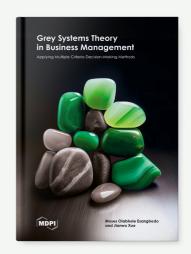


Open Access Book

Grey Systems Theory in Business Management: Applying Multiple Criteria Decision-Making Methods



Moses Olabhele Esangbedo and Jianwu Xue

This book is dedicated to addressing the central challenge of making informed business decisions within an environment characterized by uncertainty, employing Multiple Criteria Decision Making (MCDM) methodologies. Chapter 1 provides an overview of the related concepts of grey systems theory. Chapter 2 proposes evaluation criteria for five major themes, including human resource information systems and contractor selection problems. Chapters 3–6 present four improved grey hybrid weighting methods: the grey rank order centroid method, the grey regulatory focus theory method, the grey step-wise weight analysis ratio evaluation, and the grey point allocation weighting method. Chapters 7–10 introduce four improved hybrid grey evaluation methods: the grey weighted sum model, grey relational analysis, the grey regime method, and the grey integer linear programming method. Chapters 11 and 12 discuss additional grey decision-making methods, and conclusions are drawn along with future prospects.