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MANAGING KNOWLEDGE VALORIZATION CENTRES: A COMPARATIVE VIEW OF WESTERN EUROPE AND WESTERN BALKANS

1. Introduction

On global scale, universities are transforming from teaching and research institutions to knowledge valorization centres, where academic research and innovation output are translated into solutions with societal, economic and technological value (Western Balkans Info Hub, 2023). Knowledge Valorization Centers (herein after KVCs), referred to as technology parks, innovation hubs, centers for innovation and research, technology transfer centers or accelerators are at the core of this transformation. Their purpose, standing beyond the conventional academic dissemination of research, is to not only protect intellectual property, and ensuring commercial usage of it, but to build partnerships between universities and industry, support new startups, and finally to provide benefits to the society.

Regardless of the growing importance of KVCs, many higher education institutions (HEIs) face many difficulties and challenges in designing effective management models for the valorization activities. More specifically, in regions, such as Southeast Europe and Western Balkans (WB), where universities are under the pressure to strengthen innovation capabilities while facing institutional rigidities and limited resources, the governance of KVCs is challenging (EACEA, 2020; Bartlett, 2012). Additionally, the WB region exhibits fragmented intellectual property regimes and limited capacity of technology transfers offices.

On the other hand, in Western Europe, KVCs are functioning as semi-autonomous and professionalized units, that benefit from appropriate policy frameworks, funding mechanisms and strong industry-academia partnerships (Balkan Innovation, 2024). According to YERUN (2024), these centres often have dedicated leadership teams, specialized services, such as intellectual property management, spin-off incubation and societal impact.

From this point of view, it can be seen the gap that exists between the mature Western European systems and catching up Western Balkan ecosystems. In this context, this extended abstract tries to examine the governance and management of KVCs through comparative research focusing on WB versus the Western Europe. The purpose is to develop and propose a comprehensive management framework of KVCs in HEIs. More specifically this research tries to answer the following research questions:

1. How do management models of KVCs in Western European Universities differ from those in WB universities across key management dimensions, such as strategy, structure, leadership, human resources, finance, KPIs and culture?

2. How do these differences influence the capacity of KVCs to conduct the main valorization functions, in terms of intellectual property management, academia – industry collaboration, entrepreneurial support and societal impact?

3. What is required from WB Universities to move from donor or project dependency to more autonomous KVC aligned with European policy frameworks?

The existing literature on KVCs, knowledge transfer offices (KTOs), and university industry collaboration provides an overview of persistent challenges in terms of fragmented governance, where the activities are spread across faculties, research centres, and/or administrative units, which creates duplication and repeatability of mandates (Compagnucci & Spigarelli, 2020). Also, lack of strategic alignment, i.e. disconnect between valorization activities and institutional visions and national innovation policies, is widely documented. According to Etzkowitz (2008), successful KVC requires not only operational competencies but at the same time and strong leadership, clear institutional governance, performance accountability and a culture that supports collaboration.

2. Research Methodology and Data

This research uses secondary data collected from reports, news, websites and academic papers for determining the key management dimensions of established KVCs across Western Balkan universities and Western European

Management Dimension	*Western Europe (WE)*	*Western Balkans (WB)*	*Key Finding / Interpretation*
1. Strategic Management	Long-term, market-driven strategies; aligned with national innovation policies; focus on IP portfolios, licensing, spin-offs, and international partnerships.	Short-term, project-driven strategies; dependent on EU/donor calls; weak strategic continuity outside project cycles.	WE follows proactive strategic positioning; WB follows reactive project logic.
2. Organizational Structure	Specialized, multi-unit structures (IP/Legal, Licensing, Industry Relations, Start-up Incubation, Contract Research).	Lean teams (1–3 persons) covering multiple functions simultaneously; hybrid roles.	WE achieves efficiency via specialization; WB compensates with flexibility but at the cost of capacity.
3. Operational Processes	Standardized workflows (disclosure → assessment → patenting → licensing → monitoring); supported by digital management tools.	Partially formalized, often undocumented processes; reliance on personal networks; limited digital systems.	WE resembles semi-corporate practices; WB operates administratively with ad-hoc processes.
4. Leadership Model	Leaders with innovation management or industry experience; strong managerial autonomy and commercialization focus.	Leaders are often academics/administrators; limited autonomy; weak exposure to commercialization.	WE displays entrepreneurial leadership; WB displays academic–bureaucratic leadership.
5. Human Resource Management	Professional IP and tech-transfer specialists; continuous training (ASTP, AUTM, EUIPO); competitive incentives.	Generalist staff with limited training; constrained by university pay scales; skill shortages and high turnover.	HR professionalization is a structural advantage in WE; WB faces persistent capacity gaps.
6. Governance & Autonomy	Semi-independent legal/organizational forms; governance boards include industry and investors; strong accountability.	Embedded in university administration; governance dominated by academic hierarchy; low autonomy.	WE's mixed governance ensures agility; WB's administrative governance slows decision-making.
7. Financial Model	Diversified income (licensing, research contracts, consultancy, spin-off equity, government support).	Funding dominated by EU projects, small government allocations, minimal licensing revenues.	WE achieves financial sustainability; WB is grant-dependent and vulnerable to funding cycles.
8. Performance	Commercialization-driven KPIs: disclosures, patents,	Activity-driven KPIs: number of projects, trainings,	WE reports outcome-based valorization

Source: Author's research

Table 1 Aggregate Comparative analysis of KVCs in WE and WB universities and employing a comparative overview for detecting differences, challenges and empirical evidence for following the best practices by WB universities.

3. Findings

Based on the scanning of 28 KVCs[1] across WB and Western European Universities differences in 9 management dimensions were found (as shown in Table 1). The results reveal significant asymmetries, i.e. Western European universities have specialization, autonomy and diversified funding that provide opportunities for wide range of valorization activities, while WB universities function as administrative extension of universities limited by the donors capacity, human resources, rigid governance and most importantly low managerial autonomy.

Keywords: Knowledge valorization, management models, technology transfer, leadership model.

[1] Western Balkans: Office for Technology Transfer, University of Zagreb (Croatia); Centre for Technology Transfer, Faculty of Mechanical Engineering & Naval Architecture (UNIZAG FSB, Croatia); Technology Transfer Centre (TTC), University of Novi Sad (Serbia); Technology Transfer Office, University of Belgrade (Serbia); Technology Transfer Offices at University of Sarajevo & other BiH universities (Bosnia & Herzegovina); Petnica Science Center (PSC) (Serbia); SDEWES Centre — International Centre for Sustainable Development of Energy, Water & Environment Systems (Croatia / regional); Science-Technology Park of Montenegro (with its Office for Technology Transfer) (Montenegro); R&D Service Centre / Tech-Transfer initiatives, University of Montenegro (Montenegro); UBT – Technology Transfer Centre (Kosovo); Knowledge & Technology Transfer Offices at University "Ukshin Hoti" Prizren and other Kosovo universities (Kosovo); Technology Transfer Office / units at University of Prishtina (Kosovo); CIRKO – Centre for Applied Research, Testing & Lifelong Learning, Faculty of Mechanical Engineering (UKIM, North Macedonia); INNOFEIT – Centre for Technology Transfer & Innovation, Faculty of Electrical Engineering & IT (UKIM, North Macedonia); EuroCC@North Macedonia (national HPC / AI competence centre) (North Macedonia); IECE – Institute for Research in Environment, Civil Engineering & Energy (North Macedonia); CIPOZ – Centre for Applied Agricultural Research & Permanent Education, Faculty of Agricultural Sciences (UKIM, North Macedonia); Centre for Knowledge Management (CKM) — regional knowledge-management & valorization centre (North Macedonia / region). Western Europe: KU Leuven Research & Development (LRD) (Belgium); Fraunhofer Society — German Fraunhofer Institutes (Germany); ETH Transfer — Technology Transfer Office, ETH Zürich (Switzerland); TNO — Netherlands Organisation for Applied Scientific Research (Netherlands); CNRS Innovation / SATTs network (France); Cambridge Enterprise — University of Cambridge (UK); Imperial Enterprise Lab & Tech Transfer Office — Imperial College London (UK); Oxford University Innovation (OUI) — University of Oxford (UK); VTT Technical Research Centre of Finland (Finland); SINTEF Research Institute (Norway)

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