Hybrid MCDM analysis of flexibility manufacturing competence and managerial performance: a case study

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Abstract

This study is to build a decision-making hierarchical structure model using interpretive structural modeling and applies hybrid multi-criteria decision making (MCDM) to evaluate the managerial performance in flexibility manufacturing competence (FMC) system. The flexibility manufacturing competence criteria derive from the theoretical and empirical quantitative and qualitative proposed valuation methods. The result indicates that the quality of work and operating efficiency have significant weights in FMC system. The study contributions are (1) proposes a research framework that relates FMC to evaluate and align with managerial performance (2) develops a hierarchical structure using ISM and evaluates the managerial performance using hybrid MCDM method.