



PRIORITY DIRECTIONS FOR EXPANDING PRODUCTION FACTORS IN THE CONTEXT OF THE DIGITAL ECONOMY

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ABSTRACT

this thesis examines the key priorities for expanding production factors in the context of the digital economy. The study analyzes the impact of digital technologies on labor, capital, technology, and information factors, highlighting their role in modernization and enhancing production efficiency. The contribution of digital innovations—such as artificial intelligence, IoT, big data, and automated systems—to the optimization of production processes and value creation is discussed in detail. Additionally, the role of clustering and digital collaboration models is assessed as an essential mechanism for accelerating enterprise integration and fostering innovation-driven development.

Introduction. The digital economy has become a key driving force of the global economic system, leading to a fundamental transformation of production processes [1]. Modern technologies contribute to optimizing enterprise operations, reducing production costs, and improving product quality. Today, the expansion of production factors involves not only increasing traditional resources but also enhancing their efficiency through digital solutions. Therefore, the development of production factors in the context of the digital economy is considered one of the main determinants of countries' competitiveness.

Theoretical Foundations of the Digital Economy. The digital economy is an economic environment formed on the basis of digital technologies, information systems, and telecommunications, in which data emerges as the most important resource [2]. In this model, production processes are automated, services are digitalized, and organizational procedures become faster. Theoretically, the digital economy relies on innovative development, information infrastructure, network economics, and knowledge-based principles [3]. Large-scale data processing, artificial intelligence, the Internet of Things (IoT), and cloud technologies increase production efficiency and create new opportunities for enterprises.

Mechanisms for Expanding Production Factors. In addition to traditional production factors such as labor, capital, land, and entrepreneurial ability, the modern era has seen the

emergence of digital capital as a separate and significant factor. In the digital economy, the expansion of production factors is carried out through the following mechanisms:

1. Increasing labor productivity through automation and robotics.
2. Expanding market opportunities through digital platforms.
3. Enhancing management efficiency based on Big Data analytics.
4. Reducing IT costs through cloud technologies.
5. Delivering products to consumers more quickly through e-commerce.

Impact of Digital Innovations. Digital innovations exert several significant effects on production processes. First, they increase speed, enabling enterprises to exchange information in real time. Second, they improve quality, as technological control and automation help enhance product standards. Third, they reduce costs, thereby decreasing dependence on human labor. Fourth, they boost competitiveness by enabling firms to adapt more rapidly to global market demands [4].

The Role of the Cluster and Collaboration Model. In the context of the digital economy, clustering is regarded as an effective tool for advancing industrial development. The cluster model provides several significant advantages: first, it facilitates the exchange of knowledge and technology among enterprises; second, it reduces shared infrastructure costs; third, it promotes stronger innovative cooperation; fourth, it expands market opportunities; and finally, it helps improve the technological performance of local producers [5].

Conclusion and Recommendations. The digital economy has initiated a new stage in the expansion of production factors. Digital innovations, automation, digital platforms, and clustering processes play a crucial role in enhancing enterprise efficiency, ensuring competitiveness, and accelerating economic growth. Therefore, the development of digital infrastructure, the implementation of innovative management systems, and the strengthening of collaboration among enterprises remain a priority direction for the economy.

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