectives: The main objective of this hypothesis testing study is to determine if there is a significant relationship between identified (internal) contributors for different stages of the PLC and actual stage of the product in the PLC. It shall also provide an in depth view into strategies for various stages of the PLC.

Sub objectives: In line with the main objective, the following sub objectives shall be studied:

- To identify the stage of the product in the product life cycle.
- To ascertain the relation between independent variables and dependent variable (Billah, 2012).
- To identify strategies for various stages of the PLC.
- To gauge the importance level of these strategies for various stages of the PLC.
- To acquire suggestions & recommendations on how companies can increase growth and performance in the PLC (Billah, 2012).
- To acquire insights regarding the PLC with specific reference to Pakistan.

Identification of variables & theoretical framework

Based on the literature review, the identified independent variables are given in the theoretical framework below:

Graphical model

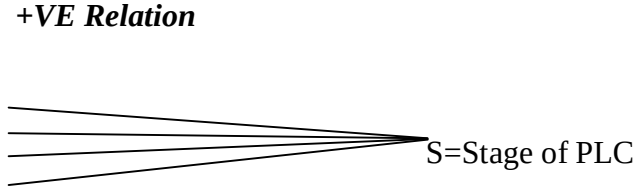

Figure 2

(Billah, 2012)

Hypothesis

The given hypothesis is directional as it states the relationship between two variables (Billah, 2012) & the literature review substantiates the positive relation between them. Hence, the Null (H_0) & Alternate hypothesis (H_1) statements for the set of variables are:

H_0: There is no relation between consistent product quality (independent variable) and the product's stage in the PLC (dependent variable)

H_1: There is a positive relation between consistent product quality (independent variable) and the product's stage in the PLC (dependent variable) (Billah, 2012)

H_0: There is no relation between conducting effective marketing campaigns (independent variable) and the product's stage in the PLC (dependent variable)

H_1: There is a positive relation between conducting effective marketing campaigns (independent variable) and the product's stage in the PLC (dependent variable)

H_0: There is no relation between continuous product differentiation/Innovation (independent variable) and the product's stage in the PLC (dependent variable)

H_1: There is a positive relation between continuous product differentiation/Innovation (independent variable) and the product's stage in the PLC (dependent variable)

H_0: There is no relation between effective distribution (independent variable) and the product's stage in the PLC (dependent variable)

H_1: There is a positive relation between effective distribution (independent variable) and the product's stage in the PLC (dependent variable) (Billah, 2012)

Research methodology & design

Study type and setting

This empirical study develops hypotheses and tests and explains the nature of relationships; establishes the difference among groups; and sees the strength between the dependent and independent variables. The use of Likert scales enables the researcher to gauge the degree of strength between these variables.

The interviews were conducted with respondents face-to-face, in their respective premises/offices (Billah, 2012) in addition to conducting the interviews by telephone and through email. Hence, the study setting is non-contrived.

Furthermore, as the managers belong to middle or senior tier of management, the extent of researcher interference was minimal and the respondents were allowed to explicitly highlight their opinion on the subject (Billah, 2012).

Overall, the model was a field study (non-contrived + minimal interference)

Sample size & sampling technique

Sample size: The unit of analysis is companies in the consumer goods industry. The sample size is 106 different managers from 31 different companies (Billah, 2012). The sample size is limited due to the highly specific profile of the managers.

Company & respondent profile: As per criteria of the research, all respondents belonged to consumer goods companies (Billah, 2012) (including those dealing in fast moving consumer goods) in Pakistan. Regarding the respondent profile, 48% managers belong to the senior tier of their respective companies (Billah, 2012), 47% of the managers belong to Middle tier while only 4.7% are first line managers. Hence, our required criteria were fulfilled (at least 80% of the managers should belong to the middle or senior levels of their companies) (Billah, 2012). This factor is important as these managers have a holistic and strategic understanding of their products, which is imperative for the nature of this research.

The respondents belong to central departments of their respective companies including finance; marketing; R&D; sales; and operations, etc. (Billah, 2012). The reason is that these departments are in direct contact with business variations in the life cycle of products and have adequate information to provide the required responses. A detailed look shows that 57% of the respondents are from the Marketing department, followed by manages from Sales (20.8%), Operations (13.2%), R&D (4.7%) and Finance (3.8%).

Collectively, these divisions and management tiers present a diversified yet focused and precise response to the research topic.

Sampling technique: Non-probability sampling was used as the managers belong to consumer goods companies only. Here, factors of time & cost were also critical. This was a Purposive sampling technique whereby the researcher used judgment sampling to select the most relevant companies and respondents, pertaining to the problem area of research (Billah, 2012).

Data collection & measurement

As discussed above, this was a primary data collection study which includes both descriptive & econometrics analysis. A distinct advantage of this design is that the acquired data is quantitative in nature and thus it presents strong findings and clear direction for decision making purposes.

The following tool was used of this study:

- Survey Method
    - Medium of Interview : Interviewing (face-to-face and email)

A formal questionnaire was developed, based on the information needs given earlier. In the questionnaire used for this research, a combination of nominal and interval scales have been used, depending on the nature of question and type of information sought. It is important to highlight here that validity and reliability of the questionnaire was established through pre-tests with a sample of corporate managers, prior to commencement of field work.

Before the commencement of interviews, the respondents were identified and a valid list of target respondents was developed (based on the pre-defined criteria). The interviews were conducted by means of the formal questionnaire both face-to-face and also through the use of email.

Coding has been used for systematic data collection. This research is quantitative in nature. The percentages and figures have been calculated from the data, in order to make the results more meaningful. Data analysis has been done through usage of SPSS software and

includes multiple regression analysis. The findings hence include both Econometrics and Descriptive analysis.

Time horizon & expected limitations

This is a one-shot, cross-sectional study as data was collected from different respondents, only once. The entire research study has been conducted in the time frame of one year.

Almost every research study may have certain limitations. As this research was conducted with high profile corporate managers in the consumer goods industry, the sample size is not more than 106 respondents (Billah, 2012).

Results & findings

Stage of PLC

This research question was highly central to the study. The respondents were asked to categorize any one product of the company in any one phase of the PLC.

It is found that most of the products are in the growth phase (almost 55%), followed by products at Maturity stage (30%), while the remainder of products are in introduction and decline phases respectively (7.5% each). This implies that the Pakistani consumer goods market is in the development and growth stage as most products are witnessing enhanced sales and increasing competition as well. The number of companies in introduction and decline stage is almost equal which implies that new products are also being launched in the same proportion as those products which are exiting the market. This may be due to changing consumer trends, technological developments and increased quality consciousness.

Additionally the above data implies that Pakistan is a growing market for business entrepreneurs and investors.

Stage-wise analysis

Introduction stage

Regression analysis

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.982[a]	.964	.917	.21442

a. Predictors: (Constant), Internal Contributors - Distribution & Availability, Internal Contributors - Differentiation & Innovation, Internal Contributors - Ensure Quality, Internal Contributors - Conduct Marketing Campaigns

The coefficient of correlation R measures the strength & direction of a relationship (Billah, 2012). As the R value given above is well above 0.7, it can be stated that the relationship is positive and significant. The co-efficient of determination R^2 gives the explanatory power of the model and shows goodness of fit (Billah, 2012). Here, $R^2 = 0.964$ means that 96.4% of the variation of dependent variable around its mean is explained by the regressors (Billah, 2012).

Table 2: ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	3.737	4	.934	20.320	.016[a]
	Residual	.138	3	.046		
	Total	3.875	7			

a. Predictors: (Constant), Internal Contributors - Distribution & Availability, Internal Contributors - Differentiation & Innovation, Internal Contributors - Ensure Quality, Internal Contributors - Conduct Marketing Campaigns

b. Dependent Variable: Impact on PLC Stage

F-statistic is a value resulting from a standard statistical test used in the above ANOVA table in order to determine if the variances between the means of two populations are significantly different. The P value or significance probability gives the probability that the null hypothesis is correct; therefore, as our P value is less than 0.05, null hypothesis is rejected. More specifically, P or Sig= 0.016 means that there is greater than 98% certainty that the difference did not occur by chance. Hence, it is implied that there is a relation between given independent variables and the dependent variable.

Based on the above analysis, it is concluded that there is a direct positive relation between identified independent variables and dependent variables, at the introduction stage. The analysis leads to rejection of the null hypothesis (Billah, 2012).

Descriptive analysis

Table 3: Statistics

		Ensure Quality[a]	Conduct Marketing Campaigns[a]	Differentiation & Innovation[a]	Distribution & Availability[a]
N	**Valid**	8	8	8	8
	Missing	0	0	0	0
Mean		4.5000	4.3750	3.3750	4.5000
Median		4.5000	4.5000	3.0000	5.0000
Mode		4.00[a]	5.00	3.00	5.00
Std. Deviation		.53452	.74402	.51755	.75593
Variance		.286	.554	.268	.571
Minimum		4.00	3.00	3.00	3.00
Maximum		5.00	5.00	4.00	5.00

a. Internal Contributors for the Introduction Stage (Independent Variables)

The internal contributors identified in the literature review were consistent product quality assurance, conducting effective marketing campaigns to retain interest of target

consumers, continuous product differentiation + innovation and ensuring that distribution/availability of the product at all times. The managers were asked to rate the occurrence of these contributors for their respective products on a scale of 1-5 (where 1 was 'Never' and 5 was 'Always').

It was seen that the highest internal contributors are assurance of quality and distribution/availability of the product in the market at all times. The managers shared that for new products, these two factors are highly important as new consumers are highly quality conscious and the good quality of the product results in repeat purchase.

In addition, they stated that distribution is important because a product must be fully available in the market at all target outlets, right from its inception, in order to counter the competition and generate trials.

The next most important factor is conducting marketing campaigns in order to generate interest of the target market. The respondents highlighted that nowadays a new product must have clutter breaking and insight based marketing campaign in order to generate trials in the target market. Unless the consumers are not told about the benefits of the new product, they will not purchase it.

Product differentiation and innovation came out to be the least important and least occurring factor in the introductory stage. Reason cited was that at the time of launch of a product, consumers need base level quality and association with the new brand. Differentiation from competitors is a factor more important in later stages of the product life cycle. Variance and standard deviation of the data is also nominal and shows consistency.

Table 4: Strategies for the Introduction Stage and Their Relative Importance

		Offer Basic Product[a]	Cost + Min. Profit[a]	Selective Distribution[a]	Product Awareness in Early Adopters[a]	Heavy Sales Promotion[a]
N	**Valid**	106	106	106	106	106
	Missing	0	0	0	0	0
Mean		3.3585	3.1604	3.7830	4.1509	4.1981
Median		3.0000	3.0000	4.0000	4.0000	4.5000
Mode		3.00	3.00	4.00	4.00	5.00
Std. Deviation		.99703	1.01547	.81655	1.01223	1.06386
Variance		.994	1.031	.667	1.025	1.132
Minimum		2.00	2.00	2.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00	5.00

a. Introduction Strategy

Extensive literature review presented the main introductory strategies as offering basic product only, charging cost +Minimum Profit, building selective distribution, building product awareness

among early adopters (Billah, 2012) and dealers and using heavy sales promotion to induce trials. The managers were asked to rate each of these strategies on a scale of 1-5 (where 1 was 'Least important' and 5 was 'Most Important'). Further, the managers were also asked to propose any other strategies which they consider important at the introductory stage. The most important strategy voted by the respondents is conducting heavy sales promotional activities. It was shared by the respondents that when a product is new, incentives must be provided to the consumers in order to generate trials and create curiosity for the product usage. This is also due to the fact that nowadays the consumer market is very competitive and a product must get noticed by the target consumers in the initial phase, in order to sustain itself in the market.

The next most important reason is creating awareness of the product in early adopters. These are those set of consumers who like to try new products and are curious by nature. For this purpose, marketing campaigns must be conducted to make the consumer aware of the existence of the new product and its benefits.

The third most important strategy highlighted by the managers is building selective distribution of the product. The respondents shared that it is best to launch the product using selective distribution approach; for example by concentrating on key (high potential) cities first and then replicating the main learnings to other cities/areas, before launching the product on a nationwide basis. Such an approach saves cost and assures success of the product in the long run.

The second last important strategy is offering a basic product, as in the introductory phase, consumers basically need a good quality product and need to build association with the new brand/product. The least important strategy is charging a price for the product with minimum profit. The managers shared their opinion that in the current scenario, companies are very price conscious and prefer healthy profit, right from the beginning of the product's life.

Growth stage

Regression analysis

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851[a]	.724	.704	.30250

a. Predictors: (Constant), Internal Contributors - Distribution & Availability, Internal Contributors - Ensure Quality, Internal Contributors - Differentiation & Innovation, Internal Contributors - Conduct Marketing Campaigns

Since the R value given above is above 0.7, it can be stated that the relationship is positive and significant (Billah, 2012). The co-efficient of determination $R^2 = 0.724$ means that 72.4% of the variation of dependent variable around its mean is explained by the regressors.

Table 6: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	12.754	4	3.188	34.844	.000[a]
	Residual	4.850	53	.092		
	Total	17.603	57			

a. Predictors: (Constant), Internal Contributors - Distribution & Availability, Internal Contributors - Ensure Quality, Internal Contributors - Differentiation & Innovation, Internal Contributors - Conduct Marketing Campaigns

b. Dependent Variable: Impact on PLC Stage

As discussed earlier, the P value or significance probability gives the probability that the null hypothesis is correct; therefore, as our P value is 0.00, the null hypothesis is rejected. Hence, it is stated that there is a relation between given independent variables and the dependent variable (Billah, 2012).

Based on the above analysis, we reject the null hypothesis and conclude that there is a positive relation between identified independent variables and the dependent variable, at the growth stage.

Descriptive analysis

Table 7: Statistics

		Ensure Quality	Conduct Marketing Campaigns	Differentiation & Innovation	Distribution & Availability
N	**Valid**	58	58	58	58
	Missing	0	0	0	0
Mean		4.4828	3.9828	3.6034	4.3276
Median		4.0000	4.0000	3.5000	4.5000
Mode		4.00	4.00	3.00	5.00
Std. Deviation		.50407	.82699	1.04192	.86629
Minimum		4.00	2.00	2.00	2.00
Maximum		5.00	5.00	5.00	5.00

a. Internal Contributors for the Growth Stage (Independent Variables)

The internal contributors identified in the literature review were rated by the managers, with respect to the growth phase. Here, the rating was on the basis of rate of occurrence of these contributors for their respective products on a scale of 1-5 (where 1 was 'Never' and 5 was 'Always').

It was seen that in this phase also, consistent quality assurance came out to be the most important and occurring contributor. It has a mean score of 4.48 out of 5. The reason stated by the respondents was that consumers mainly purchase products for their good quality and this is a

main trigger for the product's sales. In addition, when consumers are hooked onto a particular product in the introduction stage, they expect the same or better level of quality on a long term basis as well. Hence, it is equally important in the growth stage as well.

The next most important contributor with a mean of 4.3 out of 5 is distribution and availability. This is important in the growth stage, as competition becomes fierce and a product must be within reach of the consumers. Conducting marketing campaigns to retain consumer interest has a mean of 3.98 out of 5 while product differentiation and innovation come out as the least occurring contributor with an average of 3.6/5 (innovation being the main requirement of the maturity stage).

Table 8: Strategies for the Growth Stage and Their Relative Importance

		Product Extension & Better Service[a]	Penetration Pricing[a]	Intensive Distribution[a]	Product Awareness in Mass Market[a]	Reduce Sales Promotion[a]
N	**Valid**	106	106	106	106	106
	Missing	0	0	0	0	0
Mean		4.1415	3.9717	4.2830	4.2264	3.3585
Median		4.0000	4.0000	4.0000	4.0000	3.0000
Mode		4.00	4.00	5.00	5.00	3.00
Std. Deviation		.82160	.87785	.75283	.86501	1.02529
Variance		.675	.771	.567	.748	1.051
Minimum		2.00	2.00	3.00	2.00	2.00
Maximum		5.00	5.00	5.00	5.00	5.00

a. Growth Strategy

The managers were asked to rate various business strategies (indentified in the literature for the growth stage) on a scale of 1-5 (where 1 is least important and 5 is most important). The most important strategy in the growth stage is building intensive distribution. The managers shared that once a demand for a product has been generated, the next step is to ensure primary sales (making the product available at all potential outlets on a national basis). This ensures a strong base for the product. Hence, this strategy has a mean score of 4.28 out of 5.

The second most important strategy as declared by the managers is generating product awareness in the mass market. Here, the word 'mass market' is of primary importance as the marketing campaigns must focus on the large base of consumers, rather than only a select few. This factor is of high importance in the growth phase.

The third important growth strategy is product extension and better service; having an average rating of 4.14 out of 5. It was shared by the respondents that in order to keep in line with increasing consumer expectations in the growth phase, a company must strengthen this aspect; otherwise the competitor's products will become more prominent in the consumer's mind.

The next most important growth strategy having a mean of 3.9 out of 5, is penetration pricing. The respondents stated that in the growth phase, competition becomes highly intense. Hence, sometimes it becomes important for the company to have a relatively lower price of the product. This also helps to increase the usage base of consumers, attract new consumers and grow the sales on a rapid basis.

The least important strategy is reducing sales promotion which implies that some degree of sales promotional activities is required, even in the growth phase. Further descriptive statistics of the data are also given which mostly show consistency with the rest of the data.

Maturity stage

Regression analysis

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936[a]	.877	.858	.26058

a. Predictors: (Constant), Internal Contributors - Distribution & Availability, Internal Contributors - Conduct Marketing Campaigns, Internal Contributors - Ensure Quality, Internal Contributors - Differentiation & Innovation

Coefficient of correlation R is 0.9 which shows that a significant relationship exists. R^2 is the coefficient of determination. Its value is between 0 & 1. $[0 \leq R^2 \leq 1]$. In our analysis, it is 0.877 and close to 1; hence there is contribution of the overall model.

Standard error of estimate is also given which is a measure of dispersion computed from data around the regression line. The Adjusted R^2 is also shown above which is adjusted to the degrees of freedom/variables. It is used to compare different models with different explanatory variables. A model with higher Adjusted R^2 is better, as given in our analysis.

Table 10: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	13.042	4	3.260	48.017	.000[a]
	Residual	1.833	27	.068		
	Total	14.875	31			

a. Predictors: (Constant), Internal Contributors - Distribution & Availability, Internal Contributors - Conduct Marketing Campaigns, Internal Contributors - Ensure Quality, Internal Contributors - Differentiation & Innovation

b. Dependent Variable: Impact on PLC Stage

As the significance probability (P value) is 0.00, it is less than 0.05. Hence, the null hypothesis is rejected which means that there is a relation between given independent variables and the dependent variable.

Descriptive analysis

Table 11: Statistics

		Ensure Quality[a]	Conduct Marketing Campaigns[a]	Differentiation & Innovation[a]	Distribution & Availability[a]
N	**Valid**	32	32	32	32
	Missing	0	0	0	0
Mean		4.4375	3.3750	4.0000	3.2188
Median		5.0000	4.0000	4.0000	3.0000
Mode		5.00	4.00	4.00	2.00
Std. Deviation		.91361	1.07012	.50800	1.03906
Variance		.835	1.145	.258	1.080
Minimum		3.00	2.00	3.00	2.00
Maximum		5.00	5.00	5.00	5.00

a. Internal Contributors for the Maturity Stage (Independent Variables)

Regarding the internal contributors for the maturity stage, once again consistent quality of the product comes out as the main contributor, with an average rating of 4.4 out of 5. The next most important occurring contributor is product differentiation and innovation. The managers stated that in the maturity stage, the product begins to face stagnancy in terms of sales growth. This may be due to lack of consumer interest in the product and switching to similar categories can also take place. Hence, it is necessary for the decision makers to introduce innovation in the product through adding new features, benefits and novelties to the product. In addition, the product must be differentiated from the competition through incorporating and communicating one or more unique selling propositions. Such steps can help to shift the product from maturity and back to the growth phase. Hence, this contributor has a high mean score of 4 out of 5, as agreed by the managers. The standard deviation is 0.5 and variance is 0.2 which is quite nominal. The minimum rating is 3 out of 5, which shows the strength of this factor as a key contributor in the maturity phase.

The third most important internal contributor is conducting marketing campaigns to retain consumer interest. The managers shared that marketing campaigns are highly necessary in the maturity stage, as the product must stay in the top of mind of consumers and a strong association with the consumers must be maintained.

Distribution and availability comes out as the last internal contributor in the maturity of the product with a rating of 3.2. The managers stated that this factor is also important but should be maintained at a certain level in the maturity stage as well.

Table 12: Strategies for the Maturity Stage and Their Relative Importance

		Diversification[b]	Match Competitor Prices[b]	More Intensive Distribution[b]	Stress Brand Difference & Benefits[b]	More Sales Promotion[b]
N	**Valid**	106	106	106	106	106
	Missing	0	0	0	0	0
Mean		4.2075	3.9245	4.1698	4.4245	3.9811
Median		4.0000	4.0000	4.0000	5.0000	4.0000
Mode		4.00[a]	4.00[a]	4.00[a]	5.00	5.00
Std. Deviation		.95336	.97295	.84484	.70303	.91528
Variance		.909	.947	.714	.494	.838
Minimum		1.00	2.00	2.00	3.00	2.00
Maximum		5.00	5.00	5.00	5.00	5.00

a. Multiple modes exist. The smallest value is shown

b. Maturity Strategy

Regarding strategies for the maturity stage, the most important strategy is to stress brand image and benefits in all communication to consumers. The reason for this is that a number of competitors are producing similar products in the industry, in the maturity stage. Hence, consumers must be informed regarding benefits and advantages of the product in order to keep their interest retained.

The second most important strategy is diversification with a mean score of 4.2 which is between 'important' and 'highly important'. New extensions in the product must be introduced to extend the life of the product.

More intensive distribution also comes out as a key strategy having an average rating of 4.1 which is close to 'important'. More sales promotion is the next important strategy with an average rating of 3.98 out of 5. The managers highlighted that in the maturity stage, sales promotional activities are required in order to enhance sales through various incentives; both for the consumers and trade.

Matching competitor prices comes out as the least important strategy in the maturity stage, although it is pertinent to mention that this factor also has a high rating of 3.92 (close to important). The managers also added that sometimes prices are also slightly reduced in the maturity stage in order to accelerate sales from time to time.

Decline stage

Regression analysis

Table 13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.966[a]	.933	.844	.20412

a. Predictors: (Constant), Internal Contributors - Distribution & Availability, Internal Contributors - Differentiation & Innovation, Internal Contributors - Ensure Quality, Internal Contributors - Conduct Marketing Campaigns

R (coefficient of correlation) is 0.966 which shows that a significant relationship exists. R^2 is the coefficient of determination which has a value between 0 & 1. In this analysis, it is 0.933 and is close to 1; hence there is contribution of the overall model. In the table above, the Adjusted R^2 is also shown above (0.844) which is adjusted to the degrees of freedom/variables. A model with higher Adjusted R^2 is better, as given in our analysis.

Table 14: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	1.750	4	.438	10.500	.041[a]
	Residual	.125	3	.042		
	Total	1.875	7			

a. Predictors: (Constant), Internal Contributors - Distribution & Availability, Internal Contributors - Differentiation & Innovation, Internal Contributors - Ensure Quality, Internal Contributors - Conduct Marketing Campaigns

b. Dependent Variable: Impact on PLC Stage

The P value or significance probability gives the probability that the null hypothesis is correct (Billah, 2012); therefore, as our P value is less than 0.05, null hypothesis is rejected. Hence, it is implied that there is a relation between given independent variables and the dependent variable (Billah, 2012).

Descriptive analysis

Table 15: Statistics

		Ensure Quality[b]	Conduct Marketing Campaigns[b]	Differentiation & Innovation[b]	Distribution & Availability[b]
N	**Valid**	8	8	8	8
	Missing	0	0	0	0
Mean		3.2500	3.3750	3.3750	3.5000
Median		3.5000	3.0000	3.0000	3.5000
Mode		4.00	3.00	3.00	3.00[a]

Std. Deviation	.88641	.51755	.51755	.53452
Variance	.786	.268	.268	.286
Minimum	2.00	3.00	3.00	3.00
Maximum	4.00	4.00	4.00	4.00

a. Multiple modes exist. The smallest value is shown

b. Internal Contributors for the Decline Stage (Independent Variables)

The managers rated the internal contributors of the decline stage, in order of their importance and occurrence. Overall, most factors have an average rating between 3 – 3.5. It is seen that maintaining distribution and availability in the market is the most important factor in the decline stage. The managers shared that if a product loses its presence at the trade level, sales will swiftly begin to decrease and the product will gradually start to perish. Hence, the effective distribution and sales to retailers and whole sellers must be maintained and improved.

Product differentiation, innovation as well as conducting marketing campaigns share an equal rating of 3.3 out of 5. These are important contributors because incorporating additional product features and communicating the benefits of the product to the consumers are important for rejuvenating consumer interest and demand for the product. Otherwise, the product may face an accelerated decline.

Quality is once again a pre-requisite for success. The managers stated that some companies begin to decrease the quality of the product in order to save costs in the decline stage. Although this step may increase profit in the short term, it contributes to the swift decline of the product sales in the medium term.

Table 16: Strategies for the Decline Stage and Their Relative Importance

		Phase out Weak Products[a]	**Cut Price[a]**	**Consolidate Distribution[a]**	**Focused Advertising on Brand Loyals[a]**	**Reduce Sales Promotion[a]**
N	**Valid**	106	106	106	106	106
	Missing	0	0	0	0	0
Mean		4.0189	3.4151	3.9151	3.5849	3.1509
Median		4.0000	3.0000	4.0000	3.5000	3.0000
Mode		5.00	4.00	4.00	3.00	3.00
Std. Deviation		1.07775	1.13698	1.02463	1.24875	1.20943
Variance		1.162	1.293	1.050	1.559	1.463
Minimum		2.00	1.00	1.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00	5.00

a. Decline Strategy

The managers rated the various strategies for decline stage, as identified in the literature review. The rating was done on a 5 point scale (1 being least important and 5 being most important). The most important strategy highlighted by the managers is to phase out weak products. This has a mean rating of 4.01 which means it is important. The managers said that since profits are decreasing in the decline stage, it is necessary for business concerns to discontinue weak products in order to keep costs at a minimum. Hence, this strategy is of significance.

The second most important factor is consolidating distribution with an average rating of 3.9 out of 5 (which means close to important). The respondents mentioned that in the decline stage, the business concern may not find it viable to distribute the product on a nationwide basis/large scale; hence it is better to consolidate distribution in order to contain costs.

The third most important strategy for the decline stage is focused advertising on consumers having brand loyalty. The reason given by the respondents was that these consumers are the source of most product sales and the advertising budget should be mainly concentrated on them, in order to ensure better return on investment.

Cutting prices is the second last strategy with a mean rating of 3.4 which means around average. The respondents shared that this step is sometimes recommended if the sales are facing sharp decline and consumer interest is to be rejuvenated.

The least important strategy is reducing sales promotion with an average rating of 3.1 out of 5. The reason for this rating, as stated by the managers, is that promotional activities may be important in the decline stage, in order to enhance short term sales, especially in the peak selling months (in case of seasonal products).

The variance and standard deviation of the above data shows nominal variation and the other descriptive statistics are mostly in line with the rest of the data.

Conclusion

Based on the literature review and primary research for business managers in the consumer goods industry of Pakistan (Billah, 2012), the main findings are concluded as follows:

Econometrics analysis of the data proves that there is a significant relationship between identified (internal) contributors (Billah, 2012) for different stages of the PLC and actual stage of the product in the PLC.

Regarding identification of stage of different consumer products in Pakistan, it is found that most of the products are in the growth phase (almost 55%). This implies that the Pakistani consumer goods market is in the development and growth stage as most products are witnessing enhanced sales and increasing competition as well.

Regarding internal contributors, overall, the internal contributor that comes out as the most important is consistent product quality assurance. The managers shared that consumers are mainly loyal with the quality of the goods or services. The second most important factor is maintaining presence in the market in terms of distribution and availability. The managers highlighted that if a product is not readily available, the consumers will opt for the alternative or

competitive product which is available. Another important factor (especially for the growth phase) is continuous product differentiation and innovation. This is essential in order to retain interest of the target consumers and keep them engaged with the product.

Detailed strategies for various stages of the PLC have also been explained in the findings section. In the introduction stage, the most important strategy voted by the respondents is conducting heavy sales promotional activities. Subsequently, the most important strategy in the growth stage is building intensive distribution as this measure results in direct sales growth, market share enhancement and increased profits. Regarding strategies for the maturity stage, the most important strategy is to stress brand image and benefits in all communication to consumers. In the Decline stage, the most important strategy highlighted by the managers is to phase out weak products.

Based on the conclusion and detailed findings presented earlier, this research study can serve as a useful guideline for business managers in Pakistan on how to identify the stages of the PLC, the internal contributors as well as the best strategies for each phase. It can also be concluded that based on these findings, a business can certainly extend the life of a product in the growth phase and avoid maturity or decline.

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