

Preface

In day-to-day scenarios, sometimes it becomes a little difficult to reach a conclusion in solidarity. There is this ambiguity that encapsulates us and alters our decision-making power as the number of criteria and alternatives increases. The objective of this book is to provide readers with various types of tools and techniques which are available and can be utilized for better decision making; not only just from a management perspective but for solving our day-to-day problems as well. Generally, expert opinions are used for developing the required decision matrix, but in everyday life even a fellow with complete information regarding the problem in hand can act as an expert, and so, individualistic opinion can also be used for the assessment. This textbook **Multiple Criteria Decision Making Methods: Applications for Managerial Discretion** is a part of the book series on the **Applications of Mathematics in Engineering and Information Sciences**, which includes several techniques and their concepts explained in a layman's manner so as to make it easily understandable.

This book is designed to understand the usage of various approaches that illustrate the analytical reasoning and modelling which not only can provide general guidelines to the decision-maker but also is quite specific for immediate useful decision-making. The topics have majorly been divided into three sections: obtaining weights for the criteria, ranking the available alternatives, and then covering some other useful available techniques.

In every chapter, focus has been on to explain the theory of each method followed by the numerical illustration carried out for each and every technique.

It is our hope that academicians who wish to enhance their knowledge regarding applications of available multiple criteria decision-making (MCDM) methods will find this book useful as a reference guide, and that students willing to learn to grasp the basic principles, practitioners who seek to make an ideal decision, and, in general, that the readers find it useful for better understanding of the academic literature on applications of MCDM techniques.

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