1. Record Nr. UNINA9910484792803321

Titolo	Multiple criteria decision making : beyond the information age / / editors, Y. Ilker Topcu [and three others]
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-52406-X
Descrizione fisica	1 online resource (413 pages)
Collana	Contributions to management science
Disciplina	658.403
Soggetti	Multiple criteria decision making
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Intro -- Preface -- Contents -- Heterogeneous Sensor Data Fusion for Target Classification Using Adaptive Distance Function -- 1 Introduction -- 2 Literature Review -- 3 Multi-sensor Target Classification Models -- 3.1 Ensemble of Classifiers with Modified Distance Function (ECMDF): Overview -- 3.2 The Relationship Between Correlation Coefficients and Evidence Distances -- 3.3 Description of ECMDF Algorithm -- 3.3.1 The Training Phase -- 3.3.2 The Test Phase -- 3.4 Ensemble of Classifiers with Modified Distance Function and Sensor Accuracy (ECMDFS): Overview -- 4 Computational Results -- 4.1 Datasets -- 4.2 Parameter Settings -- 4.3 Performance Measure -- 4.4 Computational Results -- 4.5 Paradoxical Situations -- 5 Hybrid Multi-sensor Target Classification Algorithms -- 6 Conclusion -- References -- Selection of Emergency Assembly Points: A Case Study for the Expected Istanbul Earthquake -- 1 Introduction -- 2 Disaster Management -- 3 Post-disaster Resettlement -- 4 Selection of Emergency Assembly Points -- 5 Methodology -- 6 Case Study -- 6.1 Study Area -- 6.2 Implementation of the Model and Results -- 6.2.1 Phase 1: Assessment of the Current EAPs -- 6.2.2 Phase 2: Assessment of Regional Sufficiency -- 6.2.3 Phase 3: Selection of New Alternatives -- 6.2.4 Repetition of Previous Phrases -- 7 Conclusion -- References -- Assessing Smartness and Urban Development of the European Cities: An Integrated Approach of Entropy and VIKOR -- 1 Introduction -- 2 Literature Review -- 2.1 Smart City Concept -- 2.2 Ranking

Methodologies Approach in Urban Planning and Development -- 3 Data and Research Methodology -- 4 Results and Analysis -- 5 Conclusion -- References -- An MCDM-Based Health Technology Assessment (HTA) Study for Evaluating Kidney Stone Treatment Alternatives -- 1 Introduction -- 2 Literature Review -- 2.1 MCDM in Healthcare.
2.2 Health Technology Assessment Studies -- 2.3 MCDM Models in HTA -- 3 Methodology -- 3.1 Health Technology Assessment -- 3.2 Preliminaries of Fuzzy Logic -- 3.3 Hierarchical Fuzzy TOPSIS -- 4 The Proposed Hierarchical Structure for the Evaluation of Kidney Stone Treatment Methods -- 4.1 The Proposed Hierarchical Evaluation Structure -- 4.2 The Main Criteria Considered in the MCDM-Based HTA Framework -- 4.3 Sub-criteria Considered in the MCDM-Based HTA Framework -- 5 Case Study: Application of the Proposed MCDM-Based HTA Framework -- 5.1 Selected Kidney Stone Treatment Methods for the Case Study -- 5.2 Application of the Proposed MCDM-Based HTA Framework -- 6 Conclusion -- Appendix: A Brief Version of the Survey Used to Collect Verbal Evaluations -- 1. An Example Question for Linguistic Evaluation of Alternatives with Respect to Sub-criteria -- 2. The Question Used to Determine Weights of the Main Criteria -- 3. An Example Question Used to Determine Weights of the Sub-criteria -- References -- Geographic Distribution of the Efficiency of Childbirth Services in Turkey -- 1 Introduction -- 2 Methodology -- 2.1 Data and Study Procedures -- 2.2 Stepwise Selection of Study Variables in the DEA Model -- 2.3 Robustness Tests for DEA Efficiency Scores, Using Jackknife Analysis -- 2.4 Incorporating DEA Results with Decision-Tree Procedures -- 3 Application Results -- 3.1 Descriptive Statistics -- 3.2 Adding Variables into the DEA Model -- 3.3 Efficiency Analysis of Provinces in Terms of Childbirth Services -- 3.4 Testing the Robustness of DEA Results with Jackknife Analysis -- 3.5 Geographic Distribution of Provincial Efficiency Scores for Childbirth Services -- 3.6 Incorporating a Classification Tree Method with DEA -- 4 Discussion -- 4.1 Key Findings -- 4.2 What Is Already Known and What this Study Adds -- 4.3 Implications for Health Policymakers.
4.4 Implications for the Public -- 4.5 Limitations -- 4.6 Policy and Research Implications -- 5 Conclusion -- References -- Multicriteria Methods and the Hydropower Plants Planning in Brazil -- 1 Introduction -- 2 Inventory Studies Decision-Making -- 2.1 Criteria -- 2.2 Multicriteria Analysis -- 3 New Multicriteria Approach Proposal -- 4 Application -- 4.1 Weighted Sum Method -- 4.2 VIP Analysis -- 5 Conclusions -- References -- Regional Examination of Energy Investments in Turkey Using an Intuitionistic Fuzzy Method -- 1 Introduction -- 2 Literature Review -- 3 Overview of Renewable Energy Resources -- 4 Intuitionistic Fuzzy Sets (IFS) -- 5 An Integrated Intuitionistic Fuzzy Multi-criteria Decision-Making Method (IFMCDM) -- 5.1 Intuitionistic Fuzzy TOPSIS (IFTOPSIS) -- 6 Case Study -- 6.1 Main Criteria and Sub-criteria -- 6.2 Application -- 6.2.1 Sorting Alternatives by Means of IFTOPSIS Method -- 7 Analyses -- 7.1 Sensitivity Analysis -- 8 Conclusion -- References -- Small Series Fashion Supplier Selection Using MCDM Methods -- 1 Introduction -- 2 Literature Review -- 2.1 General Overview of Supplier Selection -- 2.2 Multi-criteria Decision Methods for Supplier Selection -- 3 Methodology -- 4 Experimental Results -- 4.1 Supplier Selection Criteria -- 4.2 MCDM Methods -- 4.2.1 AHP for Criteria Ranking -- 4.2.2 TOPSIS Method for Supplier Ranking (A Single Expert Decision-Making) -- 4.2.3 Fuzzy-TOPSIS Method for Supplier Ranking (Group Decision-Making) -- 4.2.4 Sensitivity Analysis -- 5 Conclusion -- Appendix -- Survey Questionnaire -- References -- Enhanced Performance Assessment of Airlines with Integrated Balanced

Scorecard, Network-Based Superefficiency DEA and PCA Methods -- 1 Introduction -- 2 Literature Review -- 2.1 DEA-Based Airline Studies -- 2.2 Dimension Reduction with PCA to Enhance the Discriminatory Power of DEA.
3 Proposed Methodology -- 3.1 Integration of BSC and DEA Approach -- 3.2 The Use of a Network-Based Superefficiency DEA with a Balanced Scorecard Approach and Social Network Analysis -- 3.3 The Integration of PCA and DEA -- 4 Application of the Proposed Performance Assessment Framework -- 4.1 The Selection of the Input and Output Variables -- 4.2 The Use of a Network-Based Superefficiency DEA with a Balanced Scorecard Approach -- 4.3 PCA-DEA Approach for Overall Performance Assessment -- 5 Managerial Implication and Further Research Opportunities -- References -- The Effects of Country Characteristics on Entrepreneurial Activities -- 1 Introduction -- 2 Literature Review -- 3 The Global Entrepreneurship Monitor Database -- 3.1 National Expert Survey -- 3.2 Adult Population Survey -- 4 The Proposed Model of Entrepreneurship Success -- 4.1 Variable Selection and Definition -- 4.1.1 Governmental Factors -- 4.1.2 Human Factors -- 4.1.3 Business Environment -- 4.1.4 Perceived Behavioral Control -- 4.1.5 Entrepreneurial Intention and Action -- 4.1.6 Fear of Failure -- 4.2 Dataset -- 5 Methodology -- 5.1 Structural Equation Modeling -- 5.2 Partial Least Squares Method -- 6 Application of the Model -- 6.1 Kaiser-Meyer-Olkin and Bartlett's Test -- 6.2 Evaluation of the Model -- 6.3 Moderating Effect -- 6.4 Model Fit -- 6.5 Country Group Analysis -- 6.5.1 The Country-Specific Models -- 6.5.2 Multigroup Analysis -- 7 Conclusion and Recommendations -- References -- A Geometric Standard Deviation Based Soft Consensus Model in Analytic Hierarchy Process -- 1 Introduction -- 2 Preliminaries -- 3 Consensus Models -- 4 A New Proposed Soft Consensus Model -- 4.1 Numerical Experiment of the Convergence of the Model -- 4.2 Numerical Experiment of the Acceptable Consistency of the Final Group PCM in the New Model -- 5 Comparison of Consensus Models -- 6 Case Study. 7 Conclusions -- Appendix 1 -- Appendix 2 -- References -- Coherency: From Outlier Detection to Reducing Comparisons in the ANP Supermatrix -- 1 Introduction -- 2 Literature Review -- 2.1 Consistency and Coherency -- 2.2 Units of Measurement -- 2.3 Linking Pins -- 2.4 Cluster Analysis -- 3 Linking Coherency Index -- 3.1 Motivating Examples -- 3.2 Simulation Results -- 3.3 Calculating the Linking Coherency Index (LCI) -- 4 Dynamic Clustering -- 5 Reducing the Number of Comparisons -- 6 Conclusion -- References -- Usage of Entropy-Based Objective Weighting in Neutrosophic Multiple Attribute Decision-Making -- 1 Introduction -- 2 Preliminaries: Neutrosophic Sets, Numbers, and Operations -- 3 Literature Review: Weighting in N-MADM -- 4 Entropy-Based Objective Attribute Weighting in N-MADM -- 5 Application -- 5.1 Data Set 1 -- 5.2 Data Set 2 -- 5.3 Wilcoxon Signed-Rank Test Results -- 6 Conclusions and Future Researches -- References -- Implementation of Cumulative Belief Degree Approach to Group Decision-Making Problems Under Hesitancy -- 1 Introduction -- 2 Preliminaries -- 3 Implementation of CBD Approach to Multi-criteria Group Decision-Making Problem with HFLTS -- 3.1 Problem Description -- 3.2 Proposed Methodology -- 4 Illustrative Example -- 5 Conclusion -- References -- A Literature Survey on Project Portfolio Selection Problem -- 1 Introduction -- 2 Classification Scheme -- 2.1 Type of Study -- 2.2 Methods -- 2.2.1 Benefit Measurement Methods -- 2.2.2 Mathematical Programming Methods -- 2.2.3 Cognitive Emulation Methods -- 2.2.4 Simulation and Heuristic Approaches (S&amp -- H) -- 2.2.5 Hybrid Methods -- 2.2.6 Other Methods -- 2.3 Types of Projects -- 3 Analysis of the Literature -- 3.1 Analysis on

Type of Study -- 3.2 Analysis on Methods -- 3.3 Analysis on Types of Projects -- 4 Research Directions -- 5 Conclusion -- References.