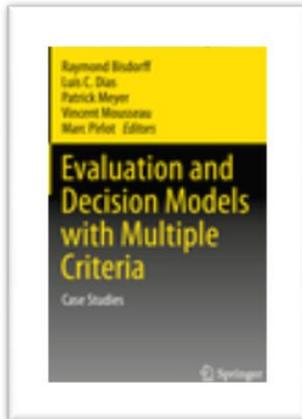


BOOK REVIEW

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**EVALUATION AND DECISION MODELS WITH
MULTIPLE CRITERIA (Case studies)**

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INTRODUCTION

The book **Evaluation and Decision Models with Multiple Criteria (Case Studies)**, 978-3-662-46815-9, is a Springer Series *International Handbooks on Information Systems* volume. This series objective, in the view of its Editors: **Bernus, P., Błazewicz, J., Schmidt, G.J., Shaw, M.J.**, is to involve contributors who are the authoritative figures in this area of information systems in each volume in order to provide a reference source for problem solvers in business, industry, and government, which can also be used by professional researchers and graduate students.

In this book, examples of **multiple criteria decision applications (MCDAs)** are presented. That is made, through the illustration of case studies, in a coherent framework provided by the methodology chapters and the comments associated to each case study.

It is hoped that the chapters describing MCDAs inspire the reader to perform experiments with MCDA methods and even to develop new variants using data from these case studies, or other cases they find interesting to study, in order to arm them with a bigger perception of real-world problems and with the tools adequate to overcome them.

The Editors: **Bisdorff, R., Dias, L.C., Meyer, P., Mousseau, V., Pirlot, M.** organized this book, with 21 chapters, in 3 parts as listed below:

INTRODUCTION

Bisdorff, Raymond (et al.)

PART I-THEORETICAL BACKGROUND

1. Aiding to Decide: Concepts and Issues
Bouyssou, Denis (et al.)

2. Modelling Preferences
Bouyssou, Denis (et al.)
3. Building Recommendations
Bouyssou, Denis (et al.)

PART II-CASE STUDIES OF MCDA APPLICATIONS

4. The EURO 2004 Best Poster Award: Choosing the Best Poster in a Scientific Conference Bisdorff, Raymond
5. Multicriteria Evaluation-Based Framework for Composite Web Service Selection Chakhar, Salem (et al.)
6. Site Selection for a University Kindergarten in Madrid Tervonen, Tommi (et al.)
7. Choosing a Cooling System for a Power Plant in Belgium
Pirlot, Marc (et al.)
8. Participative and Multicriteria Localization of Wind Farm Projects in Corsica Island: Decision Aid Process and Result
Oberti, Pascal (et al.)
9. Multi-Criteria Assessment of Data Centers Environmental Sustainability
Covas, Miguel Trigueiros (et al.)
10. The Cost of a Nuclear-Fuel Repository: A Criterion Valuation by Means of Fuzzy Logic
Kunsch, Pierre Louis (et al.)
11. Assessing the Response to Land Degradation Risk: The Case of the Loulouka Catchment Basin in Burkina Faso
Metchebon Takougang, Stéphane Aimé (et al.)
12. Coupling GIS and Multi-Criteria Modeling to Support Post-Accident Nuclear Risk Evaluation
Mercat-Rommens, Catherine (et al.)
13. A Multicriteria Spatial Decision Support System for Hazardous Material Transport
Luè, A. (et al.)
14. Rural Road Maintenance in Madagascar the GENIS Project
Tsoukiàs, Alexis (et al.)
15. On the Use of a Multicriteria Decision Aiding Tool for the Evaluation of Comfort
Öztürk, Meltem (et al.)
16. An MCDA Approach for Evaluating Hydrogen Storage Systems for Future Vehicles
Montignac, Florent (et al.)
17. An MCDA Approach for Personal Financial Planning
Braun, Oliver (et al.)
18. A Multicriteria Approach to Bank Rating
Doumpos, Michael (et al.)

PART III-MCDA PROCESS SUPPORT TOOLS

19. XMCD: An XML-Based Encoding Standard for MCDA Data
Bigaret, Sébastien (et al.)
20. Supporting the MCDA Process with the diviz workbench
Bigaret, Sébastien (et al.)

THE REVIEW

The joint effort of editors and authors of this book resulted in a unique work in the field of multiple criteria decision applications (MCDAs).

The various chapters are very well positioned in the three parts in which this book is divided. In the first part is given the theoretical and methodological framework that supports the text. In the fifteen chapters comprising the second part are displayed, discussed and studied a large number of practical situations in which the MCDA methods approach, this work subject, can be applied. The third part, as the title implies, is dedicated to the MCDA support tools.

The quantity and variety of case studies presented in the second part of this work, along with clarity, rigor and scientific quality with which they are treated, make this book a real handbook, living up to Springer Series title, in evaluation and decision models with multiple criteria. In fact, are presented so many facts of all kinds that are quite unlikely that a decision maker does not review his/her own problem in one of them.

It is also a very interesting book either for investigators or for teachers making them able, through its so exhaustive exemplification and didactic presentation, to connect theory with practice.

In the third part, the MCDA process support tools are characterized by their usefulness, scientific quality and sophistication. They are very well developed making their understanding and gathering by the reader very easy and real.

Throughout this book are described interesting situations and ways of dealing with them. It can serve as a very reliable guide to decision makers in real life.

Briefly, an outstanding book on “evaluation and decision models with multiple criteria” indispensable for problem solvers in business, industry, and government. Obligatory for academics, professional researchers and graduate students.

REFERENCE

- R. Bisdorff, L.C. Dias, P. Meyer, V. Mousseau, M. Pirlot (Eds.), Evaluation and Decision Models with Multiple Criteria (Case Studies), *International Handbooks on Information Systems*. Springer-Verlag Berlin Heidelberg, 2015.