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## PRODUCT LIFECYCLE MARKETING AND FINANCE CONSIDERATIONS (CVP)

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Abstract: This article seeks to detail the different phases of the CVP and contextualize it with the basic marketing strategies, which must be complemented with financial support. By means of qualitative research, for convenience, involving ten consultants with a minimum degree of postgraduate training and with experience with equivalent time, an attempt was made to illustrate a CVP model to be followed by business professionals.

**Keywords:** Product Life Cycle (PLC), Marketing, Finance.

#### INTRODUCTION

Planning is related to all phases of a company's life, which involves a series of responsibilities, rights and duties to be met, such as paying employees and suppliers, as well as maintaining the brand and sustaining the strategic positioning. A company can be defined in several ways, but in this article we can take the liberty that a company is the sum of the results of its portfolio of products and services. If the portfolio is consistent and balanced, the better the company's results. Considering the marketing area, especially the development of new products and services, a large part of the development of strategic planning and respective management is related to the analysis of the Teacher Life Cycle (CVP) and the BCG Matrix. Planning is carried out by all areas of the company, not being solely the responsibility of the marketing area. Based on corporate goals and objectives, the company will have where it intends to be in the future, guiding its actions and developing the best portfolio of products and services.

This article seeks to detail the different phases of the CVP and contextualize it with the basic marketing strategies, which must be complemented with financial support. By means of qualitative research, for convenience, involving ten consultants with a minimum degree of postgraduate training and with experience with equivalent time, an attempt was made to illustrate a CVP model to be followed.

#### PRODUCT LIFECYCLE MANAGE-MENT (CVP)

The Product Life Cycle (CVP) is a graph that represents the sales performance of a product and its profitability, contextualizing sales and financial contribution. It must be considered as a form of analysis for a strategic and not a tactical project, as it impacts the entire company.

Each phase is different according to sales variations, which translates, in a way, the market share. It is a marketing analysis tool that seeks to anticipate the commercial useful life of a product, taking into account the strategies and possible movements of the macroenvironment and competitors. Guth (2012) considers that according to the changes, companies must adapt their strategies. Thus, it is necessary to elaborate a robust analysis of the economic and financial viability of these projects.

One of the company's biggest challenges is the anticipation of each phase, which has different characteristics and has the ability to articulate strategies that aim to perpetuate the sales life.

### 1<sup>a</sup> PHASE - PLANNING AND RESEARCH

It is the phase where the company, from the identification of market opportunities, conducts research in order to quantify and qualify the demand, in order to measure resources and compare with the forecast of future sales. It is of paramount importance to measure, interpret and analyze market opportunities, which lead to a prototype, that is, physical materialization and other analyzes that aim to dimension the necessary resources and that accompany the sustained growth

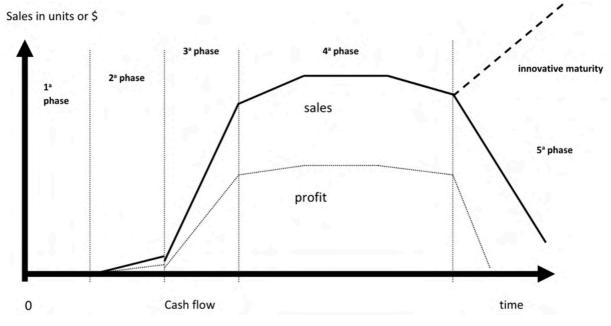


Figure 1 – Product Life Cycle (CVP). Source: Authors.

of sales in the market. Market and product testing are fundamental for the analysis and adequacy of strategies.

Strategically, in this phase the company must consider the cost of capital and the risks involved. Thinking financially, the company must use the available sources of financial resources, own and from third parties, analyzing the cost of capital and analyzing the risks involved. Another important point is that if the product is launched, it will have the duty to generate revenue in return for the resulting costs and expenses. Thus, the main question is whether the company will be able to have the necessary working capital to support such investments.

In this phase, the company must try to obtain synergy in its production processes, reduce the financial burden for leasing operations instead of directly acquiring machinery and equipment, for example.

As mentioned, there are no recipes. The only exception is when the company is able to

carry out advance sales or on-demand sales, which are usually related to BtoB. Another option is to find investment partners who can finance the initial investments and then do the profit sharing.

Incubators are important in this phase, as the greatest difficulty for companies is the first three years, as initial resources are usually limited and the lack of technical professional knowledge sometimes interferes with the development of planning, product and service research, in addition to the bureaucratic. Some Higher Education Institutions (IES) have in their set of services incubators that help companies in the opening period and junior companies that are able to sustain the operations of the companies. according to the newspaper: "Folha de São Paulo" (17/07/2016) Banco Itaú installed the Cubo in Vila Olímpia, an incubator that houses dozens of start-ups, new digital companies, after a solid selection process. The initiative has, among other objectives, to meet

*start-ups* "unicorn", that is, with great potential for businesses like Tinder or Instagram, for example.

From the consolidation of necessary resources - economic, financial, productive, human and intellectual, within a schedule of actions, it is possible to move on to the next phase.

#### 2ª PHASE - INTRODUCTION

This is the phase in which the product is launched on the market, from the situation that the basic marketing tools (marketing mix) are properly adjusted, that is: when there is a promotion, the product must already be at the points of sale and with the necessary appeals. As an example, we can comment

that the product must not be launched with its definitive version, at an initial quality level that allows the addition of other accessories and differentials. This strategy we call planned obsolescence. At every moment of the product's commercial life, items that differentiate it from the current version must be incorporated. As an example, we have the launch of automobiles and at each sales phase, the incorporation of other aggregates, such as options and the like. For the longevity of the product's commercial life, at this stage it is necessary: This is the classic behavior. Another example is the case of Club Social, which was launched in a more basic version and based on the advance of competition and market stability, versions with new flavors

Analysis of the apparent viability of the product / service						
Market viability	Present indicators that there is market potential, market acceptance of the new idea, including factors that demonstrate the desire for the product, market, growth rates, behavioral factors, among other factors directly related to the central idea.	Indicate the main points that demonstrate the success or unfeasibility of the idea, assigning a grade. Emphasize what must be done and analyze the cost-benefit ratio.				
Operational viability	Present in detail the operational aspects (macro and micro processes) that lead, from the acquisition of raw materials and services, production, internal and external logistics, commercialization and after-sales.	Explain how the company will adapt its facilities and resources in light of the addition of a new line item. Based on the analysis, the company will obtain the costs and expenses, including the initial investment.				
Financial viability	Present a forecast of the necessary investments, estimates of costs and expenses, in view of the sales potential and market perspectives.	Indicate the sources of funding – own and/or third-party resources. Identify possible angel investors, <i>stokholders</i> and <i>shareholders</i> . Sensitivity analysis. indicate note.				
Differential viability	Additional viability, taking into account the proposal of the idea and value, competitive differentials (if any), such as adding value through social and sustainability practices, for example.	Justify the insertion of competitive differentials, taking into account previous possibilities, especially marketing. indicate note.				
Apparent viability of the business	Based on the descriptive analysis of the scores attributed to previous viability and the qualitative perception of the managers (including sales forecast), indicate the apparent feasibility, highlighting and comparing positive points and points for improvement of the product.	Recommend actions, responsible people and schedule, in the sense of developing actions aimed at meeting the goals and objectives of the business.				

Table I – Apparent viability of the product and/or service.

Source: Authors.

Figure 2 – Standard behavior when using strategies.

Source: Authors.

and in different formats were launched.

The company must look for different alternatives throughout the cycle, in order to obtain the best results, as companies have the following standard behavior: (Figure 2).

In this example, applicable to most products, it is clear that the company has financial wear, recovering only in the sale of the product and over a certain period of time. Companies such as Coca-Cola have modified this scheme, carrying out first the distribution (which is their strong point) and then the promotion, managing to reduce the initial expenses of introducing new products. Another example applies to magazines, which sometimes choose to carry out intensive distribution and better visibility at the point of sale.

Incubators, within a more pragmatic support and because they deal with micro and small companies, generally choose to introduce the product in a more regionalized and segmented way, sometimes advising commercial contact with certain points of sale, to the detriment of the potential for real market and a more complete marketing plan.

In this phase, the company must take care to constantly monitor the performance of the product and the entire mix in the market and take corrective actions in order to adjust the planned to the actual. If all goes well, we move on to the next phase.

#### 3ª PHASE - DEVELOPMENT

This is the phase of the Product Life Cycle (CVP), where it is confirmed that the company's actions are working. In this phase,

unlike the Introduction phase, it is quite interesting to use other Marketing Information System (SIM) tools, such as monitoring commercial performance through secondary data (sales reports), in addition to participant observations and non-participants on market behavior in order to be able to make punctual adjustments.

With sales growth and greater visibility, it is normal to draw the attention of competitors, so the company must deepen its marketing strategies to strengthen possible barriers to entry. One can try to retain the loyalty of retailers, so that they choose to sell their products, as well as some food companies that provide refrigerators or exclusive displays that, by contract, cannot be used by competing companies.

Competitors did not have the initial efforts dispensed by the company and manage to enter with another breath. However, if there is good planning, the company can position itself as the first brand to offer the product and maintain its competitive leadership. It is during this phase that the company begins the process of deepening the market segmentation, in order to enable a wider range of alternatives for its customers and conquering new ones, in an attempt to continue growing and distance itself from the competition. After this period, it is common for the company to stabilize in sales, which is the next phase.

#### 4ª PHASE - MATURITY

This phase is characterized by the stable participation (share of market) of the companies, where any movement can generate little variation in sales. It is worth mentioning that the experience curve and the learning curve are essential for the company to apply all the knowledge obtained in order to make a difference in the market.

The experience curve proposes productivity and economy of scale increase proportionally to the increase in production, where for each piece produced more, the production cost decreases, where the company must identify a percentage. With this, the company can obtain a cost advantage over its competitors, according to Mintzberg (2010). The learning curve, on the other hand, refers to the accumulated knowledge and intellectual capital that are aggregated as intellectual capital and company assets. In other words, the greater the accumulated experience, the greater the power of the company to generate new ideas and solutions. Emphasizing Geus (1999), the company can be considered as a living being that learns from its experiences.

Companies can adopt different strategies related to the marketing mix, in order to adapt their actions to strategic movements and market perspectives. You can deepen market segmentation, as well as use more aggressive or targeted sales promotion and personal sales. The phase can be divided into three distinct subphases:

- Growing maturity, where we can see a gradual decrease in the results of the previous phase, of growth, where the company begins to have lower rates of gradual growth, which must be analyzed in the face of the entry of competitors, as well as the company's ability to generate assertive strategies, as the success doesn't just depend on the market accepting your product, but how the company can influence it. Certain product categories such as automobiles and beer may be located in this phase.
- Stable maturity, where the companies'

- shares do not vary, regardless of the strategies developed. Often, to prolong this period, they seek to obtain gains in logistical bottlenecks, involving everything from internal processes to the most optimized distribution.
- Declining maturity, where the company realizes that its market share and historical sales begin to decline, due to the loss of strength of the product in the market, either due to the lack of interest in the market or even other options for replacing the product. Product categories such as cigarettes are in this phase, heading for decline. The question remains: Is it worth continuing in the market? This is what the next two phases are about.
- Although the financial monitoring is carried out throughout the CVP, in this phase the Internal Rate of Return (IRR) and Net Present Value (PVL) can be evaluated, verifying if there was the expected financial return.

#### 5ª PHASE - DECLINE

Like living beings that lose strength and energy after a long period of development, the same situation occurs with products. This way, if the company strategically intends to withdraw its product from the market, it must analyze other issues besides the sale, such as:

- Degree of contribution of the product within the portfolio, where synergy and economy of scale can still maintain the product's survival, taking into account the redistribution of costs and expenses.
- Emotional factors, where they understand that the product was the company's first, for example, and must continue, even with great difficulty.
- Other competitors may also be leaving the market for the same reasons, where

the current product may still occupy a prominent position.

• Legal factors, as some products cannot be instantly withdrawn from the market, as they may harm current users, such as replacement parts for calculators and electronics.

If the company wishes to honorably withdraw the product from the market, it can opt for different actions aimed at gradually reducing sales, such as gradually reducing distribution and, consequently, exposure and marketing. Remember that the product is owned by the company, but it is inserted within an internal structure and also with suppliers of products and services that depended on it for its existence. Social responsability!

#### 6ª PHASE - INNOVATIVE MATURITY

It is common that after a long commercial period, products go into decline and it is the responsibility of marketers to try to revitalize them. This phase is called Innovative Maturity, where the product reaches a new phase of growth from a higher level – the end of maturity. To obtain it, the company can find something in the innovative process, new forms of presentation, use and commercialization. Havaianas sandals, for example, were cheap shoes for low-income customers. Based on a good marketing campaign, they managed to reposition the product as a reference for more favored classes and, consequently, at a premium price.

Concluindo, a análise do CVP é obrigatória e essencial para qualquer negócio. Dela deriva uma poderosa ferramenta de diagnóstico.

#### **MATRIX BCG**

It is a tool that analyzes the growth rate of products to the detriment of their market share, compared to the products of its main competitors, enabling the analysis of possible strategic moves. Enables a broader view of the financial contribution of each product, as well as, the portfolio.

Figure Y explains the natural movements that a product goes through in its commercial life, where the company must intervene in events in order to subvert this logic and increase the longevity of each product, as well as the entire company's portfolio. In summary, it is not recommended that the company has many products in the Interrogation quadrant, as it will immobilize a large volume of investments in future bets, as well as it is not healthy to keep products that no longer have commercial appeal, as they compromise resources, as well as the company's efforts and energy. One of the best situations is that most of the products that make up the portfolio are in "Stars" and "Cow Milk", in order to finance future promises in "Interrogation". Another key point is to prevent products from migrating to "pineapple" and returning to growth.

#### **PREVIOUS CONSIDERATIONS**

The company must develop an efficient, effective and effective management in the portfolio of products and services, as it is the balance of its composition that will bring the health and business continuity that the company desires. To obtain the results, marketing strategies must derive from strategic planning and CVP analysis, in order to maximize the business and financial return of the new product operation.

This process is not static and must be dynamic, in order to match the available resources with the results achieved. This way, a brief analysis of the influences of marketing and finance on CVP was presented.

Marketing strategies according to the phases of the Product Life Cycle (CVP)								
Marketing tools	1ª phase Research and Planning	2ª phase Introduction	3rd phase Growth	4th phase Maturity	Decline			
Product or Service	Definition of the concept (basic level) of the product. Dimensioning (quantitative) and analysis (qualitative) of demand. Analysis of the apparent viability of the business.	What level of quality must the product have at launch? What initial strategies, involving the marketing portfolio) will be used?	Apply barriers to entry strategies. Deepen market segmentation. Modeling marketing strategies.	Search for new uses of the product. Identify segments where the product still has sales appeal.	Decrease in marketing investments, in case the company decides to finalize the commercialization of its product.			
Square	Select intensive, selective and exclusive distribution strategies. Identify and formalize your strategic partners. Partnerships with distributors and retailers?	Identify how to distribute and monitor the evolution of sales, in order to learn in a direct and practical way. How to make the adjustments?	Develop CRM in order to identify and classify customers. understand the market.	Identify different strategies to sustain current sales while attracting new potential buyers.	Decrease points of sale and not necessarily lot size.			
Promotion	How will short- term and long-term promotion strategies be used?	Indicate punctually the promotion strategies according to the budget.	Modulate promotion strategies to ensure initial purchase and repurchase.	Identify marketing intensity and especially short-term strategies.	Decrease marketing investment, essentially using short-term strategies.			
Price	Identify by searches which initial price will be used (premium, medium or low price?)	Maintain the strategies, adapting them according to the negotiation with the distributors.	Deepen negotiations with distributors.	Maintain a pricing policy aimed at maintaining commercial balance, as well as finding ways to reduce costs and expenses.	Try to maintain pricing strategies and adopt promotional policies when there is a possibility of burning stocks.			
People	What skills and competencies will be needed to ensure the execution of marketing strategies? Submit the profile.	Management of the team of internal collaborators.	Management of the team of internal collaborators.	Management of the team of internal collaborators.	Management of the team of internal collaborators.			
Materiality	Identify, negotiate and bond with stakeholders who will provide raw materials and services. Allocate economic resources such as machinery and equipment.	Ensure that there is no shortage of products within the management of raw materials and inventories.	Ensure that there is no shortage of products within the management of raw materials and inventories.	Ensure that there is no shortage of products within the management of raw materials and inventories.	Ensure that there is no shortage of products within the management of raw materials and inventories, within the product withdrawal schedule.			
Processes	Identify, within operational feasibility, the macro and microflow of processes.	To manage the processes.	To manage the processes.	To manage the processes.	To manage the processes.			
Productivity	Identify the management indicators necessary to obtain the best results from the product.	Indicators management	Indicators management	Indicators management	Indicators management			

Table II – Marketing Strategies.

Source: Author

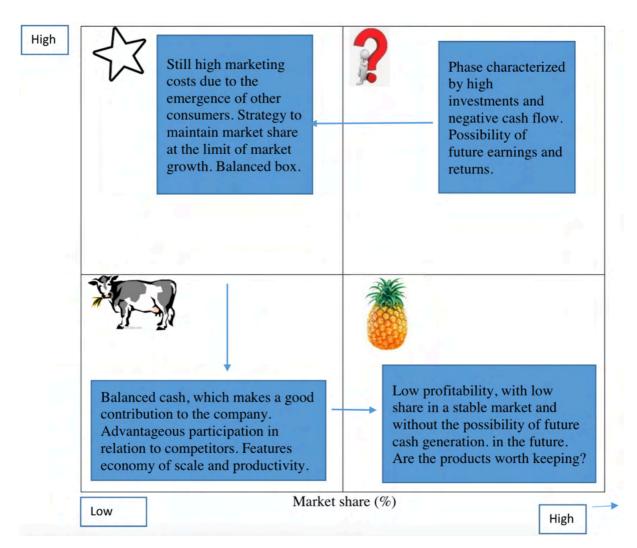


Figure 4 = Matrix BCG. Source: Authors.

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