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ANALYSIS OF DRIVERS AND BARRIERS IN SUSTAINABLE SUPPLY CHAIN IMPLEMENTATION IN INDIA: A CROSS-SECTORIAL COMPARATIVE STUDY

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Abstract

In the era of rapid industrialization, sustainability is treated as an important strategy in supply chain operations in order to safeguard environmental and societal responsibility. However, the implementation of sustainability depends on multiple factors influenced by human behavior, geographical location, regulatory bodies, and the social and economic conditions of the region. Further, the influence of sustainability factors changes across industries due to changes in organizational culture, market competition and emerging technology. The current study presents a comparative study of the drivers and barriers in sustainable supply chain management (SSCM) among Indian manufacturing industries. The intuitionistic fuzzy decision making trial and evolution laboratory (IF-DEMATEL) method has been adopted to set up a structural model and identify the influential factors responsible for the sustainability implementation of different manufacturing industries. The bootstrap resampling technique is used to conduct the internal validation of the model. The findings reveal that top management commitment, government regulations, financial investment, and innovative technology have emerged as the most influential factors for the industry types considered in the study to adopt sustainability in their supply chain. These results provide valuable insights for managers and policymakers in fostering sustainability in supply chains, with implications for future strategies in the Indian context.

Key words: barrier, DEMATEL, driver, supply chain management, sustainability

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