

Solutions of Fuzzy Transportation Problem Using Best Candidates Method and Different Ranking Techniques

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Abstract : Transportation Problem (TP) is based on supply and demand of commodities transported from one source to the different destinations. Usual methods for finding solution of TPs are North-West Corner Rule, Least Cost Method Vogel's Approximation Method etc. The transportation costs tend to vary at each time. We can use fuzzy numbers which would give solution according to this situation. In this study the Best Candidate Method (BCM) is applied. For ranking Centroid Ranking Technique (CRT) and Robust Ranking Technique have been adopted to transform the fuzzy TP and the above methods are applied to EDWARDS Vacuum Company, Crawley, in West Sussex in the United Kingdom. A Comparative study is also given. We see that the transportation cost can be minimized by the application of CRT under BCM.

Keywords : best candidate method, centroid ranking technique, fuzzy transportation problem, robust ranking technique, transportation problem

Conference Title : ICMSS 2017 : International Conference on Mathematical Sciences and Statistics

Conference Location : Venice, Italy

Conference Dates : April 13-14, 2017