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TRANSFORMATION POTENTIAL OF INNOVATION MODELS: KNOWLEDGE AS A COMPETITIVE RESOURCE

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Innovation policy in conjunction with other areas of socio-economic policy can be considered one of the resources for economic transformation based on innovation. Competition in the sphere of innovation policy is increasing, the purpose of which is to increase the innovativeness of the economy, on the one hand, and on the other hand, innovations are being transformed into an effective tool for increasing the productivity and competitiveness of the economy. Scientists [1–5] distinguish three archetypes of the open innovation model. The first archetype is based on knowledge flows "from the outside into the company", when knowledge enters the company from suppliers, consumers, universities, research organizations and even competitors. Knowledge, unlike information, presupposes action. New knowledge is always created for the sake of achieving some goal. Knowledge implies meaning and has a relative sense depending on the situation. Based on information, new approaches to interpreting events and objects are developed, hidden connections are revealed. Thus, information is a necessary environment, material for extracting or creating new knowledge. Information is a product from which new knowledge can be obtained. The second archetype is based on knowledge flows "from the company to the external environment", when knowledge obtained within the corporation is sold, the company's intellectual property is licensed and implemented. The third archetype is a combined process, when external knowledge is attracted and internal knowledge is used to form complementary innovation resources. The trends that form the open innovation model have become more noticeable in recent years, but they are not completely new.

The increasing role of knowledge in the economy is explained by several reasons: the development of science and technology, the emergence of new high-tech products, the creation of new production technologies, the growth of labor productivity and its culture; information progress, increased accessibility of information for the general population, the development and widespread use of information technologies based on inexpensive and easy-to-use computing equipment; a general increase in the level of education of people and, accordingly, their intellectual potential; the depletion of cheap natural, primarily energy resources; the growth of intellectual globalization processes.

At the present stage of society's development, intellectual resources, information and knowledge are the main value and a decisive factor in competition. The accumulation, development and management of intellectual resources have become the most important task for economic agents of any scale, from the country as a whole to a small enterprise.

Innovations have become defined not only by the company's scientific developments, they have integrated into the organizational and business context of the enterprise's activities, and have become interdisciplinary. Based on the concept of life cycles of innovation processes, products and systems, time, resource and organizational synchronization of all processes and stages of the production process is possible. The stage-by-stage and step-by-step study of innovation processes is characterized by local information, broken in time, while at the middle levels of the hierarchy, the life-cycle approach considers the process of creating and mastering innovations as a dynamically synchronized system.In the process of their implementation, there has been cross-functional integration of the activities of various divisions of the company and, as a result, the breadth and diversity of knowledge sources for creating radical innovations become critically important. It is impossible to determine the specifics of radical innovations due to technological and industry differences. It is generally accepted that it is first necessary to clearly define the level of analysis (product/process, company/industry, etc.), highlight the technological or non-technological nature of innovations, and only then distinguish between their incremental or radical nature. Sometimes the connection between radical innovations and the level of costs for innovation activities is determined, primarily with research and development costs, in order to determine their characteristics. The novelty of technologies and their complexity allow not only to create new competitive advantages, but also to ensure their sustainability and retain innovation rent.

Sources of knowledge and information should be transformed into specific production resources for their further use. It is necessary to structure knowledge and determine its place in the production process of the enterprise. Knowledge presented in accordance with the norms and rules adopted in a specific organization should be preserved. It is provided with intellectual and physical access. With constant monitoring of the relevance and demand for knowledge, it becomes a valuable resource of the enterprise. The use of knowledge to solve the problems of the enterprise requires the next step – the formation of a product or service based on this knowledge. To do this, knowledge is analyzed, expanded or, conversely, reduced, i.e. it is subjected to certain procedures that allow it to be adapted to a specific production situation, to solving a specific problem of the enterprise. Thus, a knowledge offer is created. Knowledge consumers interpret the knowledge offer (products and services based on knowledge), establish logical connections with their own knowledge elements.

If the knowledge is assessed positively, it is used to solve specific problems and tasks of an employee, department, organization.

Intellectual elements of productive capital (productive intellectual assets) ensure the creation of the intellectual component of innovative products. Intellectual capital is embodied in products at all technological stages of their creation and production: in the materials from which the products are made, in the machines and equipment used in the production cycle, in the packaging. Innovations with the highest level of market novelty are considered as the basis for achieving new and (relatively) sustainable competitive advantages in foreign markets. However, even when an innovation is not new to the world, it can also lead to the emergence of competitive advantages, firstly, due to the possibility of offering a lower price. In fact, in such cases, the innovation is disruptive in nature and is called a disruptive innovation [6].

The overwhelming majority of economists rightly agree that it is inadmissible to equate the competitiveness of an economic entity with the category of product competitiveness, which has a lower hierarchical nature. Firstly, the competitive strength of an enterprise depends not only on the degree of perfection of the products it produces. The quality and efficiency of marketing and sales activities, and the company's management are of great importance. In some cases, even the release of competitive products may not bring the desired income to the enterprise due to the inefficiency of the organization of one of the above-mentioned elements of the value chain that are not directly related to its production. Secondly, the duration of the company's life cycle often does not coincide with the duration of the life cycle of its products, which in most cases is relatively short-term. Thirdly, the assessment of the competitiveness of products, as a rule, is individual for each type of product and does not cover the entire range of goods manufactured by the enterprise.

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