Fascicle of Management and Technological Engineering, Volume VII (XVII), 2008

LIFE CYCLE OF INTERNATIONAL PRODUCTS

Liviu NEAMŢU

"Constantin Brâncuşi" University, Tg-Jiu, e-mail: liviu.neamtu@utgjiu.ro

Keywords: life cycle, product strategy, product policy

Abstract: The life cycle of a product on the international market implies accommodation of international product strategy and policy to specific phase in this evolution of product. Life cycle of a product has four evolution phases with different lengths from an external market to another. Therefore, appreciating the length and the life cycle phase is very important for the international marketing strategy of the firm. Through the product politics, in the international marketing the optimum combination among products being in varied stages of life cycle is followed.

1. THEORY OF PRODUCT LIFE CYCLE

In the specialty literature the so-named "theory of product life cycle" is used very often. In this conception, in the production development at the firm that has a priority in realizing a product there are three phases to which correspond three types of strategies in the international production and commercial domain:

-The phase of the new product when the firm has the absolute advantage in realizing the product, or a new product which is requested a lot on the external market even if the production costs and of course the prices are relatively high; so, the firm produces and markets the respective product under its name and on its expenses;

-The maturity period, meaning a development of the production within the respective firm and gradually semination of technology to third, competitive firms in accordance with the respective firm. In these conditions the initial firm is confronting with the other producers' competition, and this thing determines it to assign a part of its production capacity to some firms more favored in what concerns the costs by undercontracting or even by external investments;

-The standardization phase, when the technology is widely accessible on the international plan and a bigger and bigger number of firms have possibilities of realizing the respective product. The initial firm is in disadvantage in producing the respective product on its own market and prefers to transpose the production abroad, the necessary being assured by transportation.

An example on the market of the consumption goods is enlightening: the American discover from the first post-war years, this product reaches the maximum on the USA market at the beginning of the 8th decade; in 1977 the production is transposed in Japan and other countries from the Extreme Orient; a year later, these countries make the export to USA, and in the '80s they hold two thirds from the market; nowadays, the American firm General Electric imports completely the product from Japan and from the countries of South-East Asia.

2. INTERNATIONAL PRODUCT STRATEGY

In the elaborated strategy the enterprise should take into consideration the product life cycle. If someone analyzes the international life cycle of a product it will observe that this has four phases [2,3]:

1. The realization of export beginning with the success obtained in the origin country. The product is launched on the internal market; the success obtained determining

Fascicle of Management and Technological Engineering, Volume VII (XVII), 2008

its sale abroad. This stage corresponds to the launching of a market from the growing phase, too.

- 2. The obtaining of product abroad. The dynamism of some new markets appears and so their potential will be transposed in an effective request. But, after they make familiar with the product sold on their territory, the foreign enterprises begin to obtain it. This phase corresponds to the end of growth and the beginning of the product maturing.
- 3. The external producers increase their production to supply their own markets and they obtain the earning due to the work production growth and begin to export to other countries. They come to compete with the enterprises from the origin countries on the third markets. This is the characteristic of the maturing phase.
- 4. The growth of the production value obtained in the foreign countries and the registered cost advantages lead to the decrease of the product price realize by the firms in these countries and to their export even on the origin market; this moment represents the end of the international life cycle of the product.

In what concerns the life cycle of a product on the international market some particularities should be shown (table no. 1). [7]

Criteria	Introduction	Growth	Maturity	Saturation	Decline
Number of rivals	Few or not all	Some more	Many	The biggest number	In decrease
Number of bench-marks	Few or not at all	Many	A lot	The biggest number	Constant
The sales volume	Low	Significations	In relative growth	Maximum stability	Constant in decrease
Profit	Losses	The biggest profit on the unit	Unitary profit in decrease	Continual decrease	Decrease up to loss
Market quote	Small	Big	Constant	Constant up to decrease	Stabile at a low level
Promotion	Increased cost through mark	For the mark	Mark segmentation	To remind	For the mark in decrease
Product	Design modification	Stabile quality; the line extension	Stabile number of assortments	The pack modification	Minor modifications
Distribution	Increased costs. Limited number of canals. Specialized canals	Unitary costs in decrease. The increase of the canals number. Larger canals	Costs in decrease. The number and type of stabile canals. A single type of canal	The lowest prices on unit. The decrease of the canals number	Unitary costs. Number of canals in decrease. A single type of canal
Price	High price. High tolerances of profit	The decrease of price and tolerances	The decrease of price. Stabile tolerances	Tolerances increase. Prices modifications	Stabile tolerances. Reduced price.

Table no. 1. - Marketing aspects to life cycle of products

Thus, a product has a life cycle with different lengths from an external market to another, and the phases from the life cycle on varied external markets are not in concordance, the product being in different stages of its existence in the same moment depending on the market, and the length of the same phase can be different in a country or another.

In these conditions, a product which is considered to be new in a country could be in another phase of its life cycle in other countries and this element is very important for

Fascicle of Management and Technological Engineering, Volume VII (XVII), 2008

the external commerce operations. Therefore, appreciating the length and the life cycle phase is very important for the international marketing strategy of the firm. [6]

Considering the fact that the profit on the product unit begins to decrease before the apparition of this phenomenon in the sales curve, it results the necessity that the firm should hold predictable information over the aspects from the external markets.

It also should identify exactly the phase from the life cycle of each product using numerous criteria and market indicators, costs, profit, a marketing mix.

3. PRODUCT POLICY ON INTERNATIONAL MARKETING

The complexity of the international market and the existence of products in different stages of their life cycle make necessary the formulation and the transposing in practice of some strategies in the product domain, which are found in the product politics.

As a rule, through the product politics, in the international marketing the optimum combination among products being in varied stages of life cycle is followed. This means, on the other strategic directions: the improvement of products and the desertion of the old products; the innovation which allows the creation of new products for the external markets. [5]

The perfecting of products suppose their modification with view of maintaining on the market the stimulation of exports by improving the quality, the functional characteristics, and the performances, by changing the design, the packs etc.

The decision of improvement or of desertion of the product should uphold on a serious analysis of some aspects as: the situation of technological research potential; marketing activity; financial, human and material resources; the profitableness of predicted or effectuated actions.

There are cases in which to maintain the profit at a level suitable for the profitableness objectives, some products should be given up. The elimination of the non-profitable, old products supposes the analysis of each and every product situation to elaborate an exact diagnostic of the causes which determines its lack of profitability and if it is adequate to improve it. In this view, the analysis should start with the verification of the profitability grade and in case this is under the minimum admitted level, the possibility of decreasing the production and commerce costs should be taken into consideration. At the same time the exports should be observed if they maintain or fall. The causes being established, the measures for the product improvement should be taken under the shape of some programs of concrete action or the product should be abandoned.

The accelerated dynamism of technical, economic and social transformations recorded on the international market makes that the only way of maintenance in the competition from the external markets to be the diversification and the permanent renewal of the products. Introducing the new products is an activity which claims substantial expenses for research, development and commerce, with no hope for success and so their recuperation. Therefore a well-knowledge of the tendencies in the technical and economic domains is required, because on the contrary, there will be failures in launching the new products. The causes of failure could be: the weak knowledge of the market, the product deficiencies, the overtaking of the scheduled expenses, the competition actions, insufficient efforts, distribution networks insufficiently developed and organized, forms of surpassed commerce.

The failures can be prevented if the decisions in the process of introducing the new products in manufacturing and on the market are based on scientific researches, which solve step by step the advantages and disadvantages of projects for the new products.

Fascicle of Management and Technological Engineering, Volume VII (XVII), 2008

This permanent development leads logically to selection, a great number of projects being eliminated in different stages of analysis.

A solution for the problems imposed by the new and improved products is cooperation in producing and commerce of the varied merchandises. Through such actions the access to the modern technologies is assured, as well as the necessary sums for financing the new products.

Another up-to-date problem of international marketing is that of standardizing the products or, in other words, the attribution of the same characteristics to the product, no matter to which sale market is fated. Although on the world plan, there is a market segmentation process, sometimes taken to the extreme, and so we deal with a very small number of consumers or even with the individual consumer, the standardization of products maintains up-to-date. Therefore, at the planning and developing the products for the international markets, firms should take into consideration the advantages and disadvantages of standardization. [4]

Through the most significant advantages of the product standardization is:

- Economies in the production stage of controlling the stocks and the services politics;
- The standardization of product is the main element for the standardization of marketing mix;
- A firm which commercializes standardized products on the international market is easier to be managed, in what concerns both the organization and the control.

Concerning the disadvantages of standardizing, these are:

- The marketing flexibility is diminished because of the incapacity of adapting the product to the local requests;
- Standardization often discourages creativity and innovation, especially in the local firms which commercialize the product;
- It is ascertained that the staff from the subsidiary units on different markets tends to find its place in other companies which offer the possibility of using its ideas referring to the improvement of product.

The study of the standardization problem has as result two categories of arguments in the favor of this politics: a better marketing performance and lower marketing costs. The factors which encourage standardization, respectively the adaptation are presented in the table below.

I. The factors which encourage the standardization	II. The factors which encourage the adaptation		
1.Economy in production	1.The differentiation of the usage conditions		
2. Economies in research-development	2.The influences of settlement and governs		
3.Economies in marketing	3. The differentiation of the consumers behavior		

Table no. 2. - The determinant factors of standardization, respectively the adaptation

The adaptation of a product to a new market supposes to take into consideration two types of aspects: technical and commercial.

The technical aspects refer to the respect of some norms and technical settlements from the import country referring to the manufacturing manner, to the minimal performances, security in usage, information/instructions, etc. the sources of such normative are both national (British Standard Institution – BSI, in Great Britain, Deutsches Institut fur Normin – DIN, in Germany) and international (ISO – International Standardization Organization; CEN – Comité Européen de Normalisation).

Fascicle of Management and Technological Engineering, Volume VII (XVII), 2008

If the norms are facultative, the technical settlements are compulsory, the exporter or importer being allowed to ask an expertise firm to certify the quality of product and the conformity with norms and settlements.

In what concerns the commercial aspects of the product there are three aspects: mark, range and quality. [1]

The manufacture or commerce **mark** allows the identification of product and could be a sign of quality. To protect against the counterfeit products or the abusive usage the mark can be deposed at the national organisms for the protection of the intellectual property.

The **range** of a product consists in the assembly of product models respectively available at the producer, respectively the total amount of the possibilities offered to clients. The export draws many times a reduction of range, some of the models being eliminated because of technical, cultural or economic reasons.

The **quality** of merchandise and especially the maintenance of a constant quality are important in the competing from the external markets. The quality of product is usually expressed by solidity, viability and facility in usage. The quality of pack, the respect for the delivery term, the assurance of post-sale service should also be taken into consideration.

BIBLIOGRAPHY:

- [1] Albaum G, Strandskov J şi Duerr E., (1998), *International Marketing and Export Management*. Addison Wesley, pg. 181.
- [2] Bradley F., (1995), International marketing strategy. New York, Prentice Hall, pg. 234.
- [3] Bradley, F., (2001), Marketing internațional, Editura Teora, București, pg. 285.
- [4] Cateora P.R., Graham J.L., (2002), International Marketing. McGraw Hill, pg. 207.
- [5] Croue, Ch., (1999), Marketing International, 3-eme edition. De Boeck Wesmael S.A., Bruxxelles, pg. 295.
- [6] Danciu, V., (2005), Marketing internațional. Ed. Economică, București, pg. 199.
- [7] Neamtu, L., (2008), Marketing international. Ed. Universitaria, Craiova, pg. 160.