

CREATING INNOVATION AND DEVELOPMENT OF A NEW PRODUCT (MANAGING INNOVATIONS)

Mirko Tripunovski, Prof.

mirko.tripunoski@fon.edu.mk

FON University Skopje, Republic of Macedonia

Aleksandar Nikolovski, Prof.

aleksandar.nikolovski@fon.edu.mk

FON University Skopje, Republic of Macedonia

Antoaneta Vasileva, Prof.

antoaneta.vassileva@yahoo.com

University of National and World Economy, Republic of Bulgaria

Abstract

The creation of innovations is a complex process which requires simultaneous capability and expression of multidimensional internal changes such as: the organization innovation, the inclusion of many participants in the process of innovation and codification of the knowledge of innovation.

The especially pointed out points in this effort are, first, the strategic processes through which the creation of innovations and new products take certain forms and sustainability, second, the characteristics while creating the innovations and whether there are winners in the development of the highly technological markets, third, the factors which allow new profiles of the product and fourth, the determinants of the success of the new product.

Key words: innovations, development, strategies, product, technologies, re-courses

Introduction

The creation and management of practice in the economy and the public sector confirm the reality of the process of innovations. Through research projects, the science claims that innovations have the tendency of being

separately motivated, opportunistic, and responsible towards the customers, consecutive and interactive in their development. This is why the managers set all of the goals and directions, which are full of surprises. The development of a new product is a result of deliberate strategies, which are accomplished. This approach is very similar to a reasonable analytical process, containing a lot of complex strategic decisions regarding new products and also containing unrelated processes which complete with the system and with the true organizational factors affecting growth and innovation development.

The research science claims that many of the concepts and solutions of innovating are partially covered or illegally copied by the company. Many successful managers apply imitations at the beginning of the research, but insist on formal planning and controls. But even in these phases, the research managers learn how to obtain flexibility and avoid unsuccessful plans and ideas for introduction of a new product as an innovative strategy. At the same time, many new products are the result of the planned processes, while most of them are the result of chaotic means. The research shows that the strategic activity of the big organizations includes two categories through innovation and development of a new product. The first category refers to stimulated strategic behaviors while the second refers to the autonomic ones. The stimulated strategic behaviors are in accordance with the traditional concept of the strategy. Through encouraging different administrative mechanisms, the top management can influence the operative and middle level managers of an organization and provide strategic behaviors which are in accordance with the current strategy.

The autonomic strategic behaviors are in accordance with the time. Most of the strategic activities in the large complex companies blend in with the stimulated behavior. The autonomic behaviors represent big companies that are rich in resources, by dealing with the potential of the entrepreneurs at the operative level which shows their autonomic strategic initiative. The autonomic strategic behaviors are conceptually equivalent to the entrepreneur activity and they introduce new possibilities in the company planning process. The first – line managers believe that the possibilities on the market are different from the current strategy and are included in the activities of resources mobilization for creating an impulse for further product development. The leading products show the concept of the current strategy by pointing out the political but not the administrative product channels.

The innovation management and the creation of innovations during the development of a new product basically seek for mutual connection of the markets such as the market of ideas, the equity market and the market of knowledge or talents. Even though the ideas, the market and the talent

develop very fast looking for new value sources, the movement can be contained in the big corporations, if it has not been felt and supported by the top management on time.

Market of knowledge and market of talents

The research management is aware that if you don't provide the employee with stimulating work and solid motivation, the employee will use his job opportunity in another company. In order to keep the talented employees, the big corporations should create an internal market where they will be able to move freely to the work posts which they are interested in the most and by that using most of their skills. In return the companies will provide a positive stimulus for the employees that are ready to take risks on an unconventional initiative.

The main purpose of the market of knowledge and the market of equity is: If you have highly qualified and ambitious people who feel trapped in outtake business, they will eventually leave. To encourage and motivate them, the most important question is: will they be only seen as passengers that came and who will leave soon?

Market of ideas

The market of ideas is the center of the innovation research where the allocation of resources is based on their attraction. The allocation of the resources is perfectly adjusted to the innovations in the current businesses and to the risk management, while the resource attraction is connected to the implementation of fresh ideas, which are beneficial for the new businesses and for managing the internal rules as well as breaking the opportunities. In order to free themselves from the ideas and the passion of the employees, the large corporations must try and seek for processes; radically changing the conventional believes that the strategy is a prevention of the top managers. At the same time a lot of researches at the market of ideas are sponsoring the innovation processes, which are focused on enhancing the efficiency or developing new solutions for the customers. Before the event, the top executives personally invite hundreds of employees to deliver the ideas and their answers.

Equity Market

In comparison to the corporative strategies, the investors in the research projects operate with the different expectations of success or failure of their ideas. The investors would probably finance maybe about ten out of few thousands of ideas. Out of those ten, five would probably be unsuccessful, three would be partially successful, one would double the investments, and

one would generate from fifty to one hundred times more capital in the investments. The capitalists want to be sure that they will not experience failure. The large companies usually create a source of financing that will be totally separated from the traditional financing of the process. The aim of the research is to create an innovation friendly market of equity inside the company.

Technology management

When it comes to the management teams of big corporations, the technology management refers to recognizing the important technological opportunities, and where can they be used in redefining and advertising the technologies. In the end, these corporations follow this technology and transform it later on. Many of the current big firms were developed through the technological changes which they had used. It is clear that the long term positions of the biggest businesses depend on their opportunity to manage, to become bigger, and to use their technological expertise. This part shows the nature of the projects development, the innovative models, defining the attractive attributes of the successful innovators and the fast change on the high – technology markets.

Project development

The first step in the research in the portfolio of technologies of a firm is to understand different forms, in which the projects can appear. Some projects are directed towards enhancing the productive process, others towards enhancing the products, while some have both purposes. All this represents the commercial part of the project development, while the research and the development come before the commercial development. The portfolio includes four types of projects such as: **derivative projects**, which are focused on separate products and the enhancement of the process or the product, **platform projects**, which create the design and the components of the product and include many diversifications in the product and in the process, **emerging projects**- they set new basic products and processes that are fundamentally different than the previous ones, **research and development**-creating knowledge related to new materials and technologies. Certain technologies can create the basis or the platform for few products. The products which have similar platform but different functions are called family products. Every generation of family products has a platform which creates the basis of the specific products targeted on different or complementary markets. The enlargement of the technical skills, the knowledge of the market, and the production capabilities can enable the creation of new family products and opportunities for the businesses that seek for the close

inter-functional connection. The newly created innovations emerge in many forms and different methods.

Limited structure

The structure of innovation and the development of the new process enable the creation of new products and the possibility of satisfaction of the customer needs, through flexibility. In this case the successful innovators combine the flexibility of new rules which cannot be broken. First of all, in order to fulfill the previously mentioned thesis, the new products must be directly connected by the resources allocation. Also, there must be new stride priorities concerning these new products. This provides the managers with the opportunity to pay attention to the most important moments, and to avoid the temptation to make other attractive decisions. Secondly, the managers must set deadlines for few key phases in order to meet them. Thirdly, there must be responsibility for the biggest results. The engineering managers are responsible for the schedule of the new products while the marketing managers are responsible for defining the market, where the product will make most profits. The managers must inspect the procedure of development of every product. The successful companies set balance by using a strategy which is not very rigid.

Real communication or improvisation

The successful product innovators in the computing industry emphasize the real communication in teams of the development of the new product. The biggest part of the communication is done during the formal meetings. The founder of the products can improvise with clear priorities and responsibilities thanks to communication. Jazz improvisation means creating music, while adapting interpretation to the music. When it comes to the product innovation, we can say that it refers to creating a product while adapting the technology changes to the market. Improvisation includes projecting activities, which correspond to each other. The shorter the time that passes between designing and implementing of the activity is, the more improvised the activity becomes. The real communication between the team members and with the limited structure provides the base for the improvisation.

Future priority experiment

Most firms make plans for the future, unlike others who do not. The creators of successful portfolios of products don't make plans for future. They just use different low prices for creating more opportunities. The example for using low prices includes the development of experimental products, strategic alliances with top customers to understand the needs that will

arise in the future. In the turbulent industries the strategists cannot predict what the future will bring. The research gives more answers to the managers so they won't be surprised by the unpredictable future.

Time pressure

The successful innovators carefully manage the transition from current to future projects, while the least successful ones allow every project to take its own course. The successful innovators analyze the strategy to defeat the fast market changes by creating new products. The organization members carefully coordinate and understand the process of transition by starting the process of creating new products. The engineers, on the other hand, cope with the current products and the production. This strategy allows the managers to predict the changes and to have strong psychological influence in the organization.

Business marketing and innovation development

Many researchers claim that the traditional planning and the approaches of the resources allocation are not effective on the unstable markets. New technology, new products and services and the emerging markets create attractive opportunities. This is a new corporate level where the strategic process is focused on managing the changes and the constant agreement. In the strategic process, the corporate directors use a routine of regrouping the businesses for changing the market opportunities. It can be in the form of adding, dividing, transferring, leaving or combining. Most companies implement a strategy for products launching. This strategy is less critical on the stable markets but it is crucial when the market is unstable.

Process of developing a new product

Top companies set new products as their high priority in order to keep their competitive advantages. They directly include the managers and the employees to accelerate the actions and decision making process. The development seeks a systematic thought, because the new product is a significant risk. The high expectations for the new product are not always met, so many products are unsuccessful. Although the definition of failure is not yet clear, the researchers claim that forty percent of the industrial products do not reach their goals. There is no doubt that if the new product is denied by the market it will be a failure for the company as well as for the society.

The innovative winners in the high technology

The fast diversification in industries, the short life span products and the fast change of the competition, cause that the companies must make innova-

tions for sustaining the offer in accordance with the market. The capability of the firms to cope with the changes in high technology is the key factor to their success. The research projects make integrated comparison of successful and unsuccessful innovative products in the industry. The research shows that the successful firms usually use different structures and procedures from their competitions. Their innovative approach contains four main characteristics such as: first of all, high technology which analyzes the forces that lead the firm towards the performances of the new product, second, the ideas of the product, third, overcoming financial barriers and fourth, team processes used in the development of the new products. A good method is the opinion of the customers directly involved in the development process.

New product performances

The research studies try to discover the critical factors for success which lead the firm towards the performances of the new products. Three factors have been identified: first, the quality of the development, second, the resources used and third, the strategy of the new product. The successful companies use high-quality development processes, they pay attention to the accomplishment of the activities and to the decisions regarding the first idea. The following characteristics have been identified: 1) the successful firms predict the situation on the market and make technical evaluations; 2) they include total description of the products concept, benefits, positioning and the targeting before the process of the product development.

New product strategies

The clear and visible strategy of the new product is the second firm's motivator for determining the performances of the new product. The successful firms set aggressive product performances. The basic corporate goal is the communication with all the employees where the efforts are orientated towards defined areas, certain products, certain markets and technological domains.

Predicting the reaction of the competition

Two thirds of the all new products cause reaction among the competitors. As a result, the business marketers can enhance the chances of launching the new product by implementing a strong competitive orientation before and during the launching. The competition motivates for a reaction, when the new product is a threat to their market.

New product ideas

The market often informs about the need of new ideas for the products development and the usage of their sources inside and outside the market. Internally, the new products are followed by managers. These new products

satisfy the needs of the customers, and are serviced by specialist connected with the development of the new technology and the top managers who know the strengths and weaknesses of the company. Externally, the ideas come from members of the channels such as distributors or consumers, or by estimating the competition actions. The researchers evoke the traditional views through which the marketers usually introduce the new products. Their research suggests that customers often develop ideas for new products, and they even choose the distributor. The management observes the ability of the business market instead of the physical product. This shows the need of involving the customers in the product development. At the same time it shows the need of letting the passionate employees express their creative ideas. These employees, who are fulfilling their dreams, must be awarded for the ideas that led to the increased and improved manufacturing. This action shows that risky projects should lead to an open communication among manufacturers and consumers.

The voice of the customers

The first task of every new project is to identify the needs of the customers. The discussions among customers, usually forms a long list of needs. Special attention should be given to the fifth and the tenth level of the primary needs. The owners of the small businesses see these attributes in the stability, the low costs and the speed. The research shows that an interview with 20 or 30 customers is enough to confirm 90% of the customer needs.

Because some attributes are more important than others, ponderers are given to show their relative importance from a customer's perspective. The prioritizing allows the research team to balance the costs and the usage. The research shows that the knowledge by means of which products fulfill the needs in the best way, how much these needs shall be satisfying and whether there are some flaws that determine the further development of the product.

New products determinants and performances

Four the strategic factors and the capability of the firm in the execution of the new development process determine the success of the new product.

The advantages of the product are related to the customers' perception of the product superiority, the respect they have towards the quality, the price or the function of the product in comparison to the function for the customers. The successful products offer clear benefits such as costs decrease and higher quality. Those products, which offer high quality, superior price and performances, those which provide value of the product and better satisfaction, and also have unique attributes and high performances, which can be seen by any customer, are the winners.

The marketing synergy corresponds the project needs, the company's resources and the marketing abilities. On the other hand, the technical synergy corresponds to the needs of the projects, the resources and the given authorities. The international orientation is also important for success. The new products are designed to satisfy the foreign demand and are directed towards the world, the export markets as superior home products with an incorporated rate of success and profitability at home and foreign markets. The success lies in the international focus, the testing of the products, the pilot sale and the launching efforts.

Factor development – the success of the new product is also connected to the particular characteristics in the development process. The redeveloped efficiency provides the base for success of the product which includes a few important tasks, markets and technical evaluation.

Market and marketing skills knowledge – This is the key to success of a new product. The marketers with a good knowledge of the needs at the market have a better chance for success. The market information should be complete, it must have a good information on the customers' needs - what they want and what they prefer, also the knowledge about the customer behavior, the sensibility towards prices, the trends, and the competition.

Technical knowledge and skills – These are the remaining two factors for the successful innovation. When the technical programmers have enough knowledge about a technical aspect of the product potential, they can successfully, with the help of their skills, pass the phases from the development of a prototype, pilot production, and starting the production. These are important factors in the new product innovation.

Conclusions

The innovations are very risky but also potentially rewarded processes. The managers learn to be flexible and to expect surprises. In the companies the marketing managers implement strategic activities divided into two categories: caused by autonomic strategic behaviors. The efforts for the development of new products of the current businesses are a result of the caused strategic initiatives. Unlike those efforts, when it comes to autonomic strategies, they are formed outside the current concept of the firm, and are directed towards new business opportunities fighting for development. If the project is successful it shall be integrated with the concept of the strategy.

The long-term competitive position of many business marketing firms depends on their capability of managing and improving their basic technology. They key competences provide the base for the family products. Every generation of a new product has a platform which serves as a base for specific products oriented towards different or complimentary applications.

The current innovations provide the most important customers with better performances where the new innovations target more important customers.

The effective development of a new product seeks knowledge of the customers' needs and their technical ability. The firms with high efficiency provide resources for supporting the goals and for developing clear strategies. A quality development can be provided through a useful method which can be used by the teams to connect the needs of the customers directly with the characteristics of the specific design. The strategic factors are a need for success. The fast development of the products can provide competitive advantage and can help in the implementation of the new product development process

References

1. Usunier, J.C. (1993), International marketing. Englewood Cliffs, NJ, Prentice Hall.
2. Burger, P. (1996), Gaten in de taal, Onze Taal.
3. Bowman, J. (2002), Coumercialis rise in the East Europe. London.
4. Galloni, A. (2002), Marketers face divergent techtarget.
5. Foxall, G.R., Goldsuith, T.E., Broon, S. (2007), Psihologija na potrosuvacot vo marketingot.
6. Itano, N. (2003), After industry protests. New York.