Analytical Study of Marketing and Product Life Cycle

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Abstract

A product's or service's "life cycle" is the time it spends on the market, from the moment of its introduction to the consumer to the moment it is retired from service. The life cycle consists of several stages. Whether as a guide for corporate marketing strategy or a tool for projecting the future of a product, the notion of a product life cycle has had a significant position in the marketing literature. This research combined qualitative and quantitative methods. In-depth strategies for targeting certain market segments that have been successful for companies like Nokia, Apple, and Kodak were obtained via in-depth interviews. Sales of Nokia, Apple, and Kodak sets have been strongest in the United Kingdom, France, Italy, China, the United Arab Emirates, Germany, the United States, Thailand, and Poland, with these 10 countries accounting for sixty percent of overall sales.

Keywords:- Marketing, Product Life Cycle, Engineering, Product Life Cycle Model, consumer.

1. INTRODUCTION

A product's or service's life cycle is the time it spends in circulation. That is, from the moment it hits the shelves to the moment it is discontinued. The time it takes for a product to make its way through the market is explained by the product life cycle hypothesis. For instance, if a new product launches to widespread acclaim, consumers are so eager to buy it that it quickly displaces older, less innovative alternatives, whose sales have plummeted. The notion of the product's life cycle is widely used in management to inform choices about the product's price, promotion, market growth, packaging, and cost-cutting strategies. Many writers state that there are four distinct phases to a product's life cycle: the launch, the growth phase, the maturity phase, and the decline phase.

However, other authors expand the cycle to include a fifth phase. Some authors, such Kathe and Verma and Raskovic et al., place a development stage in the product life cycle just before to the launch stage. Those aforementioned phases affect the marketing strategy used. A product in the introduction stage needs marketing that educates consumers about the product, whereas a product in the maturity stage needs marketing that helps it stand out from the crowd. In other words, not all goods have the same amount of time spent in each phase of the product life cycle.

Products and services often follow predictable life cycles. The product's life cycle is the time span between its introduction to the market and its eventual retirement from it. During this time, there will be major changes in the product's behavior in the market, reflected in how well it sells for the firm that released it. Product life cycle management is crucial since increasing profits is the primary objective of every business that launches a new product to the market. Some businesses make use of strategic planning, while others stick to the fundamental guidelines established by the many phases of the life cycle, each of which will be examined in turn.

Whether as a guide for corporate marketing strategy or a tool for projecting the future of a product, the notion of a product life cycle has had a significant position in the marketing literature. In its most basic form, it is a model that describes how long it takes for a product to get traction in the market. Products' lifespans in the marketplace are susceptible to change due to a number of external influences, including shifting consumer preferences, the strength of rival brands, the introduction of cutting-edge technology, and the general state of the business climate. Successfully producing and selling a wide range of items may boost a company's competitiveness. Gaining a comprehensive understanding of marketing management is crucial for extending the shelf life of items. This article is to discuss product life cycle concerns and how marketing management approaches these concerns at various points in the product's life cycle. Organizations may benefit from such a debate by coming up with better ways for managing a product's life cycle.

2. LITERATURE REVIEW

Ram Komal Prasad et.al (2019) In this article, we discuss the product life-cycle models that investigate the range of tactical options available to producers when formulating a product/service package that may later call for after-sale servicing. Traditional market analysis ignores the potential and dynamism of developing markets in favor of focusing only on macroeconomic and political variables. The purpose of this study is to provide a comprehensive PLC for evaluating internal and international growth prospects in developing economies. Additional criteria are presented to analyses developing market potential based on the literature demonstrating the product life cycle in local and foreign markets with visual presentation and shows the need for a specialized composite and complete approach. Product life cycle (PLC) requirements for fast-moving consumer goods, retailers, manufacturers, service providers, engineers, and international marketplaces were all inspired by developments in emerging countries. The PLC marketing concept provides practical insights that help managers see all of their possibilities and make long-term, strategic decisions about the goods they manage. It is the goal of this work to rectify this omission by conducting a comprehensive analysis of five market circumstances, during which time composite PLC has been mostly ignored by the literature.

Natasa Naneva (2018) The success of a pharmaceutical company in the 21st century market depends on the company's ability to develop and execute efficient marketing strategies at different points in the product life cycle. Using Bertalanffy's general systems theory and Laszlo and Laszlo's evolutionary systems theory as a framework, this single-case research aimed to investigate the most effective marketing methods used by pharmaceutical businesses over the product life cycle. Three managers were interviewed for their insights on the marketing methods they've used at a central Ohio pharmaceutical firm that's been there for more than a decade. Data from government databases and other sources (such firm annual reports, press announcements, and websites) were also considered. Data interpretation and reliability of results were checked by group members. Two methods, Yin's 5-step process and theme analysis, were employed to examine the information. The data analysis revealed four overarching themes: the marketing function, the stages of the product life cycle, the variables that influence the decision-making process, and the strategic actions involved in putting business plans into action. Positive social change may result, for example, if the findings aid corporate executives in comprehending the difficulties and business customs of executing marketing tactics for the effective delivery of goods that enhance patients' health.

Shaheen Borna et.al (2018) There has been an abundance of writing on the subject of the product life cycle (PLC) in academic and professional publications since the PLC was first introduced to the marketing literature approximately 67 years ago. Despite a large body of work on PLC, academics haven't addressed numerous important concerns about product identification and how it's evolved over time. A need exists in the marketing literature, and that's what this research aims to address. We address the questions, "What does it mean for a product to retain its identity through time?" and "How do products maintain their identity in the face of evolution?" after first establishing the idea of product identity. In what ways do products diverge from one another? When we remark that "it changed," what precisely do we mean by that statement regarding a given product?

Ram Komal Prasad et.al (2019) In this article, we provide an overview of product life-cycle models, which investigate a group of strategic options available to producers from the outset of creating a product/service bundle that may later call for after-sale servicing and repair. Traditional market analysis ignores the potential and dynamism of developing markets in favor of focusing only on macroeconomic and political variables. The purpose of this study is to provide a comprehensive PLC for evaluating internal and international growth prospects in developing economies. Additional criteria are presented to analyses developing market potential based on the literature demonstrating the product life cycle in local and foreign markets with visual presentation and show the need for a specialized composite and complete approach. Product life cycle (PLC) requirements for fast-moving consumer goods, retailers, manufacturers, service providers, engineers, and international marketplaces were all inspired by developments in emerging countries. The PLC marketing concept provides practical insights that help managers see all of their possibilities and make long-term, strategic decisions about the goods they manage. It is the goal of this work to rectify this omission by conducting a comprehensive analysis of five market circumstances, during which time composite PLC has been mostly ignored by the literature.

Svetlana Boronenkova et.al (2021) The document provides an overview of marketing analysis and the data and methods that back it up. We provide a technique for doing marketing research in line with the phases of a product's life cycle. Strategic analysis tools like matrices and situational models are put to use to illustrate how marketing analysis may be used in the real world.

3. RESEARCH METHODOLOGY

Research design

Both the qualitative and quantitative approaches were employed in this study. Interviews conducted by phone and the internet are used as a qualitative research approach in this study. Primary data from interviews and questionnaires will be used in the qualitative study, while primary data from surveys will be used in the quantitative analysis. Moreover, I used the projective method by sending out questionnaires to a wide range of clients in order to solicit feedback and suggestions (Perspectives on Experience, 1972).

In-depth techniques for targeting subsets of consumers that have proven profitable for brands like Nokia, Apple, and Kodak were gleaned via interviews. The research techniques I used were informal and descriptive. The adaptive business strategy was identified via the use of a descriptive approach. The casual approach was used to determine the most important variable in the success of Nokia, Apple, and Kodak's strategies and the most important variable to improve future strategies. News stories, case studies, and the authors' own experience with brand marketing and the product life cycle provide the most relevant background information for this analysis (Uggla, 2001).

The available secondary data on brand marketing strategy will be analyzed, and primary data on customer preferences will be included into this study.

Qualitative research

My sample size for this study was 20, consisting of 12 men and 8 females, all students at my school. I also spoke with customers in the twenty-something to thirty-something age range. If given the choice between Nokia, Apple, and Kodak at the same price, nine participants in my sample would choose Nokia, Apple, and Kodak, while the last one would choose another brand. Six respondents felt they received more value than they bargained for from the brand, while two said they received just what they had bargained for.

Pricing, reputation, and methodology were considered when selecting the twelve respondents whose thoughts are presented in the findings section. Because of the brand's reputation for reliability and reasonable pricing, I decided to invest in it. Despite the fact that my target market is very price-conscious and technically savvy, I did not get responses that were particularly relevant to my case since some respondents favored phones with more advanced capabilities. Nine people who answered the survey said they would purchase the same product again if given the opportunity. Respondents typically kept their phones for three to four years if it was in excellent shape.

4. DATA ANALYSIS

Discussion

From the point at which a product first catches the attention of buyers, it progresses through a series of stages known as its "life cycle." In order to use the product life cycle as an analytical tool for brand marketing, there are two considerations that must be taken into account. Individual consumption and the effect of demographic shifts are the first consideration. An additional consideration is pinpointing the exact brand in question. A product goes through these five phases:

1. Product development
2. Introduction
3. Growth
4. Maturity
5. Decline

In this part, we will talk about the various stages of the Nokia product life cycle. Nokia is a well-known mobile phone manufacturer. The goal of this investigation is to identify the key differentiators between Nokia, Apple, and Kodak and other brands. We're interested in learning more about the tactics used at various points in the product's lifespan. Now is the time to ask how branding, price, and segmentation studies, to name a few, should be implemented at various points in the product's life cycle. Based on my investigation and the information at hand, I have decided to study the very competitive markets of Nokia, Apple, and Kodak.

I was able to improve upon my findings by using secondary data from the findings of other investigations. Along with my original study on the mobile phone industry, this will provide a comprehensive overview of client preferences. I did further research into clients' thoughts, which led me to many knowledge-based approach options that were useful in convincing them to buy my items. The techniques in place may succeed or fail, and various forms of consumer segmentation may provide different results. Apple's product life cycle foreshadows the continued success of the iPod and iPhone years down the road. It took Apple around 5 years to sell 30 million iPods each year. The iPhone took 4 years whereas the iPad took 2 years. Apple's successful brand marketing has accelerated the company's product life cycle. There were less than 55 million iPods sold in 2008. Comparatively, nearly 70 million iPhones were sold. This strongly suggests that Apple is expanding at a rapid rate and generated more over $100 billion in sales in 2011.

Since this occurred just around the time when Apple's iPhones were being released to the public, demand was strong but supply was limited during the launch period. The marketing of Apple's brand is easier than that of its competitors because of the nature of their goods. Consumers are pushed to take immediate action and buy Apple items as a result of this. Profits are low and the price of the product is high because of the extensive advertising that has gone into it so far. Early adopters and innovators are the primary target audience right now.

Apple's boom phase was marked by falling unit costs and rising sales volumes. At this point, the success of brand marketing may be measured by how well-known the brand has become, which in turn increases the number of units sold. The percentage of individuals who own an Apple device is also rising rapidly right now. As the product gains more market share, its price drops as more competitors enter the market with identical offerings. Even as Apple's growth stage revenues rise, the company's goods remain very capital intensive.

When an Apple product reaches its mature stage, its costs decrease and its sales volume rises. The mobile market is becoming more competitive as new, similar items enter the market. Even as sales of Apple devices have increased, the company has maintained a competitive edge and healthy profit margins. As the inventors, early implementers, early adopters, and late adopters become aware of the new development, brand marketing becomes more important. After the maturity phase ends, Apple products enter the decline phase of their product life cycle. During this phase, sales slowdown but profit margins remain stable since the items are still profitable. In 2014, iPad sales are expected to reach 100 million devices. More of Apple's success story is yet to come.

In recent years, because to the disclosure of financial information by several businesses every year, it has been easier to compare the Companies that are doing well in the media always reappear. This has also aided in benchmarking against the most formidable rival. Maturity-stage profits might vary depending on the approach used. At this stage, we want to know whether and to what extent NOKIA, APPLE, and KODAK are in the same phase of the product life cycle, as well as what factors contribute to the revenue gap between these companies. The most prominent brands among the mobile phone manufacturers we examined were Nokia, Apple, and Kodak. Evidence in Nokia, Apple, and Kodak's decision of segmenting may be seen in the pricing gap between the companies and their biggest rivals in the early stages of the market. Although Nokia was in its fall phase in 2009, the company nonetheless posted healthy profits. In order to assess volume quantities and yearly revenue, it is crucial to compare the annual plan and the product life cycle at this time. This will allow us to compare and contrast the techniques used by other businesses selling comparable goods in the marketplace. We also examine the criteria used to choose among these tactics.

Table 1: Analysis based on sales

YEAR	SALES
2005	100
2006	500
2007	1000
2008	1400
2009	900

TOTAL	3900

Annual sales between 2001 and 2009

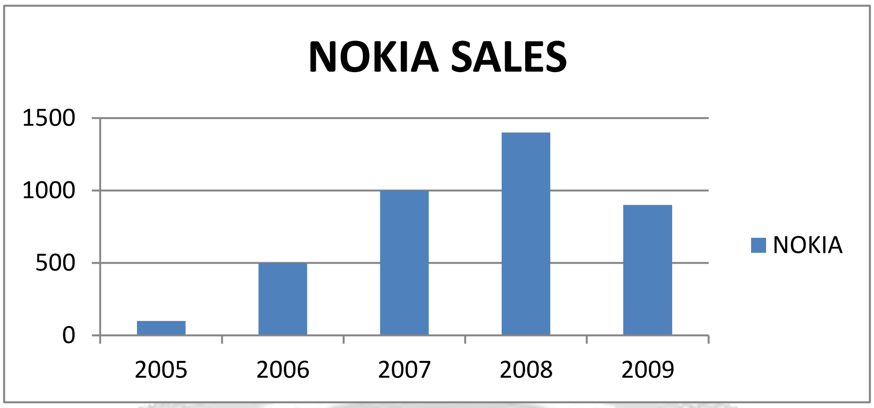

Fig :1 Nokia Sales

Source: Gartner Dataquest

From 2001 through 2009, we ran the numbers from our revenue statements to create this graph. Divide the total amount earned by the total quantity sold to get the selling prices. This also helped lay the groundwork for the current pricing policy, which has been in effect since 2001. Nokia's skimming pricing approach was first used in 2001. Consequently, it will earn less money at the end of the year while making the same number of sales. Nokia began offering its devices at cheaper prices than competitors in 2006. Sales improved as prices dropped in 2001. This is because more people bought Nokia goods in 2015 than in any year before.

Table 2: Analysis on Income

YEAR	INCOME
1998	50,000
1999	480,000
2000	820,000
2001	910,000
2002	470,000
TOTAL	2,730,000

Income amounts between 1998 and 2002

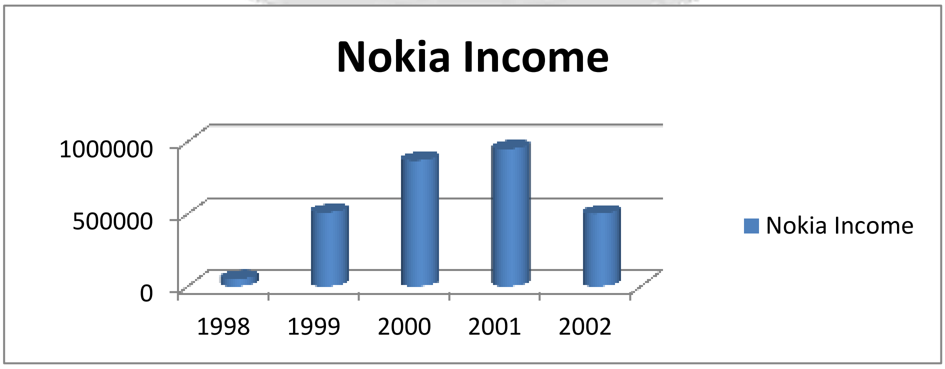

Fig: 2 Nokia Income

Source: Gartner Dataquest

Nokia was able to outsell the opposition in 2001 by undercutting their prices, but the company still couldn't match the profits of its chief rival, Apple. Nokia maintained its market share by maintaining its low pricing, which was consistently lower than that of its rivals. Revenue dropped by 4% compared to 2001's total yearly revenue. In 2001, this amounted to EUR 31,191 million, and in 2002, it reached EUR 30,016 million.

Nokia networks revenue fell by 13%, from EUR 7,534 million to EUR 6,539 million. Earnings before interest, taxes, depreciation, and amortization were EUR 4,780m in 2012, up 42% from EUR 3,362m in 2001. Goodwill impairments and financial impairments were major factors in the drop. The net debt to equity ratio improved from -41% in 2001 to -61% at the end of 2012. In comparison to 2001, when total expenditures were EUR 432 million, in 2001 they were EUR 1,041 million.

Table: 3 Global reach

Area	2001 Net sale %	2002 Net sale %
Europe	49	54
America	25	22
Asia	26	24

United Kingdom, France, Italy, China, United Arab Emirates, Germany, Brazil, United States, Thailand, and Poland are the top 10 markets for sales of Nokia, Apple, and Kodak sets, accounting for 60% of total sales. To further expand its worldwide network, the corporation spent heavily in 2002. The percentage of GDP devoted to research and development rose to 18% in 2014, up from 16% in 2001, with gains seen in 14 nations. Investments amounted to 10.2% of net sales, up from 9.6% in 2001. As new competitors joined the market in 2002, Nokia raised its pricing, making it more expensive than its rivals. Because of the high price, the competitors gained an edge, and the winning brands saw greater sales. As a result, Nokia saw a significant reduction in sales that year.

5. CONCLUSION

Some businesses utilize strategic planning, while others follow the fundamental guidelines of the various life cycle phases that will be reviewed later to determine the best pricing, marketing, growth into new markets, packaging, and cost reduction strategies. Organizations may benefit from such a debate by coming up with better ways for managing a product's life cycle. Nokia increased its prices in 2002 when new competitors entered the market, making its products more costly than those of its rivals. Sales of successful brands increased as a result of the price war that ensued. Costs go down and revenues go up as an Apple product approaches maturity. Twenty kids from my school made up the sample size for this research, 12 male and 8 female. In-depth strategies for targeting certain market segments that have been successful for companies like Nokia, Apple, and Kodak were obtained via in-depth interviews.

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