known contributors who lend considerable authority to the work.

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Reference

- 1 Slowinski R and Weglarz J (eds) (1989). *Advances in Project Scheduling*. Elsevier: Amsterdam.

Multicriterion Decision in Management: Principles and Practice

J-C Pomerol and S Barba-Romero

Kluwer Academic Publishers, Jan 2000. xiii+395 pp. £103.50. ISBN: 0-7923-7756-7

The authors state the purpose of this book in the Foreword. This book is about discrete multicriterion decision making and is not to be confused with multiple criteria linear programming. The authors made an effort to bring science to the discipline of multicriterion decision making. In their own words: 'Starting from the main scientific results which are the foundation of the domain, we will show the principle methods of multicriterion analysis, their advantages and their shortcomings.' In order to achieve this purpose, the authors divided the book into 12 chapters which comprehensively cover the topic of multicriterion decision analysis.

The first chapter is a standard approach to an explanation of multicriterion decision making. The next chapter provides a comprehensive review of the basic tools to be used in multicriterion decision making. The concept of dominance and how to employ it to reduce the number of computations is covered in Chapter 3. Weighting methodologies are

examined in Chapter 4. Ordinal methods are explained in Chapter 5. There is an interesting comparison of the Condorcet and Borda weighting schemes as well as a brief history of both gentlemen. I recommend it to all, whether interested in multicriterion analysis or not. The authors' treatment of utility functions with ordinal numbers for inputs is next. The treatment is something that needs to be called to the attention of many analysts who treat ordinal numbers as real numbers which they are not. Ranking methods are treated in Chapter 7 followed by other less common methods in Chapter 8. Expert systems and artificial intelligence are touched on in Chapter 9. There is a review of available software with comments by the authors in Chapter 10. Chapter 11 discusses how the paradigm of multicriterion decision making is to be employed. The authors in this chapter conclude that it has many advantages over linear programming. The final chapter, Chapter 12 compares multicriterion decision making with other methods. Their final summation clearly states that, if one wishes to avoid the complexity in understanding what is associated with the computations needed to optimise, multicriterion analysis offers this possibility where the decision maker is able to participate in the decision.

What is missing from the book is a thorough discussion on such topics as Bayesian and neural networks which are used in decision making in a number of software packages. The authors, and perhaps rightly so, might have omitted these topics as they considered them not to be in the discrete category. Aside from that, the book is a very comprehensive book on the subject of multicriterion decision making. I would recommend it as a text for a course on the subject. I would also recommend it for one's personal library.

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