# NEW PRODUCT AS A FACTOR OF INCREASING THE INNOVATION OF SMALL AND MEDIUM ENTERPRISES

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Abstract: Small and medium enterprises are faced with serious challenges. Expansion of global economy, deadly struggle for the markets, drastically shortening of product's life, rapid technological changes, structural transformations and etc. In order to respond to these challenges, the enterprises need to increase their productivity constantly, to improve the quality of products and services, develop new products and meet the requirements and desires of the consumers. In short, the enterprises have to be innovative all the time, because the imperative of modern business is improving all the components of the structure and business of an enterprise. Capacity of small and medium enterprises to bring more quality, functional and cheaper products on the market indicates the development of innovative processes in those enterprises. Most frequently, new products, which represent the guarantee for their successful work, represent the innovations in small and medium enterprises. Small and medium enterprises are more flexible and easier for adaptation in comparison with the environment and thus, they are far more easily adapted to new circumstances in comparison with the need for innovation of products and services. The role and influence of entrepreneurial innovation in the development of small and medium enterprises is special. It is the key factor of economic development in Serbia, because, according to the relevant data, there are over a hundred thousand companies and over two hundred thousand entrepreneurs that employ 60% of total employees and that participate in social gross product with 50%. The aim of this research paper is to indicate the need for raising the level of innovation of small and medium enterprises through the structure of production and service activity in which new product has a primary role.

**Keywords:** innovation of small and medium enterprises, new product, entrepreneurial innovation.

# 1. INTRODUCTION

During their business, small and medium enterprises undertake a series of activities in order to maintain and improve their market positions. Those activities emerge as the result of the need to adapt the enterprises to requirements of the environment, primarily the market, and they are manifested as changes of the type and scope of activity, product range, organizational structure and technical and technological basis. The mentioned changes are the reflection of company's ability to adapt and change in accordance with the requirements of environment and depending on its own possibilities and they are the condition of its survival and improvement of its market position [1].

Development of an enterprise represents a process of its adjustment to the changes and requirements of environment. To make the adjustment process more efficient, the enterprises need to determine the factors that influence their development, as well as the important characteristics of those factors' action. In accordance with

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that, enterprises with a series of relevant activities adapt their business to the requirements of environment in accordance with their abilities, needs and set goals [2-10].

Since there are many factors that influence the development of an enterprise, it is very important to identify and define them according to the character of their action. The significance of distinguishing the factors according to the character of their action is reflected in the fact that one group of those factors may represent the challenges and, if they are accepted, chances for development and prosperity of an enterprise. In the other group, we can include those factors, which unless regarded to in a proper way, may represent a danger for business of an enterprise and, ultimately, can lead to the termination of their functioning. However, it is possible that the same character has a role of both the chance and threat for company's operations, depending on the approach to it during the business process. Such is the case with technological development, which can contribute the achieving of long-term competitive advantage and realizing optimal business results, unless the enterprise accesses timely and appropriately to it. However, if the enterprise neglects its technological growth and monitoring of modern technological tendencies in its business field, it will certainly come to the deterioration of its competitive position and even the termination of business [11].

World experiences show that those enterprises that are rapid and innovative enough in their development (constantly introduce novelties) are the only ones that can survive and successfully develop in a modern economic and social development. If an enterprise wants to exist and develop, it has to accept these characteristics of the world today. For that reason, easiness and peace of mind need to be replaced by constant creative thinking: how the enterprise can be most effectively included in creative competition. In short, it means that it is necessary to think, plan, organize, perform, control and improve constantly the work process in order to fully satisfy requirements of the market and continually develop new products-services in that way.

Today's enterprises are faced with serious challenges: global economy expansion, severe struggle for markets, drastical shortening of product's life circle, rapid technological changes, structural transformations, size reduction and so on. In order to respond to these challenges, the enterprises need to constantly increase their productivity, improve the quality of products and services, develop new products and meet the requirements and desires of the consumers. In short, the enterprises need to be innovative, because improving all the components of structure and business operations is the imperative of modern business. Capacity of the enterprise to place more quality, functional and less expensive products on the market indicates the development of innovative processes in that enterprise.

#### 2. INNOVATIONS OF THE PRODUCT

Innovations of the product represent introducing of the product-service that is completely new or significantly improved – primarily, considering its characterisctics or purpose [12]. This implies a significant improvement in technical specifications, components and software implemented by materials, easier use of the products or functional characteristics of the product. Innovations of the product can be defined through the product whose intended use, or the characteristics of performances, properties, characteristics, design or use of the materials or components is significantly different in comparison with previously realized products. These innovations can include radically new technologies, or can be based on combining the existing technologies for new applications. The product that is in the output from the process of fundamental innovation represents a radical change – continuity of the innovation flow in the company is interrupted and technological regime is changed.

Incremental product innovations are defined through the existing product whose performance is significantly increased or improved. This, again, can have two forms. A simple product can be enhanced through the use of components or materials with higher performances, or a complex product, which consists of more integrated technical subsystems, can be enhanced through partial changes of one of the subsystems.

A product that emerges from the process of incremental innovation fits in the continuous innovation flow in an enterprise, and thus represents an evolutionary change, modification of already existing product with given function and content. Innovation would be enterprise's characteristic that is engaged in adopting new ideas and rapidly reacts to the impulses from the environment; and in that sense such an organization can be defined as innovative. According to the valid definition in EU, innovations of the product do not include the following [13]:

- minor modifications or improvements;
- routine improvements;

- regular seasonal changes;
- customizing the products to one client, which does not include significantly different characteristics in comparison with the product for other clients;
- changes in the design that do not influence the function, purpose or technical characteristics of product or service;
  - re-selling of a new product or providing the service by another enterprise.

Having in mind all of the above-mentioned, it can be concluded that the criteria for treating an organization as innovative are also established in this way. Therefore, slight technological improvements are not treated as innovations, which can be significant for legal regulation of technological improvements in business organizations.

#### 3. INNOVATIONS OF SERVICES

Innovation of services can be observed from various aspects, but two of them are dominant. One aspect is continuation of new services as innovation, and the other aspect is merely improving the existing services. Typical examples for the above-mentioned refer to banking, advertising, trade and other services, i.e. their improvement, such as electronic banking, electronic commerce, and Internet communications and so on.

In the developed countries of OECD, the services realize even 2/3 of the new value and participate in employement, and that share is increasing while the share of production tends to decline. Regardless of the economic effects of services, innovation studies have relatively little dealt with this field – innovation of services. There are a few questions in this field [4]:

- whether and to what extent the services are innovative;
- how the relation between innovation of services and innovations of products/process can be understood;
- what the relation between innovation and economic performances of services looks like. It can be accepted that the innovation of services analysis is specific, where various researchers specify various reasons;
- innovation theory is, basically, developed on the basis of technological innovations analysis in the domain of production;
- unclear nature of service output.

We can identify a few basic characteristics and specificities of service innovations. They are the result of specificity of services in relation to the product, and they refer to the following:

- close interaction between the production (creation) and use (consumption);
- intangible nature of service output;
- significant role of human resources in service realization;
- significant role of organizational factor in performances of a company;
- weak protection of intellectual environment.

Examples of innovation in service sector are:

- new services that improve the user's access to goods/services;
- internet services, such as e-banking or e-payment;
- new forms of providing guarantees, such as extended warranty on new or used product;
- new types of loans;
- creating web sites on the internet;
- introduction of smart cards and multipurpose plastic cards;
- offering a new system for supply control, which allows the clients to check the deliveries according to the specification in the contract.

In the future, we should expect greater dynamics in service innovations. This expectation is realistic, since the technological innovations are increasingly finding their place in service sector, which is considered work intensive according to its nature. In that way, both the efficiency, i.e. effectiveness, and comfort in service use will be increased.

#### 4. NEW PRODUCT AS AN INNOVATION

Most frequently, new product is the result of innovation in the enterprise. New products as innovations are usually the result of researches that provide the base for new product or new technology, new characteristics or new usability of the product. Timely introduction of new products is the main guarantee for successful business. Due to the constant lack of the ideas for new products, it is necessary to constantly search for the new ideas.

Under new product, we imply the following [9]:

- 1. completely new product that is the result of invention;
- 2. product that is new only to the concerned enterprise, and which is otherwise made in other enterprises;
- 3. newly configured product, i.e. the product that is slightly modified in relation to the previous solution (usually higher quality product or the product with lower costs), whose function basically remained the same:
- 4. product with new usability, represents the product that, with certain adjustments, can be used for other purposes;
- 5. product in a new packaging and with a new name;
- 6. product new to the customer, usually represents the product that product which was until then meant for export only.

#### We can reach the new product by:

- acquiring (buying patents, licenses or companies that have interesting new products). license a permission for the use of some invention, new product or technology. in principle, each invention is protected by a patent and its application is not allowed without inventor's consent. buying the patent protects only a part of invention that can be acquired by buying the license, while the rest is usually included in construction and technological documentation;
- developing one's own product or someone else's, based on the contract with a company that has an interesting idea, but does not have sufficient means for self-development.

Statistics shows that for the creation of one product, which will be in high demand or which will be able to make profit, about 55-60 good ideas are necessary, and those ideas can be found within the company or external sources of ideas. We differentiate internal and external sources of ideas.

Internal sources of ideas are the following:

- improving the quality of existing products (for example the application of quality materials);
- improvement of the existing product (for example better performance of basic function);
- expansion of product range (when a certain shoe factory starts to produce new shoe models, children's, men's, women's, special);
- development of additional programs (when a shoe factory starts to produce ortopedic shoes);
- organized creative work of a group of engineers;
- systematic encouragement of the ideas and proposals of other employees (sales, marketing, production, service, and so on);
- organized collection of innovations and patents within a company and so on.

## External sources of ideas are:

- work results of scientific and research institutions and laboratories;
- monitoring the activities of competitors;
- monitoring the activities of companies that are not direct competitors;
- monitoring the requirements of customers;
- collecting the ideas from current and potential customers;
- settlement body (customers' complaints);
- monitoring the lists of products that are imported;
- searching patent information;
- consulting scientists and engineers from other companies;
- consulting the experts from universities and institutes;
- professional literature;
- various professional associations, professional corporations, chamber of commerce etc.;
- special consulting organizations (consulting firms) etc.

New idea is destined to failure, if the selection of ideas is influenced by mood, intuition, or emotion. Selection of ideas has to be based on firmly established competing goals of the enterprise.

#### 5. INNOVATION OF SMALL AND MEDIUM ENTERPRISES

When we talk about innovation, we make a difference in the size of the enterprise at the very beginning. Innovation is a consequence of creativity and vision of the management, regardless whether the company is big, medium or small. The essence of issue and survival of the economic entity is the constant creativity and innovation, because if we allow the company to adjust to the market conditions all by itself, such economic entity is destined to failure.

Large enterprises (groups, conglomerates, companies, multi-national companies) have more capital and a more developed research-developmental structure, which exclusively deals with research and development. These enterprises also have a well-developed system of complementary functions starting from the plan, through finances, to the research marketing functions that are engaged in investigating the markets of procurement and sales, including the behaviour of the consumers. Through investment in research and development of an enterprise, human resources are developed and the effects of personnel's creativity are achieved. In addition, they have better equipment. Through permanent learning, they acquire the experience in selecting and developing innovative process or project, so that very successful results are obtained in the existing processes.

Large firms also have an advantage when it comes to risky innovative projects. In example, only the largest car manufacturers can develop a luxury car such as Mercedes, BMW, or Chrysler whose development, according to the rule, costs 5-7 times more than the development of lower or middle class vehicles. Or, only large pharmaceutical companies can invest millions of dollars or euros for research and development of two medicines, and it is not known whether one of them will be successful on the market [14].

On the other hand, large companies can be less innovative successful, because their size makes them less capable of recognizing the chance. Large companies, as a rule, have jagged bureaucratic apparatus and inertia, which is reflected in several levels of management with developed and established procedures.

A large number of employees, many headquarters (branches) and a large base of customers with a good representation on the market can also be the source of inertia, which provides the large companies to shift to new ideas rapidly.

Most frequently, small companies are more flexible and adaptable than large systems. They do not have many scales of management, administration, branches, as well as large number of employees. Small companies can find better ways to monitor the employees, consumers and suppliers. Due to limitation of resources, primarily financial, small enterprises select innovation projects very carefully, leading them up the stairs of business success. More researches on this subject have led to the conclusion that small enterprises use money for research and development very carefully, and thus they have a significantly larger number of registered patents at the rate of the money invested in research and development, as well as shorter developmental cycle.

As the advantages of small companies in some projects were perceived, the large companies started to reconstruct and disaggregate (separate) the complete technical and technological units that can function without the bulky bureaucratic apparatus. In that way, the level of management was significantly reduced, in the same way as many functions have lost their role.

Several smaller companies that are much more flexible, creating partner relations with suppliers and sales network have replaced large multidivisional companies. All this has resulted in a number of new terms such as virtual organization, network organization and modular organization.

When it comes to entrepreneurship, the first thing that comes to mind is the owner of a small or medium company who is the manager of its company as well. Many people tend to define the entrepreneur as a manager who carries the creativity and innovation. Schumpeter defines the entrepreneur as the main agent of changes. He comes up with new work methods, introduces new products or innovates the existing, creates new models of organizational structure. Successful entrepreneurs, regardless of their personal assets that can be contained in money or power curiosity or desire for praise and recognition-are striving to create new values and new different

pleasures, to turn the "material" into "resource" or to achive new forms of those resources by combining the existing ones [15].

Innovation is a specific tool of entrepreneurs, by which they use change as possibility for execution of different production and service activities. Entrepreneurial activity starts with an idea, which is developed to completion. A climate that accepts new ideas and enables the work on their realization must exist in an organization for the sake of entrepreneurship. Innovation represents a change and thus presumes something new in relation to the previous. Quality of entrepreneurs is expressed in devising, development and realization of new ideas and programs that are more profitable. In that way, it supports the development of a company that is highly dependent on the growth.

Small and medium enterprises are more flexible and adaptive in relation to the environment and assumptions of the environment, so that they are able to adapt to new circumstances much easier. In that process, the innovations have a significant role because through them we react to the changes in economic environment, and it is easier to conduct the innovations in small and medium enterprises because the organization and structure of SME is shallow and it is mostly about the project teams that are formed for that occasion in order to present the innovation until its release to the regular production. Another type of innovations emerges independently of the current situation in the environment. Those are the innovations that emerge in enterprises with the aim to improve the existing product and to replace it with the existing one on the market, to cause its penetration (expansion) and take as much space on the market with the increase of profit.

The third type of innovations is initiated by the empty space on the market in which it can clearly be seen what kind of a product is missing for the range to be complete. However, it is not enough to notice that it is necessary to introduce a new or modified product. The essence of innovation implies the strategic management through [16]:

- strategic planning;
- organizing, implementation. control and audit of planned strategic objectives.

Strategic planning is the foundation of Sthe business decisions of entrepreneurs in a pre-defined period. When we talk about the selection of strategies than we should have inmind that it is all about long-term period of time, so that it is necessary to be well acquainted with trends in the environment, as well as the potentials of own enterprise in order to fit the desired strategy into a mosaic that is called business success.

Strategic planning includes:

- business analisis;
- defining various potential strategies and adjusting the strategies with desired objectives;
- development of defined strategies and testing the results;
- creating the model of strategic performance;
- incorporating the selected strategy with the objectives of enterprise.

Global management strategy includes three compatible strategies:

- developmental strategy;
- marketing strategy;
- financial strategy.

In the beginning, there is an idea of achieving a goal, which is original and as such has the characteristics of a creation. Whether the creation will be transformed into innovation depends on the results of strategic planning and global management strategy. It practically means that for each innovation it is necessary to implement all the stages including the financial strategy through which all the above-mentioned processes result. If the financial strategy demonstrates profit, than we can start implementing the ideas devised through innovation.

# ${\bf 6.}$ IMPACT OF ENTREPRENEURIAL INNOVATION IN THE DEVELOPMENT OF SMALL AND MEDIUM ENTERPRISES

In the time to come (time of rapid technological changes – information society), a company has to change constantly in order to predict the challenges of the future. It has to pay the attention to the existing and, at the

same time, growing interests of the clients and to search for the ways to fullfil them. The development of the companies, primarily small and medium enterprises, on their way to top form is influenced by many factors [17].

Those factors certainly include good business idea, then permanent cooperation with scientific and research institutions, association in clusters, application of modern technologies (informatics), but also the knowledge on which a new product/service, which the firm wants to place, has to be based, so that a company could, for example, produce cereal instead of wheat, and furniture instead of timber or ready meals instead of pork chops. Not only that innovation in entrepreneurship is important for business success, but also it is necessary for its further growth and development, in the sense of constant application of new solutions. Successfulcompanies are created on the innovation that usually implies the application of an old idea to a new situation [18].

In order to penetrate the market and to resist the competition, the entrepreneur and his company have to offer the market i.e. the consumer a better, more quality, more functional, visually more attractive (if it is a particular product in question) and primarily different product that will attract the consumer to use precisely that product instead of those that are already on the market and that already have a certain application. In order to apply this new technology, an entrepreneur does not need an engineering degree. People who lead an enterprise have to think as entrepreneurs and to determine the types of services and product that the clients (consumers) will need, as well as to devise a plan how to acquire the ideas, so that they could create vision, mission, goals and strategy. They have to know what should be done today in the world of that what is expecting them tomorrow [19].

Small and medium enterprises are the key factor of Serbian economic development. Over a hundred thousand companies and two hundred of entrepreneurs make the 99% of total registered companies; they employ 60% of the total number of employees and participate with a 50% in gross social product. Small and medium enterprises in Serbia, as well as throughout the Southeastern Europe, are the key factors od economic development, initiators of the structural economic reforms, the important factors for the reduction of unemployement, generators of competitiveness growth, subtrahends of trade deficit, elevators of life standard etc. Recently conducted researches have demonstrated that small and medium Serbian enterprises, as well as the enterprises of identical volume of business operations throughout the developed world, have identified the information technologies, as an important factor of business. It is extremely important both from the aspect of functioning of the enterprises themselves, and from the aspect of economic development in general.

Economic theoreticians and practitioners in Serbia do not agree in many things, but in one, they do: small and medium enterprises should be the framework of Serbian economic development.

According to the dominant opinion the circles of economists, small and medium enterprises are the synonym for private sector and, in the figurative sense, of entrepreneurship. The development of entrepreneurship is exactly what is present in the Europe and the world and further economic development of Serbia should be based on it.

Main comparative advantage of small and medium enterprises is that they are flexible, able to quickly adjust to changes and satisfy the requirements of the market. In addition, those enterprises, in accordance with everything above-mentioned, can both modify (improve) the existing, and introduce new ways (methods) of business at any moment, and all that with the aim of satisfying the customer maximally and acquiring market success. Satisfaction of the consumers-success of small and medium enterprises-better functioning of the state, this is exactly the link (chain) for achieveing the total individual and social (national) success.

The very awareness of the management of small and medium enterprises in Serbia of the significance that information technologies have for business development relies on the views of European Commission on the activities that should be taken by the current and future members of EU, in order to maintain the sector of small and medium enterprises. The views of European Commission do not refer to the activities from several domains of field: entrepreneurship education and training, cheaper and faster start-up, better legislation and regulations, availability, skills, taking advantage of single European market, taxation and finances and also, the areas that are particularly important for the subject of scientific work: improving on-line access, strengthening technological and information capacity of small and medium enterprises, developing stronger and more efficient communication for more successful introduction and business of small and medium enterprises.

#### 7. CONCLUSION

Small and medium enterprises operate in a very turbulent environment. One of the most significant, but also the most uncertain factor is technical and technological progress that can represent a chance in certain conditions, and a limitation of growth and development of small and medium enterprises in other conditions. Namely, if the management of these enterprises observes and anticipates technological changes through certain activities and, in accordance with that, adapts its organizational structure, product range and volume, technical and technological progress will be propulsive factor of growth for them. However, every neglecting, isolating and avoiding innovative changes will necessarily lead to development slowdown, to stagnation and finally to cessation of functioning.

The starting point for developing entrepreneurial spirit in small and medium enterprises is defining the work plan for innovations, which is built into development plans of an enterprise, and a concrete elaboration of innovative procedure is entered in operational development of enterprise. All the existing products, services, markets, distribution channels, processes and technologies have a limited lifetime. It is up to the management of an enterprise to evaluate to what extent particular business segments can survive providing desirable effects. Business analyses should provide the information that will facilitate and determine how many and which innovations should be made in enterprises. Based on this, within the framework of innovative activity plans, a new production programme is finally defined, new technology is introduced, enterprises are organizationally restructured and new markets introduced.

Success of innovative procedure is conditioned by skill of problem solving in an entrepreneurial way, which means constant innovation of the procedures and processes for obtaining new product that will satisfy the future users or consumers with its parameters of behaviour.

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