

**Zavhorodnya Elizaveta**

*Postgraduate student at the Department of International Management,  
State University of Trade and Economics*

**Melnyk Tetyana**

*Doctor of Economics,*

*Professor of the Department of International Management,  
State University of Trade and Economics*

DOI: <https://doi.org/10.36059/978-966-397-364-7-54>

## **TALENT POOL STRATEGIC MANAGEMENT TO ENSURE UKRAINE'S ICT SECTOR COMPETITIVENESS**

Recent studies of trends in the development and availability of qualified specialists in the ICT sector of Ukraine [1–4] demonstrate that the talent pool in Ukraine is highly available and exceptional due to a top-grade formal and informal education, strong motivation, and opportunities for IT professionals to develop and grow professionally (internships, educational and training activities of IT clusters, government programmes, etc.). Moreover, as a location for IT outsourcing, Ukraine is quite competitive for the following reasons [1; 4–5]: (1) Ukrainian IT companies offer competitive rates compared to their Western European and North American counterparts (on average, 35–60 USD per hour); (2) the largest pool of highly qualified IT specialists in Eastern Europe, who are proficient in various technologies and programming languages; (3) a strong international brand of Ukrainian IT companies as productive performers with a strong work ethic that guarantees efficient and effective project completion; (4) the ability of Ukrainian IT teams to work effectively with US and European clients due to their good geographic location, English language skills and cultural compatibility.

However, with the outbreak of a full-scale war, a number of challenges and problems have arisen to ensure the competitiveness of Ukraine's ICT sector in the context of its human capital development [6–7]: damage to

digital and business infrastructure impedes the full functioning of IT companies and their ability to provide services; economic instability affects the ability of the state and businesses to invest in basic resources (technologies and training programmes), which in the long run will hinder innovation in the ICT sector; partial disruption of the work of educational institutions, which will lead to a shortage of qualified IT graduates and impede the continuous training, as well as professional development and growth of existing IT specialists; security concerns and reduced options for professional training and career opportunities lead to a gradual "brain drain" abroad; significant impact of the war on the psychological state of IT professionals, their productivity and motivation; lack of proper security and stability creates difficulties in attracting foreign IT talents, investments and technologies; etc.

Given the export-oriented nature of the domestic ICT sector, the decline in the motivation of foreign customers to enter into new contracts and projects with Ukrainian IT companies is already beginning to affect the industry's performance, and has a secondary impact on Ukraine's ability to further maintain and develop its own talent pool: a decline in export (estimated to be at the level of 2021) and tax revenues [8] and the slow recovery of IT labour market vacancies (leading to fierce competition for jobs and the inability of newcomers to start a career in IT). Additionally, the level of foreign contracts is affected by the following factors: (1) the global economic recession, which caused a series of massive layoffs in leading technology TNCs (namely, a shrinking global IT labour market); (2) difficulties with booking employees from mobilization (the legislation does not provide for a mechanism for booking IT employees); (3) the lack of a real mechanism for short-term business trips abroad. It should be noted that the most appropriate solution to the negative trends in foreign contracts is to create a special government agency that would serve as a contact point for foreign clients interested in cooperating with Ukrainian IT companies, providing information, assistance and support throughout the entire contracting process.

In line with this negative impact of the war, a review of the national strategy for human capital development in Ukraine's ICT sector is

necessary to ensure its ability to adapt, retain and grow IT talent, promote innovation, and align with national priorities for sustainable development and competitiveness.

In general, the strategy for the development of human capital in the ICT sector should incorporate three important aspects: 1) building up and developing the ICT sector's talent pool; 2) retaining and motivating experienced IT professionals in Ukraine; and (3) attracting foreign IT professionals to Ukraine to share their experience and ensure further technological development of the domestic ICT sector. It has to be noted that such a systematic approach to working out a national strategy for the development and professional growth of the talent pool will contribute to maintain the position of the ICT sector as one of the most stable and promising sectors of the Ukrainian economy.

Firstly, the development and strengthening of human capital in the ICT sector is crucial for cybersecurity, data protection, and the integrity of the digital infrastructure, allowing it to continue to operate and contribute to Ukraine's economy. Accordingly, the strategic priorities for the development and enhancement of human capital in the ICT sector of Ukraine in the context of war should include:

- 1) investing in educational programmes, specialized courses and seminars adapted to the needs of the ICT sector;
- 2) establishing partnerships with stakeholders (businesses, universities and research institutions);
- 3) supporting initiatives to develop entrepreneurship, innovation, and digital skills for the country's population;
- 4) providing financial incentives, grants, soft loans and scholarships to motivate the development in the ICT sector;
- 5) introducing mentoring, internship programmes and trainings to help newcomers gain practical experience and career development opportunities;
- 6) creation of specialized training centres for the development of ICT skills (basic and advanced);
- 7) providing preferential loans and subsidies to stimulate the launch of technology startups and SMEs in Ukraine;

8) strengthening support for and creation of technology clusters, innovation hubs, and technology parks to facilitate cooperation, knowledge sharing, and networking in the ICT community;

9) amendments to legislation to create a favourable regulatory environment for ICT R&D, patent registration and technology business in the domestic legal framework;

10) cooperation with international organizations, technology companies and educational institutions to create joint programmes for the development of IT talent.

Secondly, to retain IT professionals in Ukraine in order to ensure the stability of the industry, preserve knowledge and experience, and grow the local technological ecosystem and innovation, it is necessary to:

1) ensure an adequate level of life safety for IT professionals in Ukraine (currently, this is almost impossible to implement);

2) provide job opportunities, competitive wages and preferential treatment for IT businesses (currently problematic, given the global downturn in the IT labour market);

3) work out programmes for professional development and growth, advanced training and retraining to maintain and enhance the international competitiveness of the domestic talent pool;

4) popularize flexible working hours and remote work (easy to implement, given the existing labour practices in Ukraine);

5) strengthen the professional community and networking in the ICT sector to ensure knowledge exchange, project collaboration, career counseling, mentoring, etc.

Thirdly, attracting foreign IT professionals to Ukraine can contribute to the international competitiveness of the ICT sector in the long run by bringing in diverse perspectives and experiences, stimulating creativity and cooperation. Priority measures to implement this direction include:

1) promotion of the domestic ICT sector as an attractive environment for the development and professional realization of IT talents through targeted "marketing and recruitment campaigns", networking events, technology summits, conferences and initiatives;

2) simplifying migration processes (obtaining visas, residence and work permits, and other administrative procedures);

3) offering competitive salaries, benefits and incentives in line with the realities of the international IT market;

4) organising support services, such as housing assistance, language training, and cultural integration programmes to help foreign IT professionals adapt to the peculiarities of life in Ukraine (this will have a secondary positive effect on the level of employment in Ukraine);

5) adherence to international standards and best practices on labour ethics;

6) promoting a diverse and inclusive work environment that takes into account different views, experiences, gender, race and social equality, etc.

To summarize, the implementation of these strategic directions for the development of human capital in the ICT sector of Ukraine envisages interrelated measures and requires consolidation of efforts in the Quadruple Helix format (HEIs, government, business, and media- and culture-based public) within Ukraine, along with international organizations and other foreign counterparts.

### **References:**

1. Melnyk T., Zavorodnya Ye. (2023) Competitive advantages of the IT sector of Ukraine. *Foreign-trade: economics, finance, law*, vol. 126, no. 1, pp. 42–59. DOI: [https://doi.org/10.31617/3.2023\(126\)04](https://doi.org/10.31617/3.2023(126)04) (accessed February 23, 2024).

2. Website "Ukraine IT Report 2021". Available at: [https://drive.google.com/file/d/1rDOzj3\\_hKgXflj8czwIVzP8Ct4lBY5eW/view](https://drive.google.com/file/d/1rDOzj3_hKgXflj8czwIVzP8Ct4lBY5eW/view) (accessed February 23, 2024).

3. Website "Ukraine the Home Of Great Devs 2021". Available at: [https://beetroot.co/wp-content/uploads/sites/2/2021/03/Ukraine\\_-the-Home-Of-Great-Devs-2021-\\_-Ebook-v-2.0-2.pdf](https://beetroot.co/wp-content/uploads/sites/2/2021/03/Ukraine_-the-Home-Of-Great-Devs-2021-_-Ebook-v-2.0-2.pdf) (accessed February 23, 2024).

4. Website "Why Outsourcing in Ukraine is Worth the Choice? ". Available at: <https://linkupst.com/blog/it-outsourcing-to-ukraine> (accessed February 23, 2024).

5. Website "Portrait of an IT specialist – 2023. Analytics". Available at: <https://dou.ua/lenta/articles/portrait-2023/> (accessed February 23, 2024).

6. Website "IT Research Resilience 2022: War's Impact on Ukraine's IT Industry". Available at: <https://itcluster.lviv.ua/wp-content/uploads/2023/02/it-research-resilience-2022-public-en.pdf> (accessed February 23, 2024).

7. Website "IT RESEARCH UKRAINE 2023: Adaptability and resilience amidst war". Available at: <https://itcluster.lviv.ua/en/projects/it-research-ukraine/> (accessed February 23, 2024).

8. Website "Tech Industry Dynamics Amidst War: Findings of IT Research Ukraine 2023". Available at: <https://itcluster.lviv.ua/en/tech-industry-dynamics-amidst-war-findings-of-it-research-ukraine-2023/> (accessed February 23, 2024).