RESEARCH TRENDS AND DIRECTIONS IN ORGANIZATIONAL RESILIENCE

Anatol Melega^{1*}, Cristinel Ichim², Anişoara-Niculina Apetri³

1)2)3) Ştefan cel Mare University of Suceava, Romania

Abstract

The overlapping crises of recent years have highlighted a new dimension in the evaluation of an organization, namely its ability to adapt and survive in crisis situations, a concept defined as organizational resilience. The purpose of this research is to highlight the current state of research, as well as emerging trends and directions in research on organizational resilience. The research methodology consists of conducting a bibliometric analysis of scientific publications in the Web of Science database from 1996 to 2025. The bibliometric analysis was performed using Bibliometrix and VOSviewer software. The results of the research highlight that future research should develop predictive models and quantitative tools capable of anticipating and measuring organizational resilience in volatile contexts. At the same time, it emphasizes the need to integrate resilience into governance strategies, explore the relationship with sustainability and organizational ethics, and adapt to emerging risks generated by digitization, climate change, and geopolitical changes. The research adds value to the scientific literature by highlighting future research directions in the analysis of organizational resilience in various economic contexts.

Keywords

organizational resilience, bibliometric analysis, research directions, trends

JEL Classification

M10, M14

Introduction

Organizational resilience is a concept that has been researched over time, from theoretical studies that attempted to define the concept to technical research that laid the foundations for measuring it. Currently, organizational resilience is seen as a performance indicator that measures adaptability, robustness, and recovery from internal and external shocks. In practice, to withstand the test of time, it is not enough to simply record economic, social, and environmental performance; it is also necessary to anticipate crises, recover from them, and absorb their negative effects, transforming

^{*} Corresponding author, **Anatol Melega** – melega.anatol@usm.ro

them into opportunities. Thus, resilience has become an integral part of risk management and organizational culture, which requires the coordination of both financial and human resources. Therefore, organizational resilience is a multidimensional concept that involves the efficient, effective, and economical management of all organizational resources.

Researchers' interest in a particular concept, problem, or research topic intensifies when an event occurs in the economy or society that brings about a certain change. Regarding the concept of organizational resilience, the number of studies on this topic began to grow with the financial crisis of 2007-2009, followed by a relatively steady upward trend. The COVID-19 pandemic, the energy and military crises, and geopolitical changes have brought research on organizational resilience to the forefront, emphasizing its role in the sustainable development of the business environment.

In this vein, the research aim is to highlight the current state of research, as well as emerging trends and directions in research on organizational resilience. Thus, in order to achieve the research aim, the following research questions were formulated: RQ1: How has scientific output on organizational resilience evolved between 1996-2025?; RQ2: Which authors, networks, and publication channels are the most influential?; RQ3: What are the motor themes, niche themes, basic themes, and emerging themes in the field?; RQ4: How have recent crises reshaped research directions? RQ5: What gaps remain, and what future directions should be prioritised?. To achieve this goal, a comprehensive bibliometric analysis of scientific publications indexed in the Web of Science database from 1996 to 2025 was conducted. This research complements scientific literature, highlighting the progress of research over time and outlining the main research directions regarding organizational resilience. The limitations of the research are reflected in the analysis of only WoS-indexed works, which does not exclude the fact that there are relevant studies in other databases such as Scopus, Erih+, etc.

1. Review of the scientific literature

Organizational resilience is defined as an organization's ability to anticipate, absorb, adapt, and recover from shocks. Among the first theoretical approaches to resilience were the studies by Holling (1973) and Wildavsky (1988), who defined resilience as risk management and business continuity. Later, studies began to appear in the literature distinguishing between terms such as resilience, robustness, and adaptability (Brandon-Jones et al., 2014), with research highlighting that resilience involves not only resistance to disruption, but also the capacity for transformation. In other words, it is not enough to be resistant to shocks, but it is also necessary to have the ability to adapt the business to economic and social challenges and more. In defining resilience from a strategic perspective, resource and capability theories (Barney, 1991) have made an important contribution, placing resilience in the context of the interaction between tangible and intangible resources, management infrastructures, and organizational culture.

Between 1990 and 2000, studies on organizational resilience were limited in number, with most focusing on technical aspects of risk management, later shifting to social, psychological, and cultural dimensions. For example, Diamond (1992) used Hobbesian

and Rousseauian metaphors to show that the organizational resilience of public institutions depends on the quality of relationships between leaders and subordinates. Egeland, Carlson, and Sroufe (1993) laid the foundations for a procedural understanding of resilience, demonstrating that it is not a fixed characteristic but a result of interactions between the individual and the environment, emphasizing the role of supportive relationships. At the organizational level, Sitkin (1992) highlighted the value of "learning through failure," showing that controlled losses can contribute to adaptability and strengthen systemic resilience. Weick (1993) analyzed the "Mann Gulch disaster" and outlined four critical sources of organizational resilience that can help prevent collapse in crises: improvisation, virtual roles, wisdom, and respectful interactions. Subsequently, studies on High Reliability Organizations have shown that resilience can be cultivated through "collective mindfulness" and the development of flexible routines that allow for early detection and correction of errors (Weick, Sutcliffe & Obstfeld, 1999).

On the other hand, the literature has begun to explore the cultural and gender dimensions of resilience. Marshall (1993) showed how organizational cultures dominated by masculine values marginalize female managers and limit their ability to influence cultural processes. Meanwhile, Brown (1997) introduced the concept of "organizational trauma," suggesting that the health and resilience of an organization also depend on how it recognizes and manages its internal dysfunctions. In the context of economic transition and business globalization, various comparative studies highlighted the resilience of different governance models and the adaptation of corporate strategies (Heinisch, 2000; Locatelli, 1997). Some studies have also integrated resilience as a fundamental dimension of professional commitment and openness to change (London & Noe, 1997; Wanberg & Banas, 2000).

Thus, the period between 1990 and 2000 was one of diversification and maturation in the literature on resilience, shifting from a predominantly technical approach to a more complex and integrated one that includes psychological, cultural, organizational, and institutional factors. In practice, this change in perspective created the premises for subsequent studies, where resilience is analyzed not only as a reaction to crisis, but also as a fundamental strategic capacity for the sustainability of organizations.

Subsequently, between 2001 and 2006, the literature on organizational resilience expanded rapidly, being dominated primarily by two research directions. The first direction concerns digitization and information systems as probable sources of risk for resilience, and the second direction focuses on highlighting the role of leadership, organizational routine, and relational capital in recovery after shocks.

On the axis of digitization, Oh & Teo (2006) supported the idea that resilience is a higher-order capability, fueled by innovation and agility and amplified by IT capabilities and managerial proactivity. Riolli and Savicki (2003) proposed a multilevel model for resilience in the field of information systems, integrating simultaneously organizational sources of protection, vulnerability, and individual differences. Applied studies have shown that collaborative technologies, such as videoconferencing and virtual teams, can become "empowering technologies" for structural flexibility and rapid response (Scott et al., 2006), while enterprise system implementations can produce both rigidity and power asymmetries, diminishing flexibility, as well as constructive

slippages that, paradoxically, support resilience by relaxing excessive control (Ignatiadis & Nandhakumar, 2007).

On the axis of leadership and organizational behavior, Gittell et al. (2006) argued that financial and relational reserves such as trust, respect, and communication are codependent and condition resilience, while reactive layoffs, although intended to promote recovery, undermine these reserves. At the micro level, Gardner and Schermerhorn (2004) suggested that authentic leadership and positive organizational behavior practices can "unlock individual potential", thereby supporting performance in volatile conditions. Lengnick-Hall and Beck (2005) defined organizational resilience as a unique combination of cognitive, behavioral, and contextual elements that enables a firm to manage uncertainty and complexity through adaptive organizational routines.

Overall, the period 2001-2006 is a period of transition from "resilience as a reaction" to resilience as an organizational project, which is conceptualized combination of digital capabilities, relational capital, authentic leadership, knowledge architectures, and governance that together increase the likelihood of recovery and robust transformation in the face of shocks.

Subsequently, with the global financial crisis of 2007-2009, there was an increase in the literature on organizational resilience focused on individual psychological mechanisms, as well as organizational and institutional processes. Powley (2009) analyzed how resilience is activated during the critical moments of an unexpected crisis, highlighting three essential social mechanisms: liminal suspension, the compassionate witness, and relational redundancy. According to him, these allow organizations to reactivate their relational capital and cope with disruptions through positive adaptation. Tillement, Cholez, and Reverdy (2009) argued that organizational resilience depends on arrangements and negotiations between occupational groups involved in complex projects, highlighting the tensions between production and safety objectives. Ignatiadis and Nandhakumar (2007) analyzed the role of integrated information systems. According to them, on the one hand, information systems increase control and rigidity, reducing flexibility, while on the other hand, unexpected effects and slippages can become catalysts for organizational resilience. In the direct context of the global financial crisis, Li and Xu (2009) emphasized the need to cultivate positive psychological capital among employees, especially in situations of restructuring and downsizing. They argued that developing individual trust, hope, and resilience can mitigate collective anxiety and the costs associated with the crisis, supporting organizational performance.

After 2010, research diversified, oscillating between individual psychological perspectives, internal social dynamics, and structural implications generated by technologies and the global economic context. Kantur and Iseri-Say (2012) designed an integrated conceptual framework that brings together sources of organizational resilience, such as perceptual stance, contextual integrity, strategic capacity, and strategic action, and introduced the notion of organizational evolvability, i.e., the ability of an organization to learn and evolve after a critical event. Subsequently, Limnios et al. (2014) formulated the Resilience Architecture Framework (RAF), a typology of organizations that shows that resilience is not always a positive characteristic but can also become undesirable depending on the state of the system. They integrated concepts

such as organizational rigidity, dynamic capabilities, and organizational ambidexterity, emphasizing the constant tension between adaptability and stability. At the same time, researchers began to analyze the impact of knowledge and innovation on resilience. For example, Mafabi, Munene, and Ntayi (2012) argued that knowledge management does not directly influence organizational resilience but manifests its effects through the mediation of organizational innovation. Teo, Lee, and Lim (2017) designed a Relational Activation of Resilience Model based on the study of the 2003 SARS crisis in Singapore. According to them, leaders can activate resilience by creating a liminal space in which relationships are rebuilt, by generating rapid trust, and through careful communication.

A significant increase in the number of publications on organizational resilience was recorded between 2020-2024, fueled by the COVID-19 pandemic, the energy crisis, and geopolitical conflicts. Recent studies have highlighted the conceptual dimensions of organizational resilience, as well as its practical implications. Particular emphasis has been placed on the implications of management control systems, green innovations, psychological capital, and internal coordination processes. Weber, Pedell, and Rötzel (2024) conducted a systematic review of the relationship between organizational resilience and management control systems, arguing that the use of resilience-oriented control systems can support organizations in managing adversity. Eichholz, Hoffmann, and Schwering (2024) analyzed the role of risk management orientation and a budget planning function in increasing organizational resilience. According to them, strategic risk orientation and financial planning are factors positively associated with the adaptive capabilities of organizations, enhancing their competitive advantage in times of crisis. In terms of sustainability, Gao, Wang, and Teng (2024) argued that green innovations, both product and process, have a positive impact on resilience. Anwar, Coviello, and Rouziou (2023) analyzed the dimensions of human resources and psychological capital in the context of resilience, arguing that the individual resilience of top management team members and cross-functional coordination enhance organizational resilience, with positive effects on the performance of young firms during the pandemic. A significant theoretical contribution belongs to Thalassinos, Kadlubek, and Norena-Chavez (2023), who highlighted the diversity of definitions of organizational resilience and framed it within management theory. Through their analysis, they highlighted the need to substantiate the concept of resilience and integrate it into entrepreneurial and managerial strategies, especially in the era of digital transformation and cyber risks.

Therefore, over time, alongside economic, social, and geopolitical challenges, the specialized literature has seen a maturation of studies on organizational resilience, by integrating managerial control and financial planning as determining factors of resilience, emphasizing green innovations and external relations as sources of sustainable resilience, highlighting the role of human and psychological capital, and, last but not least, the theoretical reconceptualization of resilience in relation to digital transformations and global risks.

2. Research methodology

The research methodology focuses on a structured, objective, and reproducible bibliometric analysis of the literature on organizational resilience. To this end, scientific

publications from the ISI Web of Science (WoS) database, internationally recognized for the accuracy and comprehensiveness of its indexing of academic publications, were analyzed for the period 1996-2025. The data collection and selection process was carried out in stages, applying inclusion and exclusion criteria to ensure the relevance and scientific rigor of the data (see Table 1).

Table no. 1. Methodology for identifying and selecting data

Topic	Organizational resilience		
Database	ISI Web of Science		
WoS results without exclusion criteria	3.575 Publications		
Exclusion criteria	 related research areas; 		
	- editorials;		
	- book reviews;		
	- communications.		
Inclusion criteria - Filter 1	Research areas: Management, Business,		
	Economics, Business Finance		
WoS results after applying Filter 1	2.146 Publications		
Inclusion growth - Filter 2	Article, Proceedings Paper, Early		
	Access, Book chapters, Book		
WoS results after applying Filter 2	2.082 lucrări		
Inclusion growth - Filter 3	Highly cited papers		
WoS results after applying Filter 3	Publications		

Source: developed by the authors

Therefore, according to the data in Table 1, it can be seen that the initial query in WoS returned a total of 3,575 papers on firm/organizational resilience. Subsequently, in order to strictly delimit the field of interest and eliminate irrelevant publications, exclusion criteria were applied, targeting, in particular, adjacent research areas, editorial articles, book reviews, and short communications. In the next stage, inclusion criteria were applied, structured in three successive filters. Filter 1 involved the exclusive selection of papers from the research areas of Management, Business, Economics, and Business Finance. After applying Filter 1, the dataset comprised 2,146 papers. Subsequently, Filter 2 was applied, which involved the inclusion of only the types of publications considered relevant for bibliometric analysis, namely Article, Proceedings Paper, Early Access, Book Chapters, and Books. After applying this filter, the database was narrowed down to 2,082 publications. The third filter involved identifying and retaining works with a major impact in the field, defined as Highly Cited Papers within WoS. This filter was applied because these papers are validated by the scientific community and make a significant contribution to the evolution of the field (Melega, 2022; Grosu et al., 2023). Thus, following this filter, 42 papers were selected, considered representative for bibliometric analysis.

The Bibliometrix software package and the VOSviewer application were used for data processing and visualization, both of which are recognized for their ability to analyze bibliometric relationships and build thematic maps and collaboration networks.

3. Results and discussion

Given that, in recent times, the global climate has been increasingly exposed to economic, social, climatic, and technological changes, organizational resilience has become a topic of interest for both investors and researchers. From analyzing the ability to adapt to unexpected crises to promoting sustainable development in complex economic and social environments, research on organizational resilience has evolved rapidly in recent years (see Figure 1).

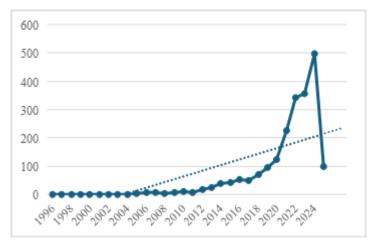


Figure no.1: Evolution of the number of studies on corporate resilience *Source:* developed by the authors

In recent years, resilience has become an essential dimension in assessing the success of enterprises, which has also influenced the increase in scientific research. According to Figure 1, it can be seen that researchers' interest in corporate resilience began to grow in 2006. The global economic crisis of 2007-2008, which began with the collapse of the US real estate market and the bankruptcy of Lehman Brothers, and the sovereign debt crisis in the eurozone between 2009-2013, gave an even greater impetus to research on organizational resilience, with the number of publications increasing from 6 in 2007 to 26 in 2013. The trend has continued to rise, with the number of publications increasing steadily: 37 publications in 2014, 41 publications in 2015, 53 publications in 2016, 51 publications in 2017, 71 publications in 2018, and 97 publications in 2019. Subsequently, between 2020 and 2024, there was a boom in the number of studies on corporate resilience, with 122 publications in 2020, 226 publications in 2021, 341 publications in 2022, 356 publications in 2023, and 497 publications in 2024. The increase in the number of publications between 2020 and 2024 is mainly due to the COVID-19 health crisis, Russia's invasion of Ukraine, and, last but not least, the energy crisis. At the same time, the increase in the number of studies was also driven by economic globalization, technological advances, and economic crises, which forced organizations to adopt more adaptable and creative strategies, as the key to

organizational resilience is a company's ability to adapt quickly to change while minimizing risks and maximizing opportunities. Given the geopolitical events, many companies have sought to build resilience, i.e., to cope with new economic challenges and adapt to change. The positive results are reflected in improved financial performance and employee satisfaction, which promotes a healthy organizational culture.

As the number of publications has grown, the global scientific network has also developed, increasing the number of collaborations between authors from different socio-economic backgrounds (see Figure 2).

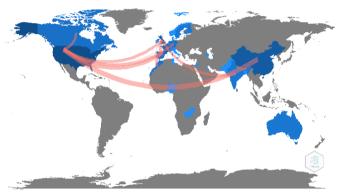


Figure no.2: Map of collaboration between countries *Source:* developed by the authors with Bibliometrix

According to Figure 2, it can be seen that international collaborations in the field of organizational resilience are concentrated around major research hubs, namely the United States and Western Europe (France, Germany, the UK, and Italy). Most collaborations are concentrated around these countries because they have a solid academic tradition and, last but not least, a great capacity to mobilize considerable financial and infrastructural resources for research. In practice, the US, France, Germany, the United Kingdom, and Italy are global research hubs that contribute to the development of science through studies that have an interdisciplinary approach.

At the same time, new players such as China, Australia, and India are emerging, whose increased involvement in the network confirms the global interest in strengthening the capacity of organizations to respond to crises. The increase in contributions from these economics reflects, on the one hand, academic expansion, but also their vulnerability to economic, health, or climate shocks, which fuels the need for applied studies on resilience. In contrast, Africa and South America have a low representation in the network, due to the unequal distribution of research resources and limited access to international partnerships.

In this regard, it is worth mentioning that the issue of organizational resilience is global in nature. International collaborations are a catalyst for the development of theoretical and methodological frameworks that provide effective responses to the overlapping

crises of recent decades. At the same time, the concentration of knowledge in certain regions confirms that organizational resilience is a strategic tool for understanding and managing uncertainty at the global level.

Table 2. The most cited documents worldwide on corporate resilience

Paper	Total Citations	TC per Year	Normalized TC
Brandon-Jones, E., Squire, B., Autry, C. W., & Petersen, K. J. (2014)	765	63.75	1.552
Ambulkar, S., Blackhurst, J., & Grawe, S. (2015)	760	69.09	1.484
Ding, W., Levine, R., Lin, C., & Xie, W. (2021)	653	130.60	2.586
Ortiz-de-Mandojana, N., & Bansal, P. (2016)	555	55.50	1.266
Belhadi, A., Kamble, S., Jabbour, C. J. C., Gunasekaran, A., Ndubisi, N. O., & Venkatesh, M. (2021)	463	92.60	1.833
Jaskiewicz, P., Combs, J. G., & Rau, S. B. (2015)	450	40.91	0.878
Kim, Y., Chen, YS., & Linderman, K. (2015)	450	40.91	0.878
Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015)	389	35.36	0.759
Williams, T. A., & Shepherd, D. A. (2016)	322	32.20	0.734
Huang, H. H., Kerstein, J., & Wang, C. (2018)	292	36.50	1

Source: developed by the authors with Bibliometrix

Table 2 shows the most influential scientific papers, by number of citations, at the international level, that address the topic of corporate resilience. The paper by Brandon-Jones et al. (2014) ranks first in terms of citations, with 765 citations. The study by Brandon-Jones et al. (2014) proposes a contingent resource-based approach to empirically differentiate the concepts of resilience and robustness in the supply chain. Based on a study of 264 British factories, the authors demonstrated that resources such as connectivity and information sharing facilitate the development of visibility capabilities, which in turn support both resilience and robustness. At the same time, the results showed that only the dimension of scale complexity has a strong moderating effect, which provides a solid theoretical basis for understanding how resources and capabilities interact conditionally with complexity factors.

Another relevant paper, which has been cited 760 times, is by Ambulkar, Blackhurst, and Grawe (2015), who developed a conceptual framework for firm resilience to supply chain disruptions. They showed that organizational orientation towards disruptions is

not sufficient to generate resilience, requiring either a risk management infrastructure or the ability to reconfigure resources. According to the authors, depending on the intensity of the shock, these mechanisms act differently: in the case of major disruptions, resource reconfiguration is decisive, while in the case of minor disruptions, the synergy between risk orientation and management infrastructure matters. With 653 citations, Ding et al. (2021) analyzed corporate immunity to the COVID-19 pandemic using financial data from over 6,700 companies in 61 economies. According to the authors, companies with solid financial resources, corporate social responsibility, and governance that was less concentrated around executives performed better on the stock market.

Another relevant study, with 555 citations, which bridges sustainability and organizational resilience, is the study by Ortiz-de-Mandojana and Bansal (2016). They demonstrated, based on a longitudinal dataset (15 years, 242 companies), that social and environmental practices (SEPs) do not bring short-term financial benefits, but contribute significantly to long-term organizational resilience, reflected in reduced financial volatility, increased sales, and higher survival rates.

A relevant contribution to the analysis of supply chain resilience during the pandemic is provided by Belhadi et al. (2021), who analyzed the resilience of supply chains in the automotive and aviation industries. The study, with 463 citations, based on TTR, FI, survey, and interview analyses, showed that sourcing strategies and the integration of Industry 4.0 technologies are critical in the automotive sector, while in aviation, the focus is on business continuity.

A related field to organizational resilience is that of family businesses and transgenerational entrepreneurship. In this regard, Jaskiewicz, Combs, and Rau (2015) conducted a study, which has accumulated 450 citations, in which they introduced the concept of entrepreneurial legacy, defined as the narrative reconstruction of past entrepreneurial achievements and resilience, which motivates both the current and future generations to engage in strategic activities aimed at supporting transgenerational entrepreneurship. Based on interviews with owners and successors from 21 German wineries, the authors showed that collective memory and family cohesion can contribute to long-term resilience and innovation.

With 450 citations, the study by Kim, Chen, and Linderman (2015) makes an essential contribution to the literature by conceptualizing supply chain disruptions using graph theory. The study shows that node or arc disruptions do not automatically imply network-level malfunctions, and that network structure (particularly power-law distribution) determines the level of resilience. From an organizational and psychological perspective, Robertson, Cooper, Sarkar, and Curran (2015) conducted a systematic review of workplace resilience training programs (2003–2014), with the research accumulating 389 citations over time. The authors highlighted that workplace resilience training programs contribute to improving mental health, subjective well-being, and employee performance. In essence, their research supports the importance of individual resilience as a foundation for organizational resilience. Williams and Shepherd (2016) investigated how emerging organizations respond to disasters by

analyzing six entrepreneurial initiatives that emerged in Haiti after the 2010 earthquake. The study showed that there are distinct ways of building community resilience, depending on available resources and perceived opportunities. The article has been cited 322 times and has opened up new avenues of research on resilience in humanitarian crisis contexts.

With 292 citations, the study by Huang, Kerstein, and Wang (2018) demonstrates how climate risk shapes the financial and strategic resilience of organizations. The authors analyzed the impact of climate risks on the performance and financing decisions of listed companies, showing that exposure to extreme weather events leads to more volatile earnings and cash flows, which causes companies to accumulate liquidity, reduce short-term debt, and adopt more prudent financial structures.

In practice, these studies outline an integrated perspective on resilience, showing that it is the result of the interaction between tangible and intangible resources, risk management infrastructure, organizational capabilities, as well as institutional and contextual factors. Their academic impact, reflected in the high number of citations and normalized TC values, confirms that the resilience of supply chains and organizations has become a central area of research in strategic and operational management.

To gain a clearer picture of research on organizational resilience, the conceptual structure of the research was analyzed using a network of terms that frequently appear together in the literature (see Figure 3).

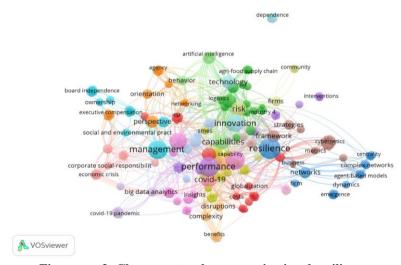


Figure no. 3: Cluster network on organizational resilience *Source:* developed by the authors with VOSviewer

At first glance, Figure 3 shows that organizational resilience cannot be analyzed in isolation, but rather is the result of a complex interaction between technological, managerial, social, and contextual factors. Therefore, a central aspect of the research

network is the integration of the performance dimension with the effects generated by crises, in particular the COVID-19 pandemic, which has accentuated the vulnerabilities of organizations and, at the same time, stimulated the development of new capabilities. Terms related to innovation, digitization, and technological transformation revolve around these concepts, confirming that the adaptation of organizations to situations of uncertainty depends on how they manage to leverage the tools offered by new technologies. At the same time, the network highlights the importance of managerial approaches and social responsibility in building sustainable resilience. The connections between management, strategic orientation, and organizational behavior highlight the fact that, beyond investments in infrastructure or technology, cultural and decisionmaking elements play an important role in an organization's ability to survive and thrive in turbulent contexts. The visibility of concepts related to complex networks and simulation models also indicates a growing interest in systemic analysis and the application of quantitative tools that can support a better understanding of the dynamics of resilience. Thus, according to the conceptual map in Figure 3, it can be said that organizational resilience is a multidimensional topic, situated at the intersection of technology, performance, and governance, strongly shaped by recent experiences of overlapping crises and oriented toward identifying integrated solutions that ensure longterm adaptability and sustainability.

In order to obtain an integrated picture of the research directions associated with organizational resilience, a thematic map structured on the basis of relevance and degree of development criteria was created using Bibliometrix software (see Figure 4).

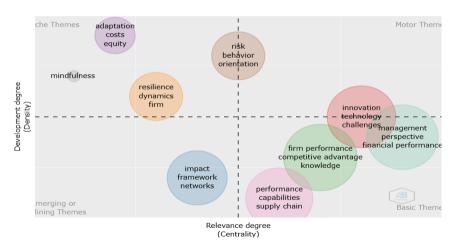


Figure no. 4: Thematic map

Source: developed by the authors with Bibliometrix

According to Figure 4, it can be observed that the topics placed in the upper right quadrant, such as innovation, technology, management, and financial performance, emerge as the "driving" topics of research, characterized by high centrality and an advanced degree of development. In practice, these represent the strategic core of the

literature, as they explain the extent to which organizational resilience depends on technological integration and managerial practices oriented toward sustainability and competitive advantage. At the same time, these areas represent dimensions with high applicability, around which numerous theoretical and empirical connections are formed. In the lower right quadrant, core themes such as company performance, organizational capabilities, supply chain, and knowledge are at the top of scientific research, but with a still moderate level of development, suggesting that although these concepts are fundamental to the field, they require further theoretical consolidation and empirical validation to become mature pillars of organizational resilience.

The upper left quadrant captures niche topics, among which adaptation, costs, equity, and mindfulness stand out. These have a high level of internal density, which indicates the depth of existing analyses, but their systemic relevance is limited, addressing particular contexts and being interpreted as specialized extensions of the field, with potential for integration into the broader framework of organizational sustainability research. In contrast, the lower left quadrant highlights emerging or declining themes, such as impact, analytical frameworks, and networks. Although their centrality is low, they may become future directions for development, particularly through the use of quantitative approaches and complex network models that allow for a deeper understanding of the dynamics of resilience at the systemic level.

Therefore, the thematic map demonstrates that research on organizational resilience is built on a consolidated core of performance and management, increasingly oriented towards innovation and technological transformation, but at the same time diversifying through specialized and emerging themes capable of expanding the boundaries of knowledge in the field.

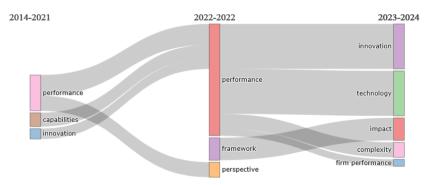


Figure no 5: Thematic evolution. *Source:* developed by the authors with Bibliometrix

With regard to the thematic evolution of research in the field of organizational resilience, Figure 5 illustrates the dynamics of scientific concerns between 2014 and 2024. According to the figure, the thematic evolution map reflects a transition from the fundamental topics related to the period 2014-2021 to a more comprehensive and multidimensional approach, highlighting future research trends that are oriented towards

the integration of digitalization in the context of resilience development. We can see that the basic topics related to pillar 1 (2014-2021 period), such as performance, capabilities, and innovation, have expanded their research area in the context of the COVID-19 pandemic, considered to be a triggering factor that has contributed to the emergence of new scientific concerns. In 2022, the theme focused almost exclusively on performance, which became a central and integrating node of the other dimensions. Alongside this, theoretical frameworks and perspectives emerged, suggesting a concern for methodological and conceptual consolidation of the field, as well as for the development of systemic approaches.

Between 2023 and 2024, research directions are becoming more diverse and sophisticated. In addition to maintaining performance as an essential dimension, topics such as innovation, technology, impact, and complexity have gained visibility, and company performance appears as a distinct sub-theme. As mentioned earlier, this evolution indicates a transition from an analysis focused on results and capabilities to a broader approach oriented towards the role of technology, systemic dynamics, and concrete consequences for organizations.

In this vein, according to the thematic evolution map, it can be noted that research in the field of organizational resilience has moved from the fundamentals of performance and capabilities to a stage of theoretical consolidation and, subsequently, to a diversification oriented towards impact, complexity, and technological transformation, a progress that reflects the maturation of the field and its adaptation to the current and future challenges of the organizational environment.

Conclusions

Research on organizational resilience has evolved significantly in recent decades, from a concept associated with risk management and business continuity to a strategic capability for the survival and sustainability of organizations. Therefore, the results obtained from the analysis of the literature highlight a progressive maturation of the field, from the technical approaches of the 1970-1990, to the integration of psychological, social, and institutional dimensions in the 1990-2000, followed by a focus on digitization, leadership, and relational capital in the period 2001-2006. Subsequently, the global financial crisis of 2007-2009 represented a turning point, stimulating research on social mechanisms and psychological capital, and in the following decade, concepts such as organizational evolvability, architectural frameworks of resilience, and interdependence with knowledge management and innovation were developed and defined. Currently, overlapping crises (the COVID-19 pandemic, the conflict in Ukraine, the energy crisis, and geopolitical changes) have generated a significant increase in the number of research studies, with a focus on management control systems, financial planning, green innovations, and the role of psychological capital. Bibliometric analysis confirms a global network of collaborations centred around the United States and Western Europe, with the emergence of relevant actors such as China, India, and Australia.

At the same time, the results of the bibliometric analysis highlight four major research directions. The first direction is represented by the consolidation of the thematic core around organizational performance, management, and digitization, where resilience is

understood as a competitive advantage. The second direction involves the integration of sustainability dimensions, in particular green innovations and corporate social responsibility, as sources of long-term resilience. The third direction is the analysis of the role of human and psychological capital, both individually and collectively, in generating adaptability and reducing organizational anxiety in times of crisis. And the fourth direction involves the theoretical reconceptualization of resilience in relation to digital transformations, globalization, and systemic complexity, which requires a multidimensional and interdisciplinary approach.

As for future research, it should develop predictive models and quantitative tools capable of anticipating and measuring organizational resilience in volatile contexts. At the same time, there is a need to integrate resilience into governance strategies, explore its relationship with sustainability and organizational ethics, and adapt to emerging risks generated by digitalization, climate change, and geopolitical shifts.

Therefore, organizational resilience can no longer be seen merely as a reaction to criss, but as a strategic, adaptive, and sustainable capacity that is indispensable for the competitiveness and viability of the business environment.

Therefore, in terms of research implications, it highlights the importance of organizational resilience as a strategic ability, not just as a response to crisis, while also emphasizing the role of technology integration, human capital, and governance in long-term sustainable development. The results of the bibliometric analysis also indicate the need to anchor resilience in control systems, financial planning, and digital strategies, in line with sustainability and social responsibility objectives.

The limitations of the research lie in the fact that the bibliometric analysis was limited only to publications indexed in the Web of Science database. Although the Web of Science database is recognized for its scientific rigor, it excludes studies indexed in other databases, such as Scopus, ProQuest, EBSCO, etc., as well as conference proceedings, legislative regulations, and practitioner-oriented publications. Another limitation is linguistic bias, as most publications indexed in Web of Science are in English, which may lead to insufficient representation of contributions from non-English-speaking regions or local journals.

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