

Bridging Innovation and Enterprise in Today's High-Tech Entrepreneurship: A Literature Review Study*

Catalin POPESCU, Mirela PANAIT and Irina Gabriela RADULESCU

Petroleum-Gas University of Ploiesti, Romania

Correspondence should be addressed to: Catalin POPESCU, cpopescu@upg-ploiesti.ro

* Presented at the 45th IBIMA International Conference, 25-26 June 2025, Cordoba, Spain

Abstract

The study investigates the transformative impact of the digital revolution on high-tech entrepreneurship, emphasizing the critical role of emerging technologies such as Artificial Intelligence, blockchain, and IoT in shaping the global economy. Motivated by the increasing significance of technology-driven entrepreneurship and the need to understand the dynamics of this rapidly evolving field, the research addresses gaps in the literature regarding the integration of digital innovation, entrepreneurial ecosystems, and policy frameworks. Despite extensive research on entrepreneurship, a comprehensive bibliometric analysis combining technological, educational, and financial dimensions remains limited. To fill this void, the study utilizes the Web of Science (WOS) database, employing a two-step Boolean search strategy to identify relevant publications. An initial search yielded 1554 publications, refined to 500 English-language articles and reviews suitable for analysis using VOSviewer software. The findings reveal that successful high-tech entrepreneurship is interconnected with collaborative frameworks such as the Triple Helix model, involving academia, industry, and government. Access to early-stage financing, integration of emerging technologies, and development of digital entrepreneurial skills are identified as key drivers of sustainable growth. Moreover, the study highlights challenges related to regulatory lag, infrastructure disparities, and geographic concentration of innovation. The results underscore the importance of adaptive management skills, resilient organizational cultures, and comprehensive educational programs in fostering successful tech entrepreneurs capable of navigating constant market changes and uncertainties.

Keywords: High-tech entrepreneurship, technological innovation, digital transformation, entrepreneurial ecosystems, Triple Helix model, Open Innovation, startup competitiveness, academic entrepreneurship