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OPTIMIZATION OF QUALITY MANAGEMENT AND PRODUCT COMPETITIVENESS

А. А. ЖУРОВА
Научный руководитель С. Л. КОМАРОВА
Консультант Е. Н. МЕЛЬНИКОВА
Белорусско-Российский университет
Могилев, Беларусь

This paper deals with the improvement of quality management and product competitiveness in industrial enterprises. The ongoing pressure of global competition necessitates that domestic industrial enterprises adapt their quality management systems to modern market demands. Traditional approaches to quality control are increasingly insufficient, as they often fail to address the dynamic and complex nature of contemporary business environments. A clear gap can be observed between routine quality assurance procedures and the strategic requirements of maintaining long-term market positions.

The primary objective is to develop an improved organizational and economic mechanism for product quality management. This mechanism is grounded in the fundamental principles of Total Quality Management (TQM), the requirements of the ISO 9000 series of standards, and modern methodologies for assessing product competitiveness. By integrating these components, the proposed approach seeks to transform quality management from a purely technical function into a strategic tool for gaining competitive advantages. It identifies a critical gap between traditional quality control procedures and the contemporary requirements of the market environment. Using comparative analysis and statistical observation, the authors reveal systemic weaknesses present in existing enterprise quality systems. The analysis establishes a clear and measurable correlation between key quality indicators such as defect rates, reliability, and customer satisfaction and the ability to retain or expand market share. This empirical link underscores the necessity of moving beyond compliance-driven quality checks toward a more holistic, process-oriented management model.

Practical testing of the proposed model is conducted within a real production setting. The experimental phase aims to evaluate the economic efficiency resulting from the implementation of optimized control procedures and digital monitoring tools. These tools include real-time data collection, statistical process control, and automated feedback systems, which collectively reduce variability and improve consistency.

The findings hold significant practical importance for the national economy, particularly within the instrument engineering and light industry sectors. The results will be formulated as specific, actionable recommendations for improving quality infrastructure, upgrading testing and certification systems, and strengthening the market positioning of enterprises. Ultimately, the implementation of the proposed mechanism is expected to contribute to higher export potential, greater customer loyalty, and more sustainable industrial development.