AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

DOI: 10.59610/bbu4.2025.4.15

Sadig Sarvan Isayev,
Ph.D. Student,
Baku Business University,
E-mail: sadigisayev13@gmail.com
ORCID: https://orcid.org/0009-0004-8980-9080

UDC: 330.341.1:378
JEL: L26, O31, I23

UNIVERSITIES AS STRATEGIC AGENTS IN ENHANCING THE EFFICIENCY OF ENTREPRENEURIAL ECOSYSTEMS

A B S T R A C T

The purpose of the research - the study aims to examine the theoretical and practical roles of universities within entrepreneurial ecosystems (EEs), with a particular focus on research and innovation centers (RICs) as pivotal mechanisms for converting academic knowledge into entrepreneurial outcomes.

The methodology of the research - the article employs a comparative and analytical approach, combining theoretical review with case study analysis. Established frameworks are critically examined, and empirical evidence is drawn from leading innovation hubs such as Stanford, MIT, and Cambridge, as well as universities in emerging economies, to illustrate how theoretical insights translate into practice.

The practical importance of the research - the findings provide actionable guidance for policymakers, university leaders, and industry stakeholders on designing and supporting RICs as strategic hubs which will strengthen universities' contributions to entrepreneurial ecosystems and regional economic growth.

The originality and scientific novelty of the research - the study advances existing literature by positioning RICs not merely as supportive infrastructures but as central leverage points that integrate knowledge spillovers, human capital development, and trilateral collaboration into a cohesive system. This perspective underscores the transformative role of universities as active engines of innovation-driven development rather than passive participants in entrepreneurial ecosystems.

Keywords: entrepreneurial ecosystem, universities, research and innovation centers, human capital, commercialization.

INTRODUCTION

An entrepreneurial ecosystem (EE) is a dynamic, interdependent network of actors, institutions, resources, and cultural norms that together enable the creation, scaling, and renewal of new ventures. It encompasses entrepreneurs, universities, firms, investors, public agencies, intermediaries, and the formal and informal rules that govern their interactions. In an era defined

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

by rapid technological change, global knowledge flows, and heightened competitive pressures, robust EEs have moved from being a desirable local feature to a strategic necessity for national and regional economic resilience, innovation-led growth, and inclusive job creation.

Among ecosystem actors, universities occupy a distinct and increasingly central role. Beyond teaching and basic research, modern universities act as knowledge producers, human-capital developers, convenors of cross-sector dialogue, and origin points for commercialization. They host laboratories, incubators, technology transfer offices, and research centers that translate scientific discovery into products, firms, and spillover benefits. As institutional anchors, universities shape norms, supply skilled labour, and often catalyze networks that link industry and government - positioning them as both sources and shapers of entrepreneurial capacity.

This article aims to analyze universities' theoretical and practical roles in shaping entrepreneurial ecosystems, with a deliberate focus on research and innovation centers as the ultimate drivers of future ecosystem development. To do so we will first ground the discussion in established theoretical frameworks - EE theory, the Triple Helix, and human-capital perspectives - and then move to concrete functions universities perform: education, commercialization, infrastructure provision, and network formation. We will examine common barriers and structural constraints that limit university-entrepreneurship linkages, and we will illustrate the arguments through comparative case studies from leading innovation hubs and emerging economies. Throughout, the analysis will maintain a throughline that connects theory to practice and culminates in actionable insights.

Our working thesis is that while universities contribute in multiple ways to entrepreneurial vitality, it is the deliberate design, resourcing, and integration of dedicated research and innovation centers that most reliably convert academic assets into sustained economic and social impact. These centers act as the bridging mechanism—aligning research agendas, mobilizing funding and industry partnerships, incubating ventures, and embedding entrepreneurial culture within academic institutions—making them the pivotal leverage point for policymakers and university leaders seeking to accelerate ecosystem performance.

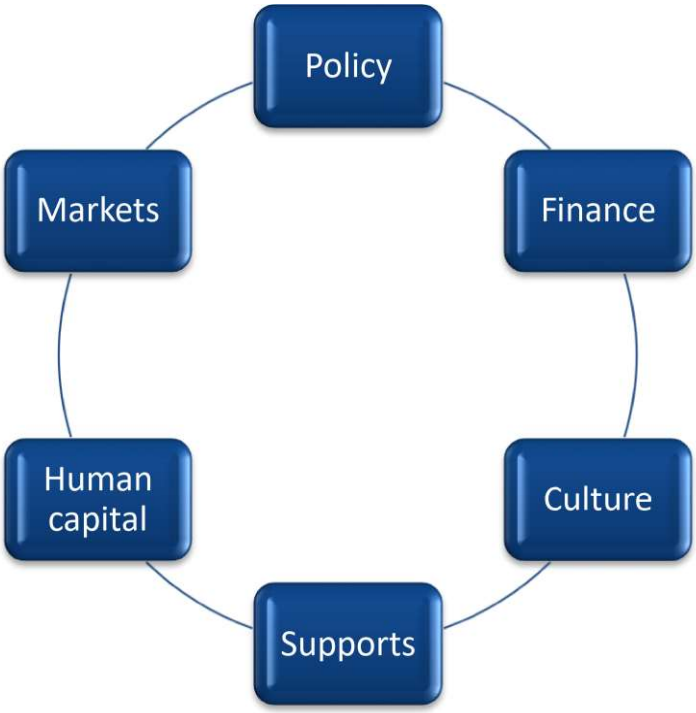
The concept of entrepreneurial ecosystem

The concept of the entrepreneurial ecosystem (EE) has been advanced to explain how different actors, institutions, and cultural norms interact to support entrepreneurship. Contemporary EE research moved quickly from a practitioner-oriented "ingredients" or checklist metaphor (culture, finance, talent, policy, infrastructure) to more analytic, systemic and process-oriented accounts. Practitioners and early commentators framed ecosystems as a set of domains that policymakers can target (for example, Isenberg's six domains: culture, policy & leadership, finance, human capital, markets, and supports). That framing is useful because it makes the problem actionable for cities and universities, but it risks reducing ecosystems to a menu of items rather than a set of interdependent relations [6, p.3]. Isenberg's domains are excellent as an operational taxonomy for practitioners - they show where to act - but they are incomplete as an explanatory model because they under-emphasize relational dynamics and causal feedbacks (i.e., how changes in one domain alter others).

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

Figure 1.

Isenberg's entrepreneurial ecosystem model



Source: Prepared by the author himself as a result of the research

Stam and colleagues pushed the literature toward a systems perspective: an EE should be seen as a network of actors, resources, and institutional conditions whose interactions produce and sustain productive entrepreneurship; the important empirical question is which links are binding constraints in a given region rather than whether a checklist item exists. Stam thus reframed the debate from "build all the ingredients" to "identify and fix the weakest links in a systemic architecture" [14, p.4]. Stam's systemic critique is persuasive. For scholarship and policy alike, it is more helpful to diagnose interaction failures (e.g., weak absorptive capacity, poor finance-talent matching) than to assume that simply creating incubators or courses will generate sustained high-growth entrepreneurship.

Spigel develops a related but complementary view: ecosystems are relational and reproducing structures - cultural norms, social networks, material resources and practices interact to enable entrepreneurs to discover opportunities and mobilize resources [13, p.49]. This account helps explain why superficially similar cities (in GDP or university quality) produce very different entrepreneurial trajectories. Spigel's relational emphasis is valuable because it foregrounds trust, narratives and repeated practices that are often invisible in "checklist" accounts; in practice, successful policy must combine Isenberg's domains with Spigel/Stam's system/process diagnostics.

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

A distinct but complementary strand explains why universities matter to EEs: they generate new knowledge and skilled people that leak into the local economy and create entrepreneurial opportunities. The Knowledge Spillover Theory of Entrepreneurship (KSTE) formalizes this: ideas and discoveries produced inside firms or universities are often imperfectly appropriable, so they generate opportunities that are exploited by entrepreneurs who commercialize otherwise un-exploited knowledge [1, p.759]. KSTE plays an important role as a theoretical link between public R&D and new-firm formation; it explains why dense research activity or large university research output correlates with entrepreneurial opportunity, but it also highlights the necessary caveat that spillovers only matter where absorptive capacity (skills, finance, networks) exists.

Human capital theory complements KSTE by showing that the stock and flow of people - students, postdocs, faculty, returning alumni - is a distinct channel of value. Recent syntheses show that education, task-relevant experience, and outcome-oriented measures of human capital materially affect opportunity recognition and venture development; importantly, human capital effects are milestone-specific (what helps opportunity recognition may differ from what helps scaling). Universities matter not just through codified outputs (papers, patents) but critically as talent factories - and policy that treats education as a blunt instrument risks over-investing in credentials without building the practical skills and networks entrepreneurs need.

Operationally, the two mechanisms - spillovers and human capital - work through observable channels: publications and patents (codified knowledge), mobility of skilled staff (tacit knowledge), university spin-offs and faculty entrepreneurship, and joint university-industry projects. But the magnitude of impact depends on local conditions (finance, regulatory framework, sectoral structure) and on the "knowledge filter" that separates invention from commercialization; several authors emphasize that universities alone are insufficient without absorptive capacity in firms and intermediary organizations [1, p.762].

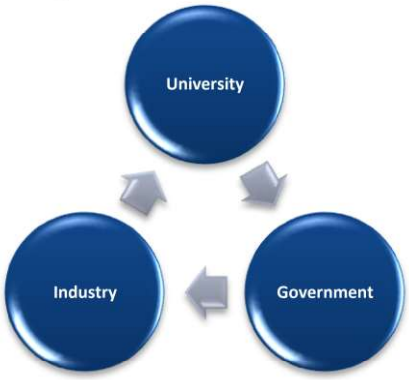
This is where RICs (research & innovation centres) matter: they are structured to lower the knowledge filter (by offering translational resources, business mentoring, lab space and linkages to investors) and to amplify the spillover and human-capital channels in ways ordinary departmental structures rarely do.

Another theoretical approach - the Triple-Helix framework formalizes the triadic interaction among university, industry and government: each sphere contributes distinct functions (knowledge production, commercialization, normative/regulatory support) and the synergies among them produce innovation outcomes. Leydesdorff and colleagues emphasize that the Triple-Helix should be read as both an empirical heuristic and a policy agenda: it explains the emergence of hybrid organizations (incubators, TTOs, science parks) and invites analysis of when and how trilateral synergies arise or unravel [8, p.22]. The Triple-Helix is an indispensable framing device because it highlights coordination problems and institutional complementarities; however, it must be applied diagnostically - not all regions have the institutional preconditions for full trilateral co-innovation, and policy must be calibrated accordingly.

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

Figure 2.

The Triple-Helix model of innovation



Source: www.wikipedia.com

Etzkowitz's work on the "entrepreneurial university" operationalizes how universities adapt a third mission (economic development) alongside teaching and research. His 2013 diagnosis catalogs the organizational changes, tensions and governance trade-offs that follow when universities pursue patenting, spin-offs and industry partnerships [3, p.491]. Etzkowitz persuasively documents the university's transformation and the institutional tools (TTOs, incubators) that follow. We endorse the core claim - universities become anchors of EEs when they combine legitimacy, convening power and sustained investment - but we also echo the caution in Stam and others: institutional anchoring is necessary but not sufficient; universities must operate within enabling local finance, policy and cultural contexts to produce durable ecosystem effects.

The theoretical insights into entrepreneurial ecosystems highlight the indispensable role of universities as knowledge producers, institutional anchors, and connectors. However, theory alone cannot sustain entrepreneurship-these functions must translate into tangible practices that influence individuals, firms, and society. In this sense, universities act not only as conceptual cornerstones but also as practical enablers of entrepreneurship. Their concrete roles can be observed in five interrelated domains: human capital development, research commercialization, infrastructure creation, collaboration with external stakeholders, and global knowledge diffusion.

At the most fundamental level, universities contribute to entrepreneurial ecosystems by shaping human capital. Through entrepreneurship education, mentoring programs, and experiential learning, they equip students with the knowledge and skills needed to create and manage ventures. Fayolle and Gailly (2015) argue that entrepreneurship education significantly influences entrepreneurial intentions by combining cognitive knowledge with behavioral competences [4, p.79]. Of course, Education is not merely about providing information but about cultivating an entrepreneurial mindset that persists even in uncertain environments. Without such human capital formation, the spillovers and institutional anchoring functions discussed earlier would remain abstract.

Universities also play a multifaceted role in the entrepreneurial ecosystem, and one of their most critical functions is acting as engines of knowledge commercialization. This process involves translating academic research and theoretical insights into tangible products, services,

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

and technologies that have real-world market value. Knowledge commercialization typically occurs through several channels, including patents, university spin-offs, licensing agreements, and the activities of dedicated technology transfer offices (TTOs). These mechanisms provide structured pathways for moving innovations from the laboratory or classroom into the commercial sphere, bridging the often significant gap between theoretical research and practical application. As O'Shea et al. (2007) emphasize, the effectiveness of commercialization efforts is strongly dependent on both the institutional capacity of the university-such as the presence of trained staff, organizational resources, and management structures-and the existence of supportive policies at local, national, or institutional levels [9, p.656]. From this perspective, commercialization can be seen as the concrete manifestation of the knowledge spillover theory, which posits that ideas generated within academic institutions can diffuse outward and create economic value beyond the campus. In addition, research and innovation centers within universities play a pivotal role in facilitating this process. These centers provide dedicated infrastructures and collaborative spaces where researchers, entrepreneurs, and investors can converge, exchange ideas, and jointly develop innovations. By fostering such synergies, universities not only generate new knowledge but also actively contribute to economic growth, the creation of new enterprises, and the broader dynamism of regional and national entrepreneurial ecosystems. Universities further support ecosystems by developing infrastructural platforms such as incubators, accelerators, and science parks. These facilities provide startups with mentorship, workspace, and access to funding networks. According to Phan et al. (2005), university-affiliated incubators are crucial in reducing the liability of newness that many startups face by embedding them within a structured support system [11, p.170]. We fully support this view, as such infrastructures act as bridges between the theoretical mission of universities and the practical realities of entrepreneurship. Without them, knowledge often remains "locked" in academic circles rather than diffusing into the economy.

The Triple Helix Model gains practical relevance through the active and sustained collaboration of universities, industries, and governments. This model emphasizes that innovation and economic development are most effective when these three spheres interact continuously, not just occasionally, through mechanisms such as collaborative projects, joint research initiatives, and coordinated policy programs. Guerrero and Urbano (2010) argue that entrepreneurial ecosystems reach their highest levels of dynamism when universities move beyond their traditional teaching and research roles to actively participate in shaping innovation policies and guiding industrial strategies [5, p.45]. Since collaboration ensures that university-driven entrepreneurship is aligned with market needs and societal goals, this is a very important factor. And it is an undeniable fact that, research and innovation centers function as the meeting points where these trilateral collaborations materialize, offering concrete evidence of universities' bridging roles.

Finally, universities facilitate the diffusion of knowledge through global networks, ensuring that ecosystems remain outward-looking and competitive. Wright et al. (2017) highlight how internationalization strategies-student mobility, global research partnerships, and joint venture programs-allow universities to act as conduits for cross-border entrepreneurial knowledge. [15, p.27]. This global orientation is critical for the future: it transforms universities from regional actors into global hubs of innovation. Research and innovation centers, once

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

again, become the operational units where this diffusion is enacted, linking local startups to global capital and talent flows.

The practical roles of universities are, therefore, not isolated activities but direct extensions of the theoretical foundations discussed earlier. Human capital development reflects the knowledge spillover theory, commercialization embodies the practical aspect of innovation diffusion, infrastructure operationalizes institutional anchoring, and collaboration gives substance to the Triple Helix framework. Each of these roles converges on a single point: the rise of research and innovation centers as the ultimate platforms where theory and practice intersect, enabling universities to become decisive drivers of entrepreneurial ecosystems.

While universities hold significant theoretical and practical roles in entrepreneurial ecosystems, their impact is not without constraints. In many contexts, the translation of knowledge, infrastructure, and collaboration into effective entrepreneurial outcomes faces persistent barriers. These challenges can broadly be divided into internal barriers within universities and external structural or policy constraints. Understanding these limitations is essential, as it shows why research and innovation centers must evolve as the focal points to address them.

One major barrier is the rigidity of academic structures. Universities are traditionally oriented toward teaching and theoretical research rather than entrepreneurial outcomes. Some argue that despite the global push toward entrepreneurial universities, many institutions still lack flexible governance structures to support commercialization and entrepreneurship.

Bureaucracy further slows the entrepreneurial potential of universities. Complex approval processes, intellectual property disputes, and risk-averse administrative cultures discourage both faculty and students from pursuing spin-offs or patents. Guerrero and Urbano (2014) noted that administrative inertia often undermines the entrepreneurial orientation of universities, leading to missed opportunities in technology transfer [5, p.61]. Of course, bureaucracy directly contradicts the agility that entrepreneurial ecosystems demand.

Limited funding is another critical barrier. Startups and research-based ventures require seed funding, yet universities in many regions operate under resource constraints. The scarcity of early-stage capital is one of the main reasons why university spin-offs struggle to scale, despite having strong intellectual property foundations. This limitation is particularly severe in emerging economies, where reliance on government funding makes university entrepreneurship vulnerable to political shifts.

Finally, cultural resistance to risk-taking hinders entrepreneurship within academia. Traditionally, universities emphasize stability and knowledge preservation rather than uncertainty and experimentation. Academics often view entrepreneurial activity as a deviation from their scholarly identity, which creates a cultural divide between researchers and entrepreneurs. We find this insight accurate, since it explains why even well-funded institutions may underperform in fostering entrepreneurship if cultural barriers remain unaddressed.

Beyond internal barriers, structural and policy-level weaknesses also limit universities' entrepreneurial impact. Many countries lack coherent national innovation strategies, leaving universities without a clear framework to align their entrepreneurial activities. Audretsch and Link (2019) argue that weak policy environments exacerbate the "valley of death" between

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

research and commercialization, particularly in less-developed ecosystems [2, p.53]. This is valid as universities cannot compensate for absent or fragmented policies on their own.

In addition, weak university–industry collaboration persists in many regions. Although the Triple Helix Model theoretically emphasizes collaboration, in practice, mistrust, misaligned incentives, and poor communication often reduce its effectiveness. Perkmann et al. (2013) noted that while industry values applied research, universities still prioritize theoretical publications, creating a structural disconnect between the two worlds [10, p.43]. From our perspective, this disconnect is one of the most pressing challenges: without effective collaboration, ecosystems risk remaining fragmented and underperforming. These challenges illustrate that while universities hold significant potential, their role in entrepreneurial ecosystems is far from automatic.

Examining real-world cases allows us to observe how the theoretical and practical roles of universities manifest in thriving entrepreneurial ecosystems. These examples highlight the strategies, structures, and mechanisms that enable universities to overcome internal and external challenges and to act as decisive drivers of regional innovation.

Stanford University's contribution to Silicon Valley is one of the most cited examples of a university acting as an entrepreneurial anchor. Through a combination of research excellence, human capital development, and deliberate industry engagement, Stanford has facilitated the creation of globally significant startups such as Google, Cisco, and Yahoo. The university's Office of Technology Licensing (OTL) and entrepreneurship programs serve as institutional mechanisms to convert research into commercially viable ventures [7, p.34]. We support this example as evidence of how theoretical spillovers and Triple Helix coordination translate into tangible ecosystem outcomes. Research and innovation centers, incubators, and structured mentorship programs at Stanford exemplify how universities can systematically address bureaucratic inertia, funding gaps, and cultural barriers.

Figure 3.

The Silicon Valley economic model

Source: https://carnegieendowment.org/

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

Similarly, MIT's ecosystem demonstrates the importance of embedding entrepreneurship within the institutional fabric of a university. MIT's Martin Trust Center for MIT Entrepreneurship and the Technology Licensing Office provide both infrastructure and advisory services to bridge the knowledge-to-market gap [12, p.112]. In Cambridge (UK), the university has developed the Cambridge Enterprise office and the Cambridge Innovation Center to facilitate university-industry collaborations and global knowledge flows. These cases confirm that structured institutional mechanisms-research and innovation centers-are central to translating theoretical roles into practical impact, particularly in supporting commercialization and fostering international linkages.

Across Europe, universities have increasingly acted as ecosystem catalysts through coordinated programs supported by the European Union. Initiatives such as the European Institute of Innovation & Technology (EIT) Knowledge and Innovation Communities (KICs) integrate multiple universities, industries, and policymakers to promote entrepreneurship and innovation across regions. These programs demonstrate how collaborative structures can address common barriers such as funding constraints and weak industry links. We view these as strong evidence that policy-aligned, university-led research and innovation centers can systematically overcome structural challenges and accelerate entrepreneurial activity.

Universities in emerging economies also illustrate how RICs can act as ecosystem drivers, albeit under more constrained conditions. For instance, the Indian Institute of Technology (IIT) system has leveraged incubators, alumni networks, and government partnerships to foster entrepreneurship in sectors ranging from software to renewable energy. Despite funding limitations and bureaucratic hurdles, these universities have created high-impact startups by institutionalizing support through dedicated innovation centers. This underscores the article's central finding: even in resource-constrained environments, well-structured research and innovation centers can bridge the gap between knowledge production and entrepreneurial outcomes.

The cases reviewed converge on several key insights. First, successful universities systematically translate theoretical foundations into practice through human capital development, research commercialization, and infrastructure creation. Second, they overcome internal and external barriers—bureaucracy, funding shortages, cultural resistance—by establishing dedicated research and innovation centers. Third, they integrate local and global networks, ensuring that their ecosystems remain resilient, competitive, and future-oriented.

Taken together, these examples illustrate how universities do not merely support entrepreneurship in a fragmented or incidental way; rather, when equipped with the right structures and mechanisms, they become the central driving force of their entrepreneurial ecosystems. Research and innovation centers, in particular, act as the strategic hubs where knowledge, talent, and collaborative networks converge, transforming theoretical potential into tangible entrepreneurial outcomes. By anchoring ecosystems, facilitating commercialization, and linking local ventures to global knowledge flows, universities demonstrate that they are not just contributors but the ultimate engines of innovation-driven regional development.

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

CONCLUSIONS

This study highlights that universities occupy a decisive position in entrepreneurial ecosystems, functioning not only as educational institutions and research centers but also as knowledge producers, talent developers, and institutional anchors. Their influence is most effectively realized when these diverse roles are consolidated through research and innovation centers (RICs), which act as structured mechanisms for translating academic research into entrepreneurial outcomes. By lowering the barriers between knowledge creation and commercialization, fostering collaboration with industry and government, and embedding entrepreneurial culture, RICs ensure that universities become active engines of innovation-driven growth.

Case studies from leading ecosystems such as Stanford, MIT, and Cambridge illustrate that entrepreneurship flourishes where universities invest in strong institutional infrastructures, well-resourced centers, and international networks. These examples also demonstrate that successful ecosystems are rarely spontaneous; rather, they are the result of deliberate institutional design and sustained collaboration. Similarly, universities in emerging economies show that even under conditions of limited resources, strategically developed RICs, alumni engagement, and policy partnerships can significantly boost entrepreneurial outcomes.

Nonetheless, the analysis makes clear that systemic challenges persist. Bureaucratic rigidity, limited funding, cultural resistance to risk-taking, and weak industry–university collaboration continue to constrain the entrepreneurial potential of many universities. External barriers such as fragmented innovation policies and underdeveloped financial ecosystems further complicate this process. These obstacles underline that universities' role in ecosystems is not automatic but requires supportive governance structures and enabling environments.

In this context, RICs emerge as the most effective leverage points for aligning academic research with entrepreneurial practice and for building adaptive, globally connected ecosystems. By integrating human capital development, knowledge spillovers, and trilateral collaboration into a coherent system, RICs transform universities into proactive drivers of sustainable and inclusive regional development. Ultimately, the long-term competitiveness of entrepreneurial ecosystems will depend on how effectively universities embrace this expanded mission, shifting from passive contributors to transformative actors at the heart of innovation and growth.

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

REFERENCES:

1. Audretsch D. B., & Lehmann E. E. (2005). Does the knowledge spillover theory of entrepreneurship hold for regions? Research Policy, 34(8), 757-774.

2. Audretsch & Link, Sources of Knowledge and Entrepreneurial Behavior, 2019. p. 208.

3. Etzkowitz H. (2013). Anatomy of the entrepreneurial university. Social Science Information, 52(3), 486–511.

4. Fayolle A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. Journal of Small Business Management, 53(1), 75–93.

5. Guerrero M., & Urbano, D. (2012). The development of an entrepreneurial university. Journal of Technology Transfer, 37(1), 43–74.

6. Isenberg, What an Entrepreneurship Ecosystem Actually Is, Harvard Business Review, 2014, p 14.

7. Kenney M., & Patton D. (2012). Entrepreneurial impact: The role of Stanford University in Silicon Valley. Technovation, 32(1), 1–10.

8. Leydesdorff & Lawton-Smith, The Triple Helix in the context of global change: dynamics and challenges, pp. 7, 2014, p 22.

9. O'Shea R., Chugh H., & Allen T. (2008). Determinants and consequences of university spinoff activity: A conceptual framework. Journal of Technology Transfer, 33(6), 653–666.

10. Perkmann, M., & Walsh K. (2013). Perkmann et al., Academic Engagement and Commercialisation: A Review of the Literature on University–Industry Relations,. International Journal of Management Reviews, p. 55.

11. Phan P. H., Siegel D. S., & Wright M. (2005). Science parks and incubators: Observations, synthesis and future research. Journal of Business Venturing, 20(2), 165–182.

12. Roberts E. B., & Eesley C. E. (2012). Entrepreneurial impact of MIT. The Journal of Technology Transfer, 37(1), 42–60.

13. Spigel B. (2017). The relational organization of entrepreneurial ecosystems. Entrepreneurship Theory and Practice, 41(1), 49–72.

14. Stam E. (2015). Entrepreneurial ecosystems and regional policy: A sympathetic critique. European Planning Studies, 23(9), 1759–1769.

15. Wright M., & H.Fryges (2014). The origin of spin-offs: A typology of corporate and academic spin-offs. Small Business Economics, p. 27.

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

İsayev Sadiq Sarvan oğlu,
doktorant,
Bakı Biznes Universiteti,
ORCID: https://orcid.org/0009-0004-8980-9080
E-mail: sadigisayev13@gmail.com,

UNİVERSİTETLƏR SAHİBKARLIQ EKOSİSTEMLƏRİNİN SƏMƏRƏLİLİYİNİN ARTIRILMASINDA STRATEJİ AGENTLƏR KİMİ

X Ü L A S Ə

Tədqiqatın məqsədi - universitetlərin sahibkarlıq ekosistemlərində nəzəri və praktiki rollarını araşdırmaq, xüsusilə də tədqiqat və innovasiya mərkəzlərinin (TİM) akademik biliklərin sahibkarlıq üçün faydalı nəticələrə çevrilməsində əsas mexanizmlər kimi funksiyalarını təhlil etməkdir.

Tədqiqatın metodologiyası - məqalədə müqayisəli və analitik yanaşmadan istifadə olunmuş, nəzəri baxışlar konkret təhlil və nümunə araşdırmaları ilə zənginləşdirilmişdir. Məşhur nəzəri çərçivələr tənqidi şəkildə dəyərləndirilmiş, empirik məlumatlar isə Stanford, MIT və Cambridge kimi aparıcı innovasiya mərkəzlərindən, eləcə də inkişaf etməkdə olan ölkələrin universitetlərindən götürülərək nəzəri yanaşmaların praktikaya necə tətbiq olunduğu göstərilmişdir.

Tədqiqatın tətbiqi əhəmiyyəti - tədqiqat nəticələri siyasətçilər, universitet rəhbərləri və digər biznes iştirakçıları üçün TİM-lərin strateji mərkəzlər kimi qurulması və dəstəklənməsi barədə praktik tövsiyələr təqdim edir. Bu yanaşma universitetlərin sahibkarlıq ekosistemlərinə və regional iqtisadi artıma daha güclü töhfə verməsini təmin edə bilər.

Tədqiqatın orijinallığı və elmi yeniliyi - araşdırma TİM-ləri yalnız dəstək infrastrukturunun elementi kimi deyil, bilik spillover-larını, insan kapitalının inkişafını və üçtərəfli əməkdaşlığı vahid bir sistemdə birləşdirən əsas dayaq nöqtələri kimi təqdim etməklə mövcud ədəbiyyata yenilik gətirir. Bu yanaşma universitetlərin sahibkarlıq ekosistemlərində passiv iştirakçı deyil, innovasiyaya əsaslanan inkişafın fəal mühərriki rolunu vurğulayır.

Açar sözlər: sahibkarlıq ekosistemi, universitet, tədqiqat və innovasiya mərkəzləri, insan kapitalı, kommersiyalaşdırma.

AUDİT 2025, 4 (50), səh. 152-164.
AUDIT 2025, 4 (50), pp. 152-164.
АУДИТ 2025, 4 (50), стр. 152-164.

Исаев Садиг Сарван оглы,
докторант,
Бакинский Университет Бизнеса,
ORCID: https://orcid.org/0009-0004-8980-9080
E-mail: sadigisayev13@gmail.com,

УНИВЕРСИТЕТЫ КАК СТРАТЕГИЧЕСКИЕ АГЕНТЫ В ПОВЫШЕНИИ ЭФФЕКТИВНОСТИ ПРЕДПРИНИМАТЕЛЬСКИХ ЭКОСИСТЕМ

Р Е З Ю М Е

Цель исследования - заключается в изучении теоретических и практических ролей университетов в предпринимательских экосистемах (ПЭ), с особым акцентом на исследовательские и инновационные центры (ИИЦ) как ключевые механизмы трансформации академических знаний в предпринимательские результаты.

Методология исследования - в работе применяется сравнительно-аналитический подход, сочетающий теоретический обзор с анализом кейс-стади. Классические концептуальные модели подвергаются критической оценке, а эмпирические данные заимствуются из ведущих инновационных центров, таких как Стэнфорд, MIT и Кембридж, а также университетов развивающихся стран, чтобы показать, каким образом теоретические положения реализуются на практике.

Практическая значимость исследования - полученные результаты представляют собой практические рекомендации для политиков, руководителей университетов и представителей индустрии по разработке и поддержке ИИЦ в качестве стратегических центров, которые усиливают вклад университетов в предпринимательские экосистемы и региональный экономический рост.

Оригинальность и научная новизна исследования - работа расширяет существующую литературу, позиционируя ИИЦ не просто как элементы поддерживающей инфраструктуры, но как центральные точки приложения усилий, интегрирующие диффузию знаний, развитие человеческого капитала и трёхстороннее сотрудничество в целостную систему. Такой подход подчёркивает трансформационную роль университетов как активных двигателей инновационно-ориентированного развития, а не пассивных участников предпринимательских экосистем.

Ключевые слова: предпринимательская экосистема, университеты, исследовательские и инновационные центры, человеческий капитал, коммерциализация.

Məqalə redaksiyaya daxil olmuşdur: 22.04.2025
Təkrar işlənməyə göndərilmişdir: 19.05.2025
Çapa qəbul olunmuşdur: 27.06.2025

Дата поступления статьи в редакцию: 22.04.2025
Отправлено на повторную обработку: 19.05.2025
Принято к печати: 27.06.2025

The date of the admission of the article to the editorial office: 22.04.2025
Send for reprocessing: 19.05.2025
Accepted for publication: 27.06.2025