
Editorial

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Biographical notes: Davide La Torre holds a Master in Industrial Mathematics and PhD in Computational Mathematics and Operations Research. His research interests include mathematical modelling, dynamical systems, inverse problems, and optimisation. He is the Editor of the *International Journal of Applied Nonlinear Science*, editorial board member of the *International Journal of Portfolio Analysis and Management* and of the *International Journal of Computing Science and Mathematics*.

It is a real pleasure to announce the publication of this special issue of the *International Journal of Applied Decision Sciences (IJADS)* by Inderscience Publishers. This issue contains six interesting papers which show different applications of multi-criteria decision making (MCDM) and goal programming (GP) techniques to operations management. Operations management is a research area which focuses on creation and distribution of goods and services. In these contexts, MCDM and GP techniques can help the decision maker (DM) to take better decisions by considering trade-offs between conflicting criteria and his/her preferences.

In the paper 'From mono-criterion to multi-criteria decision aid: a necessary but unfinished evolution in operational research' by Belaïd Aouni and Simon Laflamme, the authors discuss the evolution process from the mono-criteria decision making paradigm to the MCDM one. In the MCDM context, the DM desires to consider simultaneously several heterogeneous and conflicting dimensions instead of optimising one single objective.

In 'Small and medium enterprises project finance: identifying optimum settings of controllable factor' by R.M. Chandima Ratnayake, the author provides a methodology based on the robust design technique to calculate optimum set-points of controllable parameters concerning the project finance (PF) for small and medium enterprises (SMEs). The manuscript also provides a verification experiment based on the identified optimum settings of the controllable factors. A case study is presented to calculate the optimum set-points of control factors which affect the success of PF.

In 'Multi-criteria logistics distribution network design for mass customisation' by Francesco Costantino, Giulio Di Gravio, and Ahmed Shaban, the authors propose a

MCDM methodology for the selection and evaluation of logistics distribution networks in a customised environment. This method is based on an analytic network process (ANP) and helps the DM to select the best configuration of logistics distribution as a first step of the design process. A real case application is included to demonstrate the interesting results achieved.

In 'Possibilistic programming model for fuzzy multi-objective periodic review inventory in two-stage supply chain' by Dicky Fatrias and Yoshiaki Shimizu, the authors present a multi-objective model of periodic review inventory problem in a two-stage supply chain by incorporating some uncertainty parameters. A solution procedure is developed to solve the proposed multi-objective possibilistic mixed integer programming inventory model and to provide a systematic framework for fuzzy decision-making process. The proposed model and solution method are validated through numerical tests.

In the contribution 'Job satisfaction measurement: the multi-criteria satisfaction analysis' by Ismahene Aouadni, Abdelwaheb Rebaï, Nikolaos Christodoulakis, and Yannis Siskos, the authors propose a multi-criteria satisfaction analysis (MUSA) method to measure the university teachers' job satisfaction in Sfax University. The basic principle of MUSA is the aggregation of individual judgments into a collective value function, assuming that university teachers' global satisfaction depends on a set of criteria representing job characteristic dimensions.

In the paper 'A fuzzy goal programming approach for solving stochastic portfolio selection problem in a group decision-making context' by Laila Messaoudi and Abdelwaheb Rebaï the authors develop a novel fuzzy GP model for solving a stochastic multi-objective portfolio selection problem by considering multiple future market scenarios. The paper proposes a new method which allocates different weights for DM group members to use linguistic terms in order to express their fuzzy preferences for individual judgements.

The guest editor thanks all of the authors, as well as all others who submitted papers for consideration.