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THE ROLE OF HUMAN CAPITAL IN APPROACHES TO STUDYING INNOVATIVE ECONOMIC DEVELOPMENT

Davlatova Nilufar Avazovna

Lecturer at Asia International University

Abstract: This article examines the main approaches used in studying the innovative development of the economy of the Republic of Uzbekistan and analyzes the role of human capital in these analytical processes. The study provides a theoretical justification of how investments in human capital—through education, science, and professional development—affect the effectiveness of innovative activities. In addition, the importance of human capital in shaping innovative potential within a knowledge-based economy is highlighted.

Keywords: human capital, innovative development, knowledge-based economy, education and science system, innovative potential, labor productivity, intellectual resources.

In the context of the rapidly developing digital economy, countries are increasingly focusing on innovation-driven development models rather than relying on traditional factors of economic growth. In this regard, the role and significance of human capital as one of the key determinants of innovative economic development have gained particular relevance. Scientific and technological progress, the creation of new knowledge and technologies, and their practical implementation are directly dependent on the human factor.

In modern economic research, various approaches to studying innovative development have been formed, and in most of these approaches human capital emerges as a central concept. The fact that the first priority of the New Uzbekistan Development Strategy for 2022–2026 is defined as “Enhancing human dignity and building a people-oriented state through the development of a free civil society,” with significant emphasis on human capital, indicates the large-scale reforms being implemented in this area.

The quality of education, professional skills, scientific capacity, and the level of creative thinking are key factors determining the effectiveness of innovation processes. Therefore, investments in human capital are regarded as a sustainable and long-term source of economic growth.

The purpose of this study is to analyze the main approaches used in examining innovative economic development and to scientifically substantiate the role and significance of human capital in this process.

In modern economic research, human capital occupies a crucial position as the primary driving force of innovative development. In economic theory, human capital is interpreted as an important factor of production that includes an individual’s level of knowledge, professional skills, health, experience, and creative potential.

Human capital is an economic resource that encompasses the population’s level of knowledge, professional qualifications, experience, health, and creative capacity.

Under conditions of an innovative economy, human capital gains priority over material resources and plays a decisive role in generating new knowledge and implementing it in production and service sectors. Global experience shows that a high level of human capital

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development contributes to the emergence of innovative ideas, the creation of advanced technologies, and the production of competitive goods.

Within the institutional approach, innovative development is studied in close connection with the education system, research institutions, the labor market, and state policy. Investments directed toward education and science enable the training of highly qualified specialists, the formation of an innovative environment, and the enhancement of scientific potential. As a result, the overall level of innovative development of the national economy increases.

Human capital is one of the most important strategic resources of enterprises and the national economy as a whole. Highly qualified specialists, engineers, and researchers play a significant role in developing new products, improving technological processes, and increasing production efficiency. The quality of human capital and its effective management ensure competitive advantages and accelerate economic growth rates.

In technological development, human capital serves as the main agent responsible for creating, adapting, and implementing technologies. In the context of the digital economy, the rapid development of information technologies, artificial intelligence, and innovative platforms further increases the demand for highly skilled and knowledgeable human capital.

From a socio-economic perspective, investments in human capital are evaluated in terms of both economic and social efficiency. Investments in education, healthcare, and vocational training systems increase labor productivity and contribute to higher employment levels and income growth.

In conclusion, human capital is a leading and decisive factor in ensuring innovative economic development. Economic progress based on innovation is not limited solely to technological advancements but is directly dependent on qualified human resources capable of creating, developing, and implementing these innovations in practice. In all approaches to studying innovative development—namely institutional, resource-based, technological, and socio-economic—human capital occupies a central position.

Improvements in education quality, scientific capacity, professional skills, and creative thinking enhance the effectiveness of innovative activities and contribute to increased labor productivity and accelerated economic growth. Therefore, investments in human capital represent a fundamental prerequisite for the formation of an innovative economy.

- Based on the above conclusions, the following recommendations can be proposed:
- modernizing the education system in accordance with the requirements of an innovative economy and expanding the implementation of practice-oriented and technology-focused educational programs;
- increasing investment in research and development activities to strengthen the potential of highly qualified scientific personnel;
- enhancing integration between science, education, and production in order to develop an innovative environment and ensure the effective utilization of human capital.

References:

1.O’zbekiston Respublikasi Prezidentining, 2022-2026-yillarga 2022- 2026-yillarga mo‘ljallangan Yangi O‘zbekistonning taraqqiyot strategiyasi to‘g‘risida 28.01.2022 yildagi PF 60-son.

2. O‘zbekiston Respublikasi Prezidentining “2019-2021-yillarda O ‘zbekiston Respublikasini innovatsion rivojlantirish strategiyasi to‘g‘risidagi” qarori, 2018-yil 21-sentabr

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Journal: https://www.academicpublishers.org/journals/index.php/ijai

3. O‘zbekiston Respublikasi Prezidentining № PF-5264- sonli “O‘zbekiston Respublikasi Innovatsion rivojlanish vazirligini tashqil etish to‘g‘risidagi”gi Farmoni, 2017-yil 29-noyabr

4. Qodirov, A. “ Mintaqaviy iqtisodiyotda innovatsion faoliyatni rivojlantirishning iqtisodiy asoslari”. 2021 y Iqtisodiyot va ta'lim

5. Bahodirov, S. B. “Klasterlashuv asosida mintaqaviy innovatsion rivojlanishni jadallashtirish yo‘llari”. Innovatsion iqtisodiyot va boshqaruv, 2023y

6. To‘xtasinov, B. “ O‘zbekistonda innovatsion siyosatning institutsional asoslari”. Milliy iqtisodiyot jurnali, 2020y

7. Raxmonqulova, N. O. (2025). HUDUDLAR IQTISODIYOTIDAGI MUHIM TARKIBIY O ‘ZGARISHLAR VA ULARNI BAHOLASH USULLARI (BUXORO VILOYATI MISOLIDA). *YANGI RENESSANSDA ILM-FAN TARAQQIYOTI*, *1*(3), 525-527.
8. Toshov, M. H., & Bobojonova, M. D. (2025). RAQAMLI IQTISODIYOTNI SHAKLLANTIRISH. *Modern Science and Research*, *4*(4), 622-628.

9. Алимова, Ш. А. (2025). РОЛЬ НАЛОГОВОЙ ПОЛИТИКИ В СТИМУЛИРОВАНИИ РЕГИОНАЛЬНОГО РАЗВИТИЯ: ОПЫТ УЗБЕКИСТАНА. *Modern Science and Research*, *4*(5), 52-57.

10. Sodiqova, N. (2025). METHODOLOGY FOR DEVELOPING STUDENTS'TECHNICAL THINKING IN ECONOMICS LESSONS. *Journal of Multidisciplinary Sciences and Innovations*, *1*(3), 674-678.

11. Supiyevna, B. M. (2025). FOREIGN EXPERIENCE OF BANK CREDIT IN FINANCIAL SUPPORT OF SMALL BUSINESSES. *NEW UZBEKISTAN, NEW JOURNAL OF RESEARCH*, *2*(9), 715-721.

12. Mahmudovna, Q. G. (2025). Indicators for assessing the competitiveness of educational institutions. *Multidisciplinary Journal of Science and Technology*, *5*(6), 1956-1959.

13. Qayumovna, J. Z., Ne’matovna, R. N., & Azizovna, P. A. FAVORABLE INVESTMENT CLIMATE FORMATION ISSUES FOR ATTRACTING ACTIVE INVESTMETNS. *GWALIOR MANAGEMENT ACADEMY*, *29*.

14. Bahodirovich, K. B., & Mahmudovna, Q. G. (2025). RISK REGULATION IN BANKING SYSTEM. *MODERN EDUCATIONAL SYSTEM AND INNOVATIVE TEACHING SOLUTIONS*, *1*(5), 231-237.

15. Shadiyev, A. X. (2025). IMPROVING THE ORGANIZATIONAL MECHANISM FOR REGIONAL SOCIO-ECONOMIC DEVELOPMENT. *SHOKH LIBRARY*.

16. Ikromov, E. (2025). FISCAL POLICY: TOOLS AND CHALLENGES FOR ECONOMIC STABILIZATION. *Journal of Applied Science and Social Science*, *1*(4), 287-290.

17. Azimov, B. (2025). INNOVATIVE INFRASTRUCTURE EFFICIENCY ASSESSMENT INDICATORS AND THEIR DEVELOPMENT STAGES. *International Journal of Artificial Intelligence*, *1*(4), 827-832.

ISSN: 2692-515-x, Impact Factor: 9.23
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Journal: https://www.academicpublishers.org/journals/index.php/ijai

18. Bustanovna, J. Z. (2025). METHODOLOGY FOR ASSESSING THE EFFECTIVENESS OF AN ORGANIZATION'S MARKETING STRATEGY. *SHOKH LIBRARY*.

19. Naimova, N. (2025). THE CONCEPT OF A MANAGER, THE ESSENCE OF PERSONAL AND PROFESSIONAL CHARACTERISTICS, AND THEIR CLASSIFICATION. *International Journal of Artificial Intelligence*, *1*(4), 950-954.

20. Bobojonova, M. (2025). MARKETING IN THE GREEN ECONOMY: STRATEGIES, TRENDS, AND IMPACTS. *International Journal of Artificial Intelligence*, *1*(4), 1401-1404.

21. Ibragimov, A. (2025). IMPROVING INVESTMENT AND INNOVATION STRATEGIES IN THE LEATHER AND FUR INDUSTRY. *International Journal of Artificial Intelligence*, *1*(4), 938-941.

22. Djurayeva, M. (2025). ADVANCING COMMERCIAL BANKING THROUGH INNOVATIVE APPROACHES. *International Journal of Artificial Intelligence*, *1*(4), 1125-1128.

23. Umarova, H. (2025). PROCESSES TO IMPROVE LIVING CONDITIONS AND ENSURE EMPLOYMENT OF THE POPULATION IN RURAL AREAS IN UZBEKISTAN. *Journal of Applied Science and Social Science*, *1*(3), 213-217.