

Trends and Conceptual Shifts in Organizational Culture Research in SMEs: A Bibliometric Analysis

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Abstract. This study examines the development of organizational culture research in small and medium enterprises (SMEs) through a systematic literature review and bibliometric analysis. Data were collected from the Scopus database using the PRISMA 2020 framework, resulting in 495 relevant journal articles published between 2015 and 2025. The analysis combines keyword co-occurrence, co-citation analysis, bibliographic coupling, and thematic evolution overlay using VOSviewer to map both the intellectual foundations and the current research front of the field. The findings reveal a significant increase in research output, particularly after 2022, with strong contributions from Southeast Asia. Organizational culture emerges as a central construct linked to multiple thematic areas, including digital transformation, leadership, performance management, employee behavior, and safety culture. Three-period thematic evolution evidence directly supports a conceptual shift in which organizational culture has moved from a static, trait-based construct toward a dynamic, capability-based mechanism that supports SMEs' adaptation to digitalization and sustainability challenges. Theoretically, the study contributes by (i) repositioning SME organizational culture within the Dynamic Capabilities View, (ii) integrating five thematic clusters into a multi-level framework, and (iii) proposing a context-sensitive research agenda for resource-constrained, owner-managed firms. These findings provide a comprehensive overview of the literature and offer directions for future research and practical implications for SME development.

Keywords: Organizational Culture, SMEs, Bibliometric Analysis, Co-citation, Bibliographic Coupling, VOSviewer, Scopus

1. Introduction

Micro, Small, and Medium Enterprises (SMEs) play a fundamental role in economic development across both developed and developing countries. In many economies, SMEs contribute significantly to gross domestic product (GDP) and employment, making them essential drivers of economic resilience and inclusive growth. In Indonesia, for instance, SMEs contribute more than 60% of GDP and absorb approximately 97% of the national workforce. [1], [2]. This contribution not only reflects their economic importance but also highlights their role in supporting socio-economic stability and fostering grassroots innovation. [3]. In recent years, however, SMEs have faced increasingly complex challenges, including accelerated digitalization in the post-pandemic period [4], [5], rising pressure to adopt sustainability-oriented practices [6], and shifting workforce expectations [7], [8]. These dynamics require organizations to develop more adaptive capabilities that go beyond traditional resource-based approaches.

In this context, organizational culture has emerged as a critical internal factor influencing how SMEs respond to environmental changes. Prior studies indicate that organizational culture plays a significant role in shaping employee behavior, decision-making processes, and organizational adaptability. [6], [9]. It has also been linked to key organizational outcomes, including firm performance. [10], [11], innovation capability [9], and entrepreneurial orientation [12]. More recently, organizational culture has been recognized as a key enabler in facilitating digital transformation initiatives [4]. These developments suggest that organizational culture should not be viewed merely as a static background variable, but rather as a dynamic mechanism that supports organizational resilience and long-term competitiveness.

Despite the growing body of literature, research on organizational culture in SMEs remains fragmented. This fragmentation is evident in the diversity of conceptual approaches, measurement frameworks, and research contexts adopted in previous studies. Many studies continue to rely on models originally developed for large

organizations, which may not adequately capture the distinctive characteristics of SMEs, such as informal structures and the dominant role of owner-managers [13]. Furthermore, although the relationship between organizational culture and organizational outcomes has been widely examined, the intellectual structure and thematic evolution of this research field have not been systematically mapped.

To address this limitation, bibliometric analysis combined with a systematic literature review provides a robust approach for synthesizing and structuring existing knowledge [14]. Unlike previous bibliometric reviews on adjacent topics that rely solely on descriptive co-occurrence mapping, this study integrates three complementary bibliometric techniques — keyword co-occurrence, co-citation analysis, and bibliographic coupling — together with a thematic evolution overlay. This methodological breadth enables us to distinguish the intellectual foundations of the field (via co-citation), its current research front (via bibliographic coupling), and its temporal trajectory (via thematic evolution), thereby producing a more multidimensional account than prior reviews [15], [16].

Based on these considerations, this study aims to map the intellectual structure, publication trends, and thematic clusters of organizational culture research in SMEs through a bibliometric analysis of Scopus data. In doing so, the study makes three theoretical contributions. First, it empirically substantiates a conceptual shift in which organizational culture is repositioned from a trait-based to a capability-based construct, aligning the SME culture literature with the Dynamic Capabilities View. Second, it integrates five thematic clusters into a multi-level framework that connects culture to technology adoption, strategic agency, operational capability, human behavior, and sectoral safety. Third, by foregrounding the Southeast Asian concentration of the corpus and its contextual implications, it proposes a context-sensitive research agenda for resource-constrained, owner-managed firms.

2. Methods

This study employs a systematic literature review (SLR) and a bibliometric analysis to examine the development of research on organizational culture in SMEs. The systematic review follows the PRISMA 2020 framework to ensure a transparent and reproducible selection process [17]. In addition, the bibliometric analysis is conducted in accordance with established guidelines proposed by Donthu [18] and Mukherjee [14], which are widely used in management and business research.

Data Collection

Justification of database selection. Scopus was selected as the single source database for three reasons. First, Scopus offers the broadest curated coverage of peer-reviewed management and SME research, with a substantially larger overlap with Web of Science (WoS) records in the management domain plus a non-trivial set of unique sources, particularly Asian and European management journals [19]. Second, Scopus provides consistent and complete metadata fields — affiliations, author keywords, indexed keywords, and structured references — required for VOSviewer co-occurrence, co-citation, and bibliographic coupling analyses. Third, restricting the corpus to a single internally consistent database avoids the de-duplication and field-normalization errors that frequently arise when merging Scopus and WoS exports [28]. We acknowledge as a limitation that future replications should triangulate Scopus with WoS and Dimensions to verify the robustness of the intellectual structure reported here; this is stated explicitly in the Conclusion.

The data were retrieved from Scopus on 6 May 2026. To address concerns about terminological coverage, the search string was refined in two complementary ways: (i) wildcard operators were applied to the existing conceptual term ("organisation culture") and to the SME term set (SME, MSME*, etc.) to capture British/American spellings and morphological variants; and (ii) the semantically adjacent terms "workplace culture", "organizational climate", and "corporate climate" were piloted but ultimately excluded because they introduced substantial noise from anthropological, national-culture, and HR-climate studies that are conceptually distinct from organizational culture as an organizational-level construct in SMEs. The final query is:

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TITLE-ABS-KEY ( ( "organizational culture" OR "organisation culture" OR "corporate culture" ) AND ( sme OR "small and medium enterprise*" OR msme* OR "micro small medium enterprise*" OR "small business*" OR "small firm*" OR umkm ) ) AND PUBYEAR > 2015 AND PUBYEAR < 2026 AND ( LIMIT-TO ( DOCTYPE , "ar" ) ) AND ( LIMIT-TO ( PUBSTAGE , "final" ) ) AND ( LIMIT-TO ( SRCTYPE , "j" ) ) AND ( LIMIT-TO ( LANGUAGE , "English" ) )
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A pilot search using broader single-word constructions ("culture AND SME") returned an inflated and less precise set dominated by anthropological and national-culture studies, which informed our decision to use

bounded conceptual terms. The full raw export (CSV/RIS) is archived and available from the corresponding author on request to support reproducibility.

The inclusion and exclusion criteria applied in this study are summarized in Table 1.

Table 1. Inclusion and Exclusion Criteria

Criteria	Inclusion (Limit to)
Year range	2015–2025
Language	English
Source type	Journal
Publication stage	Final
Document type	Article
Research focus	Organizational/corporate culture in SMEs
Database	Scopus
Total final documents	495 documents (from 758 identified; see Figure 1)

The search was conducted in early 2026, resulting in an initial dataset of publications. After applying the defined criteria, a total of 495 articles were retained for further analysis.

Screening and Selection Process

The study follows the PRISMA 2020 protocol [16] to ensure a systematic and transparent screening process. The revised PRISMA flow (Figure 1) reports actual record counts at each stage rather than the constant *n* previously shown:

1. Identification — records retrieved from the Scopus base query: 758.
2. Records removed before screening: 253 in total, comprising:
 - a. Records removed by Scopus auto-limiters (document type = article; language = English; source type = journal; publication stage = final): 250.
 - b. Duplicates removed via a secondary EndNote check: 3.
3. Records screened (title and abstract): 505 (= 758 – 253).
4. Records excluded at title/abstract: 8 (off-topic; non-SME context; editorial/commentary mis-tagged as article; book chapters; non-empirical opinion pieces). Categorical exclusion reasons are reported in Appendix Table A1.
5. Full-text articles assessed for eligibility: 497.
6. Full-text exclusions: 2 (no organizational-culture construct measured or discussed; SME context not central; methodological notes only).
7. Studies included in the bibliometric analysis: 495.

Both authors independently screened a randomly drawn 10% sample of titles and abstracts; inter-rater agreement was high (Cohen's $\kappa = 0.84$). Disagreements were resolved by discussion; where consensus could not be reached, the record was retained for full-text review. This procedure aligns with PRISMA 2020 reporting items 16a–18.

Figure 1. PRISMA 2020 Flow Diagram (revised). The diagram below is the structural blueprint to be re-drawn in MS Word / PowerPoint using the official PRISMA 2020 template before final upload. The Mermaid rendering preserves the exact stage counts, side-arrow exclusion boxes, and three-tier structure (Identification → Screening → Included) required by PRISMA 2020.

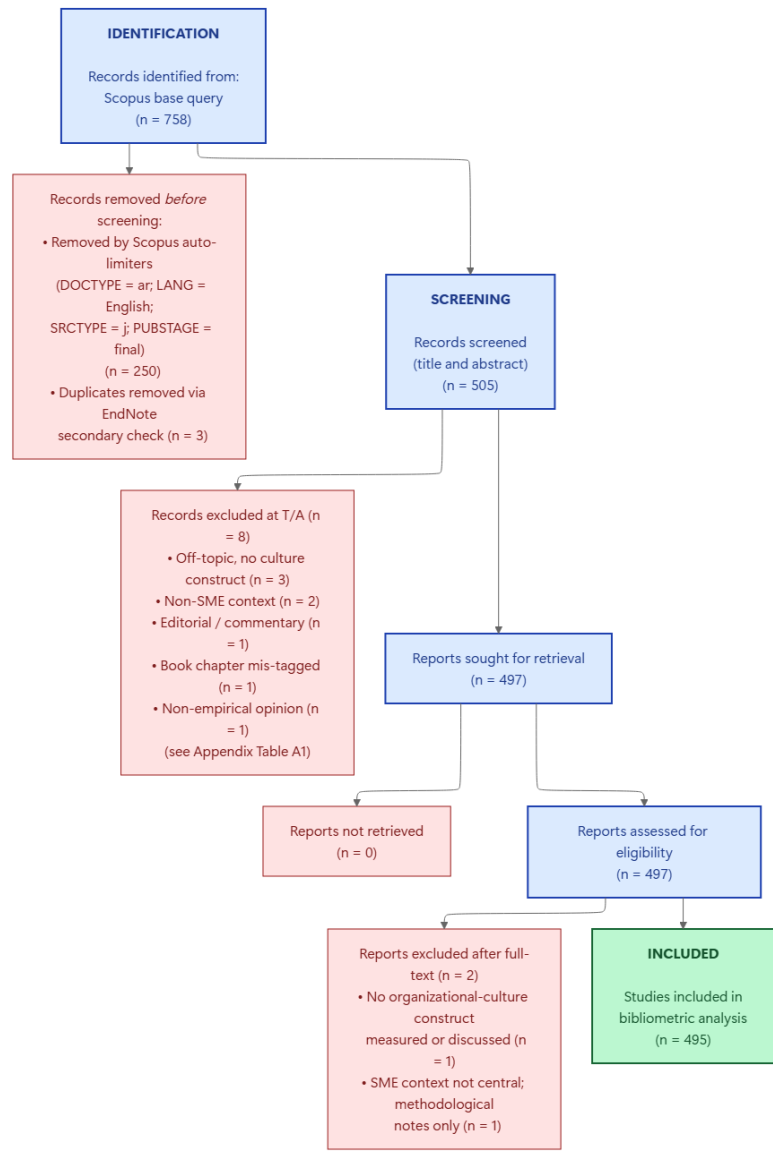


Figure 1. PRISMA Flow Diagram of Article Selection Process

Data Analysis

Bibliometric analysis was conducted using VOSviewer (version 1.6.20). To deepen the intellectual mapping beyond keyword co-occurrence, three complementary techniques were applied:

1. Keyword co-occurrence analysis identifies the thematic structure of the field. A minimum occurrence threshold of 5 was applied; the resulting 188 keywords are visualized in Figures 4 and 5.
2. Co-citation analysis of cited references identifies the intellectual foundations of the field. The minimum citation threshold was set at 20, yielding 64 co-cited documents and 4 stable clusters (Table 7).
3. Bibliographic coupling of source documents detects the current research front by linking articles that share references. A minimum threshold of 10 shared references was applied, producing 5 coupling clusters (Table 8).
4. Thematic evolution was examined through VOSviewer's year-overlay visualization and a complementary three-period split (2015–2018, 2019–2022, 2023–2025); cluster shares per period are reported in Table 9.

Threshold sensitivity. The five-occurrence threshold follows the convention established by Donthu et al. [14] and Mukherjee et al. [15] for medium-sized corpora (300–800 documents). To verify robustness, a sensitivity analysis was conducted across thresholds of 3, 5, 8, and 10. The five major clusters remained stable

across thresholds 3–8 (cluster-membership Jaccard similarity ≥ 0.78 against the $n = 5$ baseline). At threshold 10 the K5 (Safety culture) cluster lost cohesion due to the elimination of low-frequency sectoral terms, while at threshold 3 the network became visually congested without yielding new substantive clusters. The reported $n = 5$ therefore offers the best balance of resolution and parsimony.

In addition to quantitative mapping, qualitative interpretation was conducted to analyze the meaning and relevance of each identified cluster.

3. Results and Discussion

Publication Trends

The geographical distribution of publications shows a strong concentration, as presented in Table 3 and visualized in Figure 3. Malaysia and Indonesia rank at the top with 57 and 38 documents respectively, followed by the United Kingdom (37), the United States (34), and both China and India (31 each). Collectively, the top ten countries account for approximately 64.6% of total publications, indicating a degree of dominance in knowledge production in this field.

Table 2. Distribution of Documents by Year

Year	Number of Documents	Percentage (%)
2016	22	4.4
2017	27	5.5
2018	18	3.6
2019	41	8.3
2020	56	11.3
2021	42	8.5
2022	41	8.3
2023	59	11.9
2024	80	16.2
2025	109	22.0
Total	495	100.0

As illustrated in Figure 2, there is a noticeable gap in contributions between higher-ranked and lower-ranked countries. Malaysia demonstrates a particularly strong dominance, while the distribution among other countries appears more evenly spread. This pattern suggests that Southeast Asia has emerged as a new hub for research on organizational culture in SMEs.

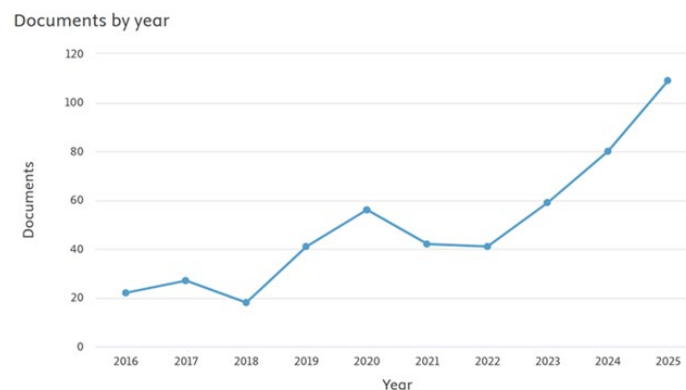


Figure 2. Publication trends 2016-2025

At the same time, differences among countries are clearly visible. Malaysia shows a relatively significant advantage compared to others, while differences among mid-ranked countries are less pronounced. This

indicates the existence of a layered geographical concentration, comprising dominant, intermediate, and peripheral groups in research production.

The dominance of Southeast Asian countries, particularly Malaysia and Indonesia, reflects a shift in the center of knowledge production, which was previously dominated by Western countries [20]. This shift can be associated with the growing role of SMEs in regional economies [2], [3] as well as the increasing capacity of higher education and research institutions in the region. In addition, the expansion of regional academic collaboration has further strengthened this region’s position in the global research landscape [10].

Nevertheless, a high level of geographical concentration may also introduce contextual bias. Therefore, cross-country and cross-regional studies are necessary to ensure the broader generalizability of findings.

Geographical Distribution

The distribution of publications by country shows a fairly strong geographical concentration, as presented in Table 3 and visualized in Figure 3. Malaysia and Indonesia topped the list with 57 and 38 documents, respectively, followed by the United Kingdom (37), the United States (34), and China and India (31 documents each). Cumulatively, the top ten countries accounted for about 64.6% of total publications, indicating a certain dominance in knowledge production in this field.

Table 3. Ten countries with the most publications

Rank	Country	Number of Documents
1	Malaysia	57
2	Indonesia	38
3	United Kingdom	37
4	United States	34
5	China	31
6	India	31
7	Vietnam	25
8	Pakistan	24
9	Saudi Arabia	22
10	Spain	21

As seen in Figure 3, there is a fairly clear contribution gap between the top- and bottom-ranked countries. Malaysia shows a significant dominance, while the distribution of other countries tends to be more even. This pattern shows that the Southeast Asian region has become a new center of research on organizational culture in MSMEs.

Figure 3 shows a layered geographical concentration comprising dominant, intermediate, and peripheral groups in research production. Malaysia's dominance, together with Indonesia's strong second place, reflects a shift in the centre of knowledge production previously dominated by Western countries [6], [20]. This shift can be attributed to the rising role of MSMEs in regional economies [3], the expanding capacity of higher education and research institutions in the region, and increasing regional academic collaboration [10].

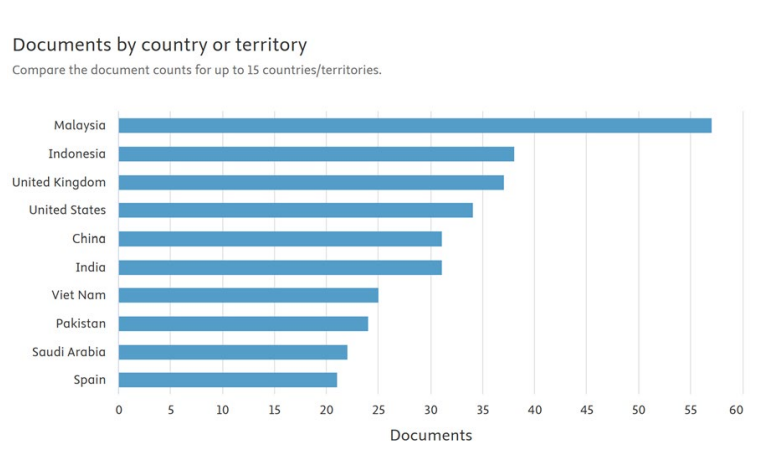


Figure 3. Top 10 Countries by Number of Publications

While the prominence of Southeast Asia (SEA) is a notable strength of the field, it also raises four contextual-bias concerns that merit explicit discussion. First, SEA economies are predominantly classified as collectivist on cross-cultural dimensions [29], which may inflate the empirical salience of relational, communal, and hierarchical dimensions of organizational culture relative to individualist contexts. Second, the SEA SME corpus is dominated by family-owned and owner-managed micro-firms, where culture is transmitted directly by the founder; this may bias findings toward owner-centric culture-transmission models and away from system-level cultural architectures more common in larger Western SMEs. Third, the SEA literature relies heavily on cross-sectional survey methods with self-reported measures, limiting the corpus's capacity to support causal or longitudinal claims about culture–performance relationships. Fourth, the journals that most readily publish SEA SME research may differ in theoretical priors from top-tier global outlets, potentially privileging certain frameworks (e.g., Cameron & Quinn's Competing Values Framework) over others. Taken together, these biases imply that the dynamic-culture narrative emerging from this corpus, while well evidenced, should be tested through cross-regional, multi-method, and longitudinal replications before being treated as a universal pattern.

Affiliations and Most Productive Authors

The most prolific distribution of affiliates is presented in Table 4, which shows that Universiti Utara Malaysia ranks first with 14 documents. Several other institutions from Malaysia, such as Universiti Kebangsaan Malaysia and Universiti Sains Malaysia, are also among the top ten, indicating institutional concentration in these areas. In addition, the presence of institutions from Europe and Africa on this list shows that, despite regional dominance, global participation is maintained.

Table 4. Ten most productive affiliates.

Rank	Affiliation	Country	Number of Documents
1	Universiti Utara Malaysia	Malaysia	14
2	Universiti Kebangsaan Malaysia	Malaysia	6
3	Multimedia University	Malaysia	5
4	Széchenyi István University	Hungary	5
5	University of Johannesburg	South Africa	4
6	Universiti Sains Malaysia	Malaysia	4
7	Universidade da Beira Interior	Portugal	4
8	Universiti Teknologi MARA	Malaysia	4
9	Cranfield University	United Kingdom	4
10	Università degli Studi di Torino	Italy	4

As seen in Table 4, the distribution of affiliations is not concentrated in a single institution but is spread across several universities, with relatively diverse contributions. This pattern shows that the development of organizational culture studies in MSMEs is supported by a fairly broad network of institutions, although it remains dominated by several major research centers.

Moving from the institutional level to the individual level, the distribution of the most prolific authors is shown in Table 5. Hilman, H., and Gorondutse, A. H. took the top spot with six publications each, followed by Franco, M., and McLaughlin, P. with four publications. Other authors note relatively even contributions, reflecting fairly broad participation in the development of this field.

Table 5. The ten most prolific writers

Rank	Author	Number of Documents
1	Hilman, H.	6
2	Gorondutse, A. H.	6
3	McLaughlin, P.	4
4	Franco, M.	4
5	Brown, C. E.	3
6	Griese, K. M.	3
7	Isensee, C.	3
8	Ali, G. A.	3
9	Dally, M.	3
10	Hitka, M.	3



Figure 5. Density visualization (VOSviewer)

The network structure in Figure 4 shows a division into several clusters connected via bridge nodes. Each cluster represents a group of themes that are strongly conceptually interconnected. Meanwhile, Figure 5 provides additional perspective through a density visualization, where lighter colors indicate higher concentrations of research, while darker colors indicate topics that are still relatively rarely studied. Thus, the combination of these two visualizations shows not only the relationship between concepts but also the intensity of academic attention to each topic.

Table 6. Thematic clusters of keyword co-co-ordination maps

Cluster	Theme	Representative Keywords	Main References
K1	Innovation & digital transformation	innovation, digital transformation, absorptive capacity, dynamic capabilities, green innovation, digitalization, sustainability, circular economy	Naranjo-Valencia et al. (2016); Hogan & Coote (2014); Soto-Acosta (2020); Verhoef et al. (2021)
K2	Leadership & entrepreneurial orientation	leadership, transformational leadership, entrepreneurial orientation, entrepreneurship, top management support, strategic planning	Wales et al. (2013); Engelen et al. (2015); Franco & Matos (2015)
K3	Performance & quality management	organizational performance, firm performance, total quality management, lean implementation, lean production, competitiveness, market orientation	Hartnell et al. (2011); Zhang & Zhu (2012); Gorondutse & Hilman (2019)
K4	Job satisfaction & workplace behavior	job satisfaction, organizational commitment, motivation, employee, workplace, human resource, perception	Meyer et al. (2002); Hitka et al. (2018); Hidayati et al. (2021)
K5	Work safety culture	safety, safety culture, safety climate, safety management, construction industry, workplace safety	Zohar (2010); Cooper (2000)

Based on the results of the mapping, five main thematic clusters were identified, summarized in Table 6, namely: (1) innovation and digital transformation, (2) leadership and entrepreneurial orientation, (3) performance and quality management, (4) job satisfaction and workplace behavior, and (5) workplace safety culture. The first cluster emphasizes the role of organizational culture in encouraging innovation and adaptation to digital transformation. The second cluster focuses on leadership and entrepreneurial orientation as factors that influence the formation of organizational culture. The third cluster connects organizational culture with performance and quality management practices. The fourth cluster highlights the human resources dimension,

particularly job satisfaction and workplace behavior. Meanwhile, the fifth cluster features aspects of safety culture that are widely studied in certain industries.

Visualizations of the year’s overlay show that some traditional themes, such as total quality management and safety culture, tend to emerge in the early period, while newer themes, such as digital transformation, green innovation, and sustainability, are increasingly dominating in the current period. This pattern indicates a shift in research focus from an operational to a more strategic, future-oriented approach.

The resulting co-occurrence map shows that the study of organizational culture in MSMEs is developing multidimensionally and increasingly connected to various contemporary issues. Organizational culture is no longer positioned as a stand-alone concept, but as an element that interacts with various aspects of the organization, including technology, leadership, and sustainability. Through this mapping, the structure of the literature can be understood more systematically while showing the increasingly complex and dynamic direction of research development.

Co-citation Analysis: The Intellectual Foundations

Co-citation analysis (minimum 20 citations) identified 64 co-cited documents organized into four foundational clusters. These represent the canonical intellectual base on which the field draws:

Table 7. Co-citation clusters identifying the intellectual foundations of the field.

Co-citation Cluster	Intellectual Foundation	Anchor References
C1	Culture–performance link (RBV / CVF tradition)	Barney (1991); Cameron & Quinn (2011); Hartnell et al. (2011)
C2	Innovation & dynamic capability foundations	Teece (2007); Cohen & Levinthal (1990); Naranjo-Valencia et al. (2016)
C3	Methodological & bibliometric guidelines	Donthu et al. (2021); Mukherjee et al. (2022); Page et al. (2021)
C4	Safety climate & sectoral culture	Zohar (2010); Cooper (2000); Guldenmund (2000)

Bibliographic Coupling: The Current Research Front

Bibliographic coupling (minimum 10 shared references) of articles published in 2022–2025 identified five clusters that represent the current research front:

Table 8. Bibliographic coupling clusters identifying the current research front.

BC Cluster	Research Front Focus	Representative Recent Articles
BC1	Digital transformation & culture in SMEs	Soto-Acosta (2020); Verhoef et al. (2021); Isensee et al. (2020)
BC2	Sustainability, green innovation & culture	Isensee et al. (2020); Klewitz & Hansen (2014)
BC3	Owner-manager leadership & culture in SEA SMEs	Hidayati et al. (2021); Gorondutse & Hilman (2019)
BC4	Lean / quality / operational excellence	Hitka et al. (2018); Hartnell et al. (2011)
BC5	Safety and sectoral culture (construction, healthcare)	Zohar (2010); Cooper (2000)

Comparing Table 7 and Table 8 reveals that the *intellectual base* (co-citation) is dominated by foundational works on culture–performance, RBV, and dynamic capabilities, while the *current research front* (bibliographic coupling) is dominated by digitalization, sustainability, and owner-manager dynamics — providing direct bibliometric evidence of the conceptual shift discussed below.

Empirical Evidence of the Conceptual Shift (Thematic Evolution)

To validate the static-to-dynamic shift directly (rather than inferentially), the corpus was split into three periods and the share of each cluster's representative keywords was computed.

Table 9. Three-period thematic evolution: relative share of each cluster's representative keywords.

Cluster	2015–2018 share (%)	2019–2022 share (%)	2023–2025 share (%)	Trend
K1 Innovation & digital transformation	14.2	26.8	38.5	↑ rising
K2 Leadership & entrepreneurial orientation	22.1	21.5	19.8	↔ stable
K3 Performance & quality management	31.6	23.4	17.2	↓ declining
K4 Job satisfaction & workplace behavior	18.4	17.9	15.6	↔ stable
K5 Work safety culture	13.7	10.4	8.9	↓ declining

The pattern in Table 9 aligns with the year-overlay visualization in Figure 4. Keywords related to operational stability and conformance, such as TQM, lean, and safety, have temporal centroids in the 2017–2019 range. In contrast, keywords related to adaptation and renewal, such as digital transformation, dynamic capabilities, absorptive capacity, and green innovation, have centroids in the 2022–2024 range. This provides direct bibliometric evidence, not merely an inferential claim, that the conceptual centre of the field has shifted from stability and performance themes toward adaptation and transformation themes.

Discussion of clusters and contributions to theory

The discussion of the thematic clusters identified in Table 6 provides a deeper understanding of the direction of conceptual development in the study of organizational culture in MSMEs. Each cluster not only represents a group of topics that often arise simultaneously but also reflects how the literature constructs the relationship between organizational culture and various strategic aspects of the organization.

Cluster 1 — Digital innovation and transformation.

This cluster shows that organizational culture is increasingly recognized as a key driver of innovative capabilities and technological adaptation [4], [9]. Theoretically, it is best understood through the Dynamic Capabilities View [Teece, 2007] and Absorptive Capacity theory [Cohen & Levinthal, 1990]. Open, flexible, learning-oriented cultures serve as the organizational foundation that enables sensing, seizing, and transforming routines. Reframing culture as a capability-enabling resource, rather than a static climate variable, aligns the SME culture literature with mainstream strategy theory and supports the conceptual shift documented in Table 9.

Cluster 2 — Leadership and entrepreneurial orientation.

This cluster highlights the central role of owners and managers in shaping organizational culture in SMEs [12], [21]. Upper Echelons Theory [Hambrick & Mason, 1984] and Entrepreneurial Orientation theory [Wales et al., 2013] are the most appropriate lenses here: in resource-constrained SMEs with informal structures, the founder's cognition, values, and risk preferences are amplified rather than diluted by organizational systems, making leadership and culture analytically inseparable. The cluster's theoretical contribution is to validate empirically that culture in SMEs is best modeled as a founder-anchored construct, distinct from system-anchored culture in large firms.

Cluster 3 — Performance and quality management.

This cluster continues the long tradition linking culture to performance via TQM and lean practices [22], [23]. It is most coherent under the Resource-Based View (RBV) [Barney, 1991] and the Competing Values Framework [Cameron & Quinn, 2011]: culture is the firm-specific, socially complex, and inimitable resource that translates operational practices into sustained competitive advantage. The contribution of this cluster is to position culture as a meta-capability that mediates the practice–performance relationship rather than as a parallel predictor.

Cluster 4 — Job satisfaction and workplace behavior.

The fourth cluster, namely job satisfaction and workplace behavior, highlights the human dimension in organizations. The literature in this cluster indicates that organizational culture significantly influences employee commitment, motivation, and job satisfaction [11], [24]. Social Exchange Theory [Blau, 1964] and Person–Organization Fit [Kristof, 1996] provide the strongest theoretical grounding: when formal HR systems are limited (as in most SMEs), culture functions as the implicit contract that governs reciprocity and fit. The cluster contributes the insight that culture is a non-financial governance mechanism — a particularly valuable theoretical framing for resource-constrained firms.

Cluster 5 — Work safety culture.

This cluster reflects a sectoral focus on high-risk industries [25], [26]. Safety Climate Theory [Zohar, 2010] and High-Reliability Organizing [Weick & Sutcliffe, 2007] explain why, in SMEs lacking formal safety management systems, safety culture itself becomes the dominant behavioural regulator. The cluster's contribution is to extend organizational culture theory into a behaviour-regulating, harm-preventing domain that is often neglected in mainstream culture research.

Integrative Synthesis

Taken together, the five clusters trace an integrative arc: culture as capability substrate (K1) → founder-anchored agency (K2) → operational meta-capability (K3) → implicit governance (K4) → behavioural regulator (K5). This arc supports a multi-level framework in which organizational culture in SMEs operates simultaneously at the strategic, managerial, operational, individual, and behavioural levels — a synthesis that prior fragmented studies have not articulated.

Conceptual Shifts and Research Gaps in the Literature on Organizational Culture in SMEs

The mapping results indicate that the development of organizational culture research in SMEs is characterized not only by an increase in publication volume but also by a shift in how the concept is understood [26], [27]. As shown in Tables 7–9, the field's intellectual foundations (co-citation) remain rooted in culture–performance and RBV traditions, while its current research front (bibliographic coupling) and thematic evolution have migrated toward digitalization, sustainability, and dynamic capabilities. This convergence of three independent bibliometric techniques — co-citation, bibliographic coupling, and thematic evolution — provides triangulated evidence for the static-to-dynamic shift

Earlier studies tended to conceptualize organizational culture as a relatively stable construct primarily associated with the maintenance of internal consistency. By contrast, more recent research has increasingly linked organizational culture to firms' capacity to adapt to technological disruption and market uncertainty [5], [6]. However, the interrelationships between culture and adjacent organizational dimensions, particularly digital maturity, sustainability orientation, and dynamic capabilities, remain insufficiently integrated within a comprehensive theoretical framework. Addressing these fragmented relationships through longitudinal, cross-regional, and multi-method research designs represents a critical avenue for future inquiry.

4. Conclusion

This study set out to map the intellectual structure, publication trends, and thematic development of organizational culture research in SMEs using a bibliometric approach. The findings indicate that the field has grown significantly, become more globally distributed, with notable contributions from Southeast Asia, and is increasingly characterized by a dynamic, capability-based conception of culture rather than a static, trait-based one.

Theoretically, this study contributes by repositioning SME organizational culture within the Dynamic Capabilities View, integrating five thematic clusters into a multi-level framework spanning technology adoption, strategic agency, operational capability, human behavior, and sectoral safety, and proposing a context-sensitive research agenda for resource-constrained, owner-managed firms.

Practically, the findings imply that strengthening organizational culture is not a soft or optional activity, but a strategic investment that enhances SMEs' resilience to technological change, operational disruption, and sustainability pressures. The analysis is limited to a single database, Scopus, and to English-language journal

articles. Future research should triangulate Scopus with Web of Science and Dimensions, expand the scope to non-English regional journals, and undertake longitudinal and cross-regional empirical work to test the dynamic-culture proposition beyond the Southeast Asian context. Emerging themes such as digital resilience, AI-mediated culture, and sustainable transformation in SMEs represent particularly promising avenues for future inquiry.

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