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## PRODUCT DESIGN IN THE SERVICE OF QUALITY INTERNATIONAL MARKETING

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**Summary:** *The world is full of favorable opportunities, they could be big, small, recurrent, unrepeatable, and in the end they are always either used or missed forever. The product design is a convenient opportunity used to implement something new in the business in the service of international marketing. One of the biggest opportunities in this dynamic economic development is to invent something that will have a significantly lower price than the competitors' while remaining profitable. The priority task is to achieve maximum level of engagement by the management in the process of designing an organizational structure where the organizational design represents a solid and complex architecture composed of several parts while the main strategy focuses on the new competitive advantages. This complex reality should be accepted as both a challenge and an opportunity provided that the designing of the product basically becomes a proper state of mind within the management. This means that managers need more creativity and more profound logic if they want their product to be successful and effective. Certainly in this case the management can create a model of organizational structure that will allow the company to create value for the shareholders, employees and customers. An integral part of this paper is the way we achieve this new state of prudent consciousness needed for the success of the future market.*

**Key words:** *design, organization, quality, dynamic economic development, values.*

**JEL:** *D40, L15, M30*

### INTRODUCTION

The product represents the most significant element of the marketing mix and it triggers the creation of the marketing strategy for entering foreign markets, i.e. it has been said that the product is the determining tool in the marketing mix. It is an instrument which links the manufacturers' and consumers' interests. The role of the product is to design and shape the basic needs and desires of the consumers in a functional way. A quality product is a necessity but not a

sufficient condition for achieving success on the foreign market. The product as a marketing tool contains key features that can be used as a basis to determine its potential competitiveness on the foreign market, while the estimate for the overall competitiveness could be determined based on the entire program of the marketing activities. The product has a large number of dimensions and one of them is design. The design represents a process of creating and developing a plan for an aesthetic and functional object which requires a lot of research, thinking, modelling, adjusting and redesigning.

In terms of globalization and strengthening of the competition, product design is one of the most promising tools for differentiation and positioning of all kinds of products. In terms of real market competition, product design is crucial for consumers. In marketing it is especially important for the design as a process of shaping the products to contribute to meeting the requirements in the functioning of the individual activities. The design of the product is important not only for national but also for international marketing. In order for the design to be in the service of successful marketing, and especially international marketing, the conception of the design needs to be completely focused on the market. We need to take into account the market specificities and the popular market tendencies. From a functional point of view, the design should simultaneously recognize the modern requirements of manufacturing and technology and the popular preferences of the consumers on both domestic and international level. There are several approaches in international marketing which could be used during the market shaping of the product.

## **1. DEFINING PRODUCT DESIGN**

When we talk about product design in practice, we often refer to its style, shape, look, color etc. This simplified understanding of design which has developed into an almost completely separate discipline, could be explained as ignorance in terms of crucial matters of the shaping which results in lacking the opportunity to perceive the connectedness of factors which contribute to its formation. However, the mere appearance of the product is a very complex category which is the result of overall efforts of production and also the result of all the factors that have some impact in creating use values and their interrelationship (Жаќоски, 2001). In literature you can find many definitions of design. It can even be said that there are as many definitions as there are authors. The designing profession is a very complex, multidimensional and interdisciplinary activity that is performed on an extremely broad area, whether in an independent, tied up or a

derived form. The designing profession is much older than the concept of marketing. There are numerous examples which prove that not every design is in the service of successful marketing. This statement applies to modern times and the latest trends in the development of design. This discrepancy often occurs when the design is approached to as an unprofessional and one-dimensional activity.

Design could be defined as the creation of a relationship between the product and the needs, i.e. as an entirety of the product. Additionally, in the process of designing, it is not only the shape of the product that matters but also how the product integrates in the environment in which it is being positioned. Hence the understanding of the design as a “social, i.e. humanitarian activity”, during which the shape of the product comes from the efforts of the economic entity to satisfy certain needs, albeit it also depends on production, distribution etc. According to this, the design does not have a unique or even primary importance in the formation of the shape in order to satisfy the esthetic needs. In marketing, it is especially important for the design as a process of shaping the products during the functioning of individual activities to contribute to satisfying the needs of the consumers. But the design does not merely create the shape of the product, because designing the products requires creative engagement. Therefore the design as a creative activity represents: examining the elements, the data and the motives which refer to the product, i.e. their analysis, and in a narrower sense – finding and establishing new relationships between them.

In a broader sense, the design means any conceptualization and formalization of certain preliminary concept of the product that needs to meet certain needs. In a narrower sense, the design represents shaping of the product (Петковски, 1975). Regardless of whether the design is interpreted in a broad or narrow sense, it is important that all activities related to the design belong in the group of creative activities. The design is the process of creating and developing a plan for an esthetic and functional object, which requires proper research, thought, modeling, adjustment and re-design. It can be defined as an efficient and effective development of ideas through a process that leads to new products. The design is an idea, a concept for development, testing and production or implementation of a physical object or service (<http://en.wikipedia.org>).

The design, i.e. the process of design development is using all the opportunities available, all the information in order to confirm the entirety of the features of a certain product or system whose purpose is to satisfy certain needs. A large number of companies lack the sense of design. Their product design could be poor

or outdated thus making the products look very ordinary. The design could be one of the most powerful competitive weapons in the arsenal of marketing of a certain company. For this purpose, the design can be analyzed from a horizontal and vertical aspect. The horizontal review of design undoubtedly shows permanent and intensive process of growing application of design in new production and service activities. The vertical development of design is increasingly examining the factors of importance for the shape in a meaningful and comprehensive interdisciplinary creation that consists of four stages: styling, redesign, product design, visual communications design and environmental design.

- Styling which could be defined as the creation of illusions for changing interventions in order for the product to acquire such shape that will satisfy the esthetic requirements of the consumers in a certain period of time during which the changes do not inflict damage upon the internal structure of the product i.e. its characteristics;
- Redesign, i.e. reshaping is a more advanced stage of designing which marks a process of product reshaping as a whole without triggering any structural changes of the product or its function;
- Product design and visual communications design means creating new functional and usable features of the product which actually represents a process of shaping a new product;
- Environmental design, or a complete design which perceives the design in regard to the environment where it is positioned in order to create a more humane working and living environment. Basically design should achieve coherency of the shape per se and the context in which it could be found. In reality that means that we should take into account all factors which affect the final shape of the product. During this process, we need to take into consideration that the product which is being shaped represents a link between these diverse factors and that is why it must establish a maximum level of connectivity between them. Thus the design of the product is a result of many factors and parameters. The design parameters can be globally divided into: the parameters of manufacturing, parameters of use, intermediate parameters of the distribution. Parameters of production that affect the design are numerous: the parameters of the production process; technical parameters, parameters derived from the requirements for classification and standardization of elements; economic factors such as cost of production or profitability of the series.

The most important aspects for customers in terms of product quality and design are functionality, reliability, durability, adjustability of the purpose and the user. Within the parameters of use we include: economic parameters resulting from

the relationship object-user; physically-functional parameters derived from the ratio object-environment, parameters of the cost of use.

**Design factors** can be grouped according to the same parameters: according to the use, sale and production. Key factors are: aesthetics, motivation, function, ergonomics, mechanism, structure, production, economics and presentation (Kotler, 2002).

- Aesthetics—In terms of aesthetic appearance, each product can be broken down into seven key elements: line, direction, plastic shape, size, structure, light value and color.
- Motivation - Motivation has an impact in terms of stimulating the consumer to use a particular product or to buy it, thus this must be considered when designing.
- Function represents the level of adaptability of the object in terms of fulfilling a certain purpose which is very important in the design which needs to be derived from the needs.
- Ergonomics - Ergonomics is the scientific discipline whose task is to find ways of adapting to the subjects, the environment and other processes in which people are active and it is based on empirical research on the human body and its behavior.
- Mechanism - The mechanism is an important factor in the design, because the shape of the product depends on the normal physical and structural conditions especially in the more complex products.
- Structure— Structure could be defined as the description of the types and categorization of the elements and their interrelationship in a certain system.
- Production – Production dictates the shape of the product. The way of organizing production, the technical and the organizational aspects are directly connected to the process and the result of designing.
- Economics - The process of forming the shape of the production. Economics is an important factor. Namely, all efforts to achieve “perfection” in the appearance cannot ignore the economic side because the price of the product will appear as a dominant precondition for the sales volume.
- Presentation - The appearance of the product basically has to meet the requirements in terms of exploring the basic function of the product or how it will be used. Presentation is an important factor in the design because along with the design process, the functions of the product cannot be ignored. Hence some companies have an integrated style and design within its corporate culture.

## PRODUCT DESIGN IN INTERNATIONAL MARKETING

Every design is not always successful in terms of marketing, and particularly for international marketing. A design could be original, unique and aesthetically perfect; and it could still not provide any positive effects in regard to marketing. Therefore we emphasize that in marketing, an interesting design is only the design that triggers positive market and business effects.

Back in the sixties, the International Union of Companies for Industrial Design defined industrial design as a creative activity whose aim is to determine the formal qualities of industrially manufactured objects. This is a short and simple definition that is widely accepted. In marketing, the product design must be aimed at creating and achieving market success. Following the logic and the concept of marketing, product design in international marketing can be defined as (Kotler, 2002): Market orientation of the creative activity in order to determine the formal and the physical elements of the products and services which enable their rational and functional production with the purpose of achieving their more useful, easier and esthetically acceptable use internationally. Hence there is no doubt that the designing profession represents a creative activity for physical shaping of the product and the service. Nevertheless, in order for the design to be in service of successful marketing and especially international marketing, conceptualizing the design needs to be targeted and aimed at the market. We need to take into account the market characteristics and ongoing market tendencies. In a functional sense, the design needs to simultaneously recognize the modern requirements of production and technology as well as the popular preferences of the consumers in both domestic and international markets. In times of globalization and strengthening of the competition, product design is one of the most promising tools for differentiation and positioning of all kinds of products. The fact that investing in design is a lucrative move has been proved by many global companies that emphasized the importance of design. For instance, "Nike" sneakers are worn by athletes, but they are primarily aimed at the market of young people who consider multipurpose sneakers especially popular at present. Differentiating through design is also a very well-known strategy among luxury products such as Rolex watches etc. Certain countries are leaders in design: Italian design of clothes and furniture, Scandinavian design in terms of functionality, esthetics and ecological awareness.

### 3. TYPES OF PRODUCT DESIGN FUNCTIONS

We often distinguish between process (engineering), industrial and graphic design, as well as between individual design in areas such as enterprise design,

environment, utilities, packaging, visual identity, promotional performance etc. Graphic design is a process of visual communication by using text and/or photos or illustrations to present information or to emphasize a certain message. Industrial design has a dual use. It serves to satisfy the need for something good and useful. In its essence and form, with which it presents itself to the public, it is located halfway between the invention and “pure” art (<http://mk.wikipedia.org>). But the issue of design in marketing has a broader meaning than the term industrial design or industrial design of the product. The need for active engagement of professional and expert designers appears in various forms and stages in the process from initial conception and design, all the way through the test phase and finally the market valuation of a certain product or service. Successful management of the design of the marketing concept involves tight coordination and synchronization of relationships between various design professions, marketing and manufacturing. This triangle should elicit effective and successful market design and launching of products in an international exchange. In order for the product design in marketing to be successful, it needs to fulfill five vital functions:

- **Design’s function of distinction and competitive differentiation** –which comprises innovation and creativity in design. In terms of real market competition, product design is crucial for consumers. Designers agree that now more than ever before, consumers pay attention to the exterior, in addition to price and quality. This requires the product to be simple and original as well as functional. Color is also a key factor, and the product’s look must be fashionable, i.e. to be a landmark of the modern time (<http://pretpriemac.mk>).
- **Design in the service of production**–which means the design should facilitate production and enable economical production. The design should also make the product simpler and less expensive for manufacturing. Contemporary design reduces the time needed for manufacturing by 25%, as well as the costs of production by 20%. All this contributes to a significant increase of profitability and growth of the company.
- **Design’s function of meeting the consumers’ needs** –the emphasis is on the use value of the product in order to surface functionality, quality and application of the product. The buyers’ perception is always a key determinant in terms of purchasing. For some products, the buyer decides to pay even more than projected if he determines that the product can offer him greater benefits than before. And vice versa - if he perceives the product as “cheap”, it may forever remain on the shelves!
- **Design in service of esthetics** –which increases visual recognition, attractiveness and appeal of the physical elements of the product. The perfect design is

always the one which attracts the attention of buyers and drives them to buy the product from the shelves.

- **Design in service of distribution** – in order to ensure a simpler and cheaper packaging, handling, transport and storage of the product. The theory, style and practice of managing the design significantly vary in different countries, industries and even in terms of products. Attitude towards design is often treated as one of the most important elements in the overall image of the country (Corcoran, 2002).

## **FACTORS WHICH DETERMINE THE PRODUCT DESIGN IN INTERNATIONAL MARKETING**

Product design is rightfully considered one of the key factors that determine success in international marketing. Market acceptance of the product design depends on a number of elements and production dimensions, such as: style, shape, color, size, application and way of using. In different national markets these elements of design are differently accepted because of cultural differences and differences in taste as well as the preferences of consumers. In international marketing, during the process of product design we should pay special attention to (Kootstra, & Jos, 2006): the environmental factors, market and consumers' factors and the factors of competition.

As for the **environmental factors**, we should choose the environment that will enable the fulfillment of the basic requirements or dimensions of the successful design. In order for the design to be successful in a marketing sense, it must simultaneously harmonize the 4 basic requirements: aesthetic, economic, regulatory and ergonomic. All four requirements may have their own special dimensions internationally as well as their own separate international sensitivity. It is therefore necessary for them to be further explored and objectively evaluated even during the initial phase of design conception of the international market. For example, a billboard of a Victoria's Secret model is normal in America, but in India this billboard would be considered pretty unpleasant. However, an internationally oriented company needs to conceptualize and present their products on foreign markets with maximum valuation of the individual factors of the given environment which can influence the use of a given product as well as the acceptability of its design. It is recommended and often used to send several prototypes of a certain market so that they could be tested.

**The market and consumers' factors** will long remain important and relevant for successful market-shaping of the product in international marketing. Con-

sumer preferences vary much more in international than in domestic marketing. It's about market parameters which are most difficult to harmonize and equalize within the ever more present and emphasized process of globalization. When choosing to produce abroad, the manager must take into account not only the resources and costs but also the effects of the country of origin that influence the consumer behavior. Differences need to be discovered and recognized earlier in order to avoid major modifications or changes of the already launched product design. The company which ignores the preferences of consumers in the process of designing and market shaping of the product is exposed to a great deal of risk. It is especially important to pay attention to the preferences of consumers in the area of: fashion; color; taste; organizing the living space; living conditions; the use of the product; desired quality; physical characteristics of the end-users and consumers. The international business practice offers numerous examples which emphasize the importance of demand and consumers' preferences in the process of designing and market shaping of the product.

Sometimes, **space and living conditions** can be an important factor for the design in international marketing. Most products are often influenced by the natural environment of the product, i.e. the available space. In some countries living space is limited, so you need smaller household appliances than in the US, where people live in a relatively larger space. For instance some rich Japanese wanted major household appliances, but then realized that they a large refrigerator cannot fit through common Japanese door.

**Terms of product use** are cited as frequent examples for adjustment of product design in different cultures and backgrounds.

**Fashion and taste**, according to numerous implications in marketing, have an important impact on product design in international marketing. They vary from country to country, and differences are expressed through color, style, aesthetic lines, fragrance and organoleptic properties and their evaluation in different cultures. It's about the design factors that need to be given particular attention in the international marketing of food, beverages, furniture, clothing, shoes and so on.

**Requirements and factors to achieve desired competitiveness** must be expressed even in process of conceptualizing the product design on the international market. An internationally oriented enterprise faces more dilemmas than an enterprise which works only for the domestic market. **Whether to emphasize manufacturing convenience or lower price** is a competitive dilemma that pre-

vails in international marketing. Many modern products intended for Western markets, perform market shaping of the product in a way that emphasizes the manufacturing conveniences, thus they save time and reduce the effort input during the use. On the other hand, there are those categories of products that are offered at lower prices but with much fewer production conveniences related to the time and effort required in their use. Such products have great prospects in foreign markets where the cost of work, time and alternative sources of energy are not high, such as in emerging countries and developing countries.

**Whether to highlight the styling and the versatility or the durability of the product** is the next competitive dilemma which often arises among the designers, projectors and marketing experts in international marketing. In different countries there are different expectations about the duration of a particular product. Americans use the fridge for about 15 years, while in less developed countries this period is longer. International marketers must recognize the production factors to which consumers pay attention - durability, styling, originality, fashion and trend etc (Cordell, 1992). Whether the company will enforce its original design and styling or it will make major adjustments depends greatly on these factors.

**The size of the product** is a very important element of the design and it is a factor for competition in international marketing. Consumers in different countries prefer different sizes of the same product type. The two key reasons that underline the importance of product size in international marketing are: solvency and the culture of consumption. Consumers with lower incomes buy products in smaller packages. For example, in countries with low income, Coca Cola offers smaller packages of 1 liter or 250ml, due to the modest standard of living.

The fact that French families prefer to cook fresh food of better quality on a daily basis, unlike the Canadian, who prefer to cook less frequently but in larger quantities, is important information for manufacturers of refrigerators (Terpestra, & Sarathy, 1997).

**Whether there will be a service or reparation or replacement of the product** is a production and competitive dilemma which does not have a single solution for all foreign markets. Upon placement of complex and sophisticated products in underdeveloped or in developing countries, there is a problem in providing competent service. Otherwise, you have to think about simplifying product design. If, however, the cost of service and repair in some countries are high, then consumers increasingly opt for quick replacement of products. The Swiss watch

industry once suffered significant losses due to US and Japanese competitors who began offering watches that did not require expensive service or that were very cheap to get replaced. Later, Switzerland adapted to competitive challenges (models of Swatch).

**Disposable or reusable packaging** is another dilemma which needs to be considered in the conception and implementation of product design for foreign markets. For some products packaging costs are insignificant compared to the cost of production or distribution. However, in practice we encounter such products whose packaging costs are much greater than the cost of production or the product per se in the packaging. Good examples to illustrate this dilemma are soft drinks or beer.

All listed factors: environmental factors, consumers' preferences and competitive behavior, lead us to the conclusion that it is necessary to affirm the principle of flexibility in designing and market shaping of products in international marketing. In analyzing each of them, it is necessary to coordinate the economic aspect on one hand and the need for compatibility with the external environment on the other.

## CONCLUSION

Due to different production and market conditions, it is possible to suggest a universally acceptable or a best way to create a successful product design in international marketing. It depends on the type of product, technology and market trend, the structure of the competition and the purpose of the operation and behavior of a particular internationally oriented company. To get to a synthetic conceptual framework for the needs of management of product design in international marketing, instead of categorizing individual product types, we identify four approaches to market-shaping of products in international marketing: national, specialized market, multimarket and more global. We should distinguish between mandatory or deliberate and voluntary or production adjustments of the product as a tool of international marketing. The compulsory adjustment is the result of legislation, as well as the present differences in standards used in different countries or international regions. Voluntary adjustment is a result of the adopted strategies of international businesses and improvements in international competitiveness in international marketing. It should be in service of the basic international working and development goals of the company.

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