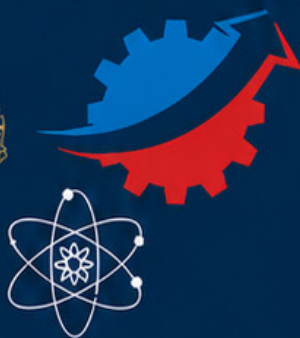


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& IQTISODIYOT

ijtimoiy-iqtisodiy, innovatsion texnik,
fan va ta'limga oid ilmiy-amaliy jurnal

2026-YIL
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- 05.01.01 – Muhandislik geometriyasi va kompyuter grafikasi. Audio va video texnologiyalari
- 05.01.02 – Tizimli tahlil, boshqaruv va axborotni qayta ishlash
- 05.01.03 – Informatikaning nazariy asoslari
- 05.01.04 – Hisoblash mashinalari, majmualari va kompyuter tarmoqlarining matematik va dasturiy ta'minoti
- 05.01.05 – Axborotlarni himoyalash usullari va tizimlari. Axborot xavfsizligi
- 05.01.06 – Hisoblash texnikasi va boshqaruv tizimlarining elementlari va qurilmalari
- 05.01.07 – Matematik modellash
- 05.01.11 – Raqamli texnologiyalar va sun'iy intellekt
- 05.02.00 – Mashinasozlik va mashinashunoslik
- 05.02.08 – Yer usti majmualari va uchish apparatlari
- 05.03.02 – Metrologiya va metrologiya ta'minoti
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- 05.05.05 – Issiqlik texnikasining nazariy asoslari
- 05.05.06 – Qayta tiklanadigan energiya turlari asosidagi energiya qurilmalari
- 05.06.01 – To'qimachilik va yengil sanoat ishlab chiqarishlari materialshunosligi
- 05.08.03 – Temir yo'l transportini ishlatish
- 05.08.06 – "G'ildirakli va gusenisali mashinalar va ularni ishlatish" (texnika fanlari)
- 05.09.01 – Qurilish konstruksiyalari, bino va inshootlar
- 05.09.04 – Suv ta'minoti. Kanalizatsiya. Suv havzalarini muhofazalovchi qurilish tizimlari
- 10.00.06 – Qiyosiy adabiyotshunoslik, chog'ishtirma tilshunoslik va tarjimashunoslik
- 10.00.04 – Yevropa, Amerika va Avstraliya xalqlari tili va adabiyoti
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- 08.00.03 – Sanoat iqtisodiyoti
- 08.00.04 – Qishloq xo'jaligi iqtisodiyoti
- 08.00.05 – Xizmat ko'rsatish tarmoqlari iqtisodiyoti
- 08.00.06 – Ekonometrika va statistika
- 08.00.07 – Moliya, pul muomalasi va kredit
- 08.00.08 – Buxgalteriya hisobi, iqtisodiy tahlil va audit
- 08.00.09 – Jahon iqtisodiyoti
- 08.00.10 – Demografiya. Mehnat iqtisodiyoti
- 08.00.11 – Marketing
- 08.00.12 – Mintaqaviy iqtisodiyot
- 08.00.13 – Menejment
- 08.00.14 – Iqtisodiyotda axborot tizimlari va texnologiyalari
- 08.00.15 – Tadbirkorlik va kichik biznes iqtisodiyoti
- 08.00.16 – Raqamli iqtisodiyot va xalqaro raqamli integratsiya
- 08.00.17 – Turizm va mehmonxona faoliyati

Ma'lumot uchun, OAK

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HUMAN CAPITAL DEVELOPMENT AND ITS IMPACT ON THE BUSINESS ENVIRONMENT IN UZBEKISTAN: A LITERATURE REVIEW

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Abstract. Human capital development is widely recognized as one of the principal drivers of productivity, innovation, and global competitiveness. This transition is particularly important for emerging economies, as they seek to shift from resource-based to knowledge-based development models. Economic reforms in Uzbekistan have fostered the development of a market-oriented economy, where strategic investment in human capital has become one of the key priorities of national policy. In today's dynamic environment, a skilled workforce is a critical factor in creating a favorable business environment. This study focuses on human capital development in Uzbekistan and its relationship with the private sector and small and medium-sized enterprises (SMEs). It also examines structural challenges, including skills shortages and brain drain. Through a review of the existing literature, the study provides an overview of how education, government policy, and the business sector interact to shape Uzbekistan's economic future.

Keywords: human capital, business environment, skills development, economic growth, labor market, education system, skill mismatch, labor migration, productivity, innovation, SMEs, Uzbekistan.

Аннотация. Развитие человеческого капитала широко признано одним из ключевых факторов производительности, инновационного развития и глобальной конкурентоспособности. Этот переход особенно важен для развивающихся экономик, стремящихся перейти от моделей, основанных на использовании природных ресурсов, к экономике, основанной на знаниях. Экономические реформы, проводимые в Узбекистане, способствовали формированию рыночно ориентированной экономики, в которой стратегическое развитие человеческого капитала стало одним из приоритетных направлений государственной политики. В современных условиях квалифицированная рабочая сила является важнейшим фактором формирования благоприятной бизнес-среды. Исследование посвящено развитию человеческого капитала в Узбекистане и его взаимосвязи с частным сектором и малым и средним предпринимательством (МСП). Кроме того, рассматриваются такие структурные проблемы, как дефицит квалифицированных кадров и «утечка умов». На основе анализа научной литературы представлено обобщённое представление о том, каким образом образование, государственная политика и бизнес взаимодействуют, формируя экономическое будущее Узбекистана.

Ключевые слова: человеческий капитал, бизнес-среда, развитие навыков, экономический рост, рынок труда, система образования, несоответствие квалификации, трудовая миграция, производительность, инновации, МСП, Узбекистан.

Annotatsiya. Inson kapitalini rivojlantirish mahsuldorlik, innovatsiyalar va global raqobatbardoshlikning asosiy omillaridan biri sifatida keng e'tirof etiladi. Ushbu jarayon, ayniqsa, resurslarga asoslangan iqtisodiy modeldan bilimlarga asoslangan rivojlanish modeliga o'tishni maqsad qilgan rivojlanayotgan mamlakatlar uchun muhim ahamiyat kasb etadi. O'zbekistonda amalga oshirilayotgan iqtisodiy islohotlar bozorga yo'naltirilgan iqtisodiyotning shakllanishiga xizmat qilmoqda hamda inson kapitalini strategik rivojlantirishni davlat siyosatining ustuvor yo'nalishlaridan biriga aylantirdi. Zamonaviy sharoitda malakali ishchi kuchi qulay biznes muhitini shakllantirishning muhim omili hisoblanadi. Tadqiqot O'zbekistonda inson kapitalini rivojlantirish va uning xususiy sektor hamda kichik va o'rta biznes (KO'B) bilan o'zaro bog'liqligini tahlil qiladi. Shuningdek, unda malakali kadrlar tanqisligi va "aqlar oqimi" (brain drain) kabi tarkibiy muammolar ko'rib chiqiladi. Ilmiy adabiyotlar tahlili asosida ta'lim tizimi, davlat siyosati va biznesning O'zbekiston iqtisodiy kelajagini shakllantirishdagi o'zaro ta'siri yoritiladi.

Kalit so'zlar: inson kapitali, biznes muhiti, ko'nikmalarni rivojlantirish, iqtisodiy o'sish, mehnat bozori, ta'lim tizimi, ko'nikmalar nomutanosibligi, mehnat migratsiyasi, mahsuldorlik, innovatsiyalar, KO'B, O'zbekiston.

INTRODUCTION

Human capital is one of the products of self-acquired skills, knowledge, intrinsic abilities, and well-being that individuals invest in to create economic value [14]. Unlike physical capital, human capital is embodied in individuals; therefore, its formation is a complex socio-economic process involving education, training, and healthcare [14]. In the modern world, human capital is no longer regarded as a secondary asset but has become a major source of innovation and competitiveness. In emerging markets such as Uzbekistan, its importance is particularly significant. Since gaining independence in **1991**, Uzbekistan has undergone profound transformations, particularly since the reform process began in **2017** [11]. Globalization and economic liberalization require a workforce that is not only educated but also technologically competent and adaptable to changing market demands. As Uzbekistan continues to modernize its industrial base, increasing attention is being given to the relationship between investment in human capital and the country's long-term GDP growth [11]. This paper examines how Uzbekistan is developing its human capital and explores the challenges associated with aligning the outcomes of the education sector with the evolving needs of the expanding private sector.

One of the fundamental principles of human capital development is based on the premise that education and training are investments capable of generating measurable returns not only for individuals but also for society as a whole [14]. Drawing on the experience of transition economies, human capital development theory suggests that the quality of labor is more important than its quantity in overcoming the middle-income trap. In the context of Uzbekistan, human capital serves as a bridge between traditional manufacturing and high-technology services. When the business environment provides appropriate incentives, individuals are encouraged to invest in themselves, creating a self-reinforcing cycle of innovation and productivity. In addition, human capital is a key driver of endogenous economic growth, as improvements in workforce quality can generate sustainable long-term economic growth when supported by a favorable institutional environment. The relationship between human capital and the business environment is mutually reinforcing. A transparent and competitive business environment, together with a highly skilled workforce, creates favorable conditions for attracting foreign direct investment (FDI) and promoting the sustainable growth of local enterprises.

LITERATURE REVIEW

A growing body of empirical research substantiates the claim that skills gaps, rather than a lack of formal education, constrain employment outcomes in Uzbekistan. **Study [1]** finds that cognitive and non-cognitive skills gaps among workers are stronger predictors of employability than years of schooling, while **study [2]** reports that only around one in five employers considers technical and vocational training relevant to their operational needs, highlighting a persistent disconnect between educational curricula and labor market demand. **Study [8]** extends this argument to the youth population, emphasizing that supply-side reforms in education and training are necessary but not sufficient without complementary demand-side job creation.

Beyond the quality of skills, several studies highlight structural challenges in the way the labor market absorbs new entrants. **Study [4]** finds that most new labor market entrants in Uzbekistan have been absorbed by the informal private sector rather than formal employment, reflecting limited aggregate demand for labor. **Study [15]** similarly concludes that Uzbekistan's capital-intensive growth model has not generated employment at a pace commensurate with economic growth, reinforcing the observations presented in **studies [11] and [12]** regarding the relationship between economic reforms and labor market outcomes.

A separate but related strand of the literature examines how foreign investment and government policy interact with human capital to influence business performance. **Study [13]** shows that FDI inflows alone have not translated into stronger employment outcomes in Uzbekistan, arguing that limited absorptive capacity—including human capital and financial market development—constrains the productivity gains associated with foreign investment. **Study [16]**, focusing on the agricultural sector, finds a positive and statistically significant interaction between FDI and human capital, suggesting that these two factors reinforce one another when complementary conditions are present. From a policy perspective, **study [3]** documents ongoing government efforts to improve the Human Capital Index, including the expansion of higher education and the establishment of a digital monitoring system. At the same time, **study [5]** notes that systemic factors—including skill mismatches, regional disparities in access to education, and uneven technological infrastructure—continue to limit the full effectiveness of these investments. **Study [10]** further adds that digital upskilling remains relatively underdeveloped among small and medium-sized enterprises, thereby limiting the private sector's capacity to enhance its competitiveness in an increasingly digital economy.

Taken together, this body of research reinforces the conclusion that the business environment is becoming increasingly dependent on human capital as a driver of sustainable growth. At the same time, it indicates that



institutional, educational, and labor market systems continue to evolve toward closer alignment with these emerging requirements. This evolving relationship provides the foundation for the theoretical and empirical discussion presented in the remainder of this paper.

RESEARCH METHODOLOGY

This paper adopts a narrative literature review approach to examine the relationship between human capital development and the business environment in Uzbekistan. Relevant sources were identified through academic databases and institutional repositories, including Google Scholar, using search terms such as “*human capital development Uzbekistan*,” “*business environment Uzbekistan*,” “*skills shortage*,” “*labor migration Uzbekistan*,” and “*SME development Uzbekistan*.” Priority was given to peer-reviewed journal articles and research papers published in **2024–2025**, reflecting the most recent stage of the country’s ongoing economic reform process.

The selection of sources was guided by their thematic relevance to three interconnected areas: education and skills development, government policy initiatives, and private sector engagement in human capital development. Studies that did not directly address the Uzbek context or that focused exclusively on macroeconomic indicators without reference to human capital were excluded from the review. The selected literature was then organized thematically around the theoretical background, the current state of human capital development, structural challenges, and their implications for business performance. Together, these themes form the basis of the subsequent sections of this paper.

ANALYSIS AND RESULTS

Human Capital Development in Uzbekistan Education and Skills Development

Education has been placed at the center of the Government of Uzbekistan’s **New Uzbekistan** development strategy. The current reform agenda focuses on three key dimensions: access, quality, and alignment with labor market needs. Considerable attention has been devoted to increasing higher education enrollment, which has historically lagged behind that of regional counterparts [9]. The ongoing modernization of the higher education system is expected to equip the labor force with the skills required in STEM (Science, Technology, Engineering, and Mathematics) disciplines and management [7] (Figure 1).

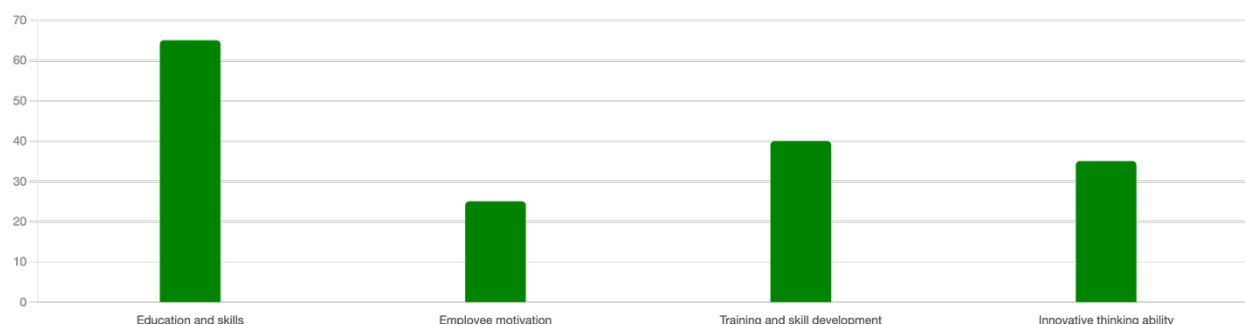


Figure 1. Impact of human capital on small business success (%)¹

Source:[14], p. 162.

The data presented in **Figure 1** indicate that education and skills are regarded as the most important contributors to small business success, accounting for **65%** of the total responses [14]. These findings suggest that improving workers’ qualifications and developing their skills can significantly enhance the performance of small businesses. The second most influential factor is training and skills development, representing **40%** of the responses [14]. This further demonstrates that continuous professional development contributes substantially to improving organizational performance (Figure 2).

¹ Source: [14], p. 162.

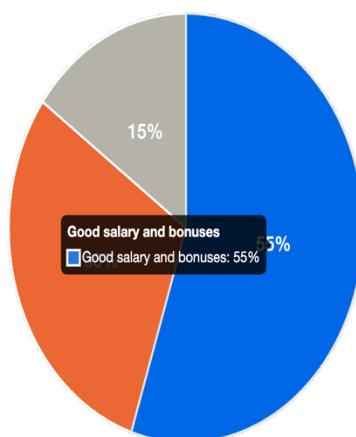


Figure 2. The role of motivation in small business (%)²

The results presented in **Figure 2** indicate that motivation plays a significant role in enhancing employee performance. Competitive salaries and bonuses (**55%**) together with career development opportunities (**30%**) contribute substantially to improving employee productivity in small businesses, thereby supporting overall organizational success. Workplace environment and working conditions (**15%**) are also recognized as contributing factors, although respondents assigned them comparatively less importance than the other factors considered [14].

Creative thinking is identified as the third most important component of small business success, accounting for **35%** of the responses. This finding suggests that small businesses benefit from employees who possess innovative and creative thinking skills. The introduction of international educational standards and the establishment of foreign university branches in Tashkent and other regions represent important steps toward narrowing the knowledge gap. Similarly, the vocational education and training (VET) system has been restructured to promote the concept of dual education, whereby students divide their time between classroom learning and practical training in the manufacturing and construction sectors [6].

Government Policies and Initiatives

Uzbekistan has established an institutional framework for human capital development supported by state programs that promote lifelong learning and digital literacy [6]. The role of the government has gradually evolved from that of a provider of education to that of a facilitator of a comprehensive learning ecosystem [7]. Key policy initiatives include:

Substantial investment in internet infrastructure to expand access to online education, particularly in rural areas.

Tax incentives for businesses that invest in employee retraining and workforce upskilling.

The **One Million Uzbek Coders** program, designed to develop a digitally skilled workforce capable of participating in the global information technology sector.

These initiatives represent not only important social policies but also strategic economic measures aimed at transforming Uzbekistan into a knowledge-based economy, where labor productivity serves as a key source of competitive advantage.

Business Sector Development

The private sector, particularly small and medium-sized enterprises (SMEs), is among the sectors most strongly influenced by the quality of human capital. In Uzbekistan, human capital is increasingly recognized as a strategic resource rather than merely an organizational expense [12]. Businesses are strengthening their resilience to economic change through internal training and workforce development programs implemented within SMEs. Furthermore, business development is increasingly shifting toward high-value-added services [9].

To enhance organizational performance, greater emphasis should be placed on developing soft skills, including critical thinking, leadership, and emotional intelligence, alongside technical competencies. Organizations that successfully implement effective Human Resource Development (HRD) practices are better positioned to establish international partnerships and participate in global value chains [9].

Challenges in Human Capital Development

Despite the positive progress achieved in recent years, several structural challenges remain that may influence the effectiveness of ongoing reforms.

The education system continues to face the challenge of aligning the skills it provides with the evolving

2 Source: [14], p. 162.



needs of the economy. This situation has influenced the performance of the business sector in Uzbekistan and highlights the importance of strengthening the connection between education and labor market requirements [12].

Many citizens of Uzbekistan seek employment opportunities abroad. While labor migration contributes positively to national income through remittances, it also presents challenges related to the availability of skilled labor within the domestic economy.

The disparity between educational outcomes and labor market requirements continues to influence the development of human capital in Uzbekistan [12].

In addition, the implementation of human capital development initiatives within the private sector remains at different stages of development, contributing to skill gaps in certain sectors of the economy [9].

Impact on Business Sector Performance

Human capital development has a direct impact on business sector performance by enhancing organizational effectiveness in several ways. A skilled workforce improves organizational performance through higher productivity [6]. It also promotes innovation by increasing the availability of knowledge, competencies, and professional expertise. As a result, organizations become more competitive in both domestic and international markets through continued investment in human capital development [6].

CONCLUSION AND RECOMMENDATIONS

The following recommendations may contribute to the further development of human capital in Uzbekistan's business sector:

Strengthen cooperation between educational institutions and the business sector to ensure that educational programs are aligned with labor market requirements.

Encourage private sector institutions to invest in workforce development. At the same time, promote measures that support balanced labor migration and strengthen conditions that encourage skilled professionals to contribute to the domestic economy.

Foster a culture of continuous learning that supports lifelong learning and professional development.

Human capital development plays a vital role in the sustainable development of Uzbekistan's business sector and the national economy. Despite the substantial progress achieved in human capital development and government initiatives, opportunities remain to further strengthen the business environment through continued investment in education, skills development, and workforce capacity. Addressing these areas will contribute to building a more competitive, innovative, and sustainable business environment in Uzbekistan.

REFERENCES

1. Ajwad M. I., Abdulloev I., Audy R., de Laat J., Kataoka S., Larrison J., Nikoloski Z., Torracchi F. *The Skills Road: Skills for Employability in Uzbekistan*. Washington, DC : World Bank, 2014.
2. Asian Development Bank. *Skills Development in Uzbekistan: A Sector Assessment*. Manila : Asian Development Bank, 2022.
3. Bahodirovna M. U. Priority Directions for Improving the Quality of Human Capital in the Republic of Uzbekistan // *Central Asian Journal of Innovations on Tourism Management and Finance*. – 2025. – Vol. 6, No. 4. – P. 1500–1508.
4. Campbell D., Rönnås P. *Towards Full and Productive Employment in Uzbekistan: Achievements and Challenges*. Geneva : International Labour Organization, 2020.
5. Eshmirzaev F. I., Salimova Z. S. Human Capital and the Dynamics of Innovative Development in Uzbekistan // *American Journal of Economics and Business Management*. – 2025. – Vol. 8, No. 10.
6. Khamdamov S. The Role of Education and Human Capital Development in Uzbekistan's Economic Growth // *American Journal of Management Practice*. – 2024.
7. Majidov K. Development of Human Capital in Accordance with Economic and Social Conditions in Uzbekistan // *European Journal of Economics, Finance and Business Development*. – 2025.
8. Marguerie A., Honorati M. *Youth Employment in Uzbekistan: Opportunities and Challenges*. Washington, DC : World Bank, 2021.
9. Nurova F. S. Human Capital Development and Economic Growth in Uzbekistan // *Iqtisodiy Taraqqiyot va Tahlil*. – 2024.
10. OECD. *Digital Skills for Private Sector Competitiveness in Uzbekistan*. Paris : OECD Publishing, 2023.
11. Qodirjonov D. Labor Migration and Skill Shortages in Uzbekistan: Implications for Human Capital and Development // *Global Economic Review*. – 2025.
12. Saidov S. Sh., Bozorboyev E. Human Capital Development Policy in Uzbekistan // *American Journal of Research in Humanities and Social Sciences*. – 2024.
13. Suyunov A. Do Foreign Direct Investments and Bank Credits Affect Employment in Uzbekistan? // *Journal of Economics and Development*. – 2022. – Vol. 24, No. 2. – P. 98–111.
14. Ulugmuradova N. B. The Impact of Human Capital on Small Business Development // *American Journal of Economics and Business Management*. – 2025.



15. World Bank. *Growth and Job Creation in Uzbekistan: An In-Depth Diagnostic*. Washington, DC : World Bank Group, 2018.
16. Zokirov K., Yusupov A., Sherov A., Abdullayev D., Daminova M., Umarova Z. The Effect of Foreign Direct Investment and Human Resources on Economic Progress of the Agricultural Sector in Selected Developing Countries of Asia (with Focus on Uzbekistan) // *Economic Annals-XXI*. – 2024. – Vol. 212, No. 11–12. – P. 10–15.



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