

MODERN MARKETING AND PRIMARY FACTOR OF PRODUCT DEVELOPMENT

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Summary: *Modern business of the companies in the world requires intensive development of good business communication on the market. Marketing managers, executives, projectants are constantly focused on a high quality of products/services, and fully meet of market demands. A quality product is the most important market factor creating reliable brand and a basis for the good company recognition on the market, as well as for its distinction from the others. Quality of products and services is most usually related to its high extent of reliability. In marketing, in practice, it is only achieved through high extent of customers' satisfaction. That means that the company that pays attention to the intensive growth of management system, proves that the achieved product quality will be a guarantee for the customer, and that one will get „the best“ for his money. This is achieved through the best quality concept of the market business and a concept of Total quality management. Therefore, projecting and the development of the quality product is in the forefront and the most important marketing decision. It is of a special importance and requires a systematic approach.*

1. INTRODUCTION

Marketing business philosophy is based on market business determinants which apply to the modern understanding of such an approach. Statement that „Every product is developed to be sold“ is a basic rule of successful companies' strategies and goals. For the product to be sold in the long-term, with special interest from the customers, it is necessary to fulfill the demands and expectations of those who buy them, regarding the quality, as well as price and functionality. It is of a special importance for the market research to be approached systematically, so that analyses could be made constantly and that it could be seen what are the market expectations from the product, and which products, design, efficacy, functionality, as well as product *performances* customer expects and accepts.

In today's times of globalization, it is necessary for the attitudes and determinants of the production to be represented creatively and enterprisingly in marketing. The point is in implementation of product development modern method process, i.e. process for customer, or it is necessary for the completely new products to be produced, so that the new customer needs and expectations are created.

Basic aim of the **management marketing** system is the product quality, which should be perfect for all its characteristics, so that it completely meets the customer's demands. Marketing approach in business provides *full and efficient information* on customer's demands. Projectants and development staff should transfuse those needs into so-called **projected product quality** through cooperation with marketing managers.

2. MARKETING SYSTEM AND PRODUCT CONCEPT

Modern marketing system focuses business on **good** product which is the guide and an aim of every production, and is, at the same time, a good solution for many other intended activities of man. The aims of marketing are primarily created to meet the customers' needs, his wishes, expectations and other. Every product on the market is favorable as long as it sufficiently meets all the demands, needs, expectations, wishes of interested subjects, as long as there is satisfactory demand on the market. Shortly - as long as there is an interest for it on the market.

Marketing managers realize the fact that „*the good product is its own best marketing*“ because it is useful for the successful business of a given company producing the product or providing certain service to customers, as well as for the meet of market needs. In practice and real consumption of the population a *product* refers to a real, material, physical product presented on the market. That is the reason for the importance of the product high quality to be achieved, as well as for everything to be completed with attractive, characteristical, appropriate package. Such a product should form the best picture of itself and company, so that it could completely meet the basic demands on the target market.

The term, the most important “*product elements*” in the marketing system, considers:

Product quality where there are included all its *characteristics and possibilities* in a quality management system with similar products. The most important elements or factors of the quality are: functionality, packaging, style, name and brand, technical, technological, safety, legal, ergonomic features and other.

Strategic route of product development and growth, is determined from the world marketing experts' side in such a way that for every product there are at least three interested subjects in constant interaction suggested to exist (figure 1), and those are:

- **Customer** – subject using or buying and consuming the product,
- **Organization** - subject producing or selling (producers, suppliers...)

Environment - (internal and external) – in which there are both customer and organization, ie. where product is made and used (social, political, economical, technological, ecological and other environment)

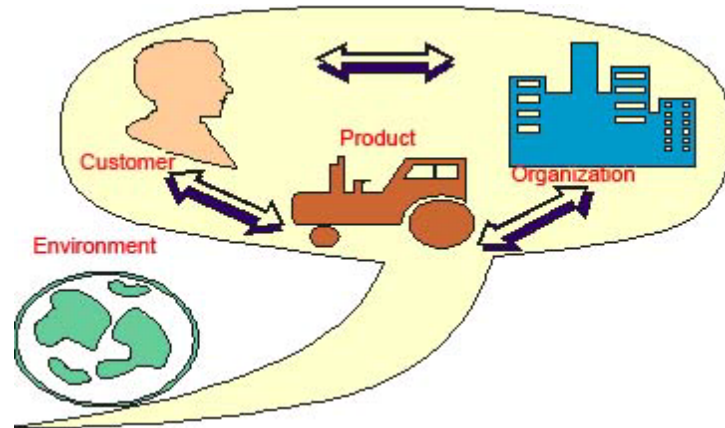


Figure 1. Subjects defining product characteristics

For *product* defining and understanding, it is important to know that every product that appears on the market is *the output of activities and processes that are performed inside one business system – BS as a process of transformation from input into that process*. Operations are performed on the product and through the activities using tools, machines, devices, units and knowledge, processes of transformation from input into output are performed.

Thus in transformation processes the different inputs are combined: materials and energy, work, information, and in **transformation p rocesses** through input, with organizational, managing and measurement and control activities, a new value is added, which is incorporated into quality product structure. Outputs from transformation processes could be of material nature (product) and of non-material nature (service) (fig. 2)

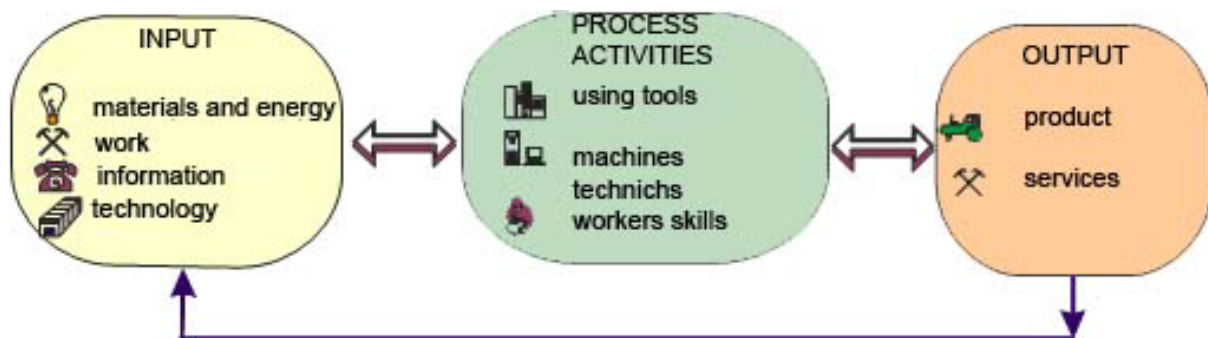


Figure 2. Process of product creation

Having in mind the importance of International Standards ISO 9001:2001, *product* may be defined in its developed form as “a result of set of interconnected or interactive activities which transforms input elements into output elements”. Complex construction products for example machines, devices, units and their parts are described using pictures in which geometrical configuration of products, their parts and specific frames are given. For the product to be well projected, very helpful today are NU – Numerical Units, CAD/CAM software programs, flexible machines, robots and similar (figure 3) where adequate checking is performed before the production of a new product starts.

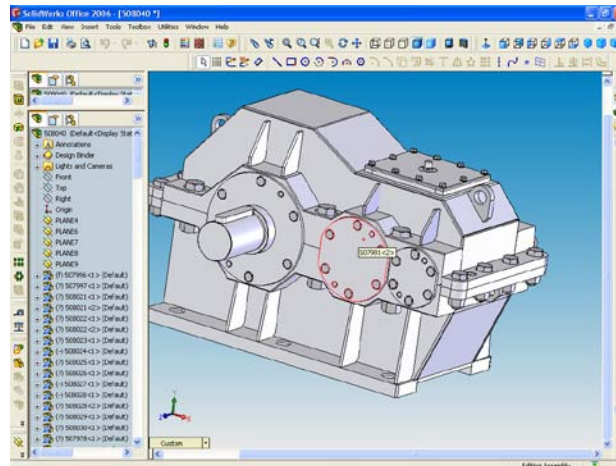


Figure 3. Modern product projecting and construction method

Every marketing manager has in mind that new product represents result of research and development elements. In marketing activities: managing, designing and development merely on the base of following the market needs and it gives excellent results. When it is well performed, almost any surprises and failures are excluded. That is the reason for a big percent of surprises in projecting and product development activities with which market demands are created. However, well affected commercials, prognosis, hypothesis and the like, needs and expectations of the market, with the help of creating those needs and expectations of the market, always bring enormous profits and necessarily lead to galloping business breakthroughs of the organization in all areas of the business.

It is very important to determine interest groups in practice – **customers** and which part of the market in the world we can conquer.

Marketing research is performed through following steps:

- Marketing experts conduct consultation survey with customers, specifically at their homes, or in the fairs, conferences, congresses, scientific meetings and other.
- Consideration, simultaneously with the previous phase, of subjects of the customers complaints
- Realization of marketing overall and modern study of the market, which can be organized independently or with the help of specialized agencies
- Organization of interviews with user groups
- Product quality improvement for existing, standard and potential customers on exhibitions and fairs
- Performing required method of comparing products (Benchmarking) with competitive products being the best in class and other.

Process of **development of marketing strategy** of modern business and product development means constant prognosis and identification of the directions for product improvement. This is achieved through interviewing customers, following competitors' moves and their condition of using technics and technology on which the organization is based.

Process of **new products projecting and development** is implemented in interaction and synergy, that means together with customers which enables the products to be in compliance with the customers' demands and for the customers' expectations and intentions to

be fully considered in the long term. Such method of product development enables organization to timely adjust implementation and development of modern and their own technology and react very quickly on customers' demands, ie. their needs and expectations.

A good basis for choosing the right product development which is interesting for the customer is using QFD method. This method should be properly implemented in company by all the function managers with understanding and prognosis of influences and potentials of new technologies on the product. This often allows creating completely new products, which is the tendency of all companies in terms of marketing, to succeed in keeping up with competition with the help of determinants of quality and prices of products that are realized on new and modern or innovative and diversified technologies.

2.1. Marketing role in *new product development*

Modern business considers implementation of new marketing techniques and technologies. Function of marketing is incorporated on the base of implementation of all the activities into research and development of new products, on scientific grounds, as well as on pragmatic implementation. It is now easily implemented through partnership between customers and through cooperation with organizations which are already present on those markets. This conception successfully exists on the world market, and it can successfully recognize customers' habits of the market with great certainty, and then recognize reliable suppliers and legislation rules.

Appearance on the market is of a crucial importance for the marketing, so that quality product is produced and realized. Great perspicacity and wisdom of managers and all employees is needed for it, and that by using creative, innovative and inventive ideas in projecting and development of the product. It is important that methodology implemented in organizational parts which are engaged in development, is modern and well-designed and that it starts from the real potentials of people as knowledge indicator creativity and enterprising. All these elements must be balanced with the highest potential possible, that will always produce creativity and creative atmosphere.

The base of successful marketing today in modern business conditions lies in modern projecting and development which could not be imagined without team work, and creating teams that are to implement some of the development projects. Business on the market implies that organization must plan product projecting and development and flexibly manage it. In doing so, it is necessary to primarily define following activities:

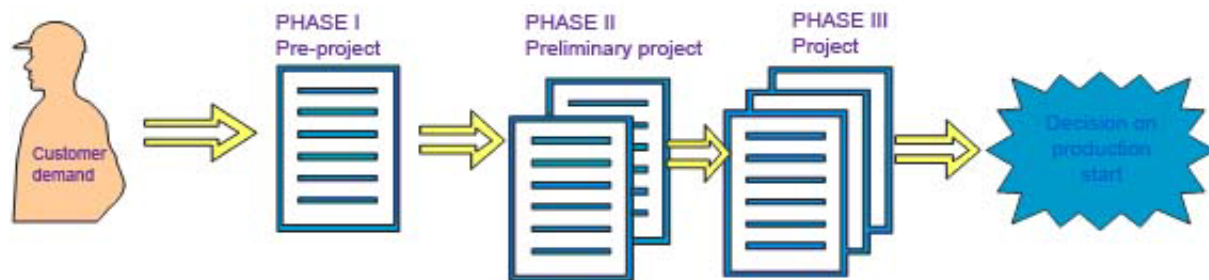
1. To clearly define effective and rational phases of projecting and development
2. To constantly implement appropriate activities of review, verification and validation for each projecting and developmental phase
3. To clearly define responsibilities and authority of the managers in company and important obligations and responsibilities of *marketing* for projecting and development.

Concept of successful business implies existence of **Regulations on quality** in companies which clearly define all activities, obligations, goals, strategies, methods, techniques, as well as interactions with all functions. That means that it is an essence for every organization to have regulations of its organizational business structure at a macro and micro level by which requirements of international and internal standards of the market are met. Through standards the organizational regulations are completely defined for all the activities needed to be performed in projecting and development of the quality product.

3. MARKETING AND PROCESS OF QUALITY PRODUCT DEVELOPMENT

Research on the relationship with customers and state on the market are used to more easily determine the process of projecting new and quality product, which should contain a set of activities in which several functions within the organization are involved. Using procedures of new product development implies that boundaries of the process must be defined at the start, more precisely the moment when development activities start and the moment they finish. Product development process starts the moment when the function of marketing in organization has achieved its goal, ie. when a customer's demand for a new product is received. That is the point when a start is defined, from the idea to project and develop a new product. Elements of development can be: capital i.e. knowledge, quality development (QFD), and an **aim** is to reach performances of the world's class quality, and these are: perfect production, satisfying the customer (QFD card implementation), projecting for quality and training of all employees for quality.

Market researches set new baselines for development, that means that the process of a new quality product development can be divided into three phases (figure 4).



Phase I – pre-project

Pre-project phase consists of the following procedure: after primarily recieved customer's demand or after the ideas about the new product collecte, a selection and processing of demands and ideas is performed, ie. all the demands are being considered and a decision on entry into development is brought. After that a project task for development, project plan and project team are defined.

Phase II - preliminary project

Based on the established plan a procedure and a production of documentation is performed, as well as an examination of the preliminary design and a preparation for the production of prototype. After that a consideration and verification of preliminary project is done and a production of additional documentation. In the process of realization implemented are methods and techniques, and those are: analisys of dismissal tree and analysis of weak spots of the product proizvoda where methods FTA, FMEA and QFD are implemented.

Phase III - project

In this phase a main project with complete documentation is produced, and that:

- *Documentation which define the product* – appearance of the product is defined (switching, built, manufacturing sheets, components, technical description, user's manual)
- *Documentation which define process of production process* – technology of production, procedures and instruction for performing all the operations in the production process, information on technological equipment are defined
- *Documentation which define quality control process* – a quality plan and control instructions are produced, etc.

After that a preparation and a test are performed. In production of test (zero) series all the required demands must be met.

Marketing researches are intensively realized in the function of marketing and that through the project validation examination. If a customer demands project validation during the test preparation of the final product in the early conditions, then it must be performed. Record is made, tests are performed under demanded conditions, where it can be seen if the output results satisfy set input demands.

4. MARKETING PRODUCT QUALITY IMPROVEMENT

For the marketing sector it is important that the improvement process of quality management system is realized through measures taken with the aim of ***improvement of product characteristics***, with which are raised an effectiveness and efficaciousness of the process needed for the successful realization of production. Those processes are of a permanent character and are not considered as a final solution. Every feature of the product which is required to satisfy the needs of customers and reach the desired level of usability is a **characteristic of product quality** (table 1), and for each product its technical characteristics are given.

Table 1. Characteristics of product quality

Characteristic of product quality		
Accessibility	Functionality	Size
Availability	Mutual replacability	Sensitivity to the impacts
Appearance	Suitability for maintenance	Suitability for storage
Adaptability	Suitability for repair	Suitability for transport
Durability	Suitability for production	Robustness
Consumption	Reliability	Weight
Flexibility	Suitability for usage	Vibration and noise

Characteristics of the product quality defined in specification are demands for quality and therefore, every technical specification for the product which supports expectations, needs and demands presents set of demands for quality. Most of the people, simply, names these demands by demands for product, which is sometimes the reason for misunderstanding. The

basic paradigm that marketing represents rests on the thesis that all the features, characteristics, integration with market, popularity and other of a certain product can be improved (figure 5).

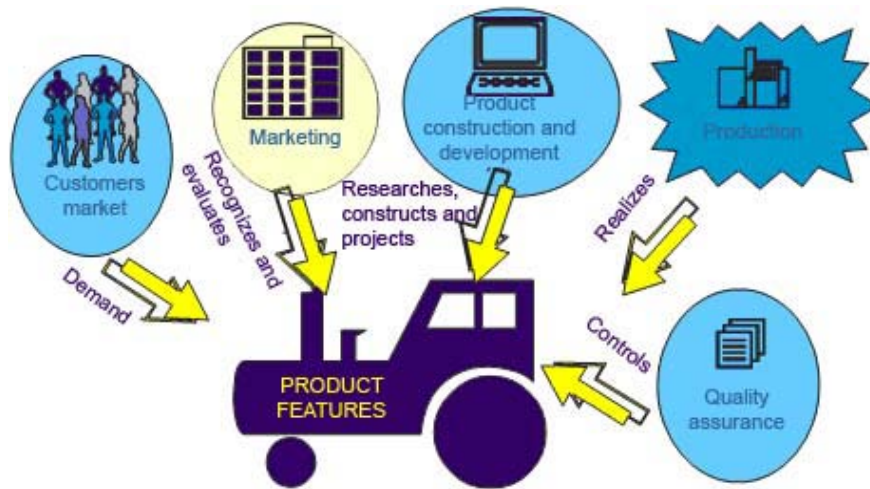


Figure 5. Phases of process in which product characteristics are incorporated

5. CONCLUSION

Marketing approach to the development of the new product starts with the process of preparation of the promotion for appearance on the market. That includes the choice of good route for the successful development of an attractive product on the market, which starts from projecting and development of quality product through the process of transformation of idea into the project and final product. This represents a base for modern production. In this work, given are the marketing managers' and all employees' activities, which must be performed in the process of projecting and development of the product, and product quality is the key factor of success of modern organizations.

In order for the product to satisfy choosy demands of customers (market), it is necessary to have all the needed features incorporated, its characteristics that will be of a great importance for the customer. The manufacturer themselves must form them in the projected phases of the business process. Firstly, customers set their demands, i.e. marketing department in company researches market, analyses, groups, and evaluates demands. After that, the development department in organization transforms, researches, constructs and projects the product. The final route of production starts in the production sector process itself, where product is realized. Control of all the processes is performed from the beginning of creating the decision to accept the idea until its realization – of the given project, during the whole time of production of new product, as well as after the selling – customers' consumption of the product on the market.

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