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Managing New Products' Product Life Cycle

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ABSTRACT

A key idea in marketing, the product life cycle directs the management of new goods from their launch through ultimate decline. This summary gives a general overview of the product life cycle and emphasises its importance in successfully managing new goods. The important life cycle phases are highlighted, along with the strategic factors to be taken into account at each step and the significance of innovation and adaptability for maximum success. The four different phases of the product life cycle are introduction, growth, maturity, and decline. A new product is introduced to the market at the introduction stage in an effort to garner interest and make the first sales. To raise awareness and encourage product acceptance at this stage, effective marketing methods are essential. These include focused advertising and distribution. Innovation and strategic adaptability are essential to effectively manage new goods throughout their life cycles. To spot areas for improvement and foresee changes in client preferences, businesses must constantly study market trends, customer input, and competing actions. In order to generate product improvements and distinguish offers, this requires a commitment to research and development, agility, and a customer-centric strategy.

KEYWORDS

Business, Market, Product, Sales, Strategy.

I. INTRODUCTION

A new product reaches the growth stage when it acquires momentum and customer acceptance. Sales, demand, and competition are all rising quickly. Businesses need to concentrate on increasing market share, cultivating client loyalty, and bolstering their position in the marketplace. To take advantage of the product's momentum at this point, consistent marketing, distribution, and customer support expenditure is necessary. Following the growth stage is the maturity period, which is marked by a plateau in sales and market saturation. There is more competition, and there may be pricing pressure. Businesses must distinguish their product offerings at this stage by innovation, product improvements, and focused marketing initiatives. Extension of the product's lifespan and maintenance of market share may be achieved by strategic pricing, bundling, and diversification activities [1]–[3]. Products eventually reach the decline stage, during which time sales and earnings decrease as a result of changed market dynamics, obsolescence, or changing consumer preferences. Businesses must thoroughly assess the profitability of the product and take into account choices including product diversification, discontinuance, or revival via repositioning or relaunching. To reduce losses and reallocate resources to other viable possibilities, effective product portfolio management and prompt exit plans are essential. Every year, over 20,000 new items join the market, including convenience meals, health and beauty aids, gadgets, cars, pharmaceuticals, hotels, restaurants, and more. For instance, about 1,400 food items with a whole grain claim were released in 2006. Other recent product launches include numerous technological items like the Nintendo Wii, iPods, and digital video recorders numerous new personal care items like new toothpaste flavors and fragrances and novel convenience foods like frozen meals, 100 calorie pack snacks, and cereal bars.

For a product to be valuable to the client after it has been developed and launched to the market, the offering must be managed successfully. The manufacturer of the good can only maintain the offering on the market and meet its profit goals if this is done. Making a lot of difficult choices is part of the process, particularly if the product is being launched to international markets. An organization must assess and comprehend aspects in the external environment, such as laws and regulations, the economy and stage of economic growth, the rivals and alternatives, cultural values, and market demands, before launching goods in international marketplaces. To effectively introduce items in overseas markets, businesses also require knowledge. Due to the many potential restrictions on global marketplaces, businesses may first launch a product in a small number of foreign regions. Other businesses, like Coca-Cola, choose to engage in international competition.

The phases a product goes through following development, from introduction to end-of-life, are included in the product life cycle. Products and services age and move through numerous stages, much as children do as they grow up. The PLC is a useful instrument that aids marketers in controlling the phases of a product's acceptability and success in the market, starting with its debut, rise in market share, maturation, and potential fall in market share. To manage and decide what to do with goods, other techniques like the General Electric methodology and the Boston Consulting Group matrix may also be utilised. For instance, if a market is stagnant but a product is selling well, the corporation may elect to invest in other items instead of keeping money from the cash cow in the product in a market that is not developing. Distinct goods and product categories have distinct product life cycles. A product may go through four phases, which are shown in Life Cycle as an example of the product life cycle. But not all goods go through each step, and each stage's duration varies. For instance, some items are discontinued from the market and never see their market share increase [4]–[6].

II. DISCUSSION

More items remain in a stage than in others. For instance, Clear Pepsi, a beverage released by PepsiCo in 1992, had a precipitous fall after its release. In contrast, shortly after its launch in the early 1980s, Diet Coke entered the growing market before moving on to the mature stage of the product life cycle. While product categories like diamonds and durable commodities often have longer life cycles, new computer devices, software, and video games can have short lifespans. Throughout a product's life cycle, several strategies may be used for promotion, pricing, distribution, or modification. Now let's examine the different product life cycle phases and what makes them unique.

The Stage of Introduction

The introduction stage is the initial phase of a product's life cycle. The last step of the development of a new product, also known as commercialization, is the introduction stage. Compared to earlier phases, marketing expenses are often greater in this one. Think of how much fuel a jet requires for takeoff compared to how much it needs when flying as an example. A new product or service requires more money to be introduced into the market, much as an aero plane needs more fuel to take flight. Supply chains and placement options are required to get the product to the customers, and communication is necessary to raise awareness of the product and convince consumers to try it. Due to the high expenditures associated with product development and promotion during the first stages, profits are often modest [7]–[9]. For many items, the duration of the introduction phase varies. However, a business may only use the word new on a product's packaging in the United States for a period of six months at a time. The goals of an organization during the introduction phase often include raising awareness, educating prospective consumers about the value and advantages, and encouraging them to try the product or service.

It may take much longer for goods and services, especially those from multinational corporations, to be accepted in overseas markets. As a result, businesses that launch goods and services overseas often need to have the financial means to commit to their success over the long term. The particular promotional tactics a business use to introduce a product differ based on the kind of product and how many rivals it has in the market. Companies that produce goods like cereal, snacks, toothpaste, soap, and shampoo often contact customers by using mass marketing strategies including television ads, Internet campaigns, and promotional programmes like coupons and samples. Companies use personal selling to connect with wholesalers and retailers like Walmart, Target, and grocery shops. Numerous businesses advertise to consumers, retailers, and wholesalers. Other, more focused advertising techniques are sometimes used, such billboards and transportation signs. Many businesses use in-store demonstrations, personal selling, and educational advertising for more complex or costly goods, such computers or plasma TVs, so that customers may understand how the items function.

In China and the US, there are several innovative, practical snacks packaging options, including jelly snacks and packets in various sizes. To deliver the product or service to the clients during introduction, an organization has to have a sufficient number of distribution channels. Additionally, the product quantities must be accessible to satisfy demand. For instance, IBM's ThinkPad was a major popularity when it was originally released, but IBM was unable to supply enough of the device due to the high demand. A company's manufacturers, distributors, and other supply chain partners working together makes it easier to match supply with demand and provide value along the way. You may have eaten the well-known Rice Krispies Treats cereal when you were a child. The cereal was so well-liked that Kellogg's struggled to meet the initial demand and ran advertisements apologizing to customers. When supply is insufficient to meet demand, rivals might join the market, as occurred when the microwave was invented. The majority of people possess a microwave, and costs have decreased dramatically since Amana priced their first model at over $500. Sales rose from 40,000 units to over a million units in only a few years when customers in the

US first learned about and saw the device. Due to a cheaper price, sales in Japan climbed even more quickly. The increased demand in both nations led to an influx of rivals and a decline in pricing.

Pricing strategies for goods in the early stages might vary based on the kind of product, competing products, the added value a product offers customers over alternatives, and the expenses associated with its development and production. Companies want customers to believe that a new product is superior to or more attractive than current offerings. Penetration pricing and skimming are two tactics that are often utilised in the first phase. A cheap beginning price is used in a penetration pricing strategy to get lots of people to test a product. The company wants to sell a lot of products in order to make a lot of money. The initial cost of new cereal variations, shampoo smells, detergent odours, and snack foods is often modest. Rarely does a business use a high pricing approach for a product like this. In order to raise customer knowledge of the product and encourage them to try it, it is often paired with advertising, discounts, samples, or other unique incentives.

In order to more rapidly recuperate the cost of the product's creation and promotion, a business may utilise a skimming pricing strategy, which entails establishing a high initial price for a product. The top, or high end, of the market is attracted by the skimming technique. Customers who are early adopters of items or those who are less price sensitive often make up this segment. Manufacturers of electronic goods like digital cameras, plasma TVs, and DVRs make their pricing high at first. The high price must, however, be reasonable given the nature of the product and the various marketing tactics being used to sell it. Examples of tactics businesses could employ in combination with a skimming strategy include selling to clients more personally, running advertisements that target certain customer segments, and putting the product in a select few distribution channels.

The Stage of Growth

A product moves into the growth stage of its life cycle if the market accepts it. Sales growth, an increase in rival businesses, and larger profitability are the hallmarks of the growth stage. Unfortunately for the business, rivals join the market swiftly during the expansion period. For instance, Pepsi quickly entered the market with Diet Pepsi when Diet Coke saw significant popularity. You'll see that Coca-Cola and Pepsi each have rival beverage products that are comparable to one another, such as their own brands of bottled water, juice, and sports drinks. Manufacturers must make sure that the product is accessible to consumers when more people start to purchase it or else, they face the danger of them purchasing rival products. For instance, when Nintendo's Wii was originally released, the manufacturers were unable to meet the demand from customers. As a result, some customers bought rival gaming consoles like the Xbox from Microsoft. After the Nintendo Wii was released, demand for the device skyrocketed. Wikimedia Commons is the source. Occasionally, a business may spend more on advertising a product while it is growing. However, marketing often highlights the unique advantages the product provides and its worth in comparison to rival products rather than urging customers to try the product.

In other words, the business must battle the competition while still informing and educating clients. In order to retain sales in the face of competition, a business might benefit by highlighting the benefits of the product's brand name. Although many different companies make personal computers, having a well-known brand like IBM gives a company an edge when rivals join the market. A corporation may have a competitive advantage if its new goods share a successful brand name with its current ones, as Black & Decker does with several of its products. Because more units are sold and more income is brought in during the expansion stage, businesses often start to turn a profit. As a business seeks to access as much of the market as possible during the expansion stage, the number of distribution channels used to offer the product may also rise. A product's expenses often stay high throughout the expansion stage as a consequence of expanding its distribution and manufacturing to assure its accessibility at various outlets. During the growth stage, the product's price normally stays around the same level, while some businesses may lower their pricing somewhat to draw in more customers and match their rivals' prices. Companies anticipate that growing their sales will boost their earnings.

The Development Stage

The sales of a product often start to level off as multiple rivals join the market and the number of potential new consumers falls. This shows that a product's life cycle has advanced to the mature stage. Consumer goods are often at the mature stage of their life cycles, with repeat consumers making up the majority of their market. Profits decline as a result of the fierce rivalry, leaving only the strongest competitors. Compared to previous phases, the mature stage is the longest. Products like Quaker Oats and Ivory Soap, which have been available for more than a century, are at the maturity stage. Stronger rivals extensively market various items to customers due to the intense competition in the mature market. The value and advantages that provide the providing a competitive edge are often the focus of the product promotion tactics. During the mature stage, the marketing directed towards a company's distributors may also rise. In order to compete, businesses may lower the price of mature items.

However, businesses must take care to avoid engaging in price wars with their rivals that would completely ruin the profit potential of their markets and put a firm's future in jeopardy.

Regarding its microprocessors, Intel and Advanced Micro Devices have fought various pricing battles. Samsung also competed against Apple's iPhone by increasing features and decreasing the cost of its Instinct smartphone. During the 2008 Christmas season, numerous internet companies participated in price wars by lowering their product and delivery rates due to the weakening economy. While major companies like Amazon.com can afford delivery expenses, pricing battles often harm smaller merchants. Many merchants bought less goods for the 2009 Christmas season after learning from their failures. To be competitive, businesses must devise plans to lengthen the mature stage of their goods. Many businesses do this by changing their target audiences, their product offerings, or their marketing plans. We now examine each of these tactics individually. By pursuing new consumers, pursuing distinct market groups, or discovering new applications for a product, a corporation might attract new customers by changing the target market. Financial institutions and car dealerships increasingly target women since they have more purchasing power. More businesses are selling their goods and services online as a result of the rise in internet customers.

Companies have the chance to prolong the product life cycles of their various products when they enter new markets. As a tactic to attract new customers, many businesses expand internationally or into other geographic regions. A product that could be at the introduction stage in one market but in the mature stage in another might be. For instance, when the American market reached saturation, McDonald's started adding outlets abroad. Before being made available in the United States, cell phones were very well-liked throughout Asia. In Asia, a lot of people use their cellphones to charge purchases and scan coupons. The American market, meanwhile, may not be ready for that kind of technology. The maturation stage of the product may also be extended by making changes to it, such as modifying its packaging, size, flavours, colours, or quality. Nabisco's 100 Calorie Packs serve as an example of how a corporation modified the packaging and size to provide convenience and 100-calorie servings to customers. Nabisco repackaged additional items as a result of the 100 Calorie Packs' increased sales of nearly $200 million, which outpaced the decline in sales of numerous packaged foods. By developing new flavours, Kraft Foods prolonged the mature stage of many crackers, including Wheat Thins and Triscuits. Although it is unpopular with customers, many businesses reduce the number of items or the size of the packaging they use to save money and prevent costs from increasing too high [10], [11].

Every year, automakers make a little amount of changes to their models to include new aesthetics and safety features. The makers of automobiles make more significant changes every three to five years. Common techniques for extending the mature stage of the life cycle include changing the packaging or adding variants or characteristics. The packaging and style of Pepsi's soft drinks and Tropicana juice products have recently altered. Consumers, however, said the new juice box resembled a less costly brand, making the product's quality seem worse. Pepsi started using the original Tropicana packaging once again as a consequence. Consumer feedback on Pepsi's revamped soda cans was likewise unfavorable. When bringing items to global markets, businesses must determine if the product can be standardized and how much, if any, adaptation or modification is required to fit local cultural requirements. Standardizing goods and marketing tactics is significantly less costly, although cultural and environmental variances often call for some adaptation. Cultural variations sometimes necessitate changing product names, colours, and packaging. For instance, Coca-Cola's diet beverages are referred to as light, not diet, in many Asian and European nations. For the Japanese market, GE manufactures smaller appliances including washers and dryers. To compete in the American market, Hyundai Motor Company had to up the calibre of their cars. Companies must also look at the external environment in international marketplaces since there are different laws, levels of competition, and economic situations as well as different cultural norms.

Europeans refer to diet beverages as light, not diet. In Germany, this Coca-Cola beverage is offered. Wikimedia Commons is the source. Some businesses alter their marketing plans to account for one or more of their goods' marketing factors. For instance, a lot of fast-food restaurants and coffee shops, including McDonald's, now sell specialty coffee that rivals Starbucks. Starbucks' management felt it was time to alter the business's strategy as a consequence. Starbucks has expanded its lunch menu over the years and stopped grinding coffee in-store in order to provide customers speedier service. The fragrance of all the lunch dishes turned off some customers who missed the coffee shop ambiance and the aroma of freshly made coffee. Starbucks' former CEO and founder Howard Schultz joined the organization once again as a consequence of the company's declining market dominance. To figure out how to alter the company's offering and lengthen the mature stage of their life cycle, Schultz contacted experts.

Starbucks later updated its lunch menu in several locations and started grinding coffee in-store to give consumers the scent they had been missing. several of its outlets now have a more classic coffee shop feel. The business has changed several of its products to provide clients who care about their health lower-calorie alternatives. To cater to consumers who were having trouble making ends meet but still wanted a nice cup of coffee, Starbucks stated it will start offering instant coffee for around a $1 per cup in 2009. Additionally, the company modified how it communicated with clients by including more interactive media, such blogs. California is home to the oldest McDonald's still open today. Wikimedia Commons is the source. Starbucks may have overextended itself, but McDonald's wants to add 14,000 coffee shops to some of its locations. Many McDonald's locations are remodeling their interiors to include flat screen TVs, recessed lighting, and wireless Internet connection in addition to the coffee bars. Customers still like the original designs of other McDonald's locations.

The Stage of Decline

The product has entered the decline stage of its life cycle when sales start to fall and keep dropping to lower levels. Changes in customer tastes, technical developments, and substitutes that meet the same need might cause demand for a product to fall during the decline stage. Do you believe that any of your classmates have ever used a typewriter, an adding machine, or a slide rule? Calculators and computers have taken the role of slide rules and adding machines, respectively. A good question to ask your parents is if they remember eight-track recordings, which were popular before cassette tapes and before CDs. Some goods lose value gradually. Some people experience a sharp deterioration. Young people's fads and styles can have relatively brief lifespans and go out of style very rapidly. Many students also don't own landlines or VCR players and find it hard to comprehend that individuals still use this outdated technology. Similar to payphones, they are quickly going out of style.

Tech devices with a strong attraction to young people, including digital cameras, mobile phones, and video games, often have short lifespans. When their goods reach the decline stage, businesses must select what methods to use. Some businesses attempt to cut down on the amount they spend on these items' promotions as well as the number of retail locations where they are offered for sale. To encourage buyers to purchase the goods, they could provide price reductions. Harvesting the product requires progressively lowering all expenditures on it, including product investments and marketing expenses. The corporation believes that by lowering these expenses, the earnings from the product will rise until their stock is depleted. The business may also choose to remove the item from its lineup. The business may decide to sell the brand to another company or just substantially cut the price to get rid of all unsold inventory. If a business chooses to retain the product, it might lose money or profit if rivals opt not to participate. Many businesses feel that the best course of action is to alter the product during the maturity period in order to delay reaching the decline stage.

Development

The real offering is planned, its requirements are defined, and prototypes of it are created during the development stage. The company also takes into account how the product will be made at this point. For instance, when a restaurant is creating a new dish, it must not only taste excellent but also be able to be manufactured quickly after being requested and at a price that allows the business to make a profit. Using the same technological platform as another product may be highly efficient and less expensive in terms of a manufacturer's offers. It is often simpler for a business to teach its technicians to service a new product when they are using the same platform.

Testing

The offering is tested at this phase, first in a lab and subsequently with actual clients. Alpha testing is another name for lab testing. The purpose of alpha testing is to confirm that the product satisfies its criteria and performs as expected in a range of settings. For instance, Kraft may introduce a brand-new food item that must function in hot and cold areas, high humidity, dry climates, and high altitudes all of which might affect how effectively the item functions. Beta testing is the next phase. Actual consumers test a product to ensure that it functions properly in a real-world setting. Beta testing examines a product's functionality as well as its distribution methods, customer support procedures, and other marketing-related elements. This process may be pricey. Depending on the product, some businesses may decide that it is preferable to just introduce the product and wait for the market to react to or test it after it is put on sale. Beta testing are often carried out in B2B settings with lead users and preferred clients. Because the product may still have defects that need to be fixed, the product's developer has to build a good rapport with these clients. Beta testing may harm the two parties' connection and harm the sales of the product's creator if there are major modifications that need to be made to the product or service and the relationship between the parties is iffy. The business is creating and testing the marketing communication strategy that will be utilised to launch the product at the same time as it is evaluating the offering's ability to satisfy its specifications. Many businesses employ user communities or consumer panels to evaluate their products as well as their communication strategies. As previously reported, JCPenney asks a user community for suggestions about their Ambrielle lingerie brand. The firm routinely delivers real prototypes to consumers for testing and feedback, along with ideas, to the group. Similar to this, the data warehousing business Teradata has a partner's organization made up of a community of users who take part in the development and testing of the company's products.

Commercialization or Launch

An offering is made accessible to consumers once it has been developed and tested. A corporation may sometimes introduce a service simultaneously in all of its markets. Other businesses could use a gradual launch strategy where the product is initially made accessible in certain areas before expanding to others. If training is required for the company's service technicians, a rolling rollout can be appropriate. After training the initial group of workers to service the product, the firm launches the offering in one market and expands into further markets as fresh groups of people train to service the product. For an illustration of the debut of a new product, see the video below. To make sure that a marketing strategy for a product reaches consumers, receives favorable feedback, and results in sales, some businesses test the strategy before it is fully implemented. It's known as a market test. Businesses may test the market in all or selected markets. For instance, one beverage manufacturer tried the marketing strategy for a new wine cooler by launching the product on the east coast and advertising it as a Polynesian drink on the west coast, the beverage was advertised as an Australian drink. The Polynesian variation was promoted and packaged differently in other new areas since it was more widely accepted.

Evaluation

A company's management keep a close eye on the development of an offering once it is offered. You've undoubtedly heard about how new films perform in the box office during the first weekend after release. A movie's first weekend often indicates how much it will gross altogether. A studio's management may opt to boost the marketing for it if the first weekend's ticket sales are strong. If the movie's ticket sales are weak, the company can decide to discontinue showing it in theatres completely and distribute it on DVD. For various kinds of offers, significant milestones may include the first 90 days following a product's introduction, then a second 90-day period, and so on. But keep in mind that businesses are continuously analysing their products and revising them by altering their pricing, their marketing strategies, or adding or removing the features and services that go along with them. Depending on the organization and other goods or services being created, the duration of milestones used to assess products may vary [12], [13].

III. CONCLUSION

Effective product life cycle management also requires cross-functional cooperation. The marketing, product development, operations, and sales departments work closely together to provide a comprehensive approach to product management. At every step of the product life cycle, the execution of marketing strategies is made possible by the flow of information and experience, which also enables quick decision-making, innovation, and marketing strategy implementation. The effective introduction and management of new goods depends on an awareness of the product life cycle and the ability to manage it. Businesses may increase their chances of success and longevity in the marketplace by deliberately adjusting and innovating throughout the life cycle. To take advantage of opportunities, address problems, and keep a competitive edge, marketing tactics, product improvements, and portfolio management must be timely adjusted. Successfully managing new goods requires adopting a customer-centric strategy, encouraging cooperation, and investing in continual development.

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