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## SMALL BUSINESS SUSTAINABILITY IN PANDEMIC TIMES: A BIBLIOMETRIC VISUALIZATION ANALYSIS

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### ABSTRACT:

Small business sustainability has emerged as a rapidly sprouting phenomenon in academic publications in recent times. Many literature reviews have been published converging on specific facets of Small Business Sustainability with broader expanses. The paper reported a systematic bibliometric and network investigation that delivers insights into not only the previous reviews but also into the varied bibliometric orientations. The analysis focused on categorizing over 3144 studies, which are further refined down to research work of recognized influence, time period, linguistics, and those related to our subject matter counting to 1031 thematics.

Using rigorous bibliometric paraphernalia and procedures, reputable and nascent research clusters were recognized, identification of significant study themes, co-citation network, and collaboration outlines. This systematic mapping of the research matter has vividly demonstrated the publication progression over time and categorized subject areas of contemporary research interests and probable directions for an impending research study. The verdicts deliver a vigorous roadmap for further inquiry in this area of study. The analysis reported in this paper has accredited widely deliberated themes such as sustainable development, entrepreneur orientation, competitiveness, and corporate sustainability.



**KEYWORDS:** Entrepreneurial orientation, Small business competitiveness, MSMEs sustainability, Covid-19 pandemic, Bibliometric analysis, Sustainable ecosystem.

### 1. INTRODUCTION:

Small Businesses have been the spine of parsimonies globally and play a crucial part in the developing states. The sector is a source of employment and income generation across the world and has been identified as a foremost chauffeur of poverty alleviation and has been obliged as a vehicle of development. Covid-19 has exposed the fault lines in the conventional way of doing business. Also, there is a mounting prominence globally on the prerequisite to bugggggg and ensure resilientensuringery post-Covid-19 situation. Experience from the Covid-19 contagion and the lockdown has underlined that shielding workers, communities, and the environment is not only the right thing to do for businesses' sustainability but also vital to long-term business resilience.

The paper objects to map scientific studies on Small businesses from the perception of "sustainability" in SCOPUS Electronic Databases (EDs). The present investigation has focused and pondered on Small Business sustainability from the 21<sup>st</sup>-century time window with the resolve of enhancing a healthier understanding of research yields in this area of research.

**2. RESEARCH DESIGN AND METHODOLOGY**

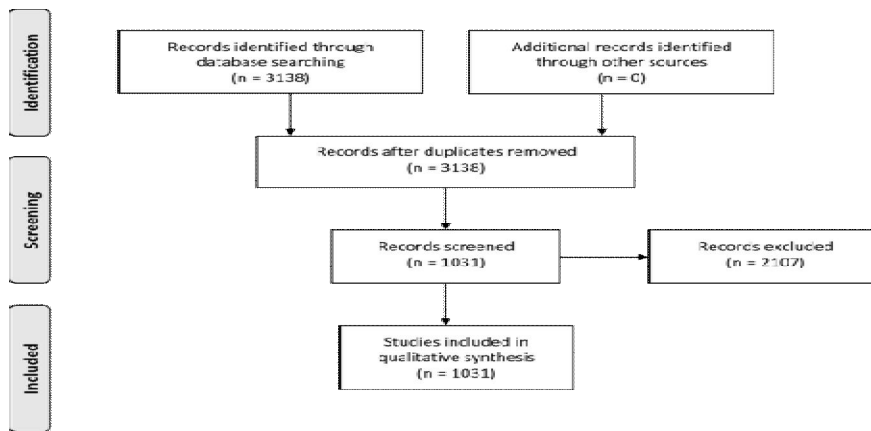
The dataset for the current analysis is derived from the SCOPUS and Web of Sciences. For sorting literature, the PRISMA technique is aimed to assist the authors in improving the commentary of systematic reviews of literature and meta-analysis to generalize reported research outcomes of the concerned subject area (Liberati et al., 2009; Moher et al., 2009) in a sequential process.

Multiple keywords were used for finding the relevant literature. It includes five keywords that were selected based on deep debates and discussions.

**Table 1. Keywords Identified for publications assortment**

1. Small business	3. Entrepreneur
2. Small ventures	4. Sustainability
5. Sustainable development	

In the next steps, the identified researches on the above strings have been further screened using the *PRISMA* protocol given below:



**Figure 1: PRISMA Protocol presentation of the reported research.**

Utilizing the aforementioned stratagem, a total of **1031** thematics were salvaged from the SCOPUS database. These articles were downloaded into a CSV format and as a reference file format. these were further analyzed by two tools; Biblioshiny in R- Studio version 1.4.1106 (Aria & Cuccurullo, 2017) and VOS-viewer i.e. visual scientific surfaces viewer version 1.6.16.

**3. RESULTS AND DISCUSSION**

The data set identified, and the annual scientific publications said databases describing distinctive features are reported below in Table 2. Out of 1031 documents, the average citation per document stood at 20.62. The author’s collaboration stood at 2.6. The metric of average documents per author is 0.439 which means in most of the documents there were more than two authors.

**Table 2. Descriptive research outcomes in the identified Dataset**

<b>Describing the Dataset</b>	<b>Results</b>
Timespan	<b>2001-2021*(till March 31, 2021)</b>
Sources (Journals, Books, etc.)	396
Documents	1031
Average years from publication	5.42
Average citations per document	20.62
Average citations per year per doc	2.55
References	54735
<b>DOCUMENT CATEGORIES</b>	
article	1031
<b>AUTHORS COLLABORATION</b>	
Single-authored documents	201
Documents per Author	0.439
Authors per Document	2.28
Co-Authors per Documents	2.5
Collaboration Index	2.6

The almanac scientific production over the last 21 years on the theme. It can also be inferred that there is an annual growth rate of **10.6 %** over the years.

### 3.1 Filtered ease of doing business research papers citation matrix analog

It was noted that “Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action (Dean & McMullen, 2007)” is the most globally cited publication. The other relevant publications are Sustainable Entrepreneurship and “Sustainability Innovation: Categories and Interactions (Schaltegger & Wagner, 2011)” and “Social entrepreneurship: Creating new business models to serve the poor (Seelos & Mair, 2005).”

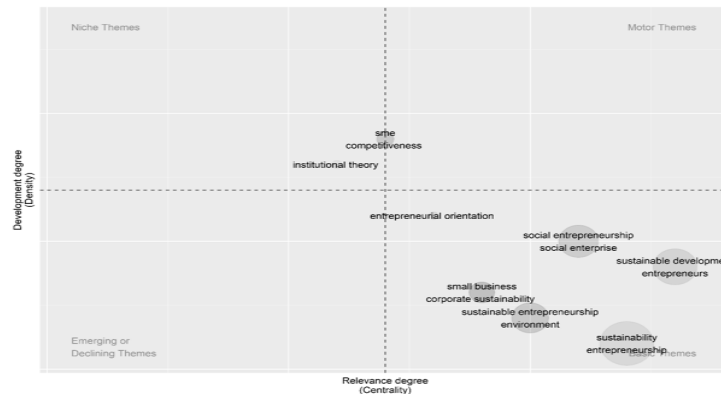
The word cloud in Figure 2 was obtained using the authors’ keywords. The bigger size of the word represents the most occurrences. “Entrepreneurship” occurred the most number of times i.e 147 times which was followed by Sustainable development(104 times). *Identification of these verticals speaks louder of its relevance to the theme and its paramount significance in its manifestations.*



**Figure 2: Word cloud for small business sustainability.**

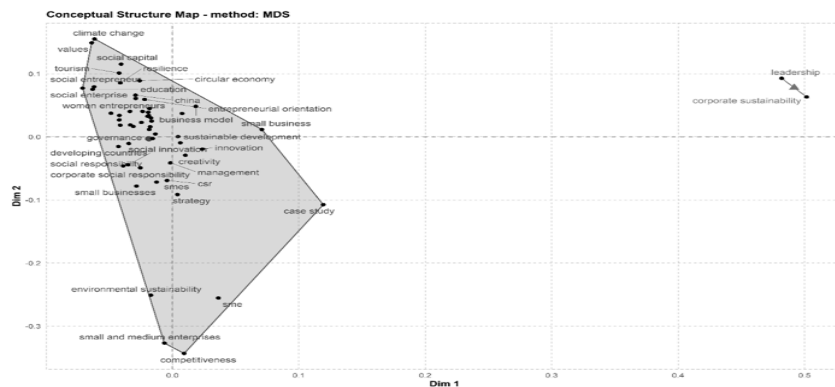
The thematic map was prepared using “Bibliometrix using the R package” (Aria & Cuccurullo, 2017). The identified small business sustainability themes are further summarized in two protruding categories as given below: **Basic theme:** Small Business, entrepreneurial orientation, Corporate

sustainability, sustainable entrepreneurship, Sustainable development, social entrepreneurship, and social enterprise. **Motor theme:** SMEs and competitiveness.



**Figure 3: Thematic map of key small business sustainability, 2001-21**

It's been further pronounced and presented in the Conceptual structure map via factorial analysis (Factor Analysis Using R) on a multidimensional scaling process in Figure 4. given below:



**Figure 4: Conceptual multidimensional structural map based on factorial analysis of descriptive small business sustainability, 2001-21.**

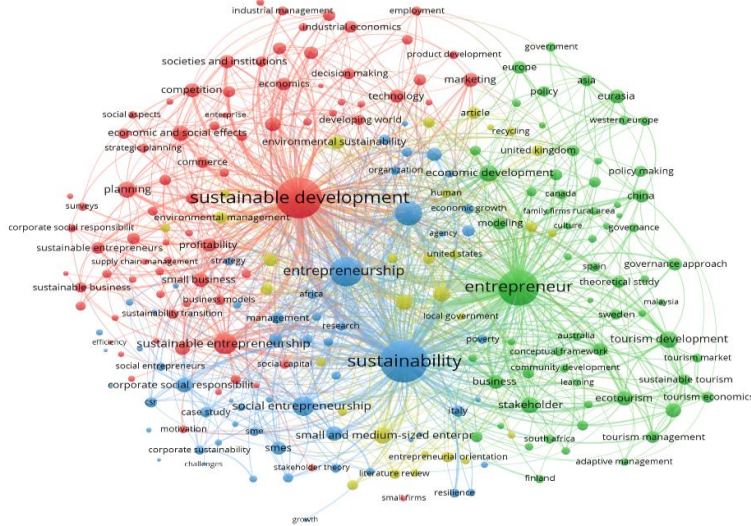
**3.2 Authors' cross-collaboration network**

This paper reviewed and obtained two collaboration networks using VOS-viewer software (VOS-viewer — SAGE Ocean | Big-Data, New Tech, Social Science). The first network was obtained related to the co-citation network and the second one was of the co-occurrences network of the keywords that appeared in the studies reviewed on the small business sustainability, 2001-2021. It is curious to note that, out of 2352 authors, 31 meet the threshold, as presented in Table 3 below:

**Table 3. Top Authors Co-citation Network on small business sustainability, 2001-2021**

Sr.no	Author	Documents	Total link strength
1	Blok, V.	5	10
2	Lans, T.	4	10
3	Ploum, I.	3	9
4	Omta, O.	3	9

The co-occurrence network of small business sustainability verticals presented in Table 4 represents the top 4 keywords occurrence has been shown based on total link strength. Similarly, Figure 5 does the same in relation to the small business sustainability manifestations in sorted publications during the period, 2001-2021.



**Figure 5: Small business sustainability verticals Co-occurrence network, 2001-2021**

Below Table 4 represents the occurrence of the top keyword based on total link strength.

**Table 4. Small business sustainability verticals Co-occurrence network, 2001-2021**

Sr.no	Keyword	Occurrences	Total link strength
1	Sustainability	305	1144
2	Sustainable development	250	1082
3	Entrepreneur	146	832
4	Entrepreneurship	149	507

**4. CONCLUSION AND POLICY IMPLICATIONS**

In the 21<sup>st</sup> century, Small Business Sustainability has expanded significant traction in academia both in rapports of empowerment apparatus and the underlying policy instrument in evolving societies. Its verticals in terms of entrepreneurial orientation, Corporate sustainability, sustainable entrepreneurship, Sustainable development, and social entrepreneurship have seen an earsplitting appreciation in terms of research inquisitiveness all over the globe, and there is a persistent escalation in research curiosity since 2001. The analysis reported in this paper has acknowledged manifold widely deliberated themes such as sustainable development, entrepreneur orientation, competitiveness, and corporate sustainability. Also, the themes acknowledged will act as a substratum for future academicians and will act as a guiding light for imminent investigators for the identification of significant research expenses. The issue is very much germane in contemporary times as the régime is beading its policy in standings of sustainability, furthering inclusivity to every sphere of society as a whole.

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