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CRAFT ENTREPRENEURSHIP AT THE INTERSECTION OF MANAGEMENT, DIGITALIZATION AND SUSTAINABILITY: A BIBLIOMETRIC MAPPING OF RESEARCH TRENDS (1991-2025)

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Abstract:
The study aims to map the development and thematic structure of craft entrepreneurship research and to identify research directions relevant to the management and transformation of craft-based enterprises. The bibliometric analysis covers 460 publications indexed in the Scopus database in 1991-2025. Publication and citation performance and author-keyword co-occurrence have been analyzed using VOSviewer. The results show a marked increase in research activity, particularly after 2020, and reveal seven thematic clusters covering craft entrepreneurship and identity; social entrepreneurship, cultural heritage and local development; innovation and sustainability; digital entrepreneurship; creative economy; niche-market specialization; and management and organizational resources. Overlay analysis indicates that entrepreneurial skills, strategic management, family business, emerging economies, handicraft and artisan entrepreneurship represent some of the most recent research topics, while entrepreneurship, innovation, craft and social entrepreneurship retain central positions in the knowledge structure. The findings demonstrate that craft entrepreneurship is evolving from a niche research topic into an interdisciplinary field increasingly connected with digitalization, sustainability and the management of small craft-based enterprises. The study provides a structured knowledge map and identifies research directions relevant to management studies and the socio-economic dimensions of production engineering.

Key words: bibliometric analysis, craft entrepreneurship, crafts, VOSviewer

INTRODUCTION

Entrepreneurship has been a subject of interest for economic researchers and practitioners for many decades, which is due to its crucial role in shaping economic and social growth [1, 2]. Entrepreneurship is a key factor of economic growth [3, 4, 5], contributing to job creation [6, 7] and stimulating innovation [8, 9]. It serves an important social function, responding to social needs and supporting the economic independence of individuals [10, 11]. In general terms, it is the process of setting up and running a business, related to taking risks, exploiting opportunities and creating economic and social value [2, 5]. A special area of entrepreneurship is craft entrepreneurship, which combines tradition with a modern approach to running a business [12, 13]. It is based on individual skills, practical knowledge and high quality of manufactured products or services [14]. In this context, entrepreneurship not only amounts to creating new ventures, but also cultivating craft heritage, innovative approaches to traditional techniques and adapting to changing market needs [15, 16].

Despite limited recognition in the literature, craft entrepreneurship is gradually gaining importance as a scientific research area [17, 18]. At the same time, there is a noticeable shortage of synthetic research

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that would integrate dispersed approaches and enable a comprehensive assessment of its development. In response to this gap, this study is to identify main research directions, publication trends and thematic connections, and to deepen knowledge about the research in this area.

The article presents a bibliometric analysis of scientific achievements [19] regarding craft entrepreneurship in 1991-2025, with emphasis on global trends and the impact of research on its development, which is based on the Scopus database and includes 460 scientific articles. The publication efficiency and keyword co-occurrence were analyzed [20], and the relationship network was visualized using VOSviewer [21]. A systematic literature review precedes the study, thus constituting the basis for a descriptive approach to the analyzed area [22].

When specifying the research gap, it should be pinpointed that the existing studies significantly contribute to understanding crafts and craft entrepreneurship, but do not exhaust the need for systematic mapping of the knowledge structure in this area. The existing literature includes, among others, a systematic review of artisan entrepreneurship, an approach to strategic entrepreneurship based on materiality, authenticity and tradition, an analysis of the role of authenticity, passion and place, research on the evolution of craft work in a family enterprise and a typology of craft configurations as alternative models of organizing work [12, 16, 17, 23, 24]. Despite the relevance of these publications, there is still no integrated bibliometric analysis that would capture the development of the field over a long-time horizon, identify publication and citation dynamics, main authors, countries, institutions and keyword associations, and at the same time indicate how craft entrepreneurship research is shifting towards digitalization, sustainability, creative economy, family enterprises and strategic management. This article addresses this gap by quantitatively mapping the knowledge structure and identifying dominant and emerging research streams over the period 1991-2025.

LITERATURE REVIEW

The structural changes observed in recent years indicate a gradual departure from the industrial economy paradigm towards a model based on creativity, human capital and the growing importance of intangible assets and authenticity of goods and services [25]. In this context, the growing interest in crafts as a manifestation of changes in the ways of creating value and organizing production processes, indicates the growing role of the craft sector, which, despite its not fully utilized potential, generates significant economic and cultural value [26, 27, 28]. Against this background, craft entrepreneurship is emerging as a special form of economic activity, combining market logic with a cultural and social dimension, as reflected in the growing interest in this research area [29, 30]. From a process perspective, it consists in identifying and exploiting market opportunities by creating value based on craftsmanship [31, 32], developed using specialized competences and production practices typical of craft activities [33, 34]. This activity is most often carried out on a small scale and associated with a high degree of authenticity and individualization of products and services offered [32, 35], including manual production, use of local resources and functioning as part of small projects [13]. The specificity of craft entrepreneurship results from the characteristic configuration of resources, including tacit knowledge, manual skills and rootedness in tradition and local context [12, 36]. Consequently, crafts should not be perceived as a relic of pre-industrial production forms, but as a dynamic and adaptive model in the modern economy, capable of integrating cultural heritage with innovation mechanisms [37]. Recent research indicates that craft enterprises not only explore market niches, but also consciously build long-term competitive advantage through the management of symbolic and material resources [16, 23]. In particular, the role of three key dimensions is emphasized - materiality, authenticity and tradition – which co-create the basis for value creation in craft enterprises [23, 38]. Materiality emphasizes the importance of the manufacturing process and physical properties of products [39, 40], authenticity refers to the perceived value and social legitimization of activities [24, 41], whereas tradition is a source of cultural continuity, thus enabling the adaptation of established practices to changing environmental conditions [42, 43]. Previous research confirms the growing importance of craft entrepreneurship as a separate research area, while indicating

a significant dispersion of theoretical and empirical threads [17, 18, 23]. This justifies the need for a systematic analysis of scientific achievements concerning this issue.
To ensure terminological consistency, this article assumes that the term “craft entrepreneurship” is the superior category for research on entrepreneurial activities based on crafts. It includes entrepreneurial activities rooted in tacit knowledge, manual skills, materiality of the production process, authenticity, tradition and the creation of economic, social and cultural value.

METHODOLOGY

In the study, a complementary research approach was applied, combining a bibliometric analysis with a systematic literature review. The bibliometric analysis enabled the identification and visualization of main research trends, knowledge structures and relationships between publications on craft entrepreneurship [44, 45]. The complementary systematic literature review allowed for an in-depth interpretation of the results and identification of key research gaps [22, 46]. The empirical material was obtained from the Scopus database, widely recognized as one of the most comprehensive and reliable sources of data used in bibliometric research [47, 48]. The analysis covered publications from 1991-2025. Due to the growing popularity of bibliometric methods in review studies [49], VOSviewer [49, 50] was used to analyze bibliographic mappings and co-occurrence of keywords [51], enabling the visualization of the connection network and identification of relationships between the analyzed elements [51]. The research procedure was carried out in accordance with the SPAR-4-SLR (Scientific Procedures and Rationales for Systematic Literature Reviews) protocol [52], including three stages: assembling, arranging and assessing. The data collection stage identified 510 publications on craft entrepreneurship in Scopus (1991-2025). After organizing and cleaning the data, 460 publications were qualified for the analysis. The detailed procedure is presented in Figure 1, based on the assumptions of the SPAR-4-SLR protocol presented by Raman et al. [52].

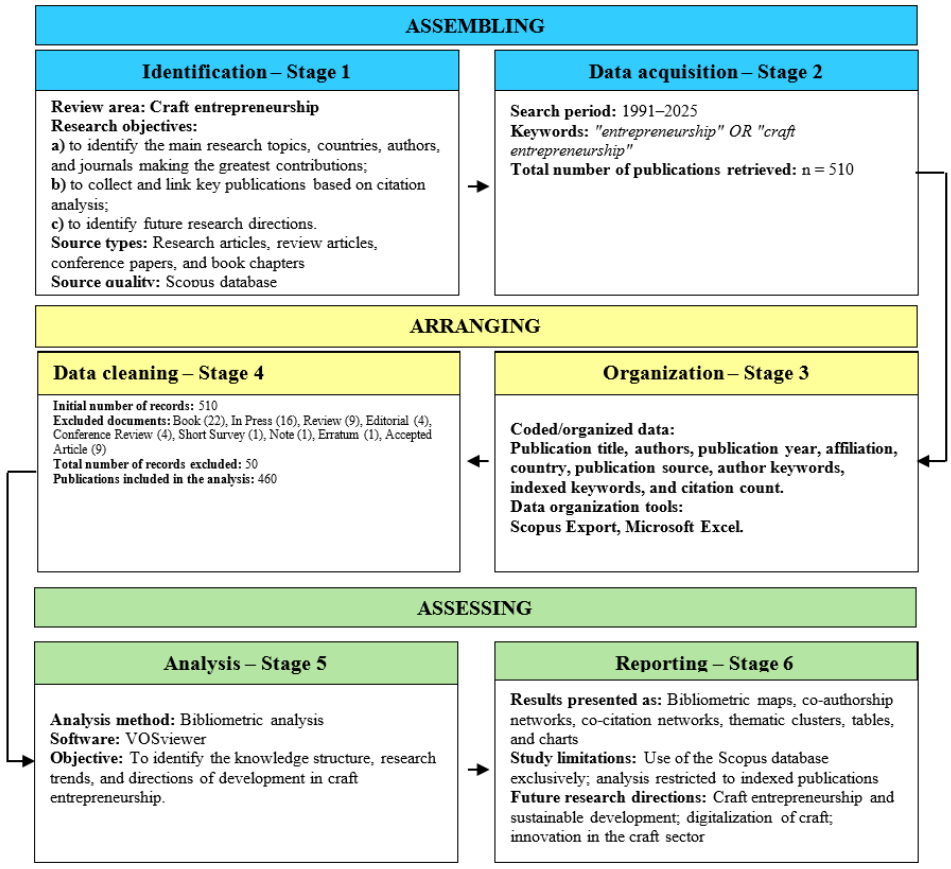


Fig. 1 SPAR-4 protocol

Alt text: *six-stage SPAR-4-SLR workflow: identification, Scopus retrieval, organization, cleaning, VOSviewer analysis and reporting.*

The choice of the Scopus database as the only data source was a deliberate decision and resulted from the need to ensure consistency, comparability and repeatability of the bibliometric analysis. Scopus offers broad coverage of peer-reviewed journals in management sciences, entrepreneurship, economics, social science, and interdisciplinary research, while providing standardized metadata needed to analyze citations, affiliations, countries, keywords, and publication sources. Limiting the analysis to one database reduces the risk of duplicate records, metadata inconsistencies and problems resulting from combining data from databases using different indexing standards. This approach increases the research procedure transparency and enables the results to be reproduced by other researchers. At the same time, the omission of databases such as Web of Science or Google Scholar may limit the completeness of the identification of scientific achievements. Hence, this fact was found as one of the study limitations.

According to the classic approach to bibliometric mapping proposed in the study on VOSviewer [53], the network analysis was performed using VOSviewer, which enables the construction and visualization of bibliometric maps based on the strength of connections between the analyzed units. VOSviewer version 1.6.20 was used in this study. The co-occurrence analysis was used, and the unit of analysis was author keywords exported from the Scopus database. The counting method was defined as full counting, and the normalization method was defined as association strength. The threshold for including a term in the map was set at a minimum of five occurrences; out of 2,218 identified terms, 69 keywords met this threshold. Before the analysis, data cleaning was carried out, which included keyword standardization, removing obvious duplicates and combining synonyms and linguistic variants regarding craft entrepreneurship, in particular: craft entrepreneurship, artisan entrepreneurship, crafts entrepreneurship, handicraft entrepreneurship.

RESEARCH RESULTS

Evolution of Craft Entrepreneurship: Publication and Citation Analysis

The analysis of publication and citation dynamics indicates a gradual increase in the significance of craft entrepreneurship as a subject of scholarly research (Figure 2).

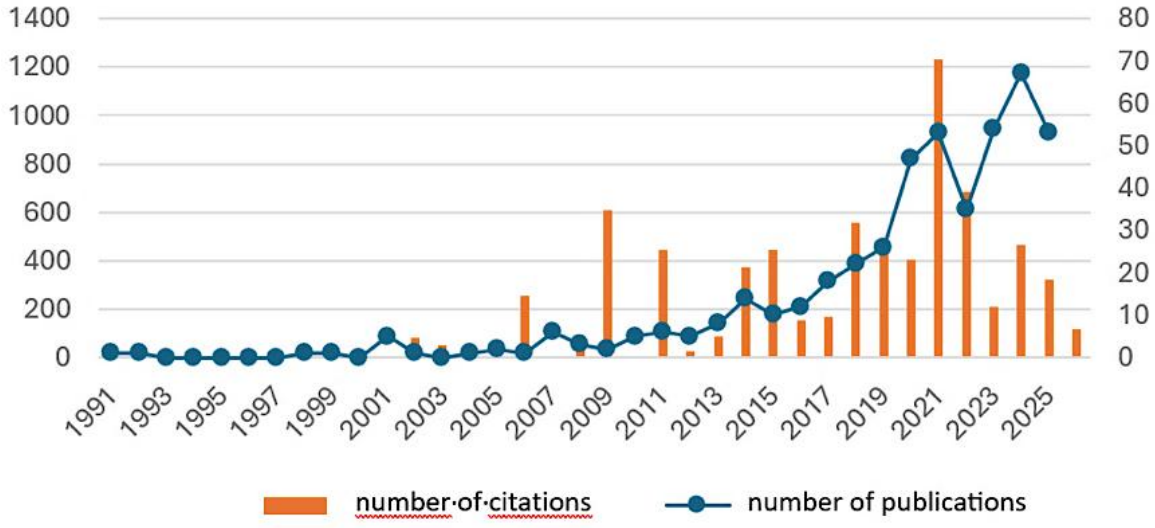


Fig. 2 Dynamics of publications and citations in craft entrepreneurship research in 1991-2025

Alt text: *Line-and-bar chart showing publications rising after 2017 and citation peaks in 2020-2021 within craft entrepreneurship research.*

Source: own study based on the Scopus data.

In the initial period of 1991-2006, the number of publications was small and did not exceed five papers per year, which indicates that craft entrepreneurship was not yet a clearly separated research area. Since 2007, a gradual increase in publishing activity has been observed, with acceleration after 2017.

Particularly dynamic development occurred after 2020, when the number of publications exceeded 50 works per year. Despite the temporary decline in 2022, the overall trend remains clearly upward. The highest publication activity was observed in 2024, with 69 works published. The results indicate that craft entrepreneurship has evolved from a niche research issue into a dynamically developing research area covering authenticity, tradition, creativity and value creation in modern economy. A similar trend is observed for the number of citations. In the initial period, the publication impact was limited, but since 2013 there has been a significant increase in the impact. The highest number of citations was recorded for 2020 publications (1231), whereas those of 2021 (684), 2008 (609), 2017 (559) and 2018 (456) were also characterized by a high number of citations. At the same time, the citation indicators per publication and citations per cited publication reached their highest values in earlier years, indicating the strong impact of individual seminal studies driving the development of this research field. The lower citation values for publications from recent years, especially 2024-2025, are mainly due to a shorter period of their scientific circulation. Overall, the findings demonstrate the growing visibility and scholarly impact of craft entrepreneurship research, confirming the progressive consolidation of this area as a distinct research stream.

The interpretation of the results indicates that the increase in the number of publications after 2017 should not be regarded solely as a result of a quantitative increase in the interest in the topic, but as a symptom of craft entrepreneurship maturing as an independent and interdisciplinary research field. The acceleration observed after 2020 corresponds to the literature findings, in which craftsmanship is increasingly analyzed not only as a traditional production form, but also as a source of innovation, authenticity, organizational resilience and new business models [17, 23, 24].

Structure and Concentration of Craft Entrepreneurship Research

The analysis of the most productive authors and research institutions indicates the concentration of scientific achievements around a relatively small group of researchers and the research centers they represent (Tables 1, 2).

Within this group, Ian Fillis is particularly noteworthy, with his research output receiving 106 citations (TC = 106), corresponding to an average of C/P = 26.50, and h- and g-index values of 3 and 4, respectively. In turn, Uma Shankar Yadav and Ravindra Tripathi each received TC = 78 and achieved the highest m-index values (m = 1.000), indicating the dynamic growth of the scientific impact of their research output.

Table 1

Bibliometric characteristics of the most productive authors in craft entrepreneurship research

Full Name	TP	NCP	TC	C/P	C/CP	h	g	m
Vanessa Ratten	10	8	79	7.90	9.88	4	8	0.800
Ian Fillis	4	3	106	26.50	35.33	3	4	0.136
Uma Shankar Yadav	4	4	78	19.50	19.50	3	4	1.000
Ravindra Tripathi	4	4	78	19.50	19.50	3	4	1.000
Sriparna Guha	4	4	16	4.00	4.00	3	4	0.750
Anirban Mandal	4	4	16	4.00	4.00	3	4	0.750
Samson Nambei Asoba	4	4	11	2.75	2.75	2	3	0.333
Helen McGrath	3	3	139	46.33	46.33	3	3	0.375
Wilhelm Skoglund	3	3	75	25.00	25.00	3	3	0.500
Fedric Kujur	3	3	13	4.33	4.33	3	3	1.000

TP –Total Publications; NCA – Number of Contributing Authors; NCP – Number of Cited Publications; TC – Total Citations; C/P – Citations per Publication; C/CP – Citations per Cited Publication; h – Hirsch index; g – Egghe index; m – m-index, indicating the rate at which scientific impact increases over time

Source: own study based on the Scopus data.

Table 2

Bibliometric characteristics of leading research institutions in the field of craft entrepreneurship

Name of the institution	TP	NCA	NCP	TC	C/P	C/CP	h	g	m
La Trobe University	11	8	9	89	8.09	9.89	4	9	0.800
HSE University	6	12	4	17	2.83	4.25	3	4	0.600
University of Stirling	5	6	3	106	21.20	35.33	3	5	0.136
Walter Sisulu University	5	6	5	13	2.60	2.60	2	3	0.333
Motilal Nehru National Institute of Technology	4	11	4	78	19.50	19.50	3	4	1.000
Copenhagen Business School	4	9	3	17	4.25	5.67	2	4	0.500
Mid Sweden University	3	10	3	21	7.00	7.00	3	3	0.750
University of Zagreb	3	10	3	102	34.00	34.00	2	3	0.105
King's College London	2	7	2	33	16.50	16.50	2	2	0.333

Abbreviations as in Table 1

Source: own study based on the Scopus data.

Despite having fewer publications, Helen McGrath recorded the highest TC = 139, followed by Ian Fillis (TC = 106). These authors also achieved the highest C/P = 46.33 and C/P = 26.5, respectively, indicating the substantial impact of their work on the development of the literature on craft entrepreneurship.
The highest number of publications was recorded for La Trobe University (TP = 11), whose research output comprises NCP = 9 and TC = 89. HSE University ranks second with six publications; however, its relatively low number of citations (TC = 17) translates into lower scientific impact indicators. In terms of scientific impact, the University of Stirling stands out particularly strongly: its five publications received a total of 106 citations, corresponding to an average of C/P = 21.20 and C/CP = 35.33. A similarly notable position is occupied by the University of Zagreb, which, despite having only three publications, accumulated 102 citations, achieving the highest average number of C/P = 34.00. The Motilal Nehru National Institute of Technology is also noteworthy, having received 78 citations across four publications and achieving the highest m-index value (1.000), indicating a dynamic increase in scientific impact over time. The geographical structure of the research output (Table 3) indicates that craft entrepreneurship research is primarily developed in Anglo-Saxon countries and selected Asian countries.

Table 3

Bibliometric characteristics of leading countries in craft entrepreneurship research

Country	TP	NCA	NCP	TC	C/P	C/CP	h	g	m
US	72	161	63	1702	23.64	27.02	22	40	0.629
Great Britain	54	136	48	1556	28.81	32.42	19	39	0.679
India	54	136	34	641	11.87	18.85	11	25	0.611
Indonesia	32	96	23	230	7.19	10	7	14	0.636
Russian Federation	30	72	16	47	1.57	2.94	4	5	0.364
Australia	21	46	19	535	25.48	28.16	9	21	0.562
Canada	18	45	13	374	20.78	28.77	6	18	0.25
Germany	15	35	12	327	21.8	27.25	9	15	0.562
Italy	15	51	12	841	56.07	70.08	8	15	0.32
Sweden	15	40	15	399	26.6	26.6	8	15	0.421

Abbreviations as in Table 1

Source: own study based on the Scopus data.

The highest number of publications was recorded in the US (TP = 72), which also had the highest number of co-authors (NCA = 161) and cited publications (NCP = 63). This research output resulted in TC = 1,702, as well as the highest h-index (22) and g-index (40), confirming the dominant position of the US in craft entrepreneurship research. Great Britain also demonstrates a high level of research activity (TP = 54). Despite having the same number of publications as India, Great Britain achieved a substantially higher

level of scientific impact. British publications received TC = 1,556, corresponding to high values of the C/P (28.81), C/CP (32.42), h-index (19), and g-index (39).
In turn, India, ranking third in terms of number of publications (TP = 54), accumulated 641 citations (TC = 641), recording lower scientific impact indicators while standing out for its high number of co-authors (NCA = 136). Australia and Canada also deserve attention, as they achieved relatively high citation indicators despite a smaller number of publications. Australia received 535 citations from 21 publications, corresponding to an average of C/CP = 25.48, whereas Canada accumulated 374 citations from 18 publications, resulting in a C/P ratio of 20.78. Italy stands out particularly strongly, however, as its 15 publications received TC = 841, recording the highest average numbers of C/P = 56.07 and C/CP = 70.08. Indonesia, the Russian Federation, Germany, and Sweden represent countries with moderate publication productivity. Among them, Germany and Sweden demonstrate the highest scientific impact, with 327 and 399 citations, respectively. In contrast, despite producing 30 publications, the Russian Federation received only 47 citations, resulting in the lowest C/P = 1.57 and C/CP = 2.94 values within the analyzed group of countries.
From the perspective of the scientific discussion, the concentration of research output in selected countries and research institutions indicates that craft entrepreneurship research development is strongly embedded in institutional, cultural, and economic contexts in which craft activities fulfil both productive and symbolic functions. The dominance of the US and Great Britain may be attributed to the greater prominence of this topic within research on entrepreneurship, creative economy, and organization of work. At the same time, the high impact of publications from Italy, Australia, and Germany suggests the importance of countries with strong craft traditions, well-developed creative sectors, and close links between craft practices and local and regional value systems. These findings reinforce the thesis that craft entrepreneurship should be examined not only in terms of publication volume but also in relation to the quality and contextual dimensions of its scientific impact.

Keyword Co-occurrence Analysis and Thematic Structure of Research
The keyword co-occurrence map was constructed based on the author keyword analysis (Figure 3).

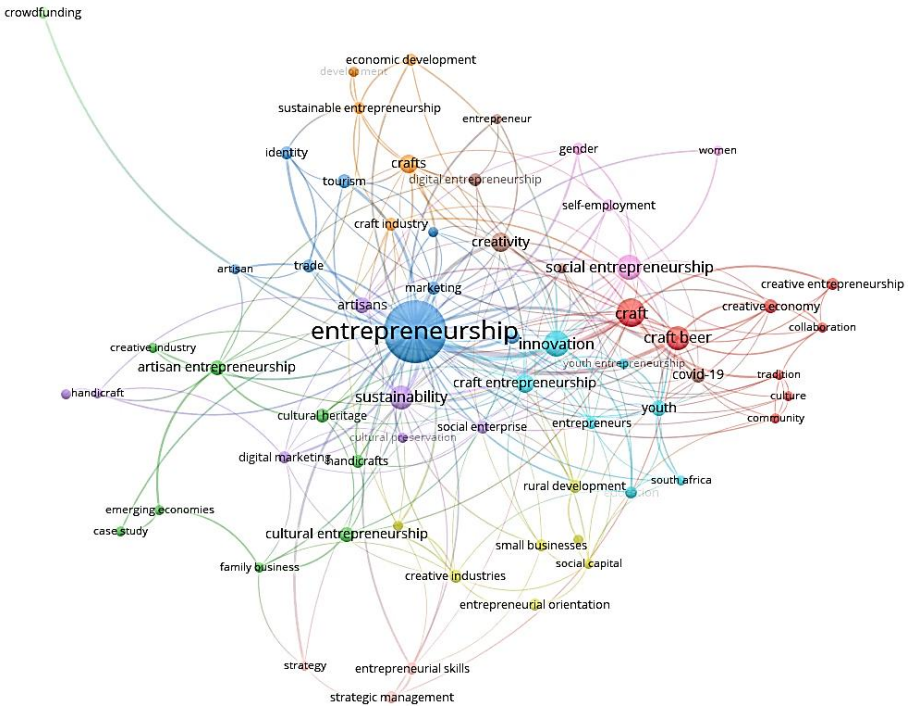


Fig. 3 Keyword co-occurrence network visualisation
Alt text: *keyword network with entrepreneurship at the centre, linked to craft, sustainability, innovation and social entrepreneurship clusters.*
Source: own study based on the Scopus database using VOSviewer.

The minimum number of occurrences for a keyword was set at five. As a result, out of 2,218 identified terms, 69 met the established threshold and were included in the subsequent analysis. The application of the clustering algorithm in VOSviewer enabled the identification of seven thematic clusters, reflecting the dominant research directions developed in 1991-2025.

The first identified cluster is the blue cluster, which can be characterized as craft entrepreneurship and the craft entrepreneur. The cluster includes keywords such as *entrepreneurship, craft, crafts, craftsmanship, trade,* and *identity*. Early studies examined the functioning of small craft enterprises and their significance for local economies [54], whereas later publications emphasized the role of marketing, internationalization, and social capital in the development of craft enterprises [55, 56]. Nowadays, craft entrepreneurship is regarded as a field combining traditional craft practices with contemporary business models [57]. The second cluster is the red cluster, which can be characterized as social entrepreneurship, cultural heritage, and local development. It comprises keywords such as social entrepreneurship, cultural entrepreneurship, cultural heritage, sustainable development, and employment. Research in this area focuses on the use of entrepreneurship to preserve cultural heritage, empower local communities, and generate socio-economic benefits. Earlier studies had already highlighted the importance of craft activities for local development and social empowerment [58, 59].More recent literature emphasizes the role of social enterprises in preserving craft traditions and supporting regional development [60, 61]. The third cluster, represented in green, focuses on innovation, sustainable development, and the development of craft enterprises. The main keywords comprising this cluster include innovation, sustainability, entrepreneur innovation, business development, and social enterprise. The thematic focus of the cluster centers on the importance of innovation for the development of craft enterprises and their ability to adapt to a changing economic environment. Research indicates that innovation and entrepreneurial orientation are important factors supporting the competitiveness of craft enterprises [42, 62]. The fourth cluster, represented in purple, encompasses research on digitalization and contemporary forms of craft entrepreneurship. It comprises keywords such as artisan entrepreneurship, digital entrepreneurship, creative industry, and handicraft. The literature emphasizes that digital transformation contributes to increasing craft product visibility, expanding market reach, and creating new business models based on creativity and innovation [63, 64].

The cluster marked in turquoise focuses on research addressing the creative dimension of craft entrepreneurship. It comprises keywords such as creativity, creative economy, craft entrepreneurship, education, and youth. Research on policies supporting craft activities and creative sectors has made an important contribution to the development of this research stream. Contemporary literature emphasizes the significance of craft as a component of creative economy and as a carrier of cultural values [27, 57]. The sixth cluster, represented in orange, can be characterized as market specialization and niche forms of entrepreneurship. It comprises keywords such as craft beer, crafts, economic development, and entrepreneur. This cluster encompasses research on the development of specialized craft market segments and the use of traditional skills and competencies to build competitive advantage. The literature highlights the growing importance of niche craft products and their contribution to local and regional development [57, 64].

The final, seventh cluster, represented in yellow, can be characterized as management and resources of craft enterprises. It comprises keywords such as small businesses, social capital, entrepreneurial orientation, management, and COVID-19. Research in this cluster focuses on factors influencing the development and resilience of craft enterprises, with particular emphasis on social capital, entrepreneurial competencies, and management practices. Particular importance is attributed to social and relational resources that support the development of craft enterprises [65], as well as their capacity to adapt to crisis conditions [66].

The temporal overlay analysis of keywords enabled the identification of the evolution of research interests in the field of craft entrepreneurship (Figure 4).

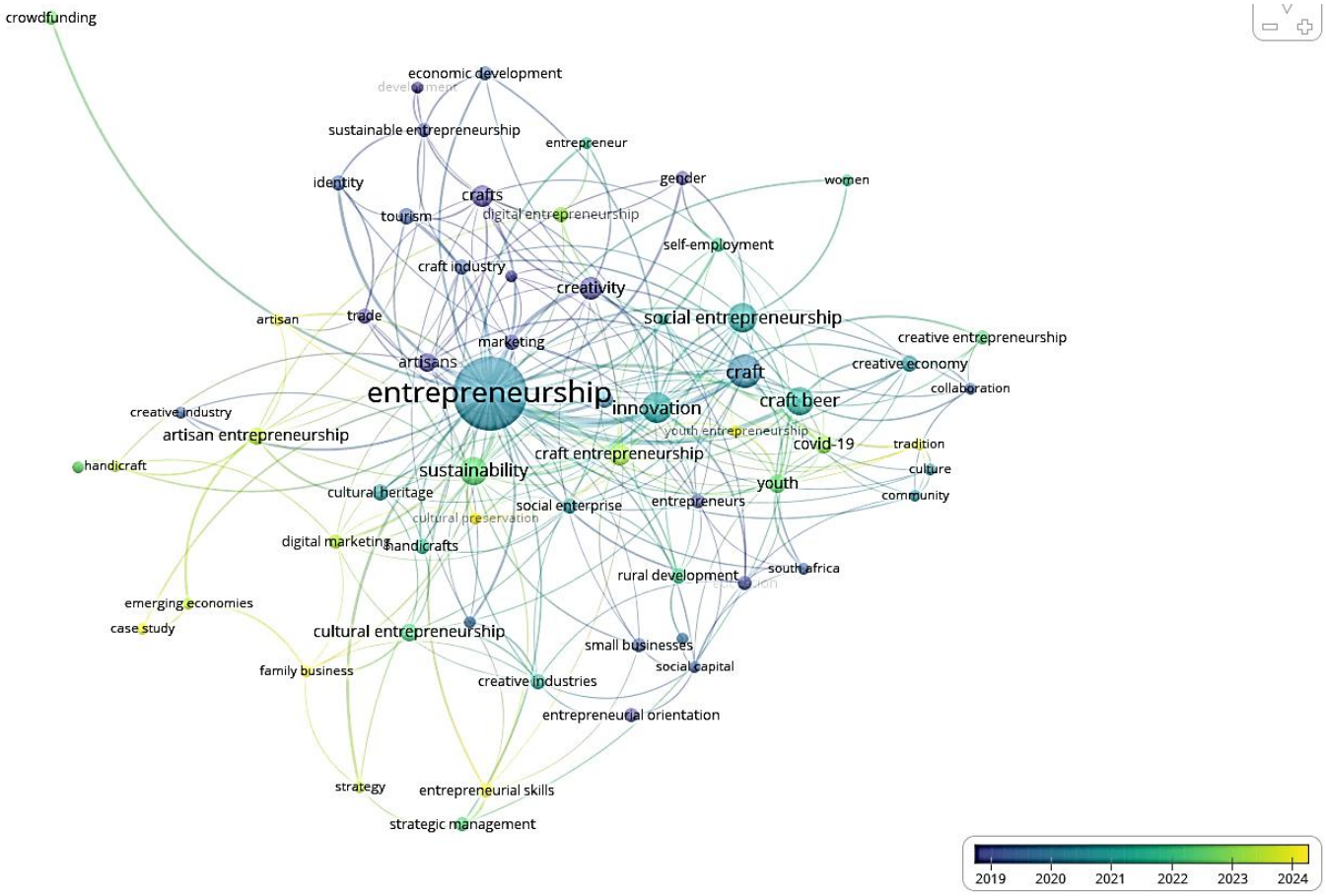


Fig. 4 Keyword Overlay Visualization Map by Publication Year
Alt text: *overlay keyword network showing recent topics in yellow, including entrepreneurial skills, strategic management and artisan entrepreneurship.*
Source: owns study based on the Scopus database using VOSviewer.

The analysis of Figure 3 indicates growing interest in topics such as entrepreneurial skills, strategic management, family business, emerging economies, handicraft, and artisan entrepreneurship, which belong to the most recent keywords identified in the research field and are highlighted in yellow. At the same time, the concepts of entrepreneurship, innovation, craft, and social entrepreneurship retain a central position within the knowledge structure, constituting a persistent foundation of research on craft entrepreneurship, as reflected by their central location on the map and their representation in green.
Considering the density of keyword occurrences (Figure 5), the highest concentration is observed around the concept of entrepreneurship, which constitutes the core research area within craft entrepreneurship studies. High density is also associated with the terms innovation, sustainability, craft, and social entrepreneurship, indicating their significant role in shaping the scholarly output in this field. In contrast, the lower density of terms such as crowdfunding, family business, strategic management, and entrepreneurial skills reflects their more specialized research character.
In light of previous literature reviews, the present study complements the existing findings by providing a quantitative assessment of the dynamics, structure, and thematic concentration of research. Previous studies indicate *artisan entrepreneurship* as an emerging and developing research field, whereas the conducted bibliometric analysis provides further insight into which research streams within this field are the most established and which remain emergent [17]. The findings suggest that future research should place more emphasis on integrating the entrepreneurship perspective with issues related to the organization of production processes, quality, digitalization of small enterprises, resilience of local value chains, and sustainable transformation of craft activities.

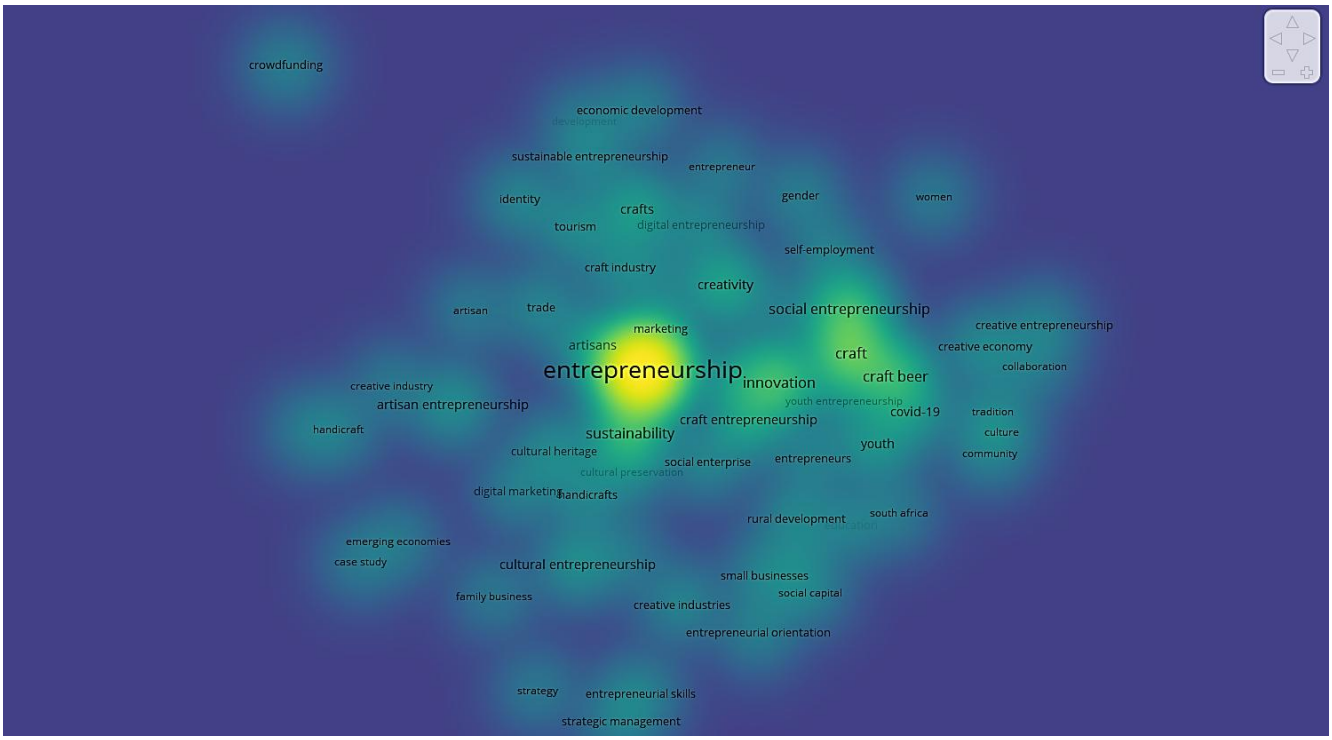


Fig. 5 Keyword Co-occurrence Density Visualization

Alt text: *density map with the strongest concentration around entrepreneurship and high-density areas for craft, sustainability and innovation.*

Source: own study based on the Scopus database using VOSviewer.

Such an approach enhances the relevance of the analyzed research area to management and quality sciences, as well as to engineering production.

The interpretation of the thematic clusters also indicates that craft entrepreneurship is not a homogeneous area. The cluster associated with social entrepreneurship and cultural heritage highlights the importance of craft for local development and the preservation of intangible resources. The innovation and sustainable development cluster, in turn, demonstrates that craft enterprises are increasingly being examined as entities capable of adaptation, modernization, and implementation of solutions addressing environmental and market challenges. In turn, the presence of keywords related to *digital entrepreneurship, handicraft, family business,* and *strategic management* points to emerging research directions in which traditional craft competencies are being integrated with digital tools, management professionalization, and the development of long-term competitive advantage [12, 16].

The importance of management professionalization is also confirmed by ceramics sector research, which shows that the implementation of individual Lean instruments without a previously defined goal is ineffective, especially in small enterprises [67].

The bibliometric findings obtained confirm that craft entrepreneurship is developing at the intersection of several research streams, including entrepreneurship, work organization, creative economy, sustainable development, digitalization, and strategic management. In this sense, the findings not only describe the structure of the research field but also demonstrate its gradual transformation. The central position of the concepts *entrepreneurship, innovation, craft,* and *social entrepreneurship* indicates that research on craft is shifting from descriptive accounts of small-scale producers toward an analysis of the capacity of craft enterprises to create economic, social, and cultural value. This interpretation is consistent with the conceptualization of craft as an alternative model of organizing work and with the perspective in which materiality, authenticity, and tradition are regarded as strategic resources of craft ventures [23, 24].

DISCUSSION

The findings identifying digitalization and sustainable development as emerging research directions in craft entrepreneurship are consistent with the latest studies on digital maturity, ESG integration, and sustainable transformation of organizations. These studies indicate that contemporary organizational transformation requires an integrated approach to digital maturity, organizational capabilities, process integration, and sustainable development outcomes [68]. In this context, craft enterprises can be examined not only as entities grounded in tradition and authenticity, but also as small-scale production and service organizations whose continued development depends on their ability to integrate digitalization, knowledge management, process integration, and a sustainability-oriented approach.

The transition from the traditional concept of CSR to an ESG-oriented approach also indicates the expansion of organizational responsibility to encompass more measurable and auditable environmental, social, and managerial dimensions linked to sustainable development [69].

From the perspective of small enterprises, barriers to digital transformation are also important, including financial constraints and a lack of specialized support in accessing and adopting new technologies, which may limit the ability of SMEs to implement Industry 4.0 solutions and achieve sustainable development objectives [70].

A broader direction of digital organizational transformation also involves the use of artificial intelligence to monitor human factors and support occupational safety, including through predictive risk models and automated hazard detection [71].

The significance of the cluster encompassing innovation, sustainable development, and the development of craft enterprises can be further interpreted in light of recent research on the relationship between digital transformation, green innovation, and business sustainability. Digital orientation, innovation capability, and the optimization of energy consumption structures have been identified as key factors supporting the integration of digital transformation with sustainable development objectives [72]. In terms of craft entrepreneurship, this means that future research should place more emphasis on both cultural and social significance of craft and capacity of small craft enterprises to adopt and implement digital and green innovation.

CONCLUSIONS

The bibliometric analysis conducted confirms the dynamic development of craft entrepreneurship research and the growing interest in this topic in scientific literature. The research indicates that craft entrepreneurship has evolved from a niche research area into an interdisciplinary research stream encompassing entrepreneurship, innovation, sustainable development, social entrepreneurship, and creative economy. Studies focusing on the relationship between traditional craft practices and contemporary business models, which enable the creation of economic, social, and cultural value are particularly important. However, it should be emphasized that the conducted analysis was based solely on publications indexed in the Scopus database, which may have resulted in the omission of some scholarly output available in other bibliographic databases. Another limitation of the study is its exclusive reliance on bibliometric methods, which enable the identification of research trends and structures but do not allow for an in-depth assessment of the content of individual publications. Particular attention should be paid to emerging research directions identified in the literature, related to entrepreneurial competencies, strategic management, family businesses, and craft entrepreneurship development in emerging economies. The growing importance of these issues highlights the need to deepen knowledge of the factors determining the development of modern craft enterprises. A promising direction for further research is also the digital transformation of craft enterprises, use of digital tools and social media, and their impact on building competitive advantage. Further research should also explore the role of craft entrepreneurship in advancing sustainable development assumptions, preserving cultural heritage, and strengthening the social capital of local communities.

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