
Editorial

Constantin Zopounidis

Financial Engineering Laboratory,
School of Production Engineering and Management,
Technical University of Crete,
University Campus, 73100 Chania, Greece
and
Audencia Business School,
8, Route de la Joneliere,
B.P. 312222,
44312 Nantes, Cedex 3, France
Email: kostas@dpem.tuc.gr

Evangelia Krassadaki*

Decision Support Systems Laboratory,
School of Production Engineering and Management,
Technical University of Crete,
University Campus, 73100, Chania, Greece
Email: lia@ergasya.tuc.gr
*Corresponding author

George Baourakis

Mediterranean Agronomic Institute of Chania (CIHEAM-MAICh),
Alysilio Agrokepito, Makedonias Str. 1, Chania, Crete, 73100, Greece
Email: baouraki@maich.gr

Biographical notes: Constantin Zopounidis is a Professor of Financial Engineering and Operations Research at the Technical University of Crete, Greece, Distinguished Research Professor in Audencia Business School, France, and Senior Academician of both Royal Academy of Doctors and Royal Academy of Economics and Financial Sciences of Spain. He is the Editor-in-Chief in *The International Journal of Multicriteria Decision Making* (Inderscience), *The International Journal of Financial Engineering and Risk Management* (Inderscience) and Co-Editor-in-Chief in *International Journal of Banking, Accounting and Finance* (Inderscience), *International Journal of Data Analysis Techniques and Strategies* (Inderscience), and the *European Journal of Operational Research* (Elsevier). In 2013, he received the Edgeworth-Pareto Prestigious Award from the International Society of Multicriteria Decision Making. He has edited and authored 100 books in international publishers and more than 500 research papers in scientific journals, edited volumes, conference proceedings and encyclopaedias in the areas of finance, accounting, operations research, and management science.

Evangelia (Lia) Krassadaki received her PhD and MSc in Multi-criteria Analysis from the Technical University of Crete and Bachelor's in Business Administration from University of Piraeus. She started her professional career in the Technical University of Crete, in 1985, while since 1990, she is a Teaching Assistant at School of Production Engineering and Management of Technical University of Crete. She also has an experience in teaching undergraduate and postgraduate engineering students, courses such as Decision Support Systems, Operations Research, and Consumer Behaviour and Market Research. Her research interests include multi-criteria analysis, decision support systems, operations research, market research, management science and engineering education. She is an author of over 30 papers published in international journals, international conferences and edited volumes.

George Baourakis is the Director of the Mediterranean Agronomic Institute of Chania, CIHEAM-MAICh since 2012. He has more than two decades experience in educational and research activities, including coordination of the Business Economics and Management MSc Program of CIHEAM-MAICh since 1989, and the management of and participation in a large number of EU and national/regional projects (FP, Erasmus+, etc). He is an Affiliate Professor in Marketing and Supply Chain Management, at the Center of Entrepreneurship, Nyenrode University, NL. He has published numerous papers in internationally refereed scientific journals, and authored/edited several scientific and academic books and special issues in international publishers.

This special issue of *International Journal of Decision Support Systems (IJSS)* is devoted to a selection of papers, reviewed and revised for publication, from the 7th International Symposium and 29th National Conference on Operational Research held in Chania, Crete, Greece in June 2018. The conference was co-organised by the School of Production Engineering and Management of the Technical University of Crete, the Mediterranean Agronomic Institute of Chania and by the Hellenic Operational Research Society (HELORS); about 60 papers were submitted and accepted after a review process. For the current special issue, five papers are selected.

The first paper, by G. Arampatzis, P-M. Stathatou, P. Scaloubakas and D. Assimacopoulos, presents the AquaNES DSS for 'Supporting decisions for the application of combined natural and engineered systems for water treatment and reuse'. The scope of the paper is the conceptualisation and development process of the DSS. The AquaNES groups all user-oriented functionality into three decision support services, while it provides various supplementary functionalities for advanced users. The usability of the services provided by the DSS is demonstrated in two real application cases.

The next paper, by Fotis Kitsios, Chrysanthi Charatsari and Maria Kamariotou, presents a 'Strategic decision support systems for short supply chain development in the agrifood sector'. The purpose is to propose such a strategic DSS model that based on the strategic information systems planning (SISP) process, could provide a holistic approach to effective decision making in short supply chain in the agrifood industry. This model supports product managers to improve the effectiveness of food supply operations.

The third paper, by Mária Trnovská and Margaréta Halická, presents 'Nonlinear data envelopment analysis models for technologies with undesirable outputs'. The authors compare two nonlinear data envelopment analysis models for environmental evaluation: the Russell measure model and the hyperbolic measure model. Since both models can be formulated as semidefinite programs, they are computationally tractable. The application

of the models is illustrated in the case of 29 European countries for the analysis of their sustainable agricultural performance.

The fourth paper, by Dimitrios Mitroulis and Fotis Kitsios, presents the benefits of digital transformation in tourism industry and especially the measurement of its impact on organisational performance. The study evaluates the level of CEOs, CIOs and other senior executives' satisfaction and proposes solutions by using the multi-criteria analysis and the results of the MUSA method.

The last paper, by Evripidis P. Kechagias, Sotiris P. Gayialis, Grigorios D. Konstantakopoulos and Georgios A. Papadopoulos, presents a thorough literature review and evaluation of road traffic forecasting methods. The algorithms, through which the traffic forecast is carried out, are categorised and analysed, focusing on their potential implementation in freight transportation systems. This review is a useful tool for academics and practitioners who study the adoption of traffic forecasting algorithms in IT solutions in order to schedule deliveries and routes in city logistics environment effectively.

Closing this short editorial, we would like to sincerely thank all the participants of the 7th International Symposium and 29th National Conference on Operational Research, who supported the event, and in particular, all the authors who submitted papers. Their contribution has been essential in developing this special issue. We would like, also, to thank the colleagues, who worked hard to review the submitted papers. Their support was crucial in assuring the high standards of this special issue.