عنوان مقاله:

A Nadir Compromise Progra mming for Sup lier Selection P roblem under Uncertainty

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خلاصه مقاله:

Supplier selection is one of the influential decisions for elfectiveness M of purchasing and manufacturing policies under competitive conditions of the market. Regarding the fact that decision—makers (DMs) consider conflicting criteria for selecting suppliers, multiple- criteria programming is a promising approach to solve the problem. This paper develops a nadir compromise programming (NCP) model for decision—making under uncertainty on the selection of suppliers within the framework of binary programming. Depending on the condition of uncertainty, three statuses are taken into consideration, and a solution approach is proposed for each status. A pure deterministic NCP model is presented for solving the problem in white condition (certainty of data), and a solution approach which is resulted from the combination of NCP and stochastic programming(SP) is introduced to solve the model in black (uncertainty of data) situation. The paper also proposes a NCP model under certainty and uncertainty for solving problem under grey (a combination of certainty and uncertainty of data) conditions. The proposed approaches are illustrated for a real problem in steel industry with multiple objectives. In addition, a simulation approach has been designed in order to examine the results obtained and verifiz capabilities of the proposed model.

کلمات کلیدی:

multi -objective programming,supplier selection,nadir compromise programming,stochastic programming

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