

## COMMERCIALIZATION AS A PROCESS OF IMPLEMENTATION AND SUPPORT INNOVATIONS

**Statement of the problem.** Today prerequisite introduction of innovations to the market is the process of commercialization. From it company expects long-term commercial effect, which is possible only if all stages of commercialization in a timely and efficiently implemented. Thus, during the creation and implementation of innovations are needed strong support. The main role of this support plays the process of commercialization, which is a prerequisite for innovation to market.

The problem is that the most of the scientific developments have broad prospects of commercialization and high potential business creation, not even designed as an innovative project. In the current conditions of the importance of innovation greatly increased interest in studying the nature category of commercialization and consider the theoretical aspects of this process in the global market innovation.

**Analysis of recent research and publications.** Studying the experience of developed countries, experts are convinced that the most important element in the innovation process is the commercialization, which serves as one of the main conditions for successful implementation of innovation. In particular, the features of the commercialization of innovation in today's analyzed Kateshova M., Kvashnin A. [1], Lyashyn A. [3], Kozmetsky J. [2], Monastyrnyy E.A., Greek Y.N. [4], Mukhopad V.I. [6]. Another on this subject point out the importance of studying the process of "commercialization" of its assessment and management.

Despite of the large amount of scientific work and publications on a selected subject, there are a number of issues regarding coverage insufficiently ways to commercialize innovations. All this testifies to the importance of the subject, and thus dictated the choice of direction of research in the scientific and practical aspects.

**Statement of the problem.** The aim of the study is theoretical understanding of the concept of "commercialization" of the process and as a result, its common aspects and phases of the global market innovation. To achieve this goal the task to analyze the content and features of ways to commercialize innovations.

**The main material of the study.** The concept of "commercialization" is more common in the literature related to innovation, intellectual property, technology, technology transfer, etc. As a step in the commercialization of the innovation process, which is responsible for ensuring that innovation has become a commodity and went on market.

By definition of an American researcher B. Twiss [7], the process of innovation - is the transformation of scientific knowledge and scientific ideas and inventions into physical reality (new), that changes society. At the heart of the innovation process is the creation, deployment and diffusion of innovations, which are the necessary features of scientific - technical innovation, their practical application and commercial feasibility in order to meet the new needs of society.

Through innovation process innovation is transformed into an improved, more efficient innovation that takes on new consumer qualities including any potential changes improved.

The main stage of the innovation process is the commercialization. By definition, V.I. Muhopad commercialization is the process of converting an object property (innovation) in revenue through trade [6]. E.A. Monastyrnyy and Y.N. Greek identified as the commercialization of the receipt of income from the sale or use in their own production [4]. George Kozmetsky describes how the commercialization of the process by which the results of research and development activities in a timely manner are transformed into products and services on the market [2].

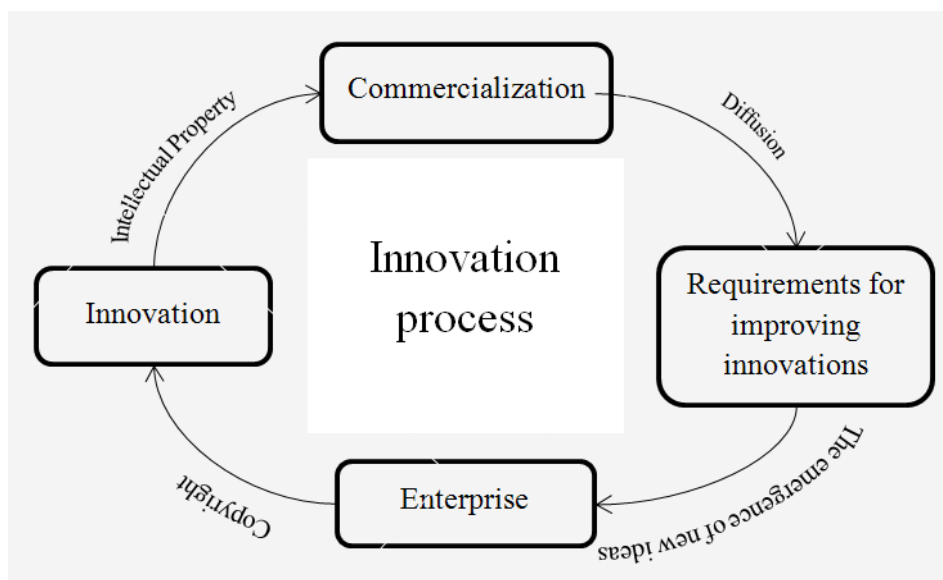
So, commercialization - is the process of removing innovations to market. It comprises several consecutive steps:

- the first stage if the company is developing several innovative products, there assessment and selection of the most favorable for the market launch. Assessment takes the form of expertise on specific criteria: the potential of an innovative product, the demand for this product in the society, the demand for the product as a potential buyer (in a particular market segment), the potential cost-effectiveness of sales (net present value, internal rate of return, payback period and etc.);
- the second stage of the commercialization process is the formation of the necessary funds. Since only a few innovative companies have sufficient funds for self-financing development, the main objective on this point is to attract investors;
- the third stage is to secure the rights created innovation with their distribution between all stakeholders;

- the fourth last stage of commercialization involves the organization of innovation and its introduction into the production process with subsequent refinements if necessary.

The most important step in the further development of innovation commercialization is serving a prerequisite for supporting innovations.

The essence of commercialization is that the company commercializes its innovation, that conveys innovation firms from different countries on the basis of time, resulting in innovations penetrate in various industries and find more and more customers, a process called diffusion. Due to the diffusion process, new conditions to improve innovation, based on which the company generates and implements new ideas in the same direction. As a result, there is a new innovation that just the process of commercialization and is involved in the diffusion (Figure 1).



**Figure 1. - The role and place of commercialization of the innovation process (authoring)**

Any process of commercialization of innovation is ever complete without the direct participants.

In general, all participants in the process of commercialization of innovations can be divided into three categories - innovation developers and their buyers (investors) and mediators [1].

Developers of innovations has such categories as:

- research institutes, funded by national and international grants, equity, etc.
- teams of inventors who are not funded by potential investors and small one-off grants;
- small and medium enterprises, which employ scientists and engineers who conduct targeted commercialize their innovations;
- single inventors who for various reasons separate from academic institutions and work independently. Members of this group can offer quite a lot of development, but they are often limited in funds.

Potential buyers of innovation as actors commercialization of innovative products, it is worth noting:

- public funds and programs that make a significant impact on the development of science, assisting in the commercialization of innovation, while highlighting significant amount of funds;
- non-state funds and grants;
- venture capital funds and "business angels" engaged in financial support to developers instead of full or partial transfer of the results of research and development;
- large and medium-sized firms that finance research for further use in their activities [8].

And third, important category of stakeholders commercialization of innovation intermediaries engaged in attracting funds and search technology. Mediator in this process may make commercialization centers, consulting companies, innovation centers and business incubators that provide different services to promote the development of the market.

In general, it should be noted that without the involvement of members of commercialization, innovation would never have reached the stage of the market in the future. In this regard, we can say that the participants of the process leads to the way of commercialization of innovations.

With globalization and increasing competition in the global market innovation appears highly relevant research and analysis methods commercialization of innovations.

World practice identifies three main ways to commercialize innovations in terms of the degree of transfer of rights to develop [3]:

1. self-use development that includes the organization of production and to market of the developments, production and transfer of leased equipment, and engineering.
  - *The organization of production and the market launch* - a set of measures and methods to achieve the objectives: the shortest possible time to bring innovative designs to the market.
  - *Leasing* - transfer of rights to use the equipment and the most innovation.
  - *Engineering* - complex works and services to create an innovative project that involves the creation, implementation, promotion and diffusion of a particular innovation.
2. assignment of intellectual property rights on development as: the sale of licenses, franchising, contract for joint development.
  - *Sales of licenses* - the owner has certain rights to use the patent for its development in a particular area during a particular period and for a fee.
  - *Franchising* - purchase a license to use the patent for production of the same brand in a particular area for a fee
  - *Contract for joint development* - a contract with the consumer of finished products to establish a new company to the joint use of all its resources.
3. the complete transfer of intellectual property rights for the development, meaning: alienation from human or sale of patent rights.
  - *Exclusion of copyright* - irrevocable transfer of copyright.
  - *Sale of patent rights* - transfer all rights completely licensee for fixed terms.

Each of the following methods of commercialization, which is due to the composition of the participants are able to offer efficient and innovative design worthy owner profits if its effective use.

**Conclusions and further research.** As a result of the natural progress of society as a whole is growing need for finding opportunities for commercialization of innovation. Based on the analysis, we can conclude that for effective commercialization should pay great attention to choice of commercialization, since it depends on the amount of income derived by a developer in the future. Hence, commercialization of the result and indicator of financial support for innovative development. Thus, further research on this issue may be directed to a more detailed study ways to commercialize and to solve problems that hinder the development process in the area of commercialization of innovative developments.

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## Kovtunen K.V., Hutareva Yu.V. COMMERCIALIZATION AS A PROCESS OF IMPLEMENTATION AND SUPPORT INNOVATIONS

**Purpose.** A theoretical understanding of the concept of commercialisation as a process and as a result, its common aspects and implementation phases on the world market of innovative developments. To analyze the content and particular properties of innovation commercialization methods.

**Methodology of research.** General scientific methods are used in the problem investigation process: analysis (in order to understand the nature of the concept of «commercialization», its participants and the

steps involved are analyzed), synthesis, deduction (the concepts of «commercialization» are analyzed, as well as the concrete aspects of commercialization), comparison (pinpointing common and distinguishing features of comparison of scientists' statements about the nomenclature of the concept of «commercialization»), classification (division and grouping of participants and commercialization process methods according to a particular feature) and a generalization method used to arrive at general conclusions.

**Findings.** The nature of the concept of «commercialization» is substantiated. The basal phases of the commercialization process are established. General innovation commercialization methods are formed.

**Originality.** It has been established that more attention needs to be paid to the selection of a commercialization method in order to have effective commercialization, because this determines the profits received by the developer in the long term.

**Practical value.** The main point is that the results of scientific research substantially reveal the base content of the concept of commercialization; practical recommendations regarding rational use of innovation commercialization methods are established.

**Key words.** Innovation process, commercialization, commercialization phases, innovation commercialization methods.