Record Nr. UNINA9910584597503321 The Palgrave Handbook of Operations Research / / edited by Saïd Salhi, **Titolo** John Boylan Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Palgrave Macmillan, , 2022 **ISBN** 3-030-96935-5 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (923 pages): illustrations 658.4034 Disciplina Operations research Soggetti Technological innovations Production management Operations Research and Decision Theory Innovation and Technology Management **Operations Management** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Part I:- Discrete (Combinatorial) Optimisation -- Chapter 1:-Bilevel Discrete Optimisation: Computational Complexity and Applications --Chapter 2:-Discrete Location Problems with Uncertainty -- Chapter 3:-Integrated vehicle routing problems: A survey -- Chapter 4:- The knapsack problem and its variants: Formulations and solution methods -- Chapter 5:- Rank aggregation: models and algorithms -- Part II:-Continuous (Global) Optimisation -- Chapter 7:- Competitive Facilities Location -- Chapter 8:- Interval tools in branch-and-bound methods for global optimization -- Chapter 9:-Continuous Facility Location Problems -- Chapter 10:-Data Envelopment Analysis: Recent developments and challenges -- Part III:- Heuristic Search Optimisation -- Chapter 11:- An Overview of Heuristics and Metaheuristics --Chapter 12:- Formulation space search metaheuristic -- Chapter 13:-Sine Cosine Algorithm: Introduction and Advances -- Chapter 14:-Less is more approach in heuristic optimization -- Chapter 15:- The New

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Sommario/riassunto

Operations Research (OR) is a fast-evolving field, which is having a significant impact on its neighbouring disciplines of Business Analytics and Data Science, and on contemporary business and management practices. This handbook provides a comprehensive and cutting edge collection of studies in the area. Views differ on what should be included within the scope of OR. The editors of this volume have taken the view that an inclusive stance is the most helpful, both for theory and practice. Real-world problems often require consideration from both 'softer' and 'harder' perspectives and need consideration of both predictive and prescriptive problems. In accordance with this inclusive approach to OR, the book is divided into six parts, covering Discrete Optimization, Continuous Optimization, Heuristic Search Optimization, Forecasting, Simulation and Prediction, Problem Structuring and Behavioural OR, and finally some recent OR Applications. This wideranging handbook includes a culturally diverse collection of authors, with different perspectives and backgrounds around Operations Research. It will be of tremendous value to researchers, students and practitioners in the field of OR Saïd Salhi is Emeritus Professor of Operational Research/Management Science at the University of Kent. UK, and former Head of the Management Science Group from 2008 to 2017. He was also the Founder and Director of the Centre on Logistics and Heuristic Optimization (CLHO) from 2008 to 2021. He is one of the four editors in chief for the Journal of the Operational Research Society (JORS). Prior to his appointment to Kent in 2005, Saïd was at the University of Birmingham in the School of Mathematics for 15 years and in his later years he acted as the Head of the Management Mathematics Group. John Boylan is Professor of Business Analytics, and former Head of the Department of Management Science at Lancaster University, UK. He currently serves as Director of the Lancaster Centre for Marketing Analytics and Forecasting, Director of the National Taught Course Centre for Operational Research (NATCOR) and President of the International Society for Inventory Research. He is one of the four editors in chief for the Journal of the Operational Research Society (JORS). Before joining Lancaster, he worked in industrial OR groups and served as Academic Dean at Buckinghamshire New University.