

عنوان مقاله:

Practical common weight Maximin approach for technology selection

محل انتشار:

دومین کنفرانس ملی مهندسی صنایع و سیستم ها (سال: 1392)

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خلاصه مقاله:

A practical common weight Maximin approach with an improved discriminating power for technology selection is introduced. The proposed Maximin approach enables the evaluation of the relative efficiency of decision-making units (DMUs) with respect to multiple outputs and a single exact input with common weights. Its robustness and discriminating power are illustrated via a previously reported robot evaluation problem by comparing the ranking obtained by the proposed Maximin approach framework with that obtained by the DEA classic model (CCR model) and Minimax method (Karsak & Ahiska, 2005). Because the number of efficient DMUs is reduced so discriminating power of our approach is higher than previous approaches and because Spearman's rank correlation between the ranks obtained from our approach and Minimax approach is high therefore robustness of new approach is justified

کلمات کلیدی:

Technology selection, Robot selection, Maximin approach, Discriminating power, weight restriction, DEA, common set of weights

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