20 - 22 March 2026 Lisbon , Portugal

Skill-Based Digital Ecosystems as A New Standard for Recruitment in The Knowledge Economy

Dmytro Hushko , Serhii Hushko , Andrii Shaikan , Oleksii Donchenk

State University of Economics and Technology, Ukraine

Abstract

The rapid transformation of the global labor market driven by digitalization, automation, and the expansion of knowledge-based economies has revealed significant limitations in traditional recruitment systems. Conventional hiring mechanisms relying on resumes, academic credentials, and job titles often fail to capture the practical competencies and adaptive capabilities required in contemporary workplaces. This paper examines skill-based digital ecosystems as an emerging standard for recruitment in the knowledge economy. The study analyzes global labor market trends, identifies inefficiencies in traditional hiring practices, and explores the principles of skills-first recruitment. Using a digital ecosystem platform model, the research demonstrates how artificial intelligence, skill verification mechanisms, and continuous learning pathways improve hiring efficiency and workforce alignment with evolving market demands. The findings indicate that integrating recruitment with skill development and verification reduces time-to-hire, enhances talent matching accuracy, and supports lifelong learning. Skill-based ecosystems establish dynamic talent marketplaces that connect employers, candidates, and training providers within an integrated digital environment. The study concludes that skill-based digital ecosystems constitute a scalable and sustainable framework for modern recruitment and workforce development.

Keywords: Digital Ecosystem; Knowledge Economy; Recruitment Innovation; Skills-Based Hiring; Workforce Development