Advances in Operations Research

Special Issue on
Advances and Applications of Multicriteria and Multiobjective Models

CALL FOR PAPERS

Nowadays, the complexity of real-world decision problems requires a deeper analysis of the problem situation, by account for its environment, perspectives of the stakeholders, and multiple factors that may influence a final decision. Multiple Criteria Decision-Making (MCDM) and Multiple Criteria Decision Aid (MCDA) are a branch of the Operational Research discipline that addresses complex decision-making problems featuring high uncertainty and conflicting objectives. These methods provide better understanding of the decision-making process; its tools help the decision-maker (DM) to make the choice of the best compromise and are a valuable instrument to assist DMs in such tasks. MCDM/A offers several methods and approaches designed for structuring the problem, building, and analyzing a model of DMs' preferences, recommend a course of action, and implement a final decision. In this regard, one of the main challenges of this field is to capture the preferences of DMs and to properly represent them into the model. Therefore, MCDM/A is a growing field in which interdisciplinary plays an important role, as the scientific developments are based on fundamental sciences as mathematics, computer science, operation research, engineering, and social sciences and management science. Given its increasing and widespread practical applications, this special issue aims to collect high quality papers of emerging developments and applications of multiple criteria decision problems in different areas.

The authors are welcome to submit papers that consider mathematical models for and applications of multicriteria methods and multiobjective methods. This special issue is open to all types of rigorously developed applications of MCDM/A models and their implementation for analyzing multicriteria or multiobjective decision problems. The aim of this special issue is to bring advances and applications of multicriteria and multiobjective models.

Potential topics include but are not limited to the following:

- Methodological developments and/or applications in the following themes:
  - Advanced applications of AHP and ANP
  - Advanced applications of MCDM/A
  - Behavioral issues in decision-making
  - Data envelopment analysis and MCDM
  - Decision rules and MCDM/A
  - Emerging developments of MCDM/A models
  - Evolutionary algorithms and MCDM/A
  - Fuzzy theory and MCDM/A
  - Goal programming
  - Group decision-making and MCDM/A
  - Interactive MCDM/A methods
  - Metaheuristic techniques and MCDM/A
  - Multiattribute utility or value theory approaches
  - Outranking methods
  - Practical applications of MCDM/A
  - Preference modeling risk and uncertainty

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/aor/aammm/.

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