

# **OR/MS AT WORK**

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**OPERATIONS RESEARCH/  
MANAGEMENT SCIENCE  
AT WORK**

*edited by*

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# PREFACE

The principle aim of this book, entitled “Operations Research/Management Science at Work”, is to provide a summary snapshot of recent research in and applications of Operations Research (OR)/ Management Science (MS) in the Asia-pacific region. The book emphasises research having potential industry interest, covering a wide range of topics from major fields of OR/MS in a systematic and coherent fashion and shows the elegance of their implementations. The book is intended to serve the needs of applied researchers who are interested in applications of OR/MS algorithms. The book includes descriptions of many real-world problems together with their solutions; we hope the reader will appreciate their applicability.

The Asia-pacific region has embraced business applications of decision support systems in recent years. Given that many of these applications are unaffected by legacy models or systems it has meant that state of the art OR/MS techniques have been embedded in them. Moreover, the increased use of OR/MS techniques in this region provides opportunities for identifying methodological advances that are taking place as a result of the unique nature of the applications. These also provide opportunities for exploring synergies and interfaces that exist between OR/MS, from the point of view of applications as well as theoretical advances.

We invited some eminent OR/MS researchers and practitioners in the Asia-pacific region to submit papers for publication in this book. We also invited some of the best papers from the Second Australian Society for Operations Research (ASOR) Queensland Branch and Operations Research Society of Japan (ORSJ) Hokkaido Chapter joint workshop.

Editing a book that covers a wide range of OR/MS applications is a very difficult and time-consuming task. The book could not have been successfully accomplished without support and constructive feedback from all the contributors. We would like to thank them for their efforts, for reviewing each other’s work, and for providing feedback on their own chapters.



All chapters were carefully selected, peer reviewed and subject to a thorough and stringent refereeing process, in accordance with the usual high standards of the International Series in Operations Research and Management Science, Kluwer Academic Publishers. In general, papers were each reviewed by at least three referees who made valuable contributions, thus improving the quality of the chapters. We would like to thank the referees and all others who have contributed in so many different ways to the success of this book.

It is an honour for us on behalf of the ASOR and ORSJ to present to the community of OR /MS a book which will give a unique opportunity to keep up-to-date with OR/MS in Australia, Japan and other countries in the Asia-pacific region.

Also, we express our gratitude to the editor of The International Series in Operations Research and Management Science, Professor Frederick Hillier and to Kluwer Academic Publishers Gary Folven for their help and encouragement throughout the book.

Editors

**Erhan Kozan and Azuma Ohuchi**