simultaneously be involved in the process of import substitution, even though in the end all the process elements have to "get through" import substitution.

The number of elements for "achieving the desired result", which in a certain period of time can be involved in the import substitution process, are defined by the costs necessary for import substitution of the element and the enterprise's total capital expenditures limit available in a certain period. A common task type of optimal import substitution is distributing a limited resource of capital investments between the elements involved in the import substitution process. Drawing up the enterprise's optimal import substitution investment program includes selecting investment projects which will provide the larger increase in the enterprise's sales within the available capital investments limit. The article provides the possibility justification of solving the enterprise's optimization problem using a dynamic programming method, and gives a relevant numerical illustration.

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# THE MECHANISM FOR FAVORABLE INNOVATIVE CLIMATE CREATING IN THE REGION

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The article reveals the features of the innovative climate of the region formation in modern economic conditions. The place and role of the "innovative climate" concept is characterizing the innovative type of development are identified; clarification of its interpretation made it possible to justify the mechanism of its formation. The proposed mechanism is based on the implementation of the open innovation model, it is distinguished by factors, conditions, principles and tools that reflect the interests of all participants in innovation activity and determine the points of their effective interaction, which ensures the formation of a favorable innovative climate in the region.

Keywords: innovative climate, innovative environment, innovative development, model of open innovation, factors, conditions, principles and tools for creating an innovative climate.

#### Introduction

In modern conditions, favorable economic conditions determine the effectiveness of innovative activities and allow you to adjust development directions and specify the growth points of the regional economies.

In connection with the introduction of the sanctions regime for high risks that accompany innovation, there was an urgent need to find ways out of this situation and speed up the transition to an innovative development path. In this regard, the formation of a favorable innovative climate in the region is becoming highly relevant.

## The concept and essence of the innovative climate of the region

Today, many scientists identify the concepts of "innovation climate" and "innovation environment". If we analyze the concepts under consideration from the point of view of geography, it should be noted that the climate characterizes weather conditions, and the environment is represented as a combination of all natural conditions of life.

Given the fact that the concept of "climate" is narrower than the concept of "environment", climate is an objective part of the environment that is not affected by humans, in contrast to the environment, including interaction with humans.

The climate has a clear geographical reference and reflects the properties of a particular geographical area, and the environment is attached to a community of people, being a condition for its development [4]. Thus, the concept of "environment" is broader than the concept of "climate", reflecting the long-term weather regime, which is typical for this area due to its geographical location [6].

Thus, the innovation environment is a field of activity that determines the specificity and content of innovative processes. At the same time, the environment is the environment, and "climate" is the conditions that create the environment for the implementation of activities.

In this regard, the innovation climate is presented in the form of "a combination of objective economic, social, political, legal and other conditions that create or not attractiveness for innovation. Moreover, the innovation climate is formed from innovation activity, innovation potential, innovation risk" [2; 3].

The innovative climate of the region is an objective characteristic of its external environment, reflecting the interaction of macro-, meso- and microclimate, which ensures the development of business processes based on the creation and implementation of open innovations.

## Factors and conditions for creating a favorable innovative climate in the region

As we know, factors are the driving forces for creating a favorable innovative climate, the reasons that determine its nature, and the conditions are the prerequisites, mandatory circumstances that determine the motivation for their implementation [2; 3]. The conditions for creating a favorable innovative climate in the modern economy are: - the availability of

financial resources for the business to develop and purchase technologies and new equipment. In conditions of limited own, borrowed and attracted financial resources, it is problematic to promote ideas and bring them to life.

In this regard, there is a need for active work to attract investment funds while minimizing risks, increasing the investment attractiveness of regional socio-economic systems; - attraction due to high payment of highly qualified, initiative and young specialists.

Moreover, the factors determining the formation of a favorable innovative climate in the modern economy are the following [1-3; 5]:

- globalization of competition, causing acceleration of innovation processes;
- the complexity and multidisciplinarity of innovation;
- the cost of innovation;
- the riskiness of innovative projects;
- intellectual security;
- a combination of various technologies and markets;
- increased mobility and freedom of highly educated professionals;
- the availability of venture capital;
- the ability to choose outside the region of any technology not used by other regions.

## Tools and principles for creating a favorable innovative climate in the region

It is worth noting that the mechanism for creating a favorable innovation climate is based on principles that allow you to efficiently create and implement open innovations, which include [1–3; 5]:

- The principle of goal-setting based on the comprehensive development of innovative activities:
- The principle of the complexity of methods in the search, selection and use of open innovation:
  - The principle of combining internal ideas and developing external knowledge;
- The principle of diversification of channels for entering the market for a new product through its own networks, as well as through the marketing system of external partners;
  - The principle of designing a model of "learning region";
- The principle of ensuring competitiveness through the widespread implementation of innovations;
  - The principle of network cooperation and interaction;
- The principle of ensuring efficiency through enhanced innovation; The principle of predominance of integrated systems of technological development ("globallinked");
- The principle of motivation of specialists and susceptibility of innovation by consumers.

With this in mind, a mechanism is proposed for creating a favorable innovation climate in the region based on the principle of implementing open innovation in the modern economy, including the following tools:

- Insourcing and outsourcing of technologies. Under technology outsourcing is meant "attracting technologies for the development of internal innovative opportunities", under outsourcing - "transfer of technologies developed within the region in order to develop the market and use technology in the external environment" [1; 5];

- business models with which the products and services that will be created by innovative regional enterprises are determined [1; 5; 6];
- effective interaction of science, education, the production sector on the basis of public-private partnerships, which allows harmonizing the interests of all participants in innovative processes [1; 2; 5];
- the involvement of society in the exchange processes, the inclusion of members of the society in the mechanism of formation and diffusion of innovations to enhance innovation [1; 5];
- regulatory support with relevant documents to create favorable economic conditions for the implementation of innovative activities, the implementation of strategic initiatives, innovative development programs;
- information support, implying a toolkit for organizing relationships, forming an information field for creating and implementing innovations, increasing the speed of making and implementing managerial decisions;
- protection of intellectual property through the implementation of measures to prevent and eliminate the consequences of the illegal distribution and use of intellectual property.

## **Conclusions**

Thus, the creation of favorable economic conditions will ensure not only the strengthening of the position of the region at the federal level, but also on the world stage. Since the mechanism for creating a favorable innovation climate in the region implies a set of methods, methods, factors, conditions and tools that ensure the creation, implementation and diffusion of innovations in all areas of economic activity. Moreover, all elements of the mechanism should work in interaction with each other, and not conditionally exist separately.

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