

# Mapping Global Research on Entrepreneurial Orientation

Loso Judijanto  
IPOSS Jakarta

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## ABSTRACT (10 PT)

This study aims to map the intellectual structure and global evolution of research on Entrepreneurial Orientation (EO) using a bibliometric analysis approach. Drawing data from the Scopus database, a total of peer-reviewed journal articles were analyzed to uncover trends, influential authors, institutional collaborations, and thematic clusters in EO literature. Using VOSviewer software, co-authorship networks, keyword co-occurrences, and temporal visualizations were generated to provide insight into the development of the field. The results reveal that EO remains a core construct in entrepreneurship research, often linked with themes such as innovation, firm performance, strategic orientation, and small and medium-sized enterprises (SMEs). More recent trends indicate a shift toward sustainability, social entrepreneurship, and academic entrepreneurship, highlighting EO's growing interdisciplinary appeal. The study contributes by consolidating fragmented knowledge, identifying emerging areas for inquiry, and offering a roadmap for future research and policy development. Despite its limitations, the findings provide valuable theoretical and practical guidance for scholars, educators, entrepreneurs, and policymakers navigating the evolving entrepreneurial landscape.

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## Corresponding Author:

Name: Loso Judijanto  
Institution: IPOSS Jakarta  
e-mail: [losojudijantobumn@gmail.com](mailto:losojudijantobumn@gmail.com)

## 1. INTRODUCTION

Entrepreneurial Orientation (EO) has become one of the most widely studied constructs in the field of entrepreneurship and strategic management. Rooted in the works of [1] and later formalized by [2], EO encompasses the processes, practices, and decision-making activities that lead to new entry. The dimensions of EO, typically innovativeness, risk-taking, and proactiveness, have provided a strong theoretical and empirical basis for understanding entrepreneurial behavior across firms and industries. As global

economies evolve in the face of digitization, sustainability demands, and post-pandemic recovery, EO has increasingly become a strategic compass for navigating uncertain and competitive business environments [3].

Research on EO has seen exponential growth over the past two decades. From early studies focusing on firm-level EO and performance relationships in developed economies, recent work has expanded to explore EO in emerging markets, social enterprises, family firms, and even within public institutions [4], [5]. Moreover, scholars have begun integrating EO with

contemporary topics such as digital transformation, corporate social responsibility, and sustainable entrepreneurship. This diversification highlights EO's versatility as a conceptual tool and signals the emergence of rich interdisciplinary discourse in the field [6].

Geographically, EO research has also shifted from being predominantly North American and European in focus to increasingly encompassing Asia, Africa, and Latin America [7]. This geographical broadening corresponds to the growing recognition of entrepreneurship as a driver of inclusive development, job creation, and innovation in non-Western contexts. Consequently, understanding the global landscape of EO research becomes crucial to capturing the nuances of how EO is conceptualized, operationalized, and applied across cultural and institutional settings.

Alongside its expanding scope, the methodological diversity in EO studies is notable. Quantitative approaches, particularly survey-based studies and structural equation modeling, dominate the literature, but qualitative and mixed-method research is increasingly gaining prominence. Bibliometric analysis, in particular, has emerged as a robust tool to synthesize large volumes of literature, trace thematic evolution, identify research clusters, and uncover intellectual structures [8]. Through such scientometric techniques, researchers can make sense of complex scholarly landscapes and propose future research directions based on empirical trends.

Despite this impressive trajectory, the sheer volume and fragmentation of EO research present challenges for scholars and practitioners alike. The literature spans multiple disciplines and is dispersed across journals of varying scopes and reputations. This dispersion necessitates a comprehensive mapping to consolidate findings, highlight influential works, and reveal underexplored areas. A systematic and data-driven overview of EO research, therefore, becomes essential for advancing theory, informing policy, and guiding entrepreneurial practice globally.

Although the literature on Entrepreneurial Orientation has grown substantially over the years, the field lacks a comprehensive global mapping that synthesizes its thematic developments, geographical focus, and methodological evolution. Previous reviews have typically focused on limited scopes without capturing the full spectrum of scholarly contributions. Moreover, emerging trends such as EO in digital entrepreneurship, sustainability, and crisis resilience remain under-integrated into mainstream frameworks. Without a holistic understanding of how EO research has evolved and where the gaps lie, scholars risk redundancy, and practitioners may overlook valuable insights applicable to their contexts. This study aims to conduct a comprehensive bibliometric mapping of global research on Entrepreneurial Orientation using data from the Scopus database.

## 2. METHODS

This study adopts a **bibliometric analysis approach** to systematically map the global research landscape on Entrepreneurial Orientation (EO). Bibliometric analysis is a quantitative technique that enables researchers to measure and visualize patterns in scientific literature by analyzing large datasets of publications, citations, keywords, and co-authorship networks [8]. This method is particularly useful in identifying the intellectual structure and thematic evolution of a field. By applying bibliometric tools, the study aims to extract insights on publication trends, leading contributors, institutional affiliations, keyword clusters, and international collaborations in EO research over the past decades.

The data for this analysis were retrieved from the **Scopus database**, one of the largest and most comprehensive bibliographic sources for peer-reviewed literature. The search was conducted using the keyword phrase "**entrepreneurial orientation**" in the article title, abstract, and keywords. To ensure the inclusion of relevant and high-quality publications, the search was limited to **journal articles** published in

**English** up to the year 2025. The final dataset was exported in BibTeX format and contained metadata including author names, titles, publication years, source titles, affiliations, countries, abstracts, and references. The time span of the analysis was deliberately left open-ended to capture the historical development and recent trajectories of EO scholarship.

The bibliometric data were analyzed using **VOSviewer** software, which specializes in constructing and visualizing bibliometric networks. The study employed various analytical techniques such as **co-authorship**

### 3. RESULTS AND DISCUSSION

#### Co-Authorship Analysis

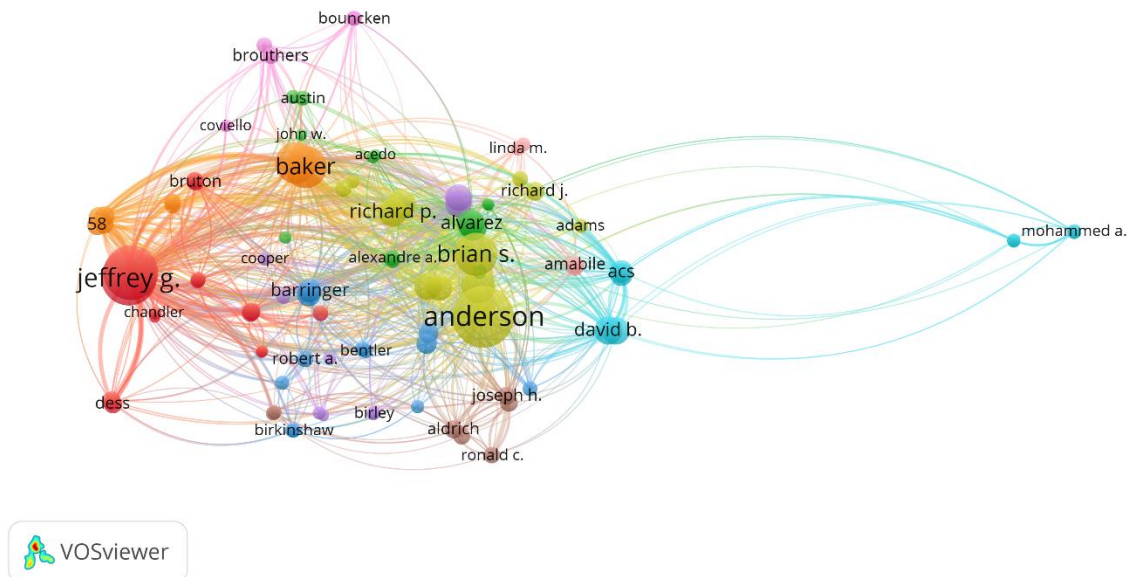


Figure 1. Author Visualization  
Source: Data Analysis, 2025

Figure 1 illustrates the co-authorship landscape in global research on Entrepreneurial Orientation (EO). At the center of the network, prominent scholars like Anderson, Brian S., and Jeffrey G. Covin appear as major nodes, indicating high productivity and centrality in collaboration networks. The dense interconnections among authors such as Baker, Barringer, Dess, and Bruton suggest a strong and cohesive

**analysis** (to examine collaboration patterns among authors, institutions, and countries), **co-occurrence analysis** (to map frequent keyword combinations and thematic clusters), and **citation analysis** (to identify influential publications and citation networks). The results were presented through network visualizations, density maps, and overlay visualizations, which collectively offer a comprehensive overview of the evolution, structure, and emerging trends within the global research on Entrepreneurial Orientation.

scholarly community, particularly in North American and European contexts. Each color cluster represents a distinct collaborative group, pointing to sub-communities that frequently co-author EO-related research. Interestingly, the presence of Mohamed A., isolated on the right yet connected via curved edges, reveals a newer or more regionally distinct cluster, potentially reflecting emerging scholarship from the Global South or Islamic entrepreneurship literature.

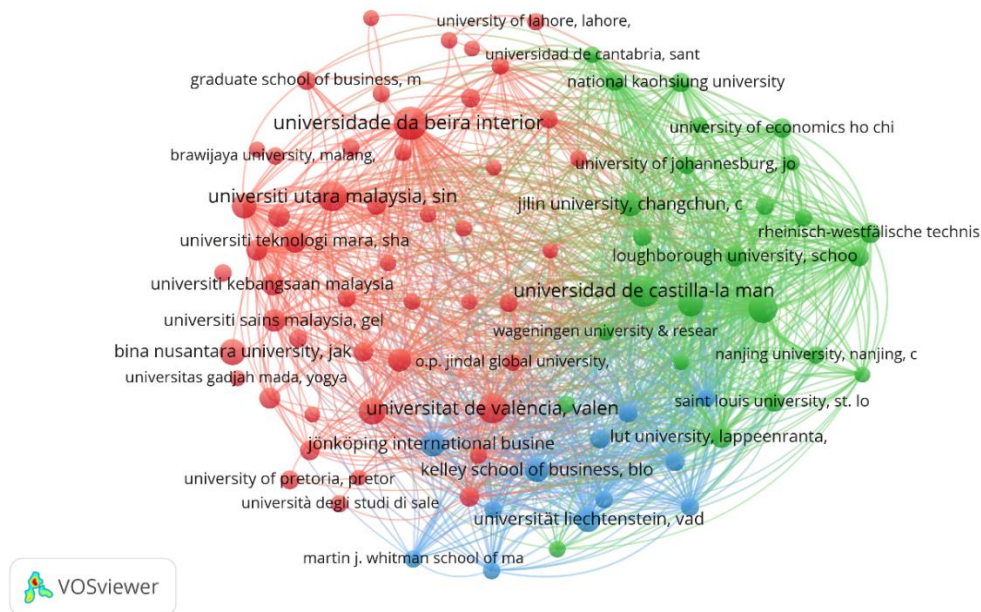


Figure 2. Affiliation Analysis

Source: Data Analysis, 2025

Figure 2 displays the institutional co-authorship network in global Entrepreneurial Orientation (EO) research, showcasing clusters of universities and research institutions that collaborate frequently. Three dominant clusters—represented in red, green, and blue—indicate regional or thematic collaboration groups. The red cluster, led by institutions such as Universidade da Beira Interior, Universiti Utara Malaysia, and Bina Nusantara University, suggests strong research activity and collaboration within

Southeast Asia and Lusophone countries. The green cluster includes European and East Asian institutions like Rheinisch-Westfälische Technische Hochschule, Nanjing University, and University of Economics Ho Chi Minh, reflecting a bridge between European and East Asian EO research. The blue cluster, centered around Universitat de València, Kelley School of Business, and Jönköping International Business School, indicates a blend of Western academic hubs with transatlantic collaboration.

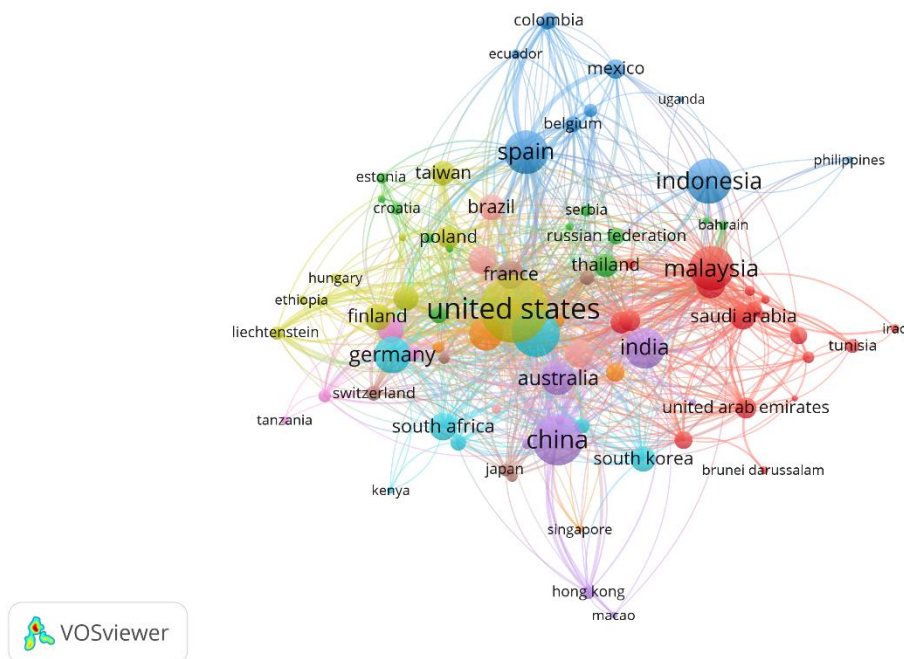




Figure 3. Country Analysis

Source: Data Analysis

Figure 3 illustrates the country-level collaboration network in global Entrepreneurial Orientation (EO) research, revealing an increasingly interconnected and international scholarly community. The United States stands at the center with the largest node, indicating its dominant role in producing and collaborating on EO research. Surrounding it are key collaborators such as China, Malaysia, India, Germany, and Australia, reflecting strong transnational partnerships between Western and Asian countries. Distinct color clusters show

**Co-Occurrence Analysis**

regional research alliances: for instance, the red cluster represents close collaborations among Malaysia, India, Saudi Arabia, and Gulf countries, while the blue cluster connects Indonesia, Spain, and Latin American countries like Mexico and Colombia. European countries such as Germany, France, Poland, and Finland form another cohesive cluster. Notably, Indonesia and Malaysia emerge as prominent contributors from the Global South, indicating a rising influence in the EO domain.

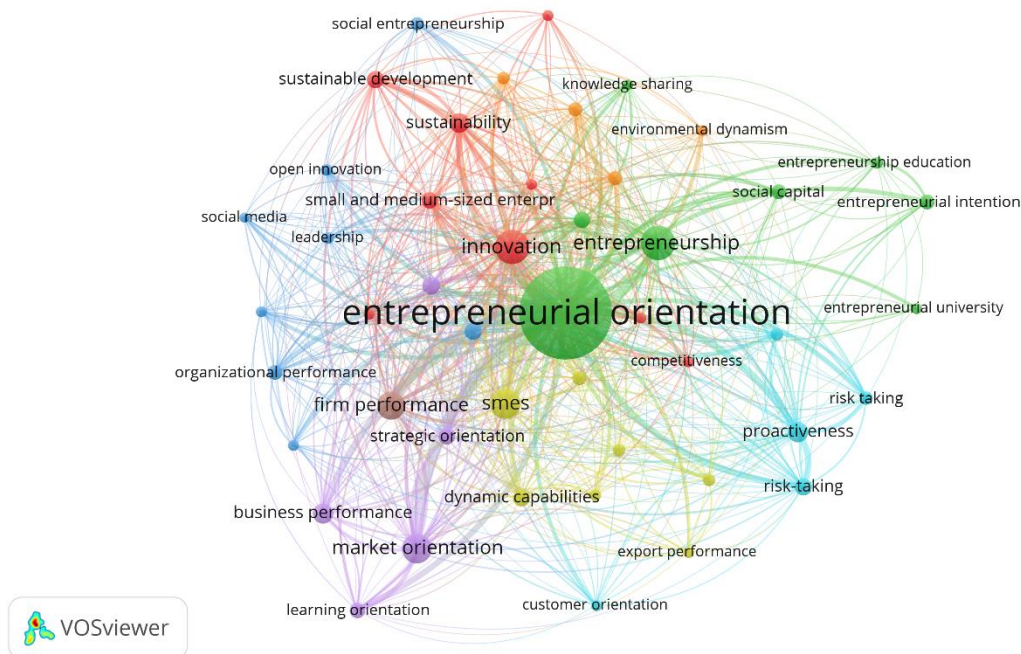


Figure 4. Network Visualization

Source: Data Analysis

Figure 4 showcases a keyword co-occurrence network in global Entrepreneurial Orientation (EO) research, revealing the intellectual structure and thematic clusters that dominate the field. At the core of the map is the term "entrepreneurial orientation", depicted as the largest and most central node, indicating its pivotal role as the anchor concept across a wide array of related themes. Its high level of connectivity demonstrates how EO is intricately linked with various constructs such as innovation, firm performance, market orientation, and sustainability. The size of the node and the

density of links surrounding it suggest the maturity of the EO field and its broad interdisciplinary influence. The green cluster, which includes keywords like entrepreneurship, innovation, social capital, and entrepreneurial intention, represents the entrepreneurial behavior and mindset dimension of EO research. This cluster often deals with the psychological, educational, and institutional factors that shape entrepreneurial actions. Terms such as entrepreneurship education, entrepreneurial university, and social capital highlight a strong research focus on how EO manifests

within academic institutions and communities. The presence of entrepreneurial intention suggests integration with theories such as the Theory of Planned Behavior, linking individual cognition with organizational orientation.

The blue cluster focuses on performance-related themes, encompassing keywords like firm performance, business performance, organizational performance, and SMEs. This cluster emphasizes empirical investigations that assess how EO influences tangible business outcomes. The inclusion of market orientation, learning orientation, and customer orientation also signals a strong intersection between EO and strategic marketing literature. These connections show that EO is often studied alongside other strategic orientations to determine how their synergies impact competitiveness, profitability, and survival in dynamic markets. The red cluster is centered around sustainability and social impact, featuring terms such as sustainability, sustainable development, social entrepreneurship, and open innovation. This reflects a growing body of literature that connects EO with global

challenges and societal responsibilities. Researchers in this cluster are concerned with how EO can drive innovation that aligns with sustainable goals, particularly within the context of small and medium-sized enterprises (SMEs). The emergence of social media and leadership within this cluster suggests an interest in how digital tools and leadership styles influence EO's impact on sustainability outcomes.

The yellow and orange clusters cover themes such as dynamic capabilities, strategic orientation, risk-taking, proactiveness, and export performance. These concepts are foundational to EO theory and reflect its core dimensions as originally proposed by Miller (1983) and further developed by Lumpkin and Dess (1996). These clusters signify the continued interest in understanding how EO enables firms to adapt, innovate, and compete in turbulent environments. The tight interlinkages between these keywords and performance indicators reinforce the theoretical view that EO is a critical enabler of strategic renewal, resilience, and international competitiveness.

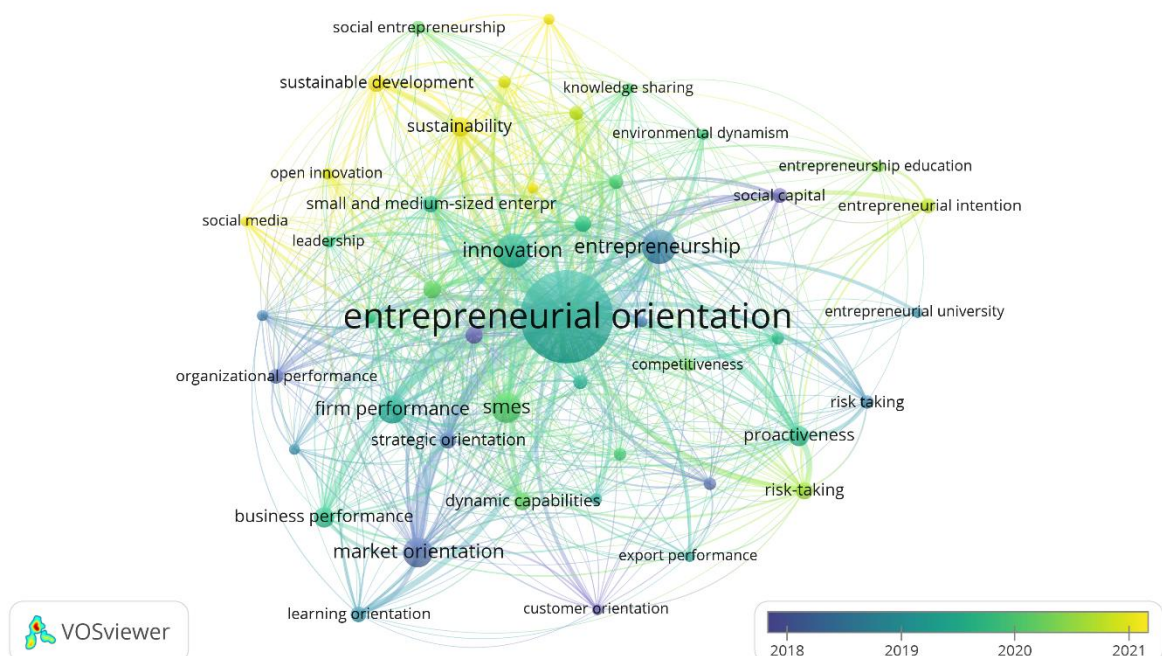


Figure 5. Overlay Visualization

Source: Data Analysis

Figure 5 reveals the temporal evolution of research themes in the domain of Entrepreneurial Orientation (EO) between

2018 and 2021. The color gradient, from dark blue (older average publication year) to bright yellow (more recent), helps identify emerging

and maturing research areas. Central concepts like "entrepreneurial orientation", "entrepreneurship", "innovation", and "firm performance" appear in cooler shades of green to blue, indicating they have been well-established topics throughout the analyzed period, especially before 2020. Their positioning at the center and their extensive connections confirm their foundational role in EO literature.

In contrast, the keywords in bright yellow, such as social entrepreneurship, sustainable development, sustainability, knowledge sharing, and entrepreneurial intention, suggest a recent surge in scholarly interest, particularly in the years approaching and beyond 2020. These themes reflect a growing global consciousness around environmental, social, and governance (ESG) concerns and align EO research with sustainability and social innovation discourses. The emergence of

entrepreneurship education, entrepreneurial university, and social capital in the more recent spectrum also indicates a shift toward examining EO's role in academic settings and community-based entrepreneurship.

Meanwhile, keywords like market orientation, learning orientation, and business performance show up in darker tones, reflecting their earlier popularity. These earlier studies often focused on the strategic alignment between EO and competitive advantage, especially in small and medium-sized enterprises (SMEs). The presence of bridging terms like dynamic capabilities, strategic orientation, and customer orientation suggests that while traditional EO research emphasized competitive strategy, the field is now evolving toward themes involving ecosystem collaboration, sustainability, and social impact.

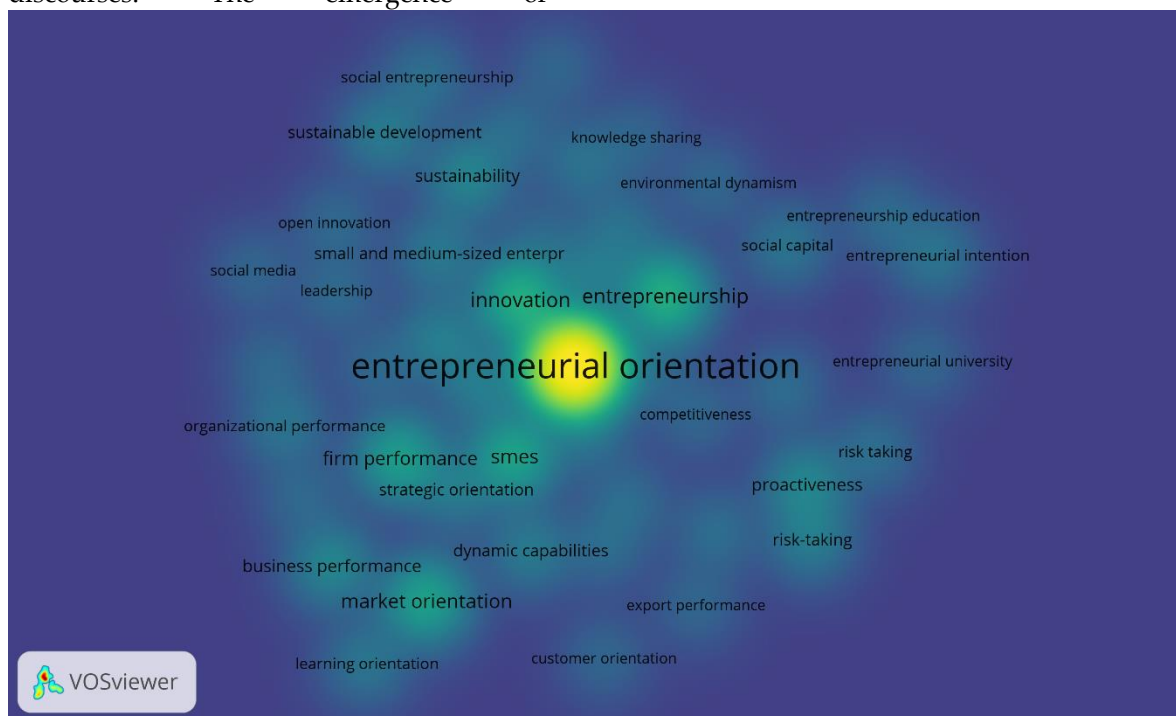


Figure 6. Density Visualization

Source: Data Analysis, 2025

Figure 6 presents a density map of keyword co-occurrence in the domain of Entrepreneurial Orientation (EO). The intensity of color, ranging from dark blue (low density) to bright yellow (high density), indicates the frequency and centrality of terms within the literature. At the core of the map,

the keyword "entrepreneurial orientation" is surrounded by a vivid yellow glow, signifying its role as the central concept with the highest number of co-occurrences. Closely linked and relatively high-density keywords such as innovation, entrepreneurship, firm performance, SMEs, and market orientation

form a dense intellectual nucleus of EO studies, reflecting the primary themes explored in this research field. As we move outward from the center, keywords like social entrepreneurship, sustainability, entrepreneurial intention, dynamic capabilities, and export performance appear in cooler green or blue hues. This suggests

Citation Analysis

these terms are important but less frequently studied or are more niche topics compared to the core cluster. Their presence, however, still highlights emerging or complementary areas of EO research, such as sustainability-driven entrepreneurship and performance in international markets.

Table 1. Top Cited Literature

| Citations | Author | Title   |
|-----------|--------|---|
| 2323      | [9]    | Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future     |
| 2116      | [10]   | Entrepreneurial orientation and small business performance: A configurational approach                                  |
| 1350      | [11]   | The effects of strategic orientations on technology- and market-based breakthrough innovations                          |
| 955       | [12]   | Entrepreneurial orientation and new venture performance: The moderating role of intra- and extraindustry social capital |
| 910       | [3]    | Strategic process effects on the entrepreneurial orientation - Sales growth rate relationship                           |
| 895       | [13]   | The impact of network capabilities and entrepreneurial orientation on university spin-off performance                   |
| 888       | [14]   | Environmental strategy and performance in small firms: A resource-based perspective                                     |
| 886       | [15]   | Entrepreneurial orientation, risk taking, and performance in family firms   |
| 838       | [16]   | Entrepreneurial orientation theory and research: Reflections on a needed construct                                      |
| 771       | [17]   | The Measurement of Entrepreneurial Orientation  |

Source: Scopus Database, 2025

Practical Implication

This study offers valuable practical insights for policymakers, educators, and entrepreneurs by highlighting the global research trends and thematic priorities in Entrepreneurial Orientation (EO). First, the identification of key clusters (such as EO’s connection with innovation, firm performance, sustainability, and social entrepreneurship) provides a roadmap for governments and development agencies to design policies that nurture entrepreneurial ecosystems aligned with contemporary challenges, including sustainable development and digital transformation. Second, academic institutions and business schools can leverage the findings to update curricula by integrating emerging topics like entrepreneurial intention, entrepreneurial education, and dynamic capabilities. Third,

entrepreneurs and industry practitioners can use this knowledge to benchmark their strategies with evidence-based insights, particularly by understanding how EO dimensions like risk-taking, innovativeness, and proactiveness correlate with business success across regions and sectors.

Theoretical Contribution

Theoretically, this study contributes to the EO literature by providing a structured and data-driven overview of its intellectual architecture over time. Through bibliometric mapping, the study uncovers the evolution of core concepts, thematic clusters, and collaboration networks, offering a meta-perspective that complements existing conceptual and empirical studies. It bridges fragmented knowledge by visually and statistically illustrating the convergence of EO with other domains such as strategic



orientation, sustainability, education, and social capital. Furthermore, the analysis highlights underexplored intersections that can inform the development of new frameworks and testable models. This contribution advances the field beyond firm performance by positioning EO as a multidimensional construct relevant to various societal and institutional contexts.

#### Limitation

Despite its comprehensive scope, the study has several limitations. The analysis relies exclusively on data from the Scopus database, which, although reputable, may omit relevant publications indexed elsewhere, such as Web of Science or Google Scholar. This may lead to a bias in geographic or journal representation. Additionally, while bibliometric methods are powerful for detecting structural patterns and trends, they do not capture the qualitative depth of the studies reviewed such as theoretical nuance, methodological rigor, or contextual interpretation. As such, future research could complement this work with a systematic literature review (SLR) or meta-analysis to evaluate the content and quality of influential articles. Finally, the fast-evolving nature of EO-related research, especially in response to global crises or technological changes, requires periodic updates to maintain

relevance and accuracy in scholarly and practical applications.

#### 4. CONCLUSION

his bibliometric study provides a comprehensive mapping of global research on Entrepreneurial Orientation (EO), revealing its intellectual structure, thematic evolution, and collaborative networks over time. The analysis confirms that EO remains a central construct in entrepreneurship literature, strongly linked to innovation, firm performance, and strategic orientation, while also expanding into emerging areas such as sustainability, social entrepreneurship, and entrepreneurial education. The study identifies influential authors, institutions, and countries that shape the field, as well as rising topics that signal future research directions. By offering both macro-level insights and specific thematic trends, this research serves as a valuable reference for scholars, educators, policymakers, and practitioners aiming to understand and advance EO theory and practice. Despite its limitations, the study lays a strong foundation for future empirical, conceptual, and interdisciplinary investigations into the dynamic and globally relevant domain of Entrepreneurial Orientation.

#### REFERENCES

- [1] D. Miller, "The correlates of entrepreneurship in three types of firms," *Manage. Sci.*, vol. 29, no. 7, pp. 770–791, 1983.
- [2] G. T. Lumpkin and G. G. Dess, "Clarifying the entrepreneurial orientation construct and linking it to performance," *Acad. Manag. Rev.*, vol. 21, no. 1, pp. 135–172, 1996.
- [3] J. G. Covin, K. M. Green, and D. P. Slevin, "Strategic process effects on the entrepreneurial orientation–sales growth rate relationship," *Entrep. theory Pract.*, vol. 30, no. 1, pp. 57–81, 2006.
- [4] I. E. N. Okoli, K. C. Nwosu, and M. E. Okechukwu, "Entrepreneurial Orientation and Performance of Selected SMEs in Southeast, Nigeria," *Eur. J. Bus. Manag. Res.*, vol. 6, no. 4, pp. 108–115, Jul. 2021, doi: 10.24018/ejbmr.2021.6.4.946.
- [5] M. Yaskun, Sudarmiatin, Agus Hermawan, and Wening Patmi Rahayu, "The Effect of Market Orientation, Entrepreneurial Orientation, Innovation and Competitive Advantage on Business Performance of Indonesian MSMEs," *Int. J. Prof. Bus. Rev.*, vol. 8, no. 4 SE-Articles, p. E01563, Apr. 2023, doi: 10.26668/businessreview/2023.v8i4.1563.
- [6] S. Oduro, "Entrepreneurial orientation and innovation performance of social enterprises in an emerging economy," *J. Res. Mark. Entrep.*, vol. 24, no. 2, pp. 312–336, 2023.
- [7] K. Puumalainen, H. Sjögrén, J. Soininen, P. Syrjä, and S. Kraus, "Crisis response strategies and entrepreneurial orientation of SMEs: A configurational analysis on performance impacts," *Int. Entrep. Manag. J.*, vol. 19, no. 4, pp. 1527–1559, 2023.
- [8] N. Donthu, S. Kumar, D. Mukherjee, N. Pandey, and W. M. Lim, "How to conduct a bibliometric analysis: An overview and guidelines," *J. Bus. Res.*, vol. 133, pp. 285–296, 2021.
- [9] A. Rauch, J. Wiklund, G. T. Lumpkin, and M. Frese, "Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future," *Entrep. theory Pract.*, vol. 33, no. 3, pp. 761–787, 2009.
- [10] J. Wiklund and D. Shepherd, "Entrepreneurial orientation and small business performance: a configurational approach," *J. Bus. Ventur.*, vol. 20, no. 1, pp. 71–91, 2005.

- [11] K. Z. Zhou, C. K. Yim, and D. K. Tse, "The effects of strategic orientations on technology-and market-based breakthrough innovations," *J. Mark.*, vol. 69, no. 2, pp. 42–60, 2005.
- [12] W. Stam and T. Elfring, "Entrepreneurial orientation and new venture performance: The moderating role of intra- and extraindustry social capital," *Acad. Manag. J.*, vol. 51, no. 1, pp. 97–111, 2008.
- [13] A. Walter, M. Auer, and T. Ritter, "The impact of network capabilities and entrepreneurial orientation on university spin-off performance," *J. Bus. Ventur.*, vol. 21, no. 4, pp. 541–567, 2006.
- [14] J. A. Aragón-Correa, N. Hurtado-Torres, S. Sharma, and V. J. García-Morales, "Environmental strategy and performance in small firms: A resource-based perspective," *J. Environ. Manage.*, vol. 86, no. 1, pp. 88–103, 2008.
- [15] L. Naldi, M. Nordqvist, K. Sjöberg, and J. Wiklund, "Entrepreneurial orientation, risk taking, and performance in family firms," *Fam. Bus. Rev.*, vol. 20, no. 1, pp. 33–47, 2007.
- [16] J. G. Covin and G. T. Lumpkin, "Entrepreneurial orientation theory and research: Reflections on a needed construct," *Entrep. theory Pract.*, vol. 35, no. 5, pp. 855–872, 2011.
- [17] J. G. Covin and W. J. Wales, "The measurement of entrepreneurial orientation," *Entrep. theory Pract.*, vol. 36, no. 4, pp. 677–702, 2012.