Purchasing Decision-Making in Supply Chain Management: A Bibliometric Analysis

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Abstract: In industrial processes, decision-making ranges across different scales, from process control to supply chain management. The purchasing decision-making process in the supply chain is presently gaining more attention as a critical contributor to the company's strategic success. Given the scarcity of thorough summaries in the prior studies, this bibliometric analysis aims to adopt a meticulous approach to achieve quantitative knowledge on the constantly evolving subject of purchasing decision-making in supply chain management. Through bibliometric analysis, we examine a sample of 358 peerreviewed articles from the Scopus database. VOSviewer and Gephi software were employed to analyze, combine, and visualize the data. Data analytic techniques, including citation network, page-rank analysis, co-citation, and publication trends, have been used to identify influential works and outline the discipline's intellectual structure. The outcomes of this descriptive analysis highlight the most prominent articles, authors, journals, and countries based on their citations and publications. The findings from the research illustrate an increase in the number of publications, exhibiting a slightly growing trend in this field. Co-citation analysis coupled with content analysis of the most cited articles identified five research themes mentioned as follows integrating sustainability into the supplier selection process, supplier selection under disruption risks assessment and mitigation strategies, Fuzzy MCDM approaches for supplier evaluation and selection, purchasing decision in vendor problems, decision-making techniques in supplier selection and order lot sizing problems. With the help of a graphic timeline, this exhaustive map of the field illustrates a visual representation of the evolution of publications that demonstrate a gradual shift from research interest in vendor selection problems to integrating sustainability in the supplier selection process. These clusters offer insights into a wide variety of purchasing methods and conceptual frameworks that have emerged; however, they have not been validated empirically. The findings suggest that future research would emerge with a greater depth of practical and empirical analysis to enrich the theories. These outcomes provide a powerful road map for further study in this area.

Keywords: bibliometric analysis, citation analysis, co-citation, Gephi, network analysis, purchasing, SCM, VOSviewer **Conference Title:** ICILSCM 2023: International Conference on International Logistics and Supply Chain Management

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