

1. Record Nr.	UNINA9910746958603321
Titolo	Advances in Best-Worst Method : Proceedings of the Fourth International Workshop on Best-Worst Method (BWM2023) // edited by Jafar Rezaei, Matteo Brunelli, and Majid Mohammadi
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2023] ©2023
ISBN	3-031-40328-2
Edizione	[First edition.]
Descrizione fisica	1 online resource (x, 247 pages) : illustrations (chiefly color)
Collana	Lecture Notes in Operations Research Series
Disciplina	733
Soggetti	Decision making
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Intro -- Committees -- Preface -- Contents -- 1 Probabilistic Group Decision-Making Using BWT -- Introduction -- Multi-attribute Value Theory -- Trade-Off Method -- Best-Worst Trade-off -- Bayesian Best-Worst Trade-Off: A Probabilistic Group Decision-Making Model -- Numerical Examples -- Conclusions -- References -- 2 Robust Stakeholder-Based Group-Decision Making Framework: The Multi-Actor Multi-Criteria Analysis (MAMCA) with the Integration of Best-Worst Method (BWM) -- Introduction -- Literature Review: MAMCA Framework and the Possibility of Integration of BWM -- Robust MAMCA-BWM Framework -- Case Illustration -- Conclusion -- References -- 3 A Consistent and Consensual Best-Worst Method and Its Application to Salespersons' Performance Evaluation Problem -- Introduction -- Literature Review -- Preliminaries -- Consensus Reaching Processes -- Best-Worst Method -- The Proposed Method -- Case Study -- Discussion -- Conclusion -- References -- 4 Which Prioritization Method Is Better for Deriving Priority from Best-Worst Preferences? A Theoretical and Experimental Analysis -- Introduction -- Background -- Best-Worst Method -- Prioritization Methods -- Analyzing the Prioritization Methods -- Analytic Solution -- Experimental Performance Measures -- Conclusions -- References -- 5 A Hesitant Multiplicative Best-Worst Method for Multiple Criteria Decision-Making -- Introduction -- Preliminaries -- HMPR -- Bwm --

Three Different Models of Hesitant Multiplicative BWM to Derive the Optimal Weights -- Illustrative Example -- Discussion -- Comparisons with the Existing Methods -- Anchoring Bias Analysis -- Conclusions -- References -- 6 Industry 4.0 and Green Entrepreneurship for Environmental Sustainability: Exploring Barriers from an Indian SME Perspective -- Introduction -- Literature Review -- Theoretical Framework -- Industry 4.0 (I4.0) in SMEs. Green Entrepreneurship (GE) in SMEs -- Relationship of I4.0 with GE -- Research Gap and Existing Problems -- Methodology -- Experts' Background and Case Analysis -- Case Details and Experts' Background -- Discussions -- Conclusion -- Implications, Limitations and Future Recommendations -- Implications -- Limitations and Future Recommendations -- Appendix -- References -- 7 Supplier Selection for the Oil Industry Using a Combined BWM & F-VIKOR, Case Study: National Iranian South Oil Company -- Introduction -- Literature Review -- Methodology -- The BWM Technique -- The Fuzzy VIKOR Technique -- Case Study -- Results and Discussion -- Criterion Localization -- Data Analysis -- Conclusion and Future Research -- References -- 8 Assessing Smartness of Automotive Industry: An Importance-Performance Analysis -- Introduction -- Literature Review -- Smart Manufacturing -- Related Work -- Methodology -- Non-linear Best-Worst Method -- Interval Analysis -- Results -- Discussion -- Conclusion -- References -- 9 Determining the Criterion Weights for the Selection of Volunteers in Humanitarian Organizations by the Best-Worst Method -- Introduction -- Methodology -- Determining the Selection Criteria -- Best-Worst Method (BWM) -- Application of the BWM in Determining the Criteria Weights -- Discussion -- Conclusion -- Appendix -- References -- 10 Emergency Service Quality Assessment Using SERVQUAL and BWM -- Introduction -- Literature Review -- Methodology -- SERVQUAL -- Best-Worst Method -- Case Study -- The Participants -- Analysis and Results -- Characteristics of the Participants -- Determination of the Weights and General Discussion -- Conclusion and Future Work -- References -- 11 Avalanche Risk Analysis by a Combined Geographic Information System and Bayesian Best-Worst Method -- Introduction -- Literature Review -- Material and Method -- Study Area. Criteria Used in the Location Selection -- Research Methodology -- Application Results -- Weighting Criteria with the Bayesian Best-Worst Method -- Integration of Criterion Weights to GIS Environment -- Discussion -- Conclusion -- References -- 12 Snow Avalanche Hazard Prediction Using the Best-Worst Method-Case Study: The Šar Mountains, Serbia -- Introduction -- Material and Methods -- Study Area -- Methodology -- Selection of Criteria by Importance -- Results and Discussion -- Conclusion -- References -- 13 Assessment of Renewable Energy Development Strategies with BWM-Grey TOPSIS -- Introduction -- Literature Review -- Renewable Energy -- Obstacles and Strategies for the Use and Development of Renewable Energy -- Research Methodology -- Best-Worst Method (BWM) -- Grey TOPSIS Method -- Findings -- BWM Findings -- Grey TOPSIS Findings -- Conclusion -- References.

Sommario/riassunto

This proceedings book contains selected papers from the Fourth International Workshop on Best-Worst Method (BWM2023), held in Delft, the Netherlands, from 8 to 9 June 2023. It presents recent advancements in theory and applications of the Best-Worst Method (BWM). It provides valuable insights on why and how to use BWM in a diverse set of applications including health, energy, supply chain management, and engineering. The book highlights the use of BWM in different settings including single decision-making vs group decision-

making, full information vs incomplete and uncertain situations. Academics and practitioners who are involved in multi-criteria decision-making and decision analysis benefit from the papers published in this book.
