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## TRANSFER OF TECHNOLOGIES AND SYSTEMS OF INNOVATIVE ACTIVITIES

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***Abstract.** Today, the systematic introduction of advanced technologies, taking into account the development of domestic industry, is an urgent issue. An important issue is the construction of relations between business and the scientific sector, taking into account the large number of scientific developments, which, unfortunately, are not implemented in production. Thus, technology transfer should ensure the establishment of a constructive dialogue between business and science. New knowledge obtained in research organizations as a result of scientific research work will be transferred to the commercial sector for public benefit.*

***Keywords:** technology transfer, innovation, technology, development, implementation.*

### Introduction

Today, the systematic introduction of advanced technologies, taking into account the development of domestic industry, is an urgent issue. An important issue is the construction of relations between business and the scientific sector, taking into account the large number of scientific developments, which, unfortunately, are not implemented in production. Thus, technology transfer should ensure the establishment of a constructive dialogue between business and science. New knowledge obtained in research organizations as a result of scientific research work will be transferred to the commercial sector for public benefit.

### Materials and methods

Recently, deep transformations of the social and economic system have taken place in the most developed countries, which have led to the emergence of an information society with its own economy, the main factors of production in which are knowledge and information.

For the first time, the concept of “innovation” appeared in the 19th century as a term used to understand the penetration of some elements of one culture into another. Objective changes in the conditions of economic life created a theoretical concept of innovation. The subject of modern innovation is primarily the creation, development and distribution of various intellectual products [1–3].

The definition of the concept of innovative activity will allow a more detailed consideration of the concept of technology transfer. Innovative activity is aimed at the use and commercialization of the results of scientific research and development and leads to the release of new competitive goods and services to the market. Researchers [3] note that “...innovative activity is directly related to the acquisition and reproduction of new scientific, scientific and technical knowledge and their implementation in the material sphere of the economy. Innovative activity is related to bringing scientific, technical ideas, developments to a specific products and technology in demand on the market”.

Therefore, innovative activity is a set of measures to bring scientific and technological developments to practical implementation in a specific innovative product that is competitive on the market. The concept of commercialization, which involves a commercial aspect and reflects, first of all, the market relevance of the innovation, deserves no less attention. Commercialization of technologies is a process by which the results are transformed in time into products and services on the market [1–3].

### Research results

Note that the terms commercialization of technologies and innovative activity have common features. Scientists talk about the identity of the concepts of technology commercialization and the innovation

process. Among the numerous definitions of the innovation process, the most widespread is the point of view, in comparison with which the interactive interaction of developers with the environment plays a critical role. The innovation development model is considered as a logically consistent, not necessarily continuous, chain of events, which can be divided into functionally related and interdependent stages that connect the performers of the innovation project with the wider scientific and technological community and the market [2]. Based on this definition, the concept of commercialization is revealed as one of the aspects of the innovation process, that is, the relationship or interaction between the market and the innovator regarding a purposefully implemented and evaluated by him as a positive change in the position of economic practice due to the application of knowledge that was not used before or were used in a different way. Therefore, using the given definitions, in the innovation process, and in a narrower sense, in the process of commercialization of technologies, new knowledge or knowledge that was otherwise used is applied to economic practice or involved in economic turnover, and is new knowledge by using existing knowledge. It is logical to state that the effectiveness of the innovation process is directly related to the effectiveness of the involvement of new knowledge in economic practice. Accordingly, the concept of technology transfer stands out in the theory of innovation.

In [2] technology transfer is described as technology, which is information intended for use and achieving some goal, or knowledge about how to do something. Transfer is the movement of technology using any information channels from one of its individual or collective carriers to another". Technology transfer can encompass the process by which basic research is applied to the production of products and the provision of services. But such a definition cannot be considered optimal either, because fundamental research is not always a source of knowledge in the innovation process.

Since the key issue of improving the efficiency of technology transfer is solving the problem of how best to create technologies and implement them in economic practice, it is appropriate to note the existence of different theoretical approaches to the emergence of innovations. Innovation models can be divided into linear and interactive models. Non-commercial transfer is implemented in the transfer of scientific and technical information or in scientific and technical cooperation. The subject of non-commercial transfer of technologies is various materials and information of a publicly available nature that do not have a clear commercial potential, as well as information about technologies in which a commercial interest is embedded, but does not allow them to be used or reproduced. The subject of non-commercial transfer is scientific discoveries, as they are not covered by property rights, because, in fact, they are a reflection of the objectively existing laws of nature and society, that is, the achievement of all mankind; as a rule, there are no real prerequisites for their commercial use; and, finally, such discoveries can be made by several researchers at once, as is known from the history of science.

Commercial forms of technology transfer are transactions in the trade of scientific and technical knowledge, or cooperation based on them, and are related to the transfer of technologies for the production of products, services or improvement of their production processes.

At the current stage of development of the world economy, technology transfer is divided into internal (within one country) and external (international). Recently, there has been a trend towards the creation of global networks of innovative activity. At the level of one country, technology transfer is carried out within the framework of national innovation systems [1].

### **Conclusions**

It is necessary to reorient the economy to new technologies. Given the state of the country's modern economy, for example, for the construction industry, overcoming the crisis is an extremely difficult task, since its solution requires support at the national level. It is necessary to clearly define the role of the construction industry for the economy, regulation of relations between participants of the construction complex and ensuring the effectiveness of project solutions. It is necessary to establish priority directions for the development of the construction industry, based on the strategic directions of the country's development. New mechanisms for financing construction and restoring the potential of scientific research organizations need to be launched to stimulate the development of effective

technological solutions. To implement such tasks, it may be useful to use the technology system transfer mechanism in the further development of Ukraine's economy.

### References

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## ТРАНСФЕР ТЕХНОЛОГІЙ ТА СИСТЕМИ ІННОВАЦІЙНОЇ ДІЯЛЬНОСТІ

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*Анотація.* Сьогодні актуальним є системне впровадження передових технологій з урахуванням розвитку вітчизняної промисловості. Важливим питанням є побудова відносин між бізнесом і науковим сектором, враховуючи велику кількість наукових розробок, які, на жаль, не впроваджені у виробництво. Таким чином, трансфер технологій має забезпечити налагодження конструктивного діалогу між бізнесом і наукою. Нові знання, отримані в дослідницьких організаціях в результаті науково-дослідної роботи, будуть передані комерційному сектору для суспільного блага.

**Ключові слова:** Трансфер технологій, інновація, технології, розвиток, впровадження.