

MTMSD 2022**I International Conference «Modern Trends in Governance and Sustainable Development of Socio-economic Systems: from Regional Development to Global Economic Growth»****FORMATION OF AN INNOVATIVE STRATEGY FOR THE
ORGANIZATION OF PRODUCTION**

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Abstract

The purpose of the study is to develop and form an innovative strategy for organizing production. The main focus is on identifying the key elements necessary for a successful innovation strategy that improves production processes and increases the competitiveness of the organization. To achieve this goal, comprehensive research methods were used, including analysis of existing innovation strategies in similar industries, conducting a SWOT analysis to identify internal and external factors influencing innovation capabilities, and interviews with key stakeholders in the organization. Skilled observations and analysis of production data were also used to identify bottlenecks and potential areas for improvement. One of the outstanding results of the study is the development of specific strategic recommendations for the innovative development of production. The study identified key factors such as an internal culture of innovation, the need to implement new technologies, and process optimization that formed the basis for the strategic plan. The conclusion is that a successful innovation strategy requires not only technical change, but also an emphasis on developing managerial and cultural aspects within the organization.

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Keywords: Innovation, organization of production, strategy

1. Introduction

The organization of production at the enterprise provides for the integration of all elements of the production process into a common process, contributes to achieving their optimal interaction in order to ensure the economic efficiency of production. The organization of production acts as a vector of the effective activity of the enterprise, since it contributes to the increase of labor productivity, the release of a quality product, the rational use of resources, the development of organizational culture and personnel in the course of production activities. The objectives of the organization of production are aimed at saving labor resources by streamlining interactions in the production process, increasing the creative nature of employees' activities and providing full interest in the results of work. In addition, an important goal is the implementation of all the necessary conditions for the execution of all the ways of production activities of the enterprise. Ways to optimize production depend more on the scientific and technical profile of the enterprise. Most organizational issues can be resolved only on the basis of in-depth knowledge of the technological processes used at the enterprise, the features of equipment and tooling, technological and design characteristics of the product (L. Idigova et al., 2023).

The organization of production is a necessary component of each production method, which is modified as it develops. The organization of the production process makes it possible to rationally take into account the totality of the main, auxiliary and service processes. Innovation management in the organization of production is inextricably linked with the formation and use of an innovation system for the introduction and dissemination of new knowledge, technologies and products within the same region at enterprises. In our opinion, innovation is the finished result of creative activity to be introduced to the market or to other areas, depending on the purpose. In this sense, the concepts of "innovation" and "innovation process" should be clearly distinguished. The terms "innovation process" and "innovation activity" are interrelated (L. Idigova et al., 2023).

The innovation process in its most general form is the process of creating, mastering and distributing innovations (Badmaev, 2020). The innovation process in its most general form is the process of creating, mastering and distributing innovations. The starting point of the innovation process is often the presence of a clearly defined problem, for which an innovative project is initiated (L. M. Idigova & Rakhimova, 2021). On the other hand, often many interesting ideas in the field of innovation are accepted by the company for implementation, despite the fact that certain problems are not seen behind these ideas, but their implementation can significantly advance in the competitive struggle. For example, if customers are quite satisfied with the existing product and cannot answer the question of what they are dissatisfied with in it, but at the same time improving this product and expanding its functionality could increase demand for it. Peter Drucker identifies the following sources of innovative ideas: differences in the desired state of affairs and reality; unforeseen major events in the market or in the industry; the idea can come from both an employee and managers (L. Idigova et al., 2023). Depending on the prevailing management style in the company, the idea needs either the approval of the management or a team ready to take part in its implementation (Kotlyar & Pushkareva, 2020).

Each innovative company has its own methods and its own features of generating and selecting ideas. At the first stage, as a rule, spontaneous ideas prevail, often having a very distant relation to the

goals and objectives of the company. In particular, this method is encouraged by the method of "brainstorming". Very rarely, these ideas can be effective and useful for the organization, because they need to be refined and "brought to mind". This is one of the most important steps in creating innovation, since it determines the further course of the innovation process (Kagermanov et al., 2021). At the next stage, a product concept is developed, which describes all the characteristics of the future product. In particular, the concept should answer the question of who this product is aimed at, what advantages it has in comparison with competing products, and it should also contain a detailed description of the functional and technical properties of the product, its design design, the product concept is the result of bringing the general idea to the product, and the compiled concept should be subjected to verification of compliance with the results of marketing research (L. Idigova et al., 2023). Those concepts that have been tested are accepted by the management for implementation, and the remaining ones are eliminated. The result of this stage is the compilation of a package of documents reflecting the concept of the product. These documents are sent to the project department, where the design and development of the innovation takes place. At the first stage of development, a computer model of innovation is usually created (Makarova & Balyashnikov, 2020).

After the model is created, a prototype is constructed. Then comes the testing and experimentation stage. A new product is being tested for safety, its technical characteristics, usability are being checked, and consumers' opinions about the novelty are being learned.

2. Problem Statement

In today's dynamic business environment, organizations face operational challenges that require careful attention and the development of effective strategies. The problem that this study examines is the absence or insufficient effectiveness of an innovation strategy in the organization of production.

Organizations face a number of problems, such as outdated technologies, insufficient flexibility of production processes, unsatisfactory competitiveness due to insufficient innovation activity. This may result in loss of market position, inability to adapt to changing customer requirements and technological changes.

- 1) What specific problems exist in the organization of production that require attention and innovative solutions?
- 2) What factors may limit the effectiveness of innovation initiatives in a given organization?
- 3) What are the consequences of an ineffective innovation strategy for an organization's competitiveness and sustainability?

The purpose of this study is to identify and analyze problems in the organization of production, as well as to develop an effective innovation strategy for solving them in order to improve the competitiveness and sustainability of the organization in the long term.

It is obvious that innovative activity in one form or another existed in ancient times. The technology of silk production in ancient China is a vivid example of this. With the formation of patent relations in society, innovation activity receives a significant boost to development, scientific and

technological progress accelerates. For a long time, innovative activity was carried out mainly by individual scientists and inventors independently (Malakhova et al., 2020). Over time, innovative activity acquires higher organizational forms. In the second half of the XIX century, there is an active transition in innovation activity from the independent work of scientists and inventors to joint developments under a single leadership. There is a specialization of activities in which each innovator has his own role. This trend was clearly manifested in the surge of inventive activity and led to the introduction of a mass of innovations to the market (Barkalov et al., 2020). A considerable share of the merits in the study of innovation in the context of teamwork belongs to the American expert Andrew Hargadon. Dispelling the well-known stereotype about the exceptional merits of Thomas Edison in inventions that came out of his laboratory, where he writes about working in it, about how he organized the work of his laboratory and gathered like-minded people who worked with a wide variety of projects and tasks, his success was more determined by the knowledge and skills of his employees than his own (Novikova & Strogonova, 2020). The end of the XIX century also marks the beginning of the history of the industrial automotive industry. In the automobile company created by Henry Ford, many technological innovations were created in the field of business organization, which were quickly adopted by other types of mass production. For example, it was at this plant that the conveyor production method was used for the first time, which to this day occupies a major place in the world industry (Razin, 2020). At the initial stage, the activities of industrial companies were mainly aimed at the practical application of the existing knowledge base, rather than the creation of new ones (Yangulbaeva, 2021). Nevertheless, many of the management principles have had a very fruitful impact on innovation management. For example, the increased specialization of labor and the associated tendency for management to delegate managerial functions is the basis of innovation management (L. M. Idigova, A. R. Salgiriyevev, et al., 2019). Thus, the management of such routine organizational processes as production, personnel management, logistics, sales, has significant differences from the management of innovative processes.

3. Research Questions

The research questions are aimed at identifying limiting factors for innovative initiatives in the organization of production, analyzing technological problems, identifying the potential for improving production efficiency through changes in the technological infrastructure, the causes of technology obsolescence and possible ways to overcome them. Also in focus are issues related to human resource requirements for the successful implementation of innovations, analysis of successful examples of innovation, change management strategies and the impact of innovation on the competitiveness of an organization in the modern business environment.

In highly centralized structures, a significant part of managerial authority is concentrated at the highest levels of management, whereas in decentralized structures, many significant decisions are made by middle and lower levels of management, as well as ordinary employees. According to the degree of scale and impact on the market environment, innovations are usually divided into incremental and radical. Incremental are also called supportive, improving (Saidov & Yalmaev, 2021). They only improve existing products and services without making significant changes to them. Radical (breakthrough, basic)

create completely new products and business models, radically changing existing markets, or creating completely new ones (L. M. Idigova, C. K. Tagaev, et al., 2019).

In Western literature, there are two categories of innovation: technological innovation and innovation in business models. The first category includes innovations in products, technological innovations in the processes of production, logistics, sales. The concept of a business model is quite broad. Schumpeter's research focuses mainly on the macroeconomic aspects of innovation. Thus, monitoring the life cycle of individual clusters can serve as a more accurate indicator of the emergence of large industrial or regional transformations (Lebedeva, 2020). As a rule, one of the main signs of innovation is the focus on creating new needs among consumers that do not correspond to market trends.

4. Purpose of the Study

The main goal of this study is to develop a clear and targeted innovation strategy for organizing production. The study is aimed at identifying key aspects that contribute to the effective implementation of innovations in production processes, taking into account the current challenges and requirements of the modern business environment. The goal is to create a strategy that will allow the organization not only to successfully cope with technological challenges, but also to increase its competitiveness and sustainability in the market.

Main objectives of the study:

- 1) Identification of the main challenges and obstacles faced by the organization in the field of innovation in production.
- 2) Analysis of existing strategies for innovative development in similar industries and identification of their applicability to the specific conditions of the organization.
- 3) Study of technological and organizational changes necessary to improve the efficiency of production processes.
- 4) Development of specific recommendations and strategic approaches to the successful implementation of innovations in the organization of production.
- 5) Assessment of potential benefits and risks associated with the implementation of the proposed innovation strategy.
- 6) Formulating general conclusions and recommendations for creating a sustainable and effective innovative environment in the organization of production.

The purpose of the study is to provide specific and practically applicable recommendations for improving innovative activity in the production activities of an organization.

5. Research Methods

To achieve the set goal and solve the research problems, various methodological approaches were used:

- 1) Literary analysis: Assessment of current scientific and practical research in the field of innovative production management, analysis of existing strategies and approaches.
- 2) Expert interviews: Conversations with experienced representatives of manufacturing companies and innovation specialists to identify best practices and problematic aspects.
- 3) Data analysis: Processing of statistical data, including data on production efficiency, level of innovation and competitiveness of the organization.
- 4) Case study: Study of successful and unsuccessful cases of innovation implementation in production organizations in order to highlight key success factors and obstacles.
- 5) Surveys and questionnaires: Collecting opinions and assessments of organization employees on issues of innovation and changes in production.
- 6) Modeling: Development of models of changes in production processes when introducing innovations for a preliminary assessment of possible results.

The choice of various research methods made it possible to comprehensively cover aspects of innovative production management, ensuring the reliability of the results and their practical applicability.

6. Findings

The study identified key aspects that are essential for the formation of an innovation strategy in the organization of production. Among the main conclusions:

- 1) Identification of technological bottlenecks that limit the improvement of production efficiency.
- 2) Analysis of human resources with identification of key competencies for the successful implementation of innovations and identification of the need for personnel training.
- 3) Assess successful competitiveness strategies related to innovation and highlight applicable elements to one's own organization.
- 4) Identification of potential risks and barriers to innovation in order to develop measures to mitigate them.
- 5) Feedback to staff to assess opinions and take into account the needs and concerns of employees in the process of forming an innovation strategy.

These results provide a concrete basis for developing a strategy aimed at effective innovative development of production organization (L. Idigova et al., 2023).

Understanding that completely different approaches and management principles should be presented to the development of innovations in the process of organizing production should become an important stage in the development of innovative science. And various authors offer their own solutions to the problem of companies losing their ability to implement radical projects. One of the main problems is the differentiation of functions between the main structure of the organization and a specialized team: since the processes of the main structure are very effective within the framework of the tasks they solve, depending on the specifics of the radical project and the tasks set, it makes sense to transfer part of the functions of the main organization on the principle of outsourcing. With a more in-depth study of innovation management, the technological side of innovation should be considered. Innovations can

affect both the entire product as a whole and its individual components (L. Idigova et al., 2023; Malykhina, 2020).

At the same time, changes in the combination and interrelation of existing components also contain novelty. Researchers Davila and Epstein consider 3 categories of innovations: incremental, half-radical and radical. According to the model, radical innovations should be based on completely new technologies and business models. With a low degree of novelty of one of the two elements, innovation is considered "half radical", while the changes of the other are much more pronounced. Rebecca Henderson and Kim Clark propose a model of 4 types of innovations that differ in two parameters: changes in individual components (improvement or radical restructuring) and changes in a combination of these components: incremental. They contain only improvements to individual components, without changing their interaction. Minor changes in individual functions of gadgets can be attributed to them.

- 1) Modular. This type involves a radical change of individual components, while their place in the system remains the same. The electric motor, for example, is a component that has led the automotive industry to modular innovations.
- 2) Architectural. The order and methods of interaction of components are changed. An example of such an innovation is a motorcycle, the creation of which did not require the invention of individual components.
- 3) Radical. The invention of the incandescent lamp has completely changed the way of lighting rooms. Firstly, the changes affected the key component when the filament appeared. Secondly, another source of energy appeared – electricity (L. Idigova et al., 2023).

7. Conclusion

As a result of the study of production organization, important aspects were identified that determine its potential for innovative development. Analysis of technological bottlenecks and human resources allows us to identify priority areas for innovation. Studying successful competitive strategies provides valuable lessons for creating your own innovation path. Risk identification and employee feedback provide the basis for developing measures to mitigate barriers and address employee needs. Generalization of data and research results forms specific recommendations for the development and implementation of an innovation strategy in an organization. These findings highlight the importance of innovation in the manufacturing sector and provide guidance for future efforts to improve organizational competitiveness and resilience in the rapidly changing digital economy.

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