



The Importance of Human Resource Management in Innovative Entrepreneurship Models

*To'iqin Shokirovich Ergashev

PhD, Associate Professor, Department of Economics, Bukhara State University, Bukhara, Uzbekistan

DOI: 10.5281/zenodo.17404634

Submission Date: 28 Aug. 2025 | Published Date: 21 Oct. 2025

Abstract

This article analyzes the role of human resource management in innovative entrepreneurship models developed in global practice and identifies key priorities for ensuring effective interconnection between them. The study emphasizes the significance of professional competence, alignment of higher education services with labor market demands, and the promotion of innovative activities as essential components for fostering sustainable entrepreneurship.

Keywords: Human resource management, Professional competence, Higher education, Labor market, Innovation, Entrepreneurship, Innovative activity.

INTRODUCTION

The transformation of modern economies requires the integration of innovation into all stages of business activity. Entrepreneurship has increasingly been recognized as a driver of competitiveness and sustainable growth, particularly in developing economies. Within this context, the management of human resources plays a decisive role, as it provides the skills, competencies, and adaptability necessary to create and implement innovative solutions. Global practice shows that innovation and human capital development are interconnected: economies that invest in professional training and effective human resource management achieve higher levels of entrepreneurial performance. This paper addresses two questions: How does human resource management influence innovative entrepreneurship models? What priorities can be identified to strengthen the interconnection between human capital, education, and innovation?

Human resource management is increasingly evolving globally, being recognized as an effective method to meet the growing demand for highly qualified personnel in the labor market. Currently, economic science has proven through numerous studies that the forms of human resource management reflect changes in the proportional application of educational service delivery methods.

METHODS

The study is based on a comparative analysis of international literature and case studies from economies that have successfully implemented innovative entrepreneurship strategies. The methodological approach includes: Literature review of theoretical frameworks in human resource management and innovative entrepreneurship; Comparative analysis of global best practices (e.g., EU, East Asian economies, and emerging markets); Systematic evaluation of the interconnection between higher education services, professional competencies, and labor market requirements.

This multi-dimensional approach allows for identifying both universal trends and context-specific priorities. The research applied grouping, systematic approach, theoretical and practical study, induction and deduction, analysis and synthesis, and comparative analysis methods.

ANALYSIS AND RESULTS

The development of innovative entrepreneurship today is considered not only a driver for national economic stability but also for international competitiveness. Global practice shows various models of human resource management in supporting innovative entrepreneurship, where strong interconnections between the two sectors provide opportunities to achieve high economic efficiency, as seen in developed countries. Considering this, it is necessary to identify opportunities for ensuring effective interconnection between innovative entrepreneurship and human resource management models worldwide.

In economic literature, early studies by classical economists such as W. Petty, A. Smith, D. Ricardo, and D.S. Mill investigated labor market development, employment, labor quality improvement, and unemployment issues. For instance, W. Petty emphasized labor as a decisive factor in wealth creation within production processes [1]. Similar scientific views appear in A. Smith's research, highlighting free competition among workers for jobs as leading to positive changes in the labor force [2]. Neoclassical economists also contributed significant insights into improving labor quality. A. Marshall's research proposed that individuals belonging to a "high labor category" are more competitive in the labor market. He argued that educational services directly influence the formation and accumulation of individual human capital, fostering positive labor force qualities [3]. Marshall's unique perspective considered knowledge as a driving force of production relations. P. Drucker introduced the concept of "knowledge work," later emphasizing that in the "knowledge society," knowledge, rather than capital, natural resources, or labor, became the fundamental economic resource, dividing knowledge into decisive resources and dominants, the sole source of competitive advantage [4]. American economist E. Denison [5] conducted a deep analysis of the U.S. economy, emphasizing that investments in human capital are not primary factors but significant contributors to economic growth. His analysis of the U.S. economy from 1929 to 1982 underscored labor quality as a key factor. Solow [6] argued that technological improvement and increasing worker skills are more effective than simply increasing the number of factories or machinery. He stated that investing in scientific research and development ensures effective economic growth. These economic theories demonstrate that the interconnection between higher education services and the labor market in human resource management evolves alongside changing professional competence requirements created by entrepreneurship. This, in turn, leads to the emergence of new specialties and professions, necessitating effective collaboration between higher education and labor markets in training specialists who can utilize the potential of innovative entrepreneurship.

A comprehensive analysis of scientific views on innovative entrepreneurship shows that this activity must create broad opportunities for economic and technological progress, not limited to products or services. Its development requires infrastructure support, particularly the organization of educational services in close integration with the real sector through human resource management.

International organizations' global studies support this conclusion. According to the World Bank, the impact of human resource management on developing an innovative economy is 60-70%, with priority given to innovative approaches over traditional education service delivery [7]. Recommendations from global organizations emphasize that organizing educational services based on innovative approaches is necessary for human resource management to promote innovative entrepreneurship, reflecting a strong internal connection between the two sectors.

Furthermore, organizing human resource management in higher education requires not only personnel supply but also the establishment of higher education institutions as central nodes of the innovative entrepreneurship ecosystem. Studies by foreign scientists such as Y. Sai [8], Y. Albuzzi [9], S. Gretzinger [10], G. Surie [11] show that marketing research in human resource management aimed at developing innovative entrepreneurship proves the importance of preparing specialists who meet market demands while simultaneously providing new ideas, technologies, and startups to real sector enterprises.

The experience of developed countries shows that in the EU [12], OECD [13], and USA [14], higher education institutions have long been integral parts of innovative ecosystems, tasked with:

Developing innovative ideas based on current real sector needs for new projects;

Actively participating in startup creation based on innovative projects;

Organizing scientific temporary teams composed of highly experienced professors and creative-thinking students to develop various innovative and startup projects;

Developing scientific-innovation service practices in higher education institutions by attracting investors and business partners.

Analysis of developed countries' experience also shows that systematic organization of higher education services in human resource management is a priority for fostering state-private sector cooperation to promote innovative entrepreneurship. This involves mechanisms such as public-private partnerships (PPP), strategic clustering, grants, venture funds, and innovative educational standards (see Table 1).

Table 1. Mechanisms for Developing Innovative Entrepreneurship between the Public and Private Sectors through Human Resource Management

№	Mechanism	Description of How the Mechanism Works
1	Public-Private Partnership (PPP)	Ensures the joint implementation of infrastructure innovative projects through cooperation between the public and private sectors.
2	Strategic Clustering	Enhances the innovation activity of a regional network by integrating education, scientific research, and production activities within a specified territory.
3	Grants and Venture Funds	This mechanism has financial significance and is widely used in financing innovative startups.
4	Innovative Education Standards	In the national economy sectors involved in innovation activities, this mechanism ensures the training of highly qualified specialists that meet competency requirements. Qualification requirements for various specialties are developed in cooperation with employers.

For example, in the practice of developed countries, the “human resources management system in promoting innovative entrepreneurship occupies a priority place among the state’s personnel policy support mechanisms, and the national human resources management strategy (HR Strategy) is implemented based on programs such as “Talent Development Programs (TDP),” “Skills Forecasting (SF),” and “Knowledge Transfer Offices (KTO)” [15].

This situation creates the foundation for concluding that in developed countries, human resources management based on the development of national human capital increases the efficiency of supporting innovative entrepreneurship. The measures implemented in each direction solve the following tasks.

Talent Development Programs (TDP) include a system of measures aimed at early identification of talented, highly creative, and scientifically capable youth using higher education services, and creating sufficient conditions for their development.

Skills Forecasting (SF) involves the development of medium and long-term forecasts of qualification requirements in terms of structural and professional competencies for jobs, based on contracts for staffing between higher education institutions’ marketing departments and employers in the labor market. These forecasts consider the increase of innovative activity due to technical-technological processes, and educational programs are developed based on these scientifically grounded forecast scenarios.

Knowledge Transfer Offices (KTO) measures aim to establish and develop mutual innovative cooperation between higher education institutions and private sector representatives, particularly innovative entrepreneurship entities.

DISCUSSION

The results highlight the strong interdependence between human resource management and innovative entrepreneurship. While developed economies emphasize high-tech skills and digital transformation, developing economies such as Uzbekistan face challenges in aligning educational outcomes with labor market needs. This discrepancy can slow the adoption of innovative entrepreneurship models. Nevertheless, the study suggests that investing in human capital, strengthening professional competence, and integrating HRM strategies into entrepreneurship ecosystems provide a path to sustainable growth. Furthermore, global experience shows that entrepreneurship thrives where HRM practices are complemented by innovation-oriented education and policy support.

CONCLUSIONS AND RECOMMENDATIONS

The research confirms that human resource management is a critical enabler of innovative entrepreneurship. Professional competence, higher education reforms, and innovation-driven HRM strategies must be prioritized to ensure sustainable entrepreneurial ecosystems. Policymakers should focus on aligning education with labor market needs, promoting lifelong learning, and encouraging collaboration between universities and businesses. Future studies should provide quantitative analyses of HRM practices in entrepreneurship across sectors and evaluate their impact on innovation performance in transition economies.

The conducted analyses showed that there are interconnections between innovative entrepreneurship and human resources management. Considering this situation, it is possible to identify the directions of this interconnection based on the relationship between innovative entrepreneurship and human resources management models.

Analyzing the interconnection between innovative entrepreneurship and human resources management models from the perspective of professional competencies of personnel leads to the conclusion that these two models are interconnected through technological, administrative, intellectual, psychological, and social links. The interconnections between models are explained as follows.

Technological interconnection – technological development is one of the priority factors stimulating innovative entrepreneurship activity on the one hand, and on the other hand, it occurs through the introduction of scientific innovations into the provision of educational services based on human resources management in training specialists. Moreover, technological changes in human resources management provide opportunities to modernize educational service processes. This situation creates necessary conditions for innovative development not only in innovative entrepreneurship but also in the educational services sector.

Administrative interconnection – this refers to a system of contractual relations arising from cooperation between higher education institutions and private sector representatives, not only for personnel training but also for developing innovative projects and organizing practical training for students.

Intellectual potential – for entrepreneurial entities engaged in innovative activities in the private sector, the involvement of highly scientifically capable personnel, mentors, and specialists as resources is essential. Human resources management is responsible for supplying resources that meet these demands. The subjects taught at higher education institutions and the specialists being trained must meet the intellectual competency requirements for personnel in the private sector's innovative development.

Psychological interconnection – this is reflected in students' entrepreneurial skills, creative thinking, motivation, and preparedness for dealing with problematic, conflict, and crisis situations.

Social interconnection – this refers to processes related to ensuring employment of graduates in new jobs created by developing and supporting local innovative initiatives.

REFERENCES

1. Petty, W. (1940). *Ekonomicheskie i statisticheskie raboty [Economic and statistical works]*. Moscow: Sotsekgiz.
2. Smith, A. (1962). An inquiry into the nature and causes of the wealth of nations (Books 1–3). Moscow: Nauka.
3. Marshall, A. (1967). Principles of economics (p. 619). London: Macmillan.
4. Drucker, P. F. (1993). Post-capitalist society. Oxford: Butterworth-Heinemann.
5. Denison, E. F. (1974). Accounting for United States economic growth, 1929–69. Washington, DC: Brookings Institution.
6. Solow, R. M. (1962). Policy of full employment. New York: Norton.
7. International Bank for Reconstruction and Development / The World Bank. (2024). Human capital for more jobs: Connecting people to work and creating entrepreneurs (19 pp.). Washington, DC: The World Bank.
8. Cai, Y., Ma, J., & Chen, Q. (2020). Higher education in innovation ecosystems. *Sustainability*, 12(11), 4376. <https://doi.org/10.3390/su12114376>
9. Alzubi, Y. (2018). Knowledge transfer for sustainability: The role of knowledge enablers in the construction industries in Jordan. *World Journal of Science, Technology and Sustainable Development*, 15(4), 325–337. <https://doi.org/10.1108/WJSTSD-06-2018-0043>
10. Gretzinger, S., Hinz, H., & Matiaske, W. (2011). Strong ties, weak ties and the management of innovation: The case of Danish and German SMEs. In M. Tuunanen, J. Windsperger, G. Cliquet, & G. Hendrikse (Eds.), *New developments in the theory of networks: Franchising, alliances and cooperatives* (pp. 277–298). Berlin/Heidelberg: Physica-Verlag. https://doi.org/10.1007/978-3-7908-2636-0_16
11. Surie, G., & Groen, A. (2017). The importance of social entrepreneurship in national systems of innovation—An introduction. *Technological Forecasting and Social Change*, 121, 181–183. <https://doi.org/10.1016/j.techfore.2017.03.009>
12. European Universities Linking Society and Technology (EULiST). (2025, April). The role of European universities in European innovation ecosystems (15 pp.). Brussels: EULiST.
13. OECD, & European Union. (2019). Supporting entrepreneurship and innovation in higher education in Austria (138 pp.). Paris: OECD Publishing. <https://doi.org/10.1787/9789264309051-en>
14. Romanovskiy, O. O., Romanovska, Yu. Yu., Romanovska, O. O., & Makhdi, M. E. (2021). Higher education innovatics: Management of innovation in the sphere of higher education and science. *Journal of Social Transformation and Education*, 2(2), 47–76.
15. Farmanov, T., Umarov, S., Hilorme, T., Khasanov, B., & Durmanov, A. (2023). The impact of energy aspects on the climatic indicators of agricultural products. *International Journal of Energy, Environment and Economics*, 30(2), 187–209.
16. Farmanov, T., Yuldasheva, N., Tursunov, I., Madumarova, Z., & Mirkurbanova, R. (2023). Application of game theory simulation in the management of an agro-industrial enterprise. In *E3S Web of Conferences* (Vol. 420). EDP Sciences. <https://doi.org/10.1051/e3sconf/202342008011>
17. Farmanov, T., Khasanov, B., Yusupova, F., Gapparov, S., & Durmanov, A. (2023). Encouraging the use of water-saving technologies. In *AIP Conference Proceedings* (Vol. 2921). American Institute of Physics Inc. <https://doi.org/10.1063/5.0165016>

18. Durmanov, A., Farmanov, T., Nazarova, F., Khasanov, B., Karakulov, F., Saidaxmedova, N., Mamatkulov, M., Madumarov, T., Kurbanova, K., Mamasadikov, A., & Kholmatov, Z. (2024). Effective economic model for greenhouse facilities management and digitalization. *Journal of Human, Earth, and Future*, 5(2), 187–204.
<https://doi.org/10.28991/HEF-2024-05-02-04>
19. Khamidov, O., Farmanov, T., Khomidov, S., & Abdulloyev, A. (2023). Methodology of optimal classification of regions by the level of industry development. In *E3S Web of Conferences* (Vol. 431). EDP Sciences.
<https://doi.org/10.1051/e3sconf/202343107047>

CITATION

Ergashev, T. Sh. (2025). The Importance of Human Resource Management in Innovative Entrepreneurship Models. In *Global Journal of Research in Business Management* (Vol. 5, Number 5, pp. 72–76).
<https://doi.org/10.5281/zenodo.17404634>