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O. Anisimova, Doctor of Economics, Professor, Head of the Management Information Systems Department in DonNU the name of Vasyl Stus, Vinnitsa,

N. Horiachova, Post-graduate student of DonNU the name of Vasyl Stus, Vinnitsa

DEVELOPMENT OF INNOVATIVE STRATEGY ON INDUSTRIAL ENTERPRISES

The factors that influence the formation of the innovation strategy are revealed: external and internal factors. At the same time, it is necessary to take into account the potential of the region for its weak and strong sides, the features of the territory and the use of the resources of the region.

The characteristic of the marketing concept and the concept of technological pushing, which depends on the type of innovative product and the situation prevailing at the moment in the market, is given.

Factors are singled out: the demand vector, improvement of output, quality control, indicators of regulatory documentation that affect the quality of products.

The role of the state in the state innovation policy is shown, which is realized in three main directions: ensuring innovation activity, forming the target program, stimulating state support. Qualification state measures of influence on innovation activity are also considered.

The schemes of innovative strategies of leadership and imitation are given. The leadership strategy is aimed at developing and researching the product, and imitating strategy is used when the technical documentation is used for the first time at the enterprise, but the market is already known. A set of measures is proposed to attract new innovative projects.

Keywords: innovation strategy, innovation, innovation activities, innovation policy, marketing concept.

О.М. Анісімова, Н.В. Горячова

РОЗВИТОК ІННОВАЦІЙНОЇ СТРАТЕГІЇ НА ПРОМИСЛОВИХ ПІДПРИЄМСТВАХ

Виявлено чинники, які впливають на формування інноваційної стратегії: зовнішні та внутрішні чинники. При цьому потрібно враховувати потенціал регіону його слабкі та сильні сторони, особливості території і використання ресурсів регіону.

Дана характеристика маркетингової концепції та концепції тих технологічій проштовхування, яка залежить від виду інноваційного продукту та ситуації, що склалася в даний момент на ринку.

Виділено фактори: вектор попиту, вдосконалення випущеної продукції, контроль якості, показники нормативної документації, які впливають на якість продукції.

Показана роль держави в державній інноваційній політиці, яка реалізується за трьома основними напрямками: забезпечення інноваційної діяльності, формування цільової програми, стимулювання державної підтримки. Також розглянуті кваліфікаційні державні заходи впливу на інноваційну діяльність.

Наведено схеми інноваційних стратегій лідерства та імітації. Стратегія лідерства спрямована на розробку та дослідження продукту, а імітаційну стратегію використовують коли технічна документація використана вперше на підприємстві, але на ринку вже відома. Запропоновано комплекс заходів для залучення нових інноваційних проектів.

Ключові слова: інноваційна стратегія, інноваційна діяльність, інновації, інноваційна політика, маркетингова концепція.

О.Н. Анисимова, Н.В. Горячова

РАЗВИТИЕ ИННОВАЦИОННОЙ СТРАТЕГИИ НА ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЯХ

Выявлены факторы, которые влияют на формирование инновационной стратегии: внешние и внутренние факторы. При этом нужно учитывать потенциал региона его слабые и сильные стороны, особенности территории и использования ресурсов региона.

Дана характеристика маркетинговой концепции и концепции технологического проталкивания, которая зависит от вида инновационного продукта и ситуации сложившейся в данный момент на рынке.

Выделены факторы: вектор спроса, совершенствование выпускаемой продукции, контроль качества, показатели нормативной документации, которые влияют на качество продукции.

Показана роль государства в государственной инновационной политике, которая реализуется по трем основным направлениям: обеспечение инновационной деятельности, формирование целевой программы, стимулирование государственной поддержки. Также рассмотрены квалификационные государственные меры воздействия на инновационную деятельность.

Приведены схемы инновационных стратегий лидерства и имитации. Стратегия лидерства направлена на разработку и исследование продукта, а имитационную стратегию используют когда техническая документация использована впервые на предприятии, но на рынке уже известна. Предложен комплекс мер для привлечения новых инновационных проектов

Ключевые слова: инновационная стратегия, инновационная деятельность, инновации, инновационная политика, маркетинговая концепция.

Statement of a problem. The social and economic system achieves success in the activities only if it is in a condition of consecutive development.

The innovative way of development of industrial enterprise is based on knowledge and on change of economic structure. Task of each industrial enterprise is forming of innovative strategy.

The strategy of innovative development of industrial enterprise is a basis of the concept of sustainable development of the state [2, 5]. The main component of sustainable development of the state is the innovative policy of the state which is aimed at providing stimulation of subjects of economy for the purpose of release of new competitive products, developments and deployments of new technologies. Competitive product quality and efficiency of its production are caused by the innovative capacity of producer.

But at the present stage of development criteria for evaluation of the beginning of work in innovative process aren't developed. Important component of all innovative process is intellectual providing various stages of development and implementation of a new product. And feature of strategy implementation of sustainable development is determination of the specific directions which will cause growth of economic potential as the entities also and the states.

The strategy of the organization is a master plan of actions which determines the strategy of tasks, resource allocation in goal achievement during the long period of time [1].

Goods and services developed or improved by constructors in enterprises that bring profit, save energy, contribute to less pollution of the climate and the environment, facilitate the work of the worker is referred to as innovative.

But innovations of managerial and economic nature can't be expressed in a cash equivalent. They aren't intended for implementation in the market. Therefore commercialization is suitable not for all innovations, and, therefore, innovations are a prerequisite for strategy financing. The profit which is got from sale of innovative products can be means for investment into different projects including and innovative. Their scientifically

based classification at the different levels is necessary for the analysis and increase in efficiency of innovations. It will give information for development and implementation of effective policy, both for the entity, and for the country.

Analysis of the last researches. Such leading economists-theorists and practitioners were engaged in strategic planning of innovation activity as: Grinov A.V, Danilishin B.M, Zaruba V.Ya., Landik V.I, Mochalov B.M, Pererva P. G. [6], Sadekov A.A, Samoukin L.I, Yakovlev A.I and others.

Studies of the problems of increasing the efficiency of production as a result of the introduction of innovations were carried out by such domestic and foreign scientists as: Ansoffa I., Berens V., Vihansky A.S, Galchinsky S.M, Heyda V.M, Mikhalev O.V, Nemtsov V.D, Ponomarenko V.S, Porter M., Twist B., Thompson A., Khargadon E., Chandler A., Shershnev S.E, Shumpeter J., Yastremsky A.M. and others.

However urgent is a problem of forming of innovative strategy.

Research purpose: Is the development of proposals to improve the system of strategic management of innovation activities in the enterprise.

Statement of the main material. In modern scientific literature there are many determinations of strategy and each author on the sees and treats need of forming of strategy.

O.V. Mikhalev Proposed to assess the quality of the investment structure by their innovativeness, and also introduced the term "level of innovative motivation for investment activity". According to the scientist, the connection between investment and innovation makes it possible to consider it an integral index of activity both at the beginning of the innovation process and at the end of the innovation process [3-4].

The researcher B.M Mochalov. Defined the strategy as the aggregate of the branches of the national economy, the production of its transportation and the provision of services to the population. The author believes that such a definition does not disclose aspects of strategic potential, but only one execution of the production function.

L.I. Samoukin Believes that the strategic potential should be considered in the relationship that arise between individual employees, labor collectives, and organizations to fully utilize their abilities to create material goods and services.

At any entity selection process of rational innovative strategy is based on results of assessment of forms of innovative activities which is shown in different types of innovations. High innovative activity is shown by the entities of mechanical engineering and metal working which use modern technologies, materials and methods of management. Generally it is the state entities and this aspect causes specifics of the state innovative policy which are aimed at the development of a public sector of economy. Forming of innovative strategy on industrial enterprise is caused by high risk level and uncertainty of result, and also a temporary factor.

Factors which influence forming of innovative strategy can be divided on external and internal. External factors are factors to which state orders for innovative products, innovative policy of the state, regulatory framework level, macroeconomic development belong. Those which arise in the entity belong to internal factors. These are financial resources and their distribution for innovative activities, and also skill level of personnel, understanding of development of new tendencies of this industry of the entity and a capability of a management to make decisions on release of innovative products.

It is also necessary to consider the regional potential of development which has both strong, and weaknesses. It is necessary to consider features of the territory and use of resources in this region.

Basis of strategic management of industrial enterprise is management of an intellectual resource which comprises material and non-material objects and assets. The research equipment, security documents of intellectual property items, information and the software

belong to tangible assets. The basic education of personnel, target and information training of personnel belongs to intangible assets.

The concept of innovative development of industrial enterprise is connected with a certain type of goods which can realize in itself(himself) a material or non-material form of knowledge. Such goods are called scientific and technical products.

The scientific and technical products are a result of intellectual activities which has commercial value. Development of the entity is possible on condition of two concepts: marketing and technological pushing through.

The marketing concept is based on production and caused by market conditions.

The concept of technological pushing through is based on the new knowledge gained as a result of innovative developments.

The successful result of implementation of these concepts depends on a type of an innovative product and the situation which developed at present in the market. But even if it will be the most demanded innovative product with an economic potential, then he can be not popular by the consumer owing to structural or professional incompatibility. Therefore this circumstance involves forming of adaptation structure the developer consumer of an innovative product which have general intellectual, financial and economic and organizational base. Therefore the innovative development strategy of industrial enterprise is characterized by increase in research and production divisions.

Innovations enhance material and technological base of industrial production by use of the equipment of high technologies, create the new level of intellectual potential. Innovative strategy assumes increase in the social status of level of the entity.

But the most important category which determines the level of development of industrial enterprise is product quality. It is connected with the following factors.

First, the vector of demand for an industrial industry changed.

Secondly, enhancement of products of indicators of reliability, capacity of the load and high-speed and temperature ranges of operation of the issued products as failure leads to death of people, pollution of ecology.

Thirdly, increased quality control of the delivered products.

Fourthly, the indicators quality of the regulating documentation (specifications, state standard, production schedules, engineering procedures).

Current trends in the world on creation of industrial output make more strict requirements on ecological application on safety and comfort. Therefore a characteristic sign of modern high-quality innovative products is increase in a share of an intellectual component.

Innovative activities of the entity are directly connected with financing of different stages of an innovative cycle.

Innovative strategy is the strategy of high-technology industrial enterprise. It creates a complex of actions for technological enhancement of production, to change of an organizational structure of the entity, implementation of innovative technologies of management.

Implementation of innovative strategy of industrial enterprise can't be based on economic methods of management. Financing of industrial enterprise which is engaged in innovative activities isn't capable to solve many problems of creation of production structure with the necessary level of innovative activity.

And a role of the state as guarantor of long-term effective policy increases in connection with features of forming and functioning of the world market.

The state innovative policy of industrial enterprises is implemented in three main directions [7]:

- ensuring innovative activities, creation of an economic and social base for implementation of innovations on industrial enterprises;

- forming of system of the state target program aimed at the development of innovations on industrial enterprises;

- forming of an incentive system and the state support in case of development of innovations on industrial enterprises.

The first direction of innovative policy of the state provides the level of competitiveness of industrial output with new tendencies of market development. The second direction is market grouping of the social benefits which promote use of all types of resources for the solution of urgent problems of development. The third direction of innovative state policy provides forming of favorable climate for development of innovative activities of all product lifecycle.

Many different factors influence development of industrial enterprise and it causes set of methods of the state impact on innovative activities. The state methods of support of the entities which are engaged in innovative activities can be divided into indirect and direct methods.

| The state corrective actions on innovative activities | |
|---|---|
| Direct corrective actions | Indirect corrective actions |
| Public | Legislative |
| 1. Public financing RESEARCH AND DEVELOPMENT | 1. Protection of intellectual property and author's right |
| Program and target | Tax |
| 1. The state order on development and deployment of an innovative product | 1. Preferential taxation |
| 2. Interrelation between scientific departments and production | 2. Accelerated depreciation method |

Fig. 1. System of the state support of innovative activities industrial enterprises (it is enhanced by authors)

The innovative policy of the state is directed to effective functioning of industrial enterprises, namely in the field of the structural organization of a technical and economic, intellectual and managerial component.

When forming innovative strategy it is necessary to consider nature of their implementation. Strategy assumes consecutive behavior which allows the entity to determine itself in the environment. Depending on the internal and external environment the following classification signs of innovative strategy which are provided to tab. 1 can be considered by the entity. In case of constantly changing market conditions it is possible to allocate two groups of innovative strategy: active and passive. The entity which chooses active strategy stakes on use of the new technological ideas. From active innovative strategy it is possible to allocate two types of strategy: leaderships and imitations. Distinction between them is that if the new technology of the entity is realized in an innovative product, in that case use the strategy of leadership.

Table 1

Signs of classification of innovative strategy.

| Strategy classification sign | Strategy types | Essence of strategy |
|---|---|---|
| Stages of innovative activities | Stage of strategy of Research and Development | Carrying out by the entity new researches and developments |
| | Stage strategy of production | Production updating |
| | Stage strategy of implementation | Conclusion of new products to the market |
| Nature of implementation of innovative strategy | Competitive strategy | Is characterized by innovative products which are offered to implementation and correspond to the high level of product competitiveness |
| | Strategy of borrowing | Purchase of the production license at other entity |
| | Marketing: - defensive; - dependent; - protective. | Strategy is directed to preserving the taken positions in the market. this strategy is characteristic of the entity of stronger in marketing, than in Research and Development, improvement of products and the production technology |

The entity which chooses the strategy of leadership directs the main part of the investments to development and a research of a product. The scheme in case of the choice of innovative strategy of leadership is provided on fig. 2.

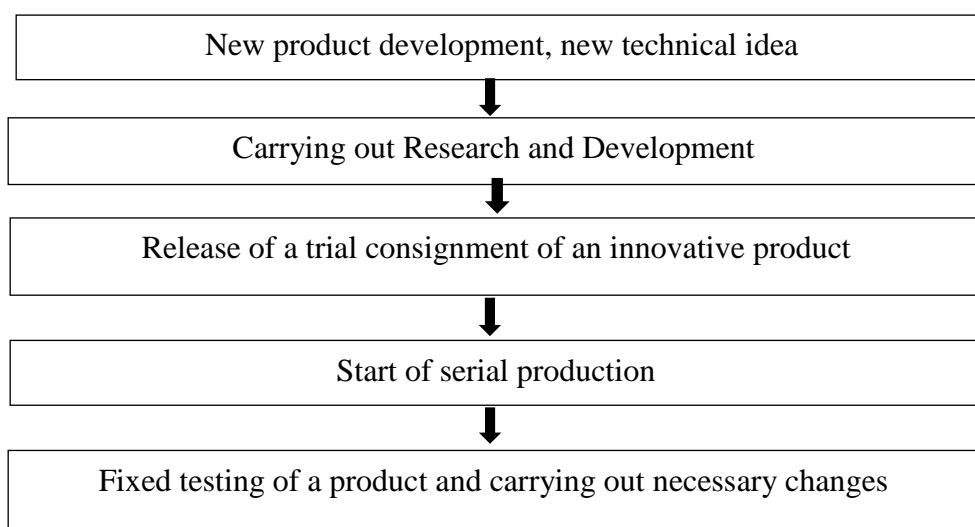


Fig. 2. Scheme of innovative strategy

The entity uses imitating strategy in that case when the technical idea is used among the first, but in the market and often the enterprises that use imitation strategists become leaders in the market bypassing the original leader of the innovation.

Passive innovative strategy are fixed innovations in marketing. When the entity chooses passive innovative strategy, it is displayed on changes of external conditions.

Innovative strategy are aimed at the development, implementation of capacity of the entity, and also its region and are considered as reaction to change of the external environment.

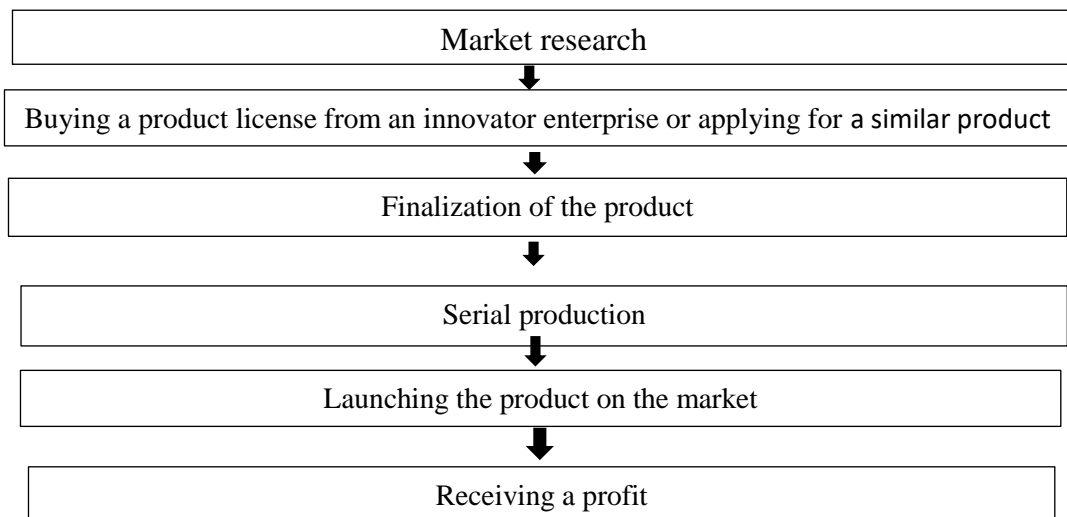


Fig. 3. Scheme of the innovative strategy of imitation

The innovative policy of the enterprise must proceed from the fact that it is located in the region. Also, the state considering the potential of the enterprise must proceed from the region in which the enterprise is located. Developing an innovative strategy, the enterprise must take into account the specifics and capabilities of the region, its resources, both labor and natural, energy costs, environmental resources. The developed state policy should also take into account the specifics of the region in which the enterprise is located.

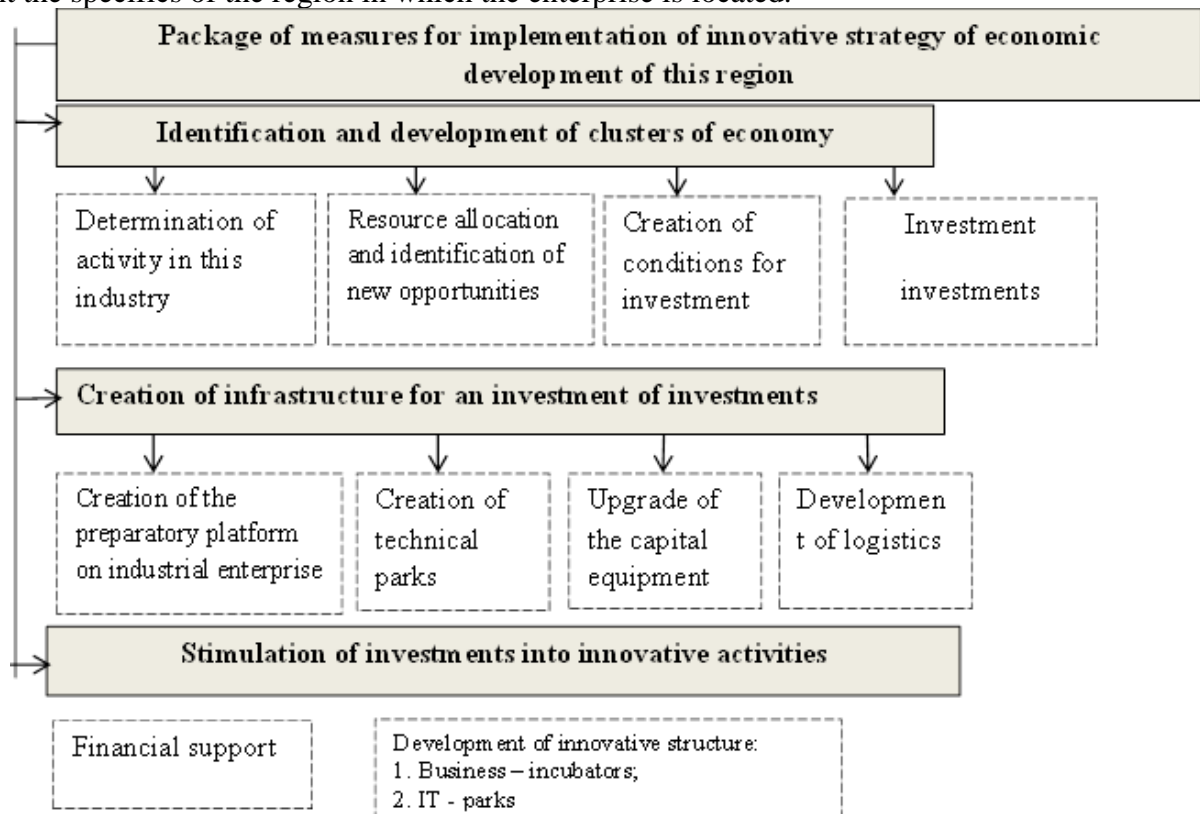


Fig. 4. A set of measures to attract new investment projects (it is enhanced by authors)

If the region is industrial, all the prerequisites for the development of industry should be directed to the region. If the region is agrarian then state policy should be aimed at the

development of the agrarian industry in this region. That is, the state-region-enterprise is closely related.

The package of measures of fig. 4 is necessary for attraction of new investment projects. Creation of conditions for implementation of investment projects gives the chance to this region or area the advancing growth of total amount of the involved investments into this region or area. Identification and development of innovative clusters which determine activity by different clusters, and also attraction and an investment of investments into the innovative project that promotes development of this industry and economy of the region concern to them. One of the main components in this set of measures is the creation of an infrastructure for investment. To implement such an infrastructure, it is necessary to create preparatory sites at industrial enterprises, technical parks, and also to upgrade the main equipment. But without stimulating investment in innovation, this can not be done. We need to attract both domestic and foreign investors for Research and Development.

Results of a research. The market of innovative products takes the leading place along with the raw materials market, fuel and energy resources and technologies. Without development of this type of the market further development of a world economic system is impossible. The concept of steady functioning of industrial enterprise is based on development of innovative strategy which regulates communication between different stages of product lifecycle. Also important criterion of efficiency of implementation of innovative strategy is the level of standard legal support of all stages of product lifecycle. Summing up the results, it should be noted that forming of regional strategy is directly connected with forming by the innovative strategy and management of industrial enterprises where the key moment is providing optimum conditions of forming, development and use of knowledge in the form of tangible and intangible assets of industrial potential which are directly connected with laws of the government. Only in case of a consent of actions of industrial enterprises with the government, scientific research, preserving and strengthening of innovative and industrial capacity of the region is possible. This mechanism will become more efficient for stimulation of development of innovations in this region.

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