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# INNOVATIVE MANAGEMENT IN THE TEXTILE INDUSTRY: ENHANCING EFFICIENCY THROUGH DIGITAL TECHNOLOGIES AND FOREIGN EXPERIENCE

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**Abstract:** This article explores the issues of improving methods for managing innovative activities in textile and knitwear industry enterprises, as well as creating new consumer values by introducing innovative projects into management practices. The study covers measures aimed at increasing the production efficiency of industrial enterprises, ensuring their financial stability, and enhancing the global competitiveness and innovation development index of the national economy.

**Keywords:**industry, textile industry, innovation, innovative activity, economic efficiency, labor productivity, innovative management, management models, financial management, foreign experience, digital technologies.

#### Introduction.

In the state policy aimed at ensuring the stability of economic growth in the countries of the world, the creation of new consumer values through the introduction of innovative projects into the management practice of industrial enterprises is defined as one of the priority areas. As a result of the development of modern technologies, there is a need to introduce innovative management methods in the production processes of industrial enterprises and the effective use of modern tools of the digital economy.

In the 1980s, an increase in production costs at industrial enterprises, a decrease in household incomes, and a decrease in the profitability of industrial enterprises in the countries of the world negatively affected the financial stability of the overall economy. This situation has led to the need to orient production processes in the sectors of the national economy of most countries towards innovative management.

Issues of managing innovative activity at enterprises of the textile and garment and knitwear industry have a significant impact on the development of this industry. The effective use of scientific and technological achievements by industrial enterprises, their integration with digital technologies, and increasing their competitiveness in the market are among the important tasks.

Leading countries of the world use various approaches to the development of innovative activity. In Germany, within the framework of the "Industry 4.0" program, production processes are fully automated, and artificial intelligence and IoT technologies are widely used. Japan and South Korea have achieved great success in optimizing the textile industry through robotics and automated systems. The USA and China have achieved increased competitiveness in the textile industry by developing high-tech production clusters.

In Turkey, a system for supporting innovative programs for small and medium-sized businesses has been developed, which helps local entrepreneurs master new technologies. India, thanks to the strong development of the IT sector, effectively uses artificial intelligence and big data technologies in the textile industry.



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Enterprises must have clear mechanisms for improving the management of innovation processes. For this, it is necessary to define a system of action plans, responsible structures, deadlines, and resources. Regulatory documents on the management of innovation processes should be clearly defined at various levels of the enterprise, including in the management system and the financing process.

The organization and effective management of innovation processes at the enterprise depends on a number of factors, including the level of development of innovation potential. This process is characterized by workplace literacy, research and development, system stability, and the ability to implement new products. Also, an important factor is the allocation of sufficient funds for the implementation of innovative projects.

The Innovation Development Department plays a central role in this process. It must have specially trained personnel, an organizational structure, and a unique status. The management system of the innovation unit must be ready to accept new opportunities. This division is engaged in the analysis of data on innovations, the development of strategic programs and promising solutions, as well as the adaptation of production processes to new requirements and rules.

In addition, highly qualified scientific personnel in the organization should pay attention to the protection of commercial secrets, scientific research, and the needs of users. It is important that their activities are aimed at the constant improvement and modernization of production methods. These are indicators reflecting labor productivity at enterprises.

Labor productivity is a developing indicator. It is constantly changing under the influence of many causes and factors. Some of them contribute to increasing labor productivity, while others can lead to its decline. In addition, the conditions under which the labor process takes place can also influence the level and growth of labor productivity. If conditions are favorable, they intensify the influence of a particular factor, or if unfavorable, they weaken this influence. For example, natural and climatic conditions significantly affect the results of labor in agriculture and its productivity. Social conditions related to the forms of ownership of the means of production, as well as conditions related to production relations, can have a serious impact on labor productivity under other equal conditions.

- ✓ The increase in labor productivity at the enterprise manifests itself as follows:
- ✓ Increasing the volume of products without changing the quality of products created per unit of time;
  - ✓ Improvement of quality without changing the volume of products created per unit of time;
  - ✓ Reduction of labor costs per unit of output;
  - ✓ Reduction of the share of labor costs in the cost of production;
  - ✓ Reduction of production and turnover time of goods.

External factors include:

- ✓ Changes in the level of diversity and productivity of products in connection with changes in state orders and market supply and demand;
  - ✓ Socio-economic changes in society and regions;
  - ✓ The level of labor cooperation, material and technical supply, natural conditions, etc.

In our opinion, the most important socio-economic factors influencing labor productivity in the management of innovative activity at textile and garment and knitwear enterprises include:

- 1. Economic factors
- ✓ Technological progress the introduction of automation, digital technologies, and artificial intelligence increases labor productivity.



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- ✓ Production infrastructure updating modern means of production, equipment, and technologies contributes to increased productivity.
- ✓ Financial resources financing of innovative projects, availability of investments and credit resources play an important role.
- ✓ Market and economic stability the equilibrium of supply and demand, the inflation rate, and the level of economic stability directly affect productivity.
  - 2. Social factors
- ✓ Working conditions the creation of a safe and comfortable working environment, the health of workers increase productivity.
- ✓ The level of personnel qualifications and education constant improvement of knowledge and skills, a high level of professional training is important.
- ✓ Social protection and wages workers work more effectively when their salaries, incentive systems, and social guarantees are high.
- ✓ Motivation and interest in work the reward system, career growth, and the psychological environment at the workplace have a great influence on labor productivity.
  - 3. Organizational and managerial factors
- ✓ An effective management system good planning and management increases productivity.
- ✓ It is necessary to pay attention to the optimal distribution of working time prevention of overload, balance of rest and working time.
- ✓ Teamwork and corporate culture cooperation and effective communication between employees increase productivity.
  - 4. Innovative and digital factors
  - ✓ The use of automated systems artificial intelligence and robotics increases productivity.
- ✓ The introduction of information technologies cloud technologies, ERP systems, and systems based on artificial intelligence will optimize production processes.
- ✓ Electronic control and remote work systems in the digital economy, remote work contributes to increased productivity.
- ✓ The following models can be used for the development of innovative management at enterprises of the textile and garment and knitwear industry:
- ✓ Centralized Management Model The enterprise's innovation policy is determined by a single center.
- ✓ Interdepartmental Integrated Model Innovative activity is organized separately in each department and operates on the basis of mutual cooperation.
- ✓ The Technopark model is a way of developing and implementing innovations in cooperation with research institutions and manufacturing enterprises.
- ✓ Smart production model organization of high-tech production processes using IoT and automated systems.

The textile industry plays an important role in the development of the economy of Uzbekistan, and the growth of its socio-economic indicators leads not only to an increase in this sector, but also to an increase in the country's economic potential. Based on the foregoing, the improvement of the mechanism for managing innovative potential in the textile industry remains the most pressing issue. Therefore, as a result of our research, a model for managing innovative activity at enterprises of the textile and garment and knitwear industry has been developed.

One of the most pressing issues today in the management of innovative activity at enterprises of the textile and garment and knitwear industry is financing. In addition to the state



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budget or foreign investments, enterprise funds, that is, a certain part of the profit received, are spent on innovation, innovations, inventions. As the analysis conducted in the research work shows, it can be said that work in this direction is being carried out slowly, since science and technology do not sufficiently meet the internal needs of enterprises. As a result, the cost of manufactured products is increasing, and the prices of goods and products on the market are rising. Another key aspect of this is the decline in the effectiveness of innovations.

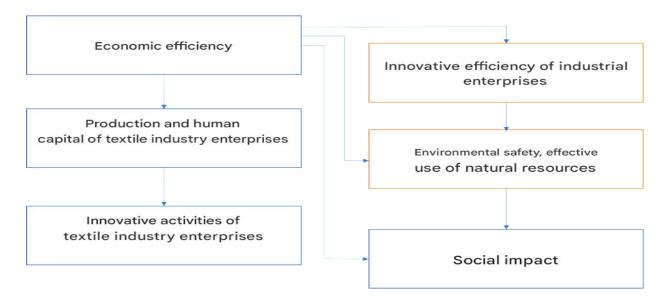


Figure 1. Models of innovative management at textile and garment and knitwear industry enterprises.

Digitalization is an important factor in accelerating innovation processes. The introduction of digital technologies in enterprises, the use of big data, artificial intelligence, and automated management systems will increase efficiency. Digital solutions allow optimizing production processes, reducing costs, and accelerating the implementation of innovative projects.

The introduction of the Department of Innovative Development of the Processing Industry is crucial for further increasing the innovative potential of enterprises. The innovation development department should work under the leadership of a manager and include specially trained specialists.

In today's global economy, industrial enterprises need to pay great attention to flexibility to increase competitiveness. In the context of the development of market relations, the organization and effective management of production processes using modern methods is of great importance. Industrial enterprises, as an integral part of the national economy, contribute to the economic stability of the country and the well-being of the population.

It is necessary to deeply study the factors hindering innovative activity and contributing to its development. This will contribute to the acceleration of innovation processes at the national level, the formation of a modern and flexible innovation policy, and the setting of effective strategic goals. In accordance with the strategic goals of innovative development, it is necessary to create the necessary conditions for the modernization, technical and technological renewal of economic sectors.

In developed countries, great attention is paid to the strategic management of investments to increase the innovative activity of industrial enterprises. This serves to increase the efficiency



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of industrial production and accelerate innovation processes. The expansion of the range of innovative products and services allows for the introduction of new forms of production processes, the creation of new jobs, and the development of international cooperation.

Increasing the sustainability of enterprises based on innovations is carried out by systematically reviewing and optimizing the innovation strategy. At the same time, the clustering approach is also important, which includes such stages as preparation, analytical analysis, strategic planning, implementation, and forecasting prospective development.

Innovations are an economic process in constant motion and are the main factor in the creation and development of new products and services. Therefore, state policy on scientific research and the effective development of economic sectors should be based on advanced scientific technologies.

Today, the widespread introduction of digital technologies in industrial enterprises is of great importance. In particular, artificial intelligence (AI), IoT (Internet of Things), Big Data (big data), and cloud technologies (Cloud Computing) are becoming an integral part of innovative management. These technologies provide the following advantages:

- ➤ Automation of production processes this allows saving time and costs;
- ➤ Making analytical decisions based on data increasing management efficiency through rapid analysis of large amounts of data;
- ➤ Increasing competitiveness increasing product quality and production volume through innovative technologies;
- ➤ Increasing labor productivity reducing the influence of the human factor with the help of robotics and automated systems;
- > Cost optimization increasing energy efficiency and reducing excessive resource consumption.

Through the implementation of digital technologies, the innovation management system works more effectively and helps industrial enterprises quickly adapt to market requirements.

In order to increase the effectiveness of innovation management in the digital economy, the following proposals are put forward:

- Improvement of the system of financing innovative projects at enterprises of the textile and garment and knitwear industry;
- Further strengthening of the regulatory framework for the development of innovative activity;
  - > Study of advanced foreign experience and adaptation to national economic conditions;
- ➤ Increasing labor productivity through the integration of digital technologies into production processes;
- ➤ Increasing competitiveness through the widespread use of artificial intelligence and IoT technologies.

These proposals will serve the development of an innovative management system and increase the competitiveness of industrial enterprises.

In conclusion, the need to increase the economic efficiency of production enterprises is undeniable. Firstly, market conditions do not tolerate stagnation, insolvency, and losses. Secondly, if industrial enterprises do not pay sufficient attention to increasing labor productivity, this not only limits the prospects of workers, but also negatively affects the stability of the entire enterprise. Therefore, the efficient use of all types of resources and increasing labor productivity at each stage of production processes is an important factor ensuring the economic efficiency of any enterprise.

# ORIGINAL ARTICLE

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