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Managing university innovation as a contribution to local development

Castro Villa, Wilfredo Manuel*
García Mera, Silvia Magdalena**
Arteaga Linzan, Monica Maria***
Tituano Zambrano, Mariana del Jesús****

Abstract

Universities face significant challenges in contributing to local development, needing a transformation of existing mechanisms and procedures. This shift requires more than incremental improvements; it demands structural innovations in traditional internal dynamics. This article proposes a theoretical and methodological framework designed to support university innovation management as a catalyst for local development. This framework is operationalized through a namesake model. Quantitative and qualitative methods and techniques were employed in the development of the research. Key methodological tools included documentary reviews, checklists, and interviews with internal and external stakeholders, as well as a cross-impact matrix. The application of these tools revealed the integrative and strategic nature of the core category and its alignment with the university's substantive processes. The theoretical foundations established here address the gaps identified in previous research. Furthermore, the model—structured around four core transformation elements—offers a pertinent alternative for universities, highlighting the importance of innovation management in fulfilling their social mission.

Keywords: universities development management; local development management; Cuban southeast.

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* PhD candidate in Organizational Management, University of Granma, Cuba; Postgraduate specialist in Public Management, University of Granma, Cuba; Bachelor of Sociocultural Studies; Assistant Professor; First Vice-Rector; Email: wcasvil@gmail.com; ORCID: https://orcid.org/0000-0001-5748-6441

** PhD in Philosophy and Letters; University of Alicante, Spain; Master's degree in Teaching and Educational Research; Commercial Engineer; Coordinator of the Social Work Research Network; Associate Professor; Email: Silvia.garcia@utm.edu.ec; ORCID: https://orcid.org/0000-0002-6134-9017

*** PhD in Pedagogical Sciences; Agrarian University of Havana "Fructuoso Rodríguez Pérez" – Cuba; Bachelor of Science in Education; Associate Professor I; Academic Coordinator, Technical University of Manabí; Email: monica.arteaga@utm.edu.ec; ORCID: https://orcid.org/0000-0001-5799-6046

**** Master in Human Talent Management, Technical University of Manabí, Ecuador; Bachelor of Science in Education, Languages Specialty (English), Technical University of Manabí; Bachelor of Executive Secretariat, Laica Eloy Alfaro University of Manabí; Occasional Part-Time Professor Civil Contract without employment relationship, Technical University of Manabí, Email: mariana.tituano@utm.edu.ec ORCID: https://orcid.org/0000-0002-8444-4965

Gestión de innovación universitaria en contribución al desarrollo local

Resumen

Las universidades enfrentan desafíos significativos en su contribución al desarrollo local, lo que exige una transformación de los mecanismos y procedimientos existentes. Este cambio que requiere más que mejoras incrementales; demanda innovaciones estructurales en las dinámicas internas tradicionales. El presente artículo propone un marco teórico-metodológico diseñado para sustentar la gestión de la innovación universitaria como un catalizador del desarrollo local, operacionalizado a través de un modelo que lleva este mismo nombre. En el desarrollo de la investigación se emplearon métodos y técnicas tanto cuantitativos como cualitativos. Las herramientas metodológicas incluyeron el análisis documental, listas de verificación y entrevistas con actores clave internos y externos, así como una matriz de impactos cruzados. La aplicación de estas herramientas reveló el carácter integrador y estratégico de la categoría principal y su alineación con los procesos sustantivos de la universidad. Los fundamentos teóricos aquí establecidos abordan las brechas identificadas en investigaciones precedentes. Asimismo, el modelo —estructurado en torno a cuatro elementos de transformación fundamentales— ofrece una alternativa pertinente para las universidades, destacando la importancia de la gestión de la innovación en el cumplimiento de su misión social.

Palabras clave: gestión de innovación en universidades; gestión del desarrollo local; suroriente cubano.

1. Introduction

In the current global landscape, numerous examples underscore the pivotal influence of universities on national development. Their impact is particularly significant within their immediate environments, where they play a leading role in local development governance, underpinned by a commitment to social responsibility (Vega et al., 2018; Olaya et al., 2020)

The volatile dynamics of the contemporary era require development actors to move beyond incremental management improvements toward radical internal transformations. Universities are no exception; to effectively address micro-environmental challenges and meet the demands of socio-economic development, they must transform their institutional capacities and enhance the quality of their core processes (Almuiñas et al., 2016)

While innovation and its management are recognized as vital mechanisms for institutional reconfiguration in higher education (Muñoz and Vega, 2024), the existing literature lacks sufficient detail on the specific mechanisms required for successful implementation.

The Science and Innovation-Based Government Management

System (SGGCI), as applied in the Cuban context, provides a more robust framework for reimagining Local Development Strategies. By fostering networks of actors who collaborate in the production, dissemination, and application of knowledge, this system facilitates more effective execution (Díaz-Canel, 2023). Its design underscores the pivotal role of the university, as its impact serves as a critical driver of territorial development and governance (Rovira et al., 2022).

While Cuban higher education has pioneered contributions from the science system to local development (Núñez, 2017; León et al., 2022; Núñez et al., 2021), challenges remain. This is evidenced by the diagnostic results of the project: 'Innovation management in universities in south-eastern Cuba: Science, socio-productive practice, and territorial development' (Reyes and Orberá, 2023).

The identified evidence suggests that coordination among local actors remains insufficient to effectively address the strategic development priorities of the territories. This reinforces a fragmented, "siloed" approach to addressing socioeconomic demands, which obscures the broader needs outlined in Municipal and Provincial Development Strategies (EDM and EDP). Furthermore, these strategic frameworks frequently treat the university through a traditional supply-side lens, perceiving it merely as a service provider rather than a strategic partner in development.

Consequently, municipal needs are often excluded from the agendas for professional development, science, and innovation. This misalignment results in scarce technology transfer and limited implementation of R&D&I outcomes. The disconnect highlights a significant gap between institutional output and the practical requirements of the local productive and social sectors.

These issues are further compounded by the insufficient integration of processes and structural levels within the university itself, hindering a comprehensive response to local challenges. This internal fragmentation is exacerbated by a lack of institutional agility in responding to environmental shifts, reflecting an innovation management deficit that prevents universities from fulfilling their potential as drivers of local development.

In contributing to local development management, universities face structural challenges that necessitate a profound modification of their mechanisms and procedures. To address these gaps, this research aims to develop a theoretical-methodological framework and the underlying premises to support university innovation management.

This study adopts a mixed-methods approach, utilizing documentary analysis, checklists, interviews with internal and external stakeholders, and a cross-impact matrix system.

2. Towards innovative university management model for local development

Three fundamental questions guide the reflection on university innovation management and its contribution to local development: First, are universities institutions where innovation can inherently occur? Second, how is innovation management conceptualized within these institutions? And third, what distinguishes university innovation management when specifically contributing to local development?

To address the first question, it is essential to establish the distinctive elements of innovation. According to the scientific literature, innovation has received significant theoretical attention since Schumpeter first introduced the concept (Delgado, 2015). For the purposes of this research, while innovation is recognized as both a process and a result in a state of complementarity, its classification has historically fluctuated between these two main definitional dichotomies.

The position adopted in this study aligns with NC-ISO 56000 (2020), which defines innovation as a result—encompassing products, services, processes, models, or methods—while recommending that when used to describe a process, it should be accompanied by specific qualification. In the latter sense, it is conceptualized as a set of interrelated activities that transform inputs into intended innovative outcomes.

Innovation thus transcends mere ideas or inventions (Melo et al., 2024), evolving into the conception and implementation of significant changes aimed at improving institutional performance (Oslo Manual 2005, as cited in Peralta et al., 2020). Adopting a more generalized perspective, innovation is here defined as a knowledge-based change that generates value (OECD 2005, as cited in Herrera and Suárez, 2021).

There is a broad consensus regarding the definition of innovation. Its distinctive features include its purposeful nature—resulting in the introduction of new or significantly improved products, processes, or methods (Tamayo, 2018; Benavente, 2018; Figueroa et al., 2022)—and the multi-actor, interactive essence of the process itself (NC-ISO 56000, 2020; Díaz-Canel, 2021). Furthermore, the classical economic conception of innovation (Schumpeter, 1978) has expanded to encompass organizations in a general sense (Tamayo, 2018; Díaz-Canel, 2021; Figueroa et al., 2022), transcending earlier approaches that confined it strictly to the business sector.

Universities constantly encounter new challenges driven by social shifts that compel them to innovate within their processes (Hormaza et al., 2022), even when operating under organizational cultures rooted in deep-seated traditions. To meet established standards of excellence and respond to contextual imperatives, these institutions must implement both incremental modifications and radical structural changes. Consequently, they adopt innovation as a primary mechanism for institutional reconfiguration.

An institution aspiring to remain competitive cannot rely on isolated improvements; it must implement them consistently, strategically, and systematically (Erazo and Salguero, 2021). The key to sustainable improvement lies not only in the willingness to innovate but also in robust management that provides the necessary institutional scaffolding. This reflection leads directly to the second guiding question.

Current trends in Innovation Management (IM) show an annual increase in academic output, with articles and books comprising 85% of the literature. There is a general consensus on its nature as a process-driven discipline, materialized through management functions that require the establishment of an innovation vision, strategy, policy, and objectives. This involves fostering a supportive organizational culture and creating the necessary conditions for success,

including the strategic acquisition of resources (NC-ISO 56000, 2020).

IM provides the essential framework for an organization to capitalize on environmental opportunities despite volatile conditions. By leveraging available resources, the institution can transform itself and respond to internal and external demands through a value chain that ensures high levels of stakeholder satisfaction once the innovation is realized (NC-ISO 56000, 2020; Velázquez, 2024).

International models for Innovation Management (MInn) at the organizational level have historically focused on the business sector (CIDEM, 2002; UNE 166002, 2002; IMP3rove, 2008; COTEC, 2010). However, models specifically designed for universities have branched into two distinct directions:

1. Innovation Management (GInn) as a Subprocess: This view treats management as a component of a broader innovation cycle that ultimately concludes in external, "extra-university" spaces (León, 2022; Hincapié et al., 2024).
2. MInn as an Administrative Process: This approach frames management as a structural tool used to reconfigure the university's internal management system, ensuring that innovation is an inherent institutional output (Peña, 2020).

Understanding MInn as an administrative process, associated with the university management system, requires the integration with and among university processes, connection and preparation among the actors involved, and adaptability as the organization must change, based on the transformations occurring in its environment.

The answer to the third question starts from considering the importance of the knowledge sector and in particular of universities in the local development management (LDM) (Gregersen, 2017; Arocena, 2022). The current university guides its projection and performance through three substantive functions (teaching, research and university extension), the third of which puts all its attention and intention on the necessary orientation towards society and in particular to the context in which they operate where it has greater importance *(Hinojosa et al*., 2022). Through this lens, social responsibility is more than a concept; it is a formal commitment to the common good and societal development (Salcedo et al., 2023). This commitment must be explicitly expressed in the university's mission and integrated into its Strategic Project.

Achieving these objectives requires a comprehensive understanding of three critical dimensions. First, the internal innovation cycle: Analyzing how the innovation cycle "closes" within the university context and identifying the specific conditions that enable this completion. Second, Inter-process Synergy: Examining the relationship between MInn and other management systems. In this framework, processes act as a network where each is simultaneously a supplier and a customer to the others. Finally, Territorial Problem-Solving: Orienting internal innovation toward practical solutions for the surrounding territory. In this model, the territory and its stakeholders are not merely passive "clients" of university services; they are active participants who intervene directly in the management process itself.

Similar to the Cuban model of development management—which uniquely balances centralization and decentralization, economic sectorization,

and the dual subordination of institutions—the strategic direction of Cuban universities is shaped by specific national mandates. Their projection stems from the Ministry of Higher Education's (MES) commitments to the 2030 National Economic and Social Development Plan. Consequently, the primary contributions of these universities must directly address the demands of Municipal Development Strategies (EDM) and Provincial Development Strategies (EDP), which serve as the essential instruments of territorial progress. These contextual specificities demand unique management perspectives that remain largely unaddressed by conventional international theories.

While Cuban literature extensively covers university management (UM), Innovation Management (MInn), and local development, there is a notable void in research that fully integrates these elements to address how university innovation management specifically contributes to Local Development Management (LDM). Existing conceptual models, despite their differing objectives, offer several foundational elements for consideration: the object of study, analytical perspectives, the nature of university contributions, and the theoretical frameworks employed. Across these models, the university is consistently viewed as a proactive subject of development rather than a passive observer. Furthermore, the qualities of its contribution are categorized as Interactive (Reyes & Orberá, 2023); Strategic and Integrative (Batista & Pérez, 2016; Alpízar, 2019), and the Constructivist approach.

Despite emerging definitions, significant conceptual and methodological gaps persist. Current literature fails to fully address the specific treatment of Innovation Management (MInn) within universities or model the precise relationships that drive its contribution to Local Development Management (LDM). Furthermore, there is a lack of focus on the national-sectoral alignment required to define university commitments, and the nuanced relationships between universities and their territorial stakeholders remain underdeveloped.

Current models frequently treat environmental demands as static inputs, often overlooking the monitoring mechanisms required to identify emerging opportunities. Without these mechanisms, it is difficult to develop the robust solutions necessary to drive Municipal (EDM) and Provincial (EDP) Development Strategies. Furthermore, Innovation Management (MInn) is rarely treated as an organic component of the University Management (UM) system. This lack of integration between UM, MInn, and LDM creates a theoretical and practical gap that prevents universities from fully realizing their potential contribution to society.

To bridge these inadequacies, this research proposes a new category: GIUGDL (University Innovation Management Oriented toward Local Development).

The GIUGDL is defined as a strategic, integrative process embedded within the university management system. it facilitates the planning, organization, direction, and control of resources to create and apply knowledge, capabilities, and ideas. These are transformed into new or improved products, services, processes, and models intended for both institutional and territorial implementation. Ultimately, the GIUGDL aligns the university's mission with the sustainable, multidimensional progress

of the local context

The GIUGDL is fundamentally defined by its dual nature: it is both strategic and integrative. These two qualities ensure the university is not just a participant in development, but a catalyst for it.

Strategic: The strategic dimension aligns the university's internal trajectory with national and territorial goals. It is characterized by: Visionary Alignment: It orients the entire institution toward a Vision that balances local territorial commitments with national priorities. Informed Decision-Making: It utilizes technological surveillance (context monitoring) and institutional intelligence (information processing) to manage risks and exploit macro-environmental opportunities. Agile Reconfiguration: By placing the university in an advantageous position to anticipate change, it facilitates the continuous updating of the management system. Value Creation: It ensures that the generation of knowledge and ideas leads to tangible products, services, or models that benefit the organization and the country.

Integrative: The integrative dimension treats innovation as a holistic organizational effort rather than an isolated activity. It is characterized by: Comprehensive Management: It approaches GIUGDL from a total organizational perspective, coordinating across all structural levels and processes. Stakeholder Synergy: It incorporates the creative contributions of both internal and external stakeholders, fostering a high-interactivity environment where diverse actors work toward common goals. Multidisciplinary Focus: It leverages the strengths of all knowledge areas to provide comprehensive, cross-functional responses to regional and organizational demands.

3. Methodological considerations

The research utilized a mixed-methods approach, developed in two distinct phases to ensure both depth and breadth of analysis. The first one consisted on an exploratory analysis that was centered on an extensive bibliographic review and mapping of the field's evolution. Using VOSviewer software (v.1.6.15), the study analyzed a dataset of 1,959 files retrieved from the Scopus and Dimensions databases. The longitudinal scope, spanning from 1974 to the present, provided the necessary empirical foundation for the theoretical and methodological framework previously described.

The application of a specialized checklist to assess the EDM and EDP of southeastern Cuban provinces revealed eleven critical aspects that had not been addressed in depth, most notably the failure to incorporate the university as an active object of transformation and the lack of an explicit declaration of knowledge, science, and innovation as primary instruments for achieving projected developmental goals. A parallel evaluation of the university's internal framework indicated that, despite advancements in strategic design, significant barriers remain; specifically, an imprecise definition of what constitutes an innovative institution, coupled with the absence of dedicated innovation strategies and policies, restricts the university's transformation and its capacity to establish the necessary conditions for integrating the GIUGDL into its general management system.

Key informant interviews conducted with 15 stakeholders from both internal and external university sectors confirmed

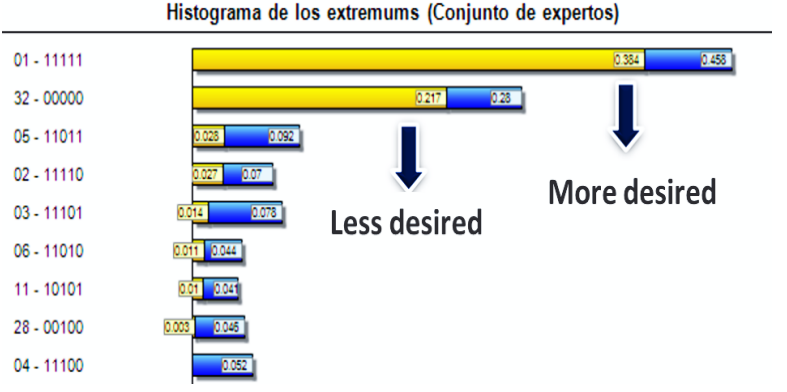
the systemic inadequacies necessitating a model redesign. Beyond identifying shortcomings, these dialogues established the essential groundwork for fostering high-level commitment among university senior management and local territorial actors, ensuring a collaborative foundation for the proposed changes.

The synthesis of data from both instruments facilitated the identification of 36 barriers, 21 variables, and 18 key actors. This robust dataset informed the second integration phase, where current and potential dependencies among variables and actors were mapped. This analysis utilized the Crossed-Impact Multiplication Matrix Applied to a Classification (MICMAC) and the Actors' Analysis Method (MACTOR) to define the structural weight and influence within the system.

Subsequently, the research employed the Cross-Impact Matrix System (SMIC-PROB-EXPERT) method to construct future scenarios. Five central hypotheses were developed by internal stakeholders with extensive management expertise: four addressing the orientation of the university's substantive mission toward Local Development Management (LDM), and a fifth specifically focused on the operationalization of the GIUGDL.

The resulting visualization of probable scenarios (Graph 1) indicated a consensus on Scenario 01—where all five hypotheses are fulfilled—as the most probable and desirable outcome. Conversely, in scenarios where the GIUGDL is not realized (notably 32, 02, 06, 28, and 04), the university's contribution is significantly diminished or the scenario itself becomes highly improbable. These findings underscore not only the urgent necessity of implementing the GIUGDL but also its fundamental viability within the specific context of Cuban higher education.

Graph 1
Probability of scenarios in the GIUGDL context



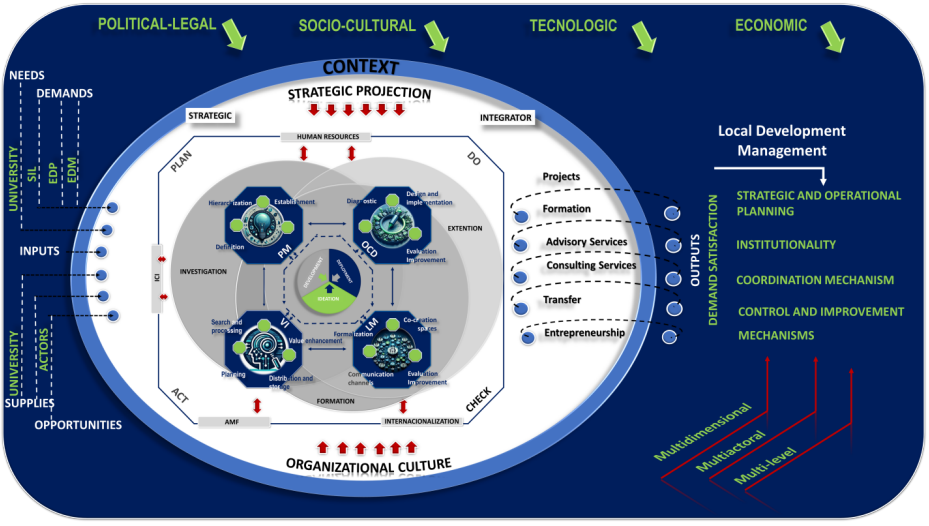
4. GIUGDL model and its components

With the institutional and territorial context established, the inquiry shifts toward the representational and methodological substance of university innovation management: How can this

process be modeled to ensure a verifiable contribution to Local Development Management (LDM)? Furthermore, what specific conditions are required to yield a "surprising" or transformative result—one that transcends routine administration to become a cornerstone of organizational and social evolution?

The general architecture of the Innovation Management Model in Cuban Universities and its contribution to local development (the GIUGDL Model), as illustrated in Illustration 1, adopts the formal process representation established by ISO 9001:2015.

Illustration 1
Representation of innovation management modelling in universities and their contribution to local development management



The content of the GIUGDL model directly operationalizes its strategic and integrative foundations through four core transformation elements that facilitate the university's alignment with the demands of the EDM and EDP. Specifically, it enables this connection through the systematic monitoring and analysis of information, a priority management system that weights innovations according to their contribution to LDM, the development of organizational capacities to ensure effective execution, and a robust link management framework that guarantees the interactive nature of the entire process.

Furthermore, aligning with the theoretical framework of Bravo et al. (2019), the GIUGDL is influenced by a set of critical external factors—

specifically political-legal, sociocultural, technological, and economic dimensions—that shape the environment in which the university and the territory interact.

The internal architecture of the model is anchored by several critical elements, beginning with a clear strategic projection that aligns institutional goals with territorial needs. Central to this is an innovation-oriented organizational culture, which, as defined by Avila et al. (2024), must be characterized by "fostering creativity, experimentation, and risk acceptance in the process of generating and applying new ideas and solutions" (p. 58). Furthermore, the model incorporates the various university processes that function as both suppliers and clients of the GIUGDL, ensuring that the substantive functions of the organization are fully integrated into the innovation cycle (Illustration 1).

External actors—comprising clients, suppliers, and regulatory bodies—align with theoretical frameworks regarding stakeholders in science and technology (De la Cruz et al., 2021). To sustain an innovative environment built on interaction and collaboration, active contributions are required from all internal university members, including administrators, faculty, staff, and students.

It is essential to identify the primary input sources: the local innovation system and the Municipal Development Strategy (EDM) and Provincial Development Strategy (EDP). These strategies serve as the foundational backbone and connective tissue for Local Development Management (LDM), into which the university is integrated. Consequently, these inputs consist of the demands of the local innovation system and development strategies, the opportunities provided by external stakeholders, and the specific needs of the university itself. The resulting outputs focus on the university's direct contributions to LDM. These are manifested through enhanced strategic and operational planning for regional growth and a more robust structural framework for local management. Furthermore, these outputs consolidate mechanisms for informed decision-making, multi-actor coordination, and the efficient use of endogenous and exogenous resources, while ensuring social relevance and the continuous improvement of the overarching process.

The four phases of the Deming cycle are integrated into a model aligned with four essential transformation elements: surveillance and intelligence, priority management, organizational capacity development, and link management. Together, these elements facilitate a strategic and integrative approach to the Management of University Innovation for Local Development (GIUGDL). These components are interconnected and interface with core university processes and innovation activities—specifically ideation, development, and deployment—which are situated at the center of the model, though they do not necessarily follow a linear sequence. These transformation elements do more than just enable Innovation Management (MInn) within universities; by their very design, they ensure the university actively contributes to the GIUGDL framework.

- **Transformation element: surveillance and intelligence**

This element aligns with the

concepts of Technological Surveillance (González 2013, as cited in Balza, 2016) and Competitive Intelligence (Gutiérrez, 2017), integrated under the unified perspective of NC 1308 (2018). Its implementation facilitates the continuous monitoring of the environment, alongside the analysis and dissemination of critical information. This serves as an essential precursor for anticipating territorial demands and ensuring that strategic planning is effectively oriented to address them. Furthermore, surveillance and intelligence guide university innovation processes toward meeting the requirements of the local innovation system, as well as the objectives of the EDM and EDP. Notably, this proposal addresses a specific dimension that remains absent from previously reviewed models.

- **Transformation Element: Priority Management**

The university requires the establishment of clear priorities that align the objectives of Innovation Management (MInn) with the urgency and significance of Local Development Management (LDM). This involves a systematic process of definition and prioritization (Sarache et al., 2005) to ensure strategic alignment. Such prioritization is fundamental to the planning phase, as it facilitates the identification of priority areas based on environmental needs, the creation of a precise project roadmap tailored to the territory's strategic projections, and the assessment of the university's capacity to deliver effective responses. Ultimately, the output of this element provides critical guidance to institutional managers, supporting decision-making processes linked to innovations that drive local development.

- **Transformation element: development of organizational capabilities**

The third element is fundamental to fostering an environment conducive to innovation, necessitating the integration of strategic management, innovation management, organizational learning, infrastructure management, and relational capabilities (Duque et al., 2018). The development of organizational capabilities is, by its very nature, inextricably linked to human resources and training processes; simultaneously, it functions as both a client and a supplier to all other organizational elements. As the university cultivates capabilities within and for its internal processes, it inherently extends these benefits to its network of linked actors. This synergy enhances relationship mechanisms, facilitates the identification and execution of new strategic lines, and informs policy formulation. Furthermore, it strengthens popular participation, local governance, and the establishment of robust mechanisms for monitoring, control, feedback, and continuous improvement.

Innovation training is an emerging concept that has become a vital necessity for higher education institutions (Guerrero and Vásquez, 2024; Pablo et al., 2024). This paradigm shift requires careful attention to how training is materialized through the active participation of students, faculty, staff, and extra-university stakeholders. In this regard, we concur with Acurero et al. (2025) that the continuous training of these actors is a fundamental pathway to enhancing their skills and potential—an essential component for the sustained progress and institutional development of any organization.

Human resources serve as the crystallization of institutional knowledge; therefore, investing in staff training and development is essential (González et al., 2023). Through collaborative training initiatives, universities can focus on cultivating creativity and implementing innovative ideas, effectively preparing students for the evolving challenges of the professional landscape (Briones et al., 2024). As noted by Pablo et al. (2024, p. 1426), "A center cannot improve if it does not have trained teachers." Extending this logic, it is equally important to develop competencies among non-teaching staff and external stakeholders to ensure a holistic approach to institutional growth.

These collective efforts can foster initiatives that not only refine internal processes but also facilitate the interdisciplinary development of innovative solutions. By leveraging teamwork and utilizing both implicit and tacit knowledge—sourced from within and outside the university—these initiatives provide tangible benefits to local communities and the environment. Ultimately, organizational capacity development is a comprehensive cycle that encompasses capacity assessment, the strategic design and implementation of development programs, and continuous evaluation and improvement.

- **Transformation element: link management**

Connectivity management serves as the foundational framework for collaboration within innovation projects and initiatives. As Guerrero (2021) posits, the act of connecting is a transformative function that catalyzes both broader social progress and internal institutional evolution.

This element fosters deep collaboration by mobilizing the resources and capabilities of both local and international non-university stakeholders. By tapping into regional and global tacit knowledge, connectivity management enhances the social relevance of academic research. It further streamlines the transition from research to innovation; by involving external managers from the conceptual stage, the university ensures that development aligns with environmental demands and real-world challenges.

Given the university's multifaceted nature, engagement is inherently multi-directional, serving diverse purposes through various channels. Navigating this complexity requires a systematic approach: first, by identifying key actors and their specific profiles; second, by establishing robust communication channels—both physical and digital—to facilitate consultation. It is equally vital to formalize the regulatory frameworks for interaction and conflict resolution. By defining dedicated co-creation spaces, institutions can implement agile methodologies that accelerate development and optimize resource allocation (López, 2015). This ensures high-quality, tailored solutions (de Arteche et al., 2025) while allowing for continuous process evaluation to secure long-term sustainability and innovation.

5. Conclusions

Innovation management in universities, through its contribution to local development, establishes an integrative framework that addresses a significant gap in current literature. Existing research often acknowledges the necessity of linking university management, innovation, and local development, yet it fails to explore

their complex interdependencies. This article identifies this theoretical void and provides a robust conceptual and methodological proposal to bridge it.

The implementation of the GIUGDL (University Innovation Management for Local Development) is supported by Cuba's Science and Innovation-Based Government Management System, which emphasizes the role of universities in multilevel coordination within a hybrid context of centralization and decentralization. This model offers a scalable solution for nations seeking a balance between national cohesion and territorial autonomy, though it necessitates further empirical validation across diverse global contexts.

The efficacy and conceptual basis of the GIUGDL are driven by two distinct yet complementary approaches: a strategic approach, which aligns university innovation planning with territorial development priorities; and an integrative approach, which redefines the university as a multi-actor co-creation hub. Together, these frameworks enable the university to transcend its traditional role as a knowledge provider, becoming an active co-producer of solutions tailored to its development context.

Ultimately, the GIUGDL model represents a significant advancement over existing theoretical and methodological paradigms. By centering on four core transformation elements, it empowers the university to anticipate territorial demands, prioritize strategic actions, build organizational capacity, and systematically manage the alliances essential for sustainable growth.

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