Record Nr. UNINA9910683360103321 Autore Mazurek Jiri Titolo Advances in Pairwise Comparisons: Detection, Evaluation and Reduction of Inconsistency / / by Jiri Mazurek Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 9783031238840 9783031238833 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (153 pages) Collana Multiple Criteria Decision Making, , 2366-0031 Disciplina 519.542 Soggetti Operations research Mathematics Social sciences Computer science - Mathematics Production management Operations Research and Decision Theory Mathematics in the Humanities and Social Sciences Mathematical Applications in Computer Science **Operations Management** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Introduction -- Multiplicative pairwise comparisons -- Inconsistency Nota di contenuto indices and their properties -- Inconsistency reduction -- Alternative approaches to the evaluation of inconsistency in pairwise comparisons -- Inconsistency of incomplete pairwise comparisons matrices --Ordinal inconsistency. Sommario/riassunto This book tackles issues associated with inconsistency in pairwise comparisons from both theoretical and practical perspectives. Human judgments are seldom absolutely consistent, or absolutely precise, therefore problems of measuring and handling inconsistency belong among hot topics of the current research, especially in the theoretical

framework of multiple criteria decision aiding (MCDA). The book presents and discusses the state-of-the-art of this field including both cardinal and ordinal inconsistency, the problems of different scales for

comparisons and inconsistency reduction, and the alternative approaches to inconsistency detection and measurement. This book is a unique one-stop guide for readers who are interested in inconsistency in pairwise comparisons. Researchers and practitioners in the area of multiple-criteria decision-making (MCDM) and the analytic hierarchy process (AHP) will find this informative book particularly valuable.