

## عنوان مقاله:

A New Group Data Envelopment Analysis Method for Ranking Design Requirements in Quality Function Deployment

## محل انتشار:

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## خلاصه مقاله:

Data envelopment analysis (DEA) is an objective method for priority determination of decision making units (DMUs) with the same multiple inputs and outputs. DEA is an efficiency estimation technique, but it can be used for solving many problems of management such as ranking of DMUs. Many researchers have found similarity between DEA and MCDM techniques. One of the earliest techniques in MCDM is Quality Function Deployment (QFD) which is a team-based and disciplined approach to product design, engineering and production and provides in-depth evaluation of a product. The QFD team is responsible for assessing the relationships between customer requirements (CRs) and design requirements (DRs) and the interrelationships between DRs. In practice, each member demonstrates significantly different behavior from the others and generates different assessment results, leading to the QFD with uncertainty. In this paper data envelopment analysis is used to overcome this uncertainty. Each member's subjective assessment is taken into account directly and a new data envelopment analysis method in group situation is constructed which differs from multi-objective decision making models. Then, without using Charnes-Cooper transformation, the proposed model is transformed into a linear programming problem in a completely different manner.

We will call the proposed model "Grouped-QFDEA".

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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