

INNOVATION AND PERFORMANCE MANAGEMENT: MAPPING THE RESEARCH LANDSCAPE USING BIBLIOMETRIC ANALYSIS

Andra-Teodora GORSKI¹

¹Lucian Blaga University of Sibiu, 0000-0003-2805-015X

Abstract:

Innovation serves different strategic purposes and is crucial for enhancing organizational performance in order to gain or to maintain a sustainable competitive advantage. By broadening the innovation ecosystem through collaboration with external partners, customers, and other stakeholders, organisations can share ideas, technologies, and resources. This paper aims to examine the interrelationships between performance management, innovation, and the multifaceted nature of different drivers, with a focus on their collective impact on organisational outcomes. The research methodology employed a bibliometric analysis based on the search on the Web of Science core collection. The resulted documents in English were exported and further processed with the aid of the SciMAT software to explore the evolution and interrelationship between these concepts and other keywords. According to the research results, innovation is closely linked with other keywords including performance management, human resource management (HRM), sustainability, governance, environmental performance, supply chain management and others. Technological innovation, product development, and organisational capabilities were also found by the research to have a significant interconnection. This highlights innovation as a crucial competency for enhancing firm performance and meeting market demands. Furthermore, research identifies transformational leadership as a critical factor in this process. This leadership style has been found to significantly boost employee motivation, thereby influencing innovation performance in a positive manner. To achieve sustainable growth, organizations should prioritize their innovation capabilities, foster a culture of creativity, and integrate innovation with performance management.

Keywords: *Driver, Innovation, Mediating Role, Performance Management, Transformational Leadership*

JEL classification: *C55, L25, M10, O30, Q56*

1. Introduction

The significance of innovation within the contemporary global landscape cannot be overstated. It serves as a catalyst for economic growth (Dhar et al., 2023), propelling nations, industries, and organizations toward heightened competitiveness (Aghion et al., 2005) and sustainable development. By introducing groundbreaking concepts and methodologies, innovation drives productivity gains, streamlines operational efficiencies (Basu and Kumar, 2010), and facilitates the creation of new market opportunities.

One of the greatest economists of the previous century, Schumpeter, has emphasized the role of innovation as a driver of economic development (Sldezik, 2013). Innovation, in the context of contemporary scholarship, pertains to the conception, development, and implementation of novel ideas, processes, products, or services that bring about substantial enhancements to existing practices, create value, and foster progress across various domains (Giannopoulos, 2015).

Innovation flourishes in an ecosystem shaped by some vital characteristics: technological progress, a culture of collaboration, a culture of risk-taking and a transformational leadership style. These interrelated enablers interact to enhance the ability of individuals and organisations to design and implement transformative solutions that transcend existing paradigms and redefine the limits of economic, environmental, and human progress.

¹ andra.teodora.gorski@gmail.com

Innovation plays a key role in driving organisational performance by promoting creativity, generating new products/ services, improving processes, and enhancing competitive advantage. In today's dynamic business environment Innovation and performance management are integral components of organizational success. While innovation drives competitiveness and growth, performance management ensures alignment with strategic goals and objectives.

The scope of this paper is to identify the evolution and concepts around the synergetic link between innovation, performance management and the multifaceted nature of drivers for organisational success. The research objectives are:

- To identify the scientific contribution towards the development of the research topic.
- To identify the evolution of the concepts included in the research topic.
- To perform a cluster network analysis in order to identify the existing links between the concepts that constitute the strategic map.

The paper starts with a literature review, followed by the research methodology, results and discussion, and ends with conclusions.

2. Literature review

In their systematic review of the literature on innovation, Crossan and Apaydin (Crossan & Apaydin, 2009) proposed an enhanced definition of the term. Innovation is viewed as the creation, production, adaptation, and exploitation of original ideas that add value to existing products, services, and markets. An important highlight is that innovation must be understood as both an outcome, as well as a process.

Innovation encapsulates a multifaceted interplay between creativity, technology, entrepreneurship, and adaptation, fostering a transformative cycle of continuous improvement and evolution within both economic and societal frameworks. The relationship between innovation and creativity rests upon a nuanced distinction within the realm of scholarly discourse. Creativity embodies the cognitive capacity to generate original and imaginative ideas, often arising from the synthesis of diverse knowledge and perspectives. It constitutes the initial stage of the innovative process, serving as a wellspring of novel concepts. Creativity involves the recombination of existing elements, ideas, or paradigms, thereby yielding unconventional insights that challenge established norms. In contrast, innovation encompasses a broader continuum that extends beyond mere ideation. It constitutes the application of creative concepts to real-world contexts, engendering tangible value and impact. The innovation process necessitates the conversion of creative ideas into practical solutions, products, or processes that address specific needs or opportunities (Andreson et al., 2014). As such, innovation manifests itself as a systematic, multi-dimensional process involving improvement, experimentation, and adaptation. While creativity fosters the emergence of new ideas, innovation brings them to maturity and ensures their integration within a social, economic, or industrial framework.

Innovation promotes collaboration across disciplines and cultures, fostering diverse perspectives that fuel advancements in knowledge and intellectual capital. Therefore, creating an environment that promotes innovation (Lin, 2007) by implementing supportive policies (Yuan & Woodman, 2010), investing in research and development, and fostering a culture of risk-taking is essential to unlocking the potential of innovation for a successful and inclusive future.

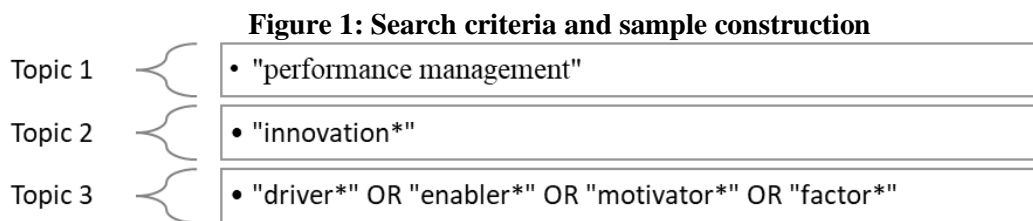
Managers should integrate technological innovation, including both product and process innovations, into their business operations to address forecasting challenges and cultivate dynamic capabilities, thereby enhancing overall performance. In this context, technological innovation can play an important mediating role in linking big data as a valuable asset to organisational outcomes (Saleem et al., 2020).

Coupled with technology, a culture of openness and collaboration can function as an essential enabler of innovation. Organizations that prioritize different opinions, encourage interdisciplinary dialogue (Linh, 2007), and embrace experimentation create an environment where new perspectives can collide, creating an environment in which ideas can cross-pollinate to reach innovative solutions. The

management context, particularly the social and performance management context, has a significant impact on the performance of innovation within an organization. Organizational culture plays a crucial role in encouraging collaboration and information sharing, which in turn influences the effectiveness of innovation. Additionally, organizational culture significantly affects the management environment and an organization's capacity for innovation. Therefore, it is essential for businesses to enhance their organizational cultures. According to Zhang et al. (2023), this can be achieved by prioritising psychological safety, collectivism, and power distance.

3. Research methodology

To investigate the relationship between performance management, innovation, and influencing drivers (encompassing enablers, motivators, factors), a quantitative bibliometric analysis was conducted using the Web of Science (WoS) database. The chosen topic of innovation management is a well-established research area, and a preliminary search revealed a substantial volume of relevant publications. This study aimed to identify scholarly works situated at the intersection of these three key themes: (1) performance management; (2) innovation; (3) drivers' umbrella, as depicted in Figure 1.



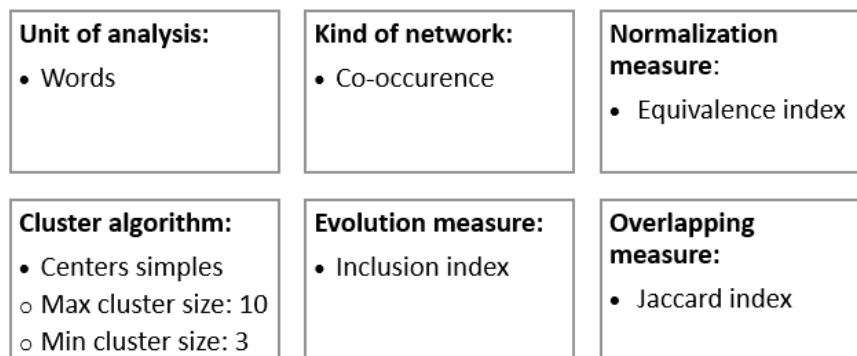
Source: Author's processing based on WoS search

The WoS search yielded 183 documents published in English. English was the only language filter applied. These retrieved documents were subsequently exported in .txt format for further analysis. SciMAT software (Cobo et al., 2012) was then employed to conduct a science mapping analysis, enabling a longitudinal examination of research trends over time. SciMAT was chosen due to its rigorous methodology grounded in established bibliometric indicators and the analysis of bibliographic networks (Martínez-Martínez et al., 2023).

4. Research results and discussion

The research conducted was conceptual, with the unit of analysis being words or terms (as defined by the author, source, or added). The analysis configuration is present in Figure 2.

Figure 2: Analysis Configuration

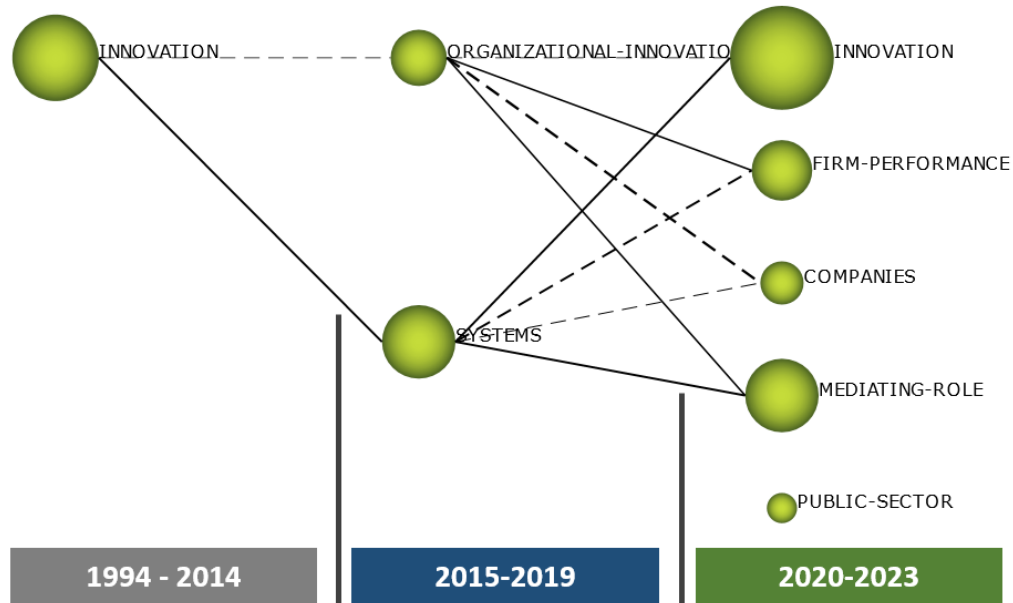


Source: Authors processing based on the report automatically generated by SciMAT

4.1 The Evolution Map

The study employed strategic diagrams to examine the thematic evolution of the research domain. In order to identify the evolution of the key concepts, the research period 1994-2023 was divided into three intervals: 1994-2014, 2015-2019, and 2020-2023 (Figure 3).

Figure 3: The Evolution Map



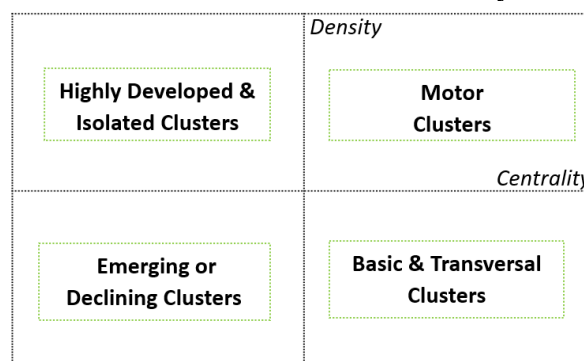
Source: Authors processing utilizing SciMAT

An analysis of the evolution map shows that the main cluster identified for the period 1994-2014 was "innovation", which has been replaced for the period 2015-2019 by two other clusters, namely "organisational innovation" and "systems". This transformation indicates the researchers' interest in the systemic approach, which was subsequently incorporated into the resulting new specific concepts. For the period 2020-2023, the map identifies five significant clusters: "innovation", "firm-performance", "companies", "mediating-role", and "public-sector". Notably, the "public-sector" cluster appears to be in isolation, while all the other clusters are related to the two preceding. It is evident that both "organisational innovation" and "systems" (identified in the period 2015-2019) are now present in four new clusters: "innovation", "firm-performance", "companies" and "mediating role".

4.2 Strategic Diagrams

The strategic diagram is built on two indicators - centrality (represented horizontally) and density (represented vertically).

Figure 4. Cluster classification based on density and centrality



Source: Authors processing based on the report automatically generated by SciMAT

For each period, the detected clusters have a defined position – based on Collon’s centrality and density – in one of the fourth resulted quadrants: basic and transversal clusters, motor clusters, highly developed and isolated clusters, and emerging or declining clusters (Figure 4). In the last quadrant, the identification of themes as emerging or declining is based upon the year of the documents forming that cluster.

For further analysis, the most recent period was chosen, 2020-2023, which in fact includes the most clusters - "innovation", "firm performance", "companies", "mediating role", and "public-sector". Table 1 presents information on the centrality and density of the clusters, including their centrality and density range, according to which they fall into one of the four quadrants.

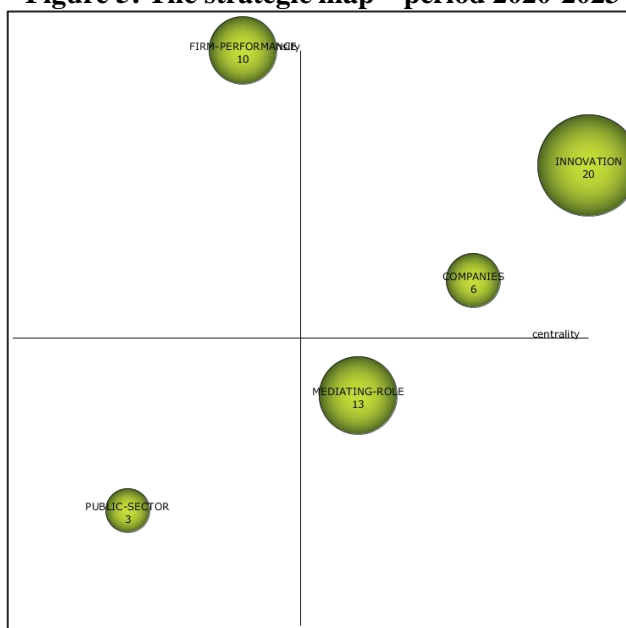
Table 1: Cluster Information for Strategic Map

Name	Centrality	Centrality range	Density	Density range	Quadrat
INNOVATION	101.25	1	42.04	0.8	Motor
FIRM-PERFORMANCE	84.58	0.4	57.63	1	Motor
COMPANIES	95.17	0.8	22.6	0.6	Highly Developed & Isolated
MEDIATING-ROLE	90.11	0.6	20.5	0.4	Basic & Transversal
PUBLIC-SECTOR	31.23	0.2	11.46	0.2	Emerging or Declining

Source: Source: Authors processing based on data from SciMAT

Based on the two parameters - centrality and density - the clusters were given ranks. Thus, from the perspective of transversal development (relevance of the cluster for the research topic) the cluster "innovation" is ranked first, with the highest centrality (Centrality: 101.25; Centrality range: 1). Next in descending order are the following clusters: "companies" (Centrality: 95.17; Centrality range: 0.8), "mediating role" (Centrality: 90.11; Centrality range: 0.6), "firm-performance" (Centrality: 84.58; Centrality range: 0.4) and "public-sector" (Centrality: 31.23; Centrality range: 0.2). In terms of density (level of development), "firm-performance" ranks first (Density: 57.63; Density range: 1), followed by "innovation" (Density: 42.04; Density range: 0.8), "companies" (Density: 22.06; Density range: 0.6), "mediating role" (Density: 20.5; Density range: 0.4) and "public-sector" (Density: 11.46; Density range: 0.2).

Figure 5: The strategic map – period 2020-2023



Source: Authors processing utilizing SciMAT

Based on these parameters, the Strategic Map was drawn up (Figure 5). As it can be seen in the motor themes quadrant two clusters appear: "innovation" very well represented as size and centrality and "companies" - with smaller size, lower centrality and density. "Mediating-roles" is located in the basic quadrant and "firm-performance" in the niche quadrant. The "public-sector" cluster is an emerging cluster not in decline. This results from analysing years of document appearance that fall in the 2020-2023 timeframe.

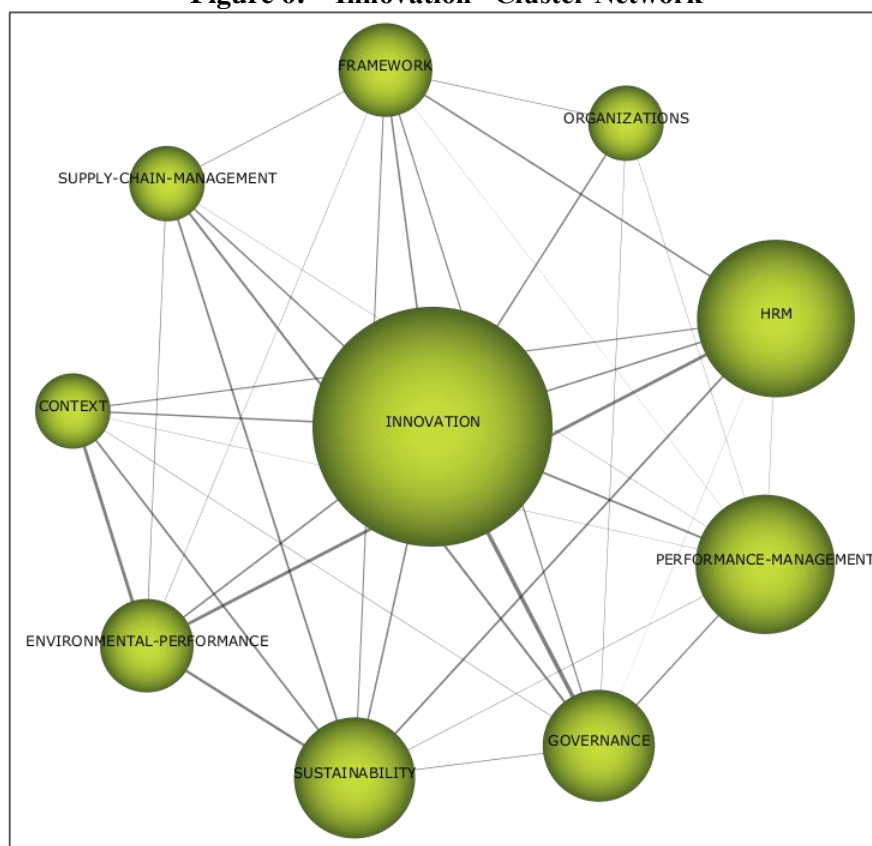
4.3 Clusters' networks

In the following, the clusters related to the most recent period (2020 - 2023) will be addressed. In this regard, "innovation", "companies", "mediating-role", "firm-performance", and "public sector" clusters networks will be analysed, to identify the connections with other topics.

A) Innovation

Figure ... displays the network for the "innovation" cluster. The key concepts related to it are represented by thinner or thicker lines, depending on the strength of the link. As can be seen 'innovation' is central and connected to nine other nodes. In descending order of concept size (as number of documents) the following are: "hrm", "performance-management", "sustainability", "governance", "environmental-performance", "framework", "organizations", "supply-chain-management", and "context". The figure also illustrates the links between these concepts that form the map.

Figure 6: "Innovation" Cluster Network



Source: Authors processing in SciMAT

The most significant in terms of size are: "hrm" (human resource management), "performance-management", "sustainability" and "governance". In terms of links weight, the most powerful are the links with "governance" (weight: 0.33) and "performance-management" (weight: 0.17), followed by links with "sustainability", "environmental-performance", "framework", "hrm", "context", "supply-chain-management", and "organizations" (Tabel 2).

Table 2: Links between “innovation” and the nodes in cluster network

Node A	Node B	Weight
innovation	governance	0.33
innovation	performance-management	0.17
innovation	sustainability	0.15
innovation	environmental-performance	0.15
innovation	framework	0.15
innovation	hrm	0.14
innovation	context	0.14
innovation	supply-chain-management	0.14

Source: Source: Authors processing based on data from SciMAT

As can be seen in Figure 6 and emphasized in Table 3, the data analysis reveals that there are also other strong links in this construct (marked with a thicker line). This are between "hrm" and "environmental-performance" (weight: 0.27), followed by the link between "hrm" and "environmental-performance" (weight: 0.27), which in turn has a strong link with "sustainability" (weight: 0.23).

Table 3: Other significant links in the "innovation" strategic map

Node 1	Node 2	Weight
environmental-performance	context	0.27
environmental-performance	hrm	0.27
sustainability	environmental-performance	0.23
governance	supply-chain-management	0.19
sustainability	context	0.17
sustainability	supply-chain-management	0.17
sustainability	hrm	0.17

Source: Source: Authors processing based on data from SciMAT

B) Firm-performance

In terms of link strength, as can be concluded from the data analysis (Table 4), "firm-performance" is most strongly related to "market-orientation" (weight: 0.38), followed by "organizational-performance" (weight: 0.29) and relies heavily on "technological-innovation" (weight: 0.28).

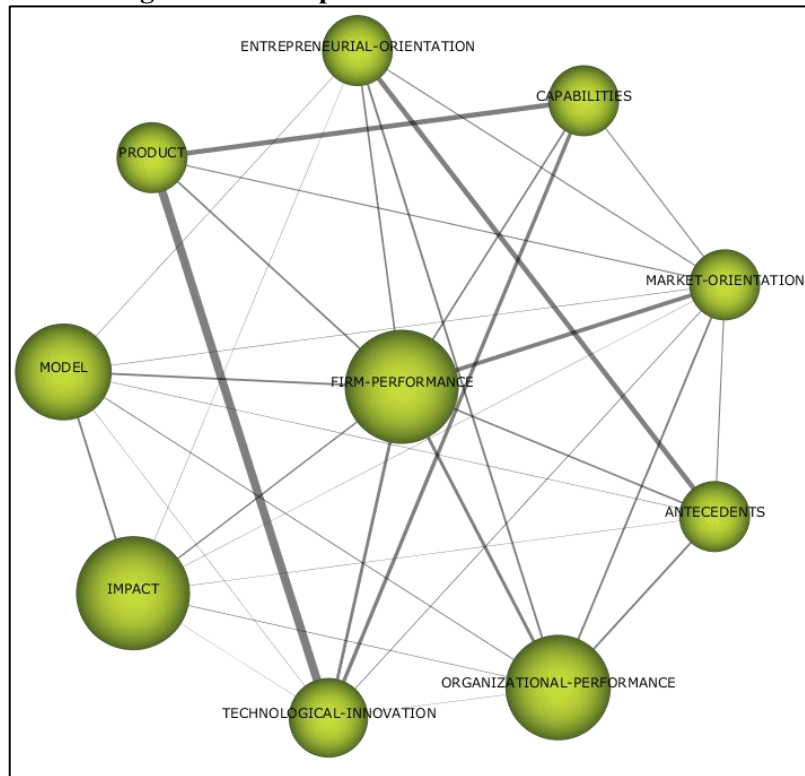
Table 4. Links between “firm performance” and the nodes in cluster network

Cluster	Node	Weight
firm-performance	market-orientation	0.38
firm-performance	organizational-performance	0.29
firm-performance	technological-innovation	0.28
firm-performance	model	0.19
firm-performance	antecedents	0.17
firm-performance	product	0.17
firm-performance	entrepreneurial-orientation	0.17
firm-performance	capabilities	0.17

Source: Source: Authors processing based on data from SciMAT

As can be seen in Figure 7 and emphasized in Table 5, there are also other strong links in this construct (marked with a thicker lines).

Figure 7. “Firm performance” Cluster Network



Source: Authors processing in SciMAT

Analysing Figure 7, a strong triangle can be noticed between the nodes "technological-innovation", "product" and "capabilities" - indicating that in order to deliver market-demanded products, there is a need for innovation - especially technological innovation - which is a vital capability for the firm performance.

Table 5: Other significant links in the "firm-performance" strategic map

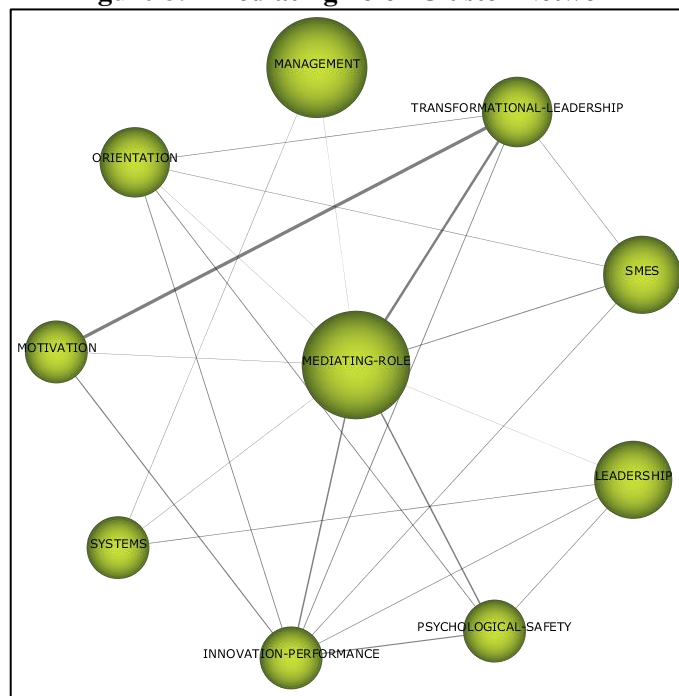
Node 1	Node 2	Weight
antecedents	entrepreneurial-orientation	0.44
product	capabilities	0.44
firm-performance	market-orientation	0.38
technological-innovation	capabilities	0.33
organizational-performance	firm-performance	0.29

Source: Source: Authors processing based on data from SciMAT

C) Mediating role

As can be seen "mediating-role" is central and related to other nine nodes: "management", "orientation", "smes", "leadership", "transformational-leadership", "motivation", "psychological-safety", "innovation-performance", and "systems".

Figure 8: “Mediating-role” Cluster Network



Source: Authors processing in SciMAT

In terms of link strength, as can be observed from the data analysis (Table 6), "mediating-role" is most strongly related to "transformational-leadership" (weight: 0.25), followed "psychological-safety" (weight: 0.15), and "innovation-performance" (weight: 0.15).

Table 6. Links between “mediating role” and the nodes in cluster network

Cluster	Node	Weight
mediating-role	transformational-leadership	0.25
mediating-role	psychological-safety	0.15
mediating-role	innovation-performance	0.15
mediating-role	smes	0.09
mediating-role	systems	0.04
mediating-role	motivation	0.04
mediating-role	orientation	0.03
mediating-role	leadership	0.02

Source: Source: Authors processing based on data from SciMAT

Another key aspect to be noted is the strong link (marked with a thicker line) between "transformational leadership" and "motivation", which indicates the important role that this leadership style plays in promoting "motivation", which in turn influences "innovation performance" (Table 7).

Table 7. Other significant links in the "mediating-role" strategic map

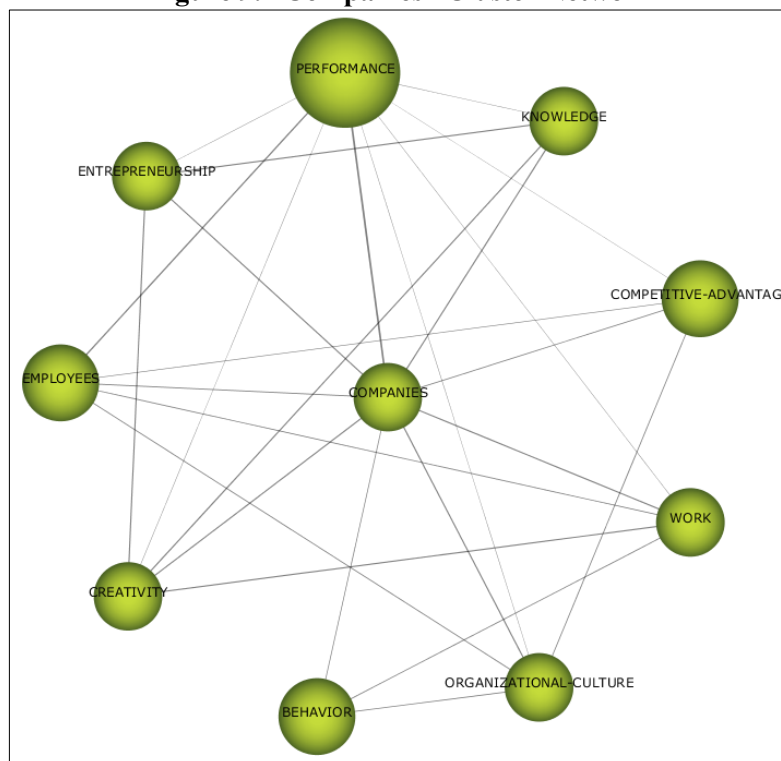
Node 1	Node 2	Weight
motivation	transformational-leadership	0.33
innovation-performance	motivation	0.11
psychological-safety	innovation-performance	0.11

Source: Authors processing based on data from SciMAT

D) Companies

The cluster "companies " is related to other nine nodes: "performance", "competitive-advantage", "employees" , "behavior", "organizational-culture", "knowledge", "entrepreneurship", "creativity", and "work" (figure ...). The most representative node - both in size and weight is "performance".

Figure 9. "Companies" Cluster Network



Source: Authors processing in SciMAT

Regarding weight, there are no other strong links that should be particularly highlighted, considering that their values are 0.11 and 0.08 (Table 8).

Table 8: Links between "companies" and the nodes in cluster network

Cluster Node	Node	Weight
companies	performance	0.17
companies	entrepreneurship	0.11
companies	knowledge	0.11
companies	work	0.11
companies	organizational-culture	0.11
companies	creativity	0.11
companies	competitive-advantage	0.08
companies	behavior	0.08
companies	employees	0.08

Source: Authors processing based on data from SciMAT

One aspect in the cluster network refers the two interesting quadrants (Q1 and Q2): (Q1) formed by "performance", "competitive advantage", "organizational culture" and "employee"; (Q2) formed by "performance", "knowledge", "creativity", "entrepreneurship". These can be seen in Figure ..., and their weight presented in Table 9.

Table 9: Other significant links in the "companies" strategic map

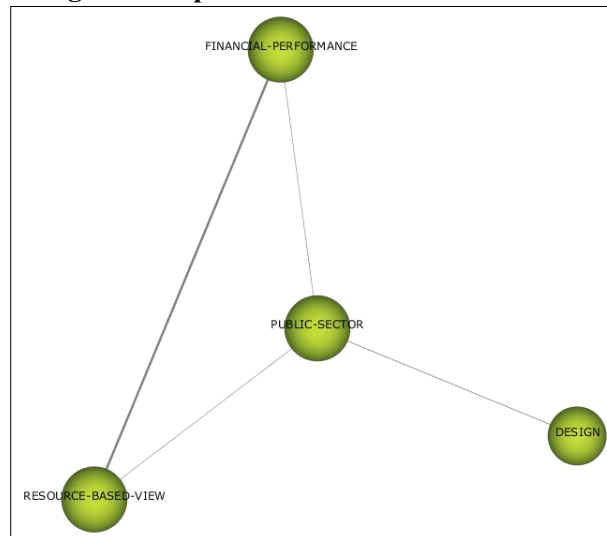
Node 1	Node 2	Weight
Q1		
performance	competitive-advantage	0.03
competitive-advantage	organizational-culture	0.08
organizational-culture	employees	0.08
employees	performance	0.12
Q2		
performance	knowledge	0.04
knowledge	creativity	0.11
creativity	entrepreneurship	0.11
entrepreneurship	performance	0.04

Source: Authors processing based on data from SciMAT

E) Public-sector

The "public-sector" cluster is small and has only three links with: design (weight: 0.08), resource-based view (weight: 0.06), and financial performance (weight: 0.06). The strongest link in this construct is between "financial-performance" and "resource-based-view" (weight: 0.25).

Figure 10: "public-sector" Cluster Network



Source: Authors processing in SciMAT

Considering that resource-based theory is very important from a performance perspective, it is also interesting to identify the links between the resource-based view in the "public-sector" cluster and concepts found in the other clusters presented previously. Thus, links are identified between the resource-based view and:

- "governance" (0.04), "performance-management" (0.03) and "innovation" (0.01) – from the "innovation" cluster;
- "organizational-performance" (0.14), "model" (0.04), "firm-performance" (0.03) from the cluster "firm-performance";
- "entrepreneurship" (0.08) – from the cluster companies;
- "balanced-scorecard" (0.06) – is not assigned to any cluster.

Table 10: Links between “public-sector” and the nodes in cluster network

Cluster Public-sector	Node	Another cluster	Nodes	Weight
public-sector	resource-based-view	innovation	innovation	0.01
public-sector	resource-based-view	innovation	governance	0.04
public-sector	resource-based-view	innovation	performance-management	0.03
public-sector	resource-based-view	firm-performance	organizational-performance	0.14
public-sector	resource-based-view	firm-performance	firm-performance	0.03
public-sector	resource-based-view	firm-performance	impact	0.03
public-sector	resource-based-view	firm-performance	model	0.04
public-sector	resource-based-view	companies	entrepreneurship	0.08
public-sector	resource-based-view	NO cluster	balanced-scorecard	0.06

Source: Authors processing based on data from SciMAT

Conclusions

Organizations can pursue various types of innovation, including product and/ or service innovation, process innovation, business model innovation, managerial, and organizational innovation. Each type of innovation serves different strategic purposes and is crucial for enhancing organizational performance in order to gain or to maintain a sustainable competitive advantage. By broadening the innovation ecosystem through collaboration with external partners, customers, and other stakeholders, organisations can share ideas, technologies, and resources. This provides organisations with access to a diverse pool of knowledge and expertise.

The research has yielded some interesting conclusions:

- The concept of innovation is central in the strategic map, with significant relationships with concepts like governance, performance management, sustainability, human resource management and others.
- There were found strong links between HRM and environmental performance, indicating the critical role of HRM practices in driving environmental initiatives within organizations.
- Firm performance emerges with strong links to market orientation, organizational performance, and technological innovation.
- The presence of a strong triangle between technological innovation, product, and capabilities underscores the importance of innovation as a fundamental capability for enhancing firm performance and delivering market-demanded products.
- In the mediating role cluster, the transformational leadership node has the highest weight. Furthermore, when analysing the links in the mediating role strategic map, the strong link between transformational leadership and motivation can be noted. This underlines the role of this leadership style in fostering employee motivation, which in turn influences innovation performance (also emphasised in the research).
- Interconnectedness of performance, organizational culture, knowledge, and creativity/ entrepreneurship is emphasizing their synergic influence on organizational success.
- There is important to consider resource-based perspectives in assessing financial performance within the public sector.

Innovation, especially technological innovation, plays a critical role in improving organisational performance and competitiveness. Therefore, organizations should prioritize investments in innovation capabilities to maintain market relevance and achieve sustainable growth. To foster a culture of innovation within organizations, it is important to understand the interplay between innovation, governance, and performance management, especially concerning environmental and sustainability goals. Organisations should prioritise the development of a culture that fosters creativity and

entrepreneurship, whilst leveraging knowledge assets to drive performance and maintain competitive advantage. It is important to emphasise the significance of employee engagement and creativity, as this can lead to sustainable growth and innovation within organisations.

In all this journey, leaders play an important role in promoting an environment where employees feel empowered to generate and implement innovative ideas. In this regard, transformational leadership is crucial in promoting employee motivation and creating an environment conducive to innovation. Strategies aimed at enhancing leadership effectiveness and fostering psychological safety can positively impact innovation performance.

Aligning innovation with performance management is crucial for effectively measuring, monitoring, and evaluating the impact of innovation on overall performance and success. Here are some recommendations for practitioners:

- To achieve this, it is recommended to include performance indicators of innovation effectiveness, such as the number of new products or services introduced, patents filed, R&D investment, and customer satisfaction with innovative solutions.
- Tracking innovation-related metrics allows organizations to assess innovation performance and identify areas for improvement to drive long-term growth and profitability.
- Performance metrics should include both short-term innovation outcomes, such as the introduction of new products, and long-term strategic objectives, such as expanding market share and diversifying revenue sources.

In conclusion, these findings highlight the importance of performance management, leadership, organizational culture, HRM, and strategic decision-making in promoting innovation to achieve sustainable growth across diverse sectors. By integrating performance management with innovation strategies, organizations can optimize resource allocation, track performance metrics, and drive continuous improvement, thereby enhancing their competitive advantage and long-term success. To effectively navigate challenges and exploit opportunities within today's dynamic business environment, organisations must prioritise investment in innovation capabilities, foster a culture that encourages creativity and entrepreneurship, and empower transformational leadership.

The previous presented findings highlight the paramount importance of leadership, organizational culture, strategic decision-making, and performance management in driving innovation and achieving sustainable growth across various sectors. The multifaceted nature of innovation, firm performance, and organizational effectiveness underscores the need for a comprehensive approach to management. Organizations should prioritize investment in innovation capabilities, foster a culture that encourages creativity and entrepreneurship, and empower transformational leadership to navigate the complexities of the modern business landscape effectively. Additionally, integrating innovation into performance management processes is crucial for aligning organizational goals with innovation objectives, monitoring progress, and ensuring accountability for innovation outcomes. By integrating performance management with innovation strategies, organizations can optimize resource allocation, track performance metrics, and drive continuous improvement in innovation practices, thereby enhancing their competitive advantage and long-term success.

Besides the previous mentioned aspects, policy frameworks and supportive infrastructure constitute another vital underpinning of innovation (Dhar et al., 2023). Governments and institutions play a critical role in fostering innovation through funding research initiatives, offering incentives for private investment, and establishing intellectual property protections. Moreover, the integration of education and research institutions into the innovation ecosystem (Wu et al., 2023) facilitates knowledge transfer and talent development, while also generating new ideas.

References

- Aghion, P., Bloom, N., Blundell, R., Griffith, R., & Howitt, P. (2005). Competition and Innovation: An Inverted-U Relationship*. *Quarterly Journal of Economics*, 120(2), 701–728. <https://doi.org/10.1162/0033553053970214>

- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *Journal of Management*, 40(5), 1297–1333. <https://doi.org/10.1177/0149206314527128>
- Basu, A. J., & Kumar, U. (2004). Innovation and Technology Driven Sustainability Performance Management Framework (ITSPM) for the Mining and Minerals Sector. *International Journal of Surface Mining, Reclamation and Environment*, 18(2), 135–149. <https://doi.org/10.1080/13895260412331295394>
- Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2012). SciMAT: A new science mapping analysis software tool. *Journal of the American Society for Information Science and Technology*, 63(8), 1609–1630. <https://doi.org/10.1002/asi.22688>
- Crossan, M. M., & Apaydin, M. (2010). A Multi-Dimensional Framework of Organizational Innovation: A Systematic Review of the Literature. *Journal of Management Studies*, 47(6), 1154–1191. <https://doi.org/10.1111/j.1467-6486.2009.00880.x>
- Dhar, B. K., Shaturaev, J., Kurbonov, K., & Nazirjon, R. (2023). The causal nexus between innovation and economic growth: An OECD study. *Social Science Quarterly*, 104(4), 395–405. <https://doi.org/10.1111/ssqu.13261>
- Giannopoulos, A. (2015). Performance Management as a Process of Promoting Innovation in Software Industry. *Procedia - Social and Behavioral Sciences*, 175, 401–407. <https://doi.org/10.1016/j.sbspro.2015.01.1216>
- Lin, H. (2007). Knowledge sharing and firm innovation capability: An empirical study. *International Journal of Manpower*, 28(3/4), 315–332. <https://doi.org/10.1108/01437720710755272>
- Martínez-Martínez, A., Cegarra-Navarro, J.-G., Cobo, M.-J., & De Valon, T. (2023). Impacts and Implications for Advancing in Environmental Knowledge in Hospitality Industry in COVID Society: A Bibliometric Analysis. *Journal of the Knowledge Economy*, 14(2), 2026–2053. <https://doi.org/10.1007/s13132-022-00910-5>
- Saleem, H., Li, Y., Ali, Z., Ayyoub, M., Wang, Y., & Mehreen, A. (2021). Big data use and its outcomes in supply chain context: The roles of information sharing and technological innovation. *Journal of Enterprise Information Management*, 34(4), 1121–1143. <https://doi.org/10.1108/JEIM-03-2020-0119>
- Śledzik, K. (2013). Schumpeter's View on Innovation and Entrepreneurship. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2257783>
- Wu, Y. J., Goh, M., & Mai, Y. (2023). Social innovation and higher education: Evolution and future promise. *Humanities and Social Sciences Communications*, 10(1), 283. <https://doi.org/10.1057/s41599-023-01759-y>
- Yuan, F., & Woodman, R. W. (2010). Innovative Behavior in the Workplace: The Role of Performance and Image Outcome Expectations. *Academy of Management Journal*, 53(2), 323–342. <https://doi.org/10.5465/amj.2010.49388995>
- Zhang, W., Zeng, X., Liang, H., Xue, Y., & Cao, X. (2023). Understanding How Organizational Culture Affects Innovation Performance: A Management Context Perspective. *Sustainability*, 15(8), 6644. <https://doi.org/10.3390/su15086644>