

عنوان مقاله:

A Hybrid Fuzzy Multi-criteria Decision Making Model Based on Fuzzy DEMATEL with Fuzzy Analytical Network Process and Interpretative Structural Model for Prioritizing LARG Supply Chain Practices

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خلاصه مقاله:

In recent years, taking advantage of LARG supply chain (SC) paradigm, a combination of four paradigms (clean, agile, resilience and green) has been increasingly employed. For capturing the advantages of LARG in SC, companies needed to recognize proper practices and implement them with appropriate planning and infrastructure. However, one of its deficiencies is lack of proper method in the prioritization of the LARG paradigms and practices as well as explanation of their relationship. Hence, the main contribution of this paper is to present a comprehensive approach to deal with inherent vagueness and uncertainty of the human decision process using fuzzy set theory, it aims to provide a quantitative basis via a hybrid fuzzy multi-criteria decision making (FMCDM) model that will make easy data collection and shall decrease the calculation. This model combines fuzzy decision making trial and evaluation laboratory (DEMATEL) with fuzzy analytical network process (ANP), i.e. FDANP, to determine the global weights of paradigms and practices and develop their impact relation map. Finally, the implementation of practice was prioritized by using interpretative structural model (ISM). It should be noted that, to measure the efficiency of this method, Iranian dairy industries as a case study was considered. With the help of obtained results, it can be determined the most and the least important practices and paradigms and prioritization of their implementation.

کلمات کلیدی: LARG Supply Chain, LARG Practices, FDANP Technique, ISM, Dairy Industries

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