Record Nr. UNINA9910811300003321 Autore Reis Pinheiro Carlos Andre <1940-> Titolo Heuristics in analytics: a practical perspective of what influences our analytical world / / Carlos Andre Reis Pinheiro, Fiona McNeill Pubbl/distr/stampa Hoboken, New Jersey:,: John Wiley & Sons, Inc.,, [2014] ©2014 **ISBN** 1-118-41674-0 1-118-43426-9 1-118-42022-5 Edizione [1st edition] Descrizione fisica 1 online resource (254 p.) Wiley & SAS business series Collana Altri autori (Persone) McNeillFiona Disciplina 658.4/033 Soggetti Management - Statistical methods Decision making - Statistical methods Business planning - Statistical methods Heuristic algorithms System analysis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Heuristics in Analytics: A Practical Perspective of What Influences Our Analytical World; Copyright; Contents; Preface; Acknowledgments; About the Authors: Chapter 1: Introduction: The Monty Hall Problem: Evolving Analytics; The Business Relevance of Analytics; The Role of Analytics in Innovation; Innovation in a Changing World; Summary; Chapter 2: Unplanned Events, Heuristics, and the Randomness in Our World: Heuristics Concepts: Heuristics in Operations: The Butterfly Effect; Random Walks; The Drunkard's Walk; Probability and Chance; Summary Chapter 3: The Heuristic Approach and Why We Use It Heuristics in Computing; Heuristic Problem-Solving Methods; Genetic Algorithms: A Formal Heuristic Approach; Foundation of Genetic Algorithms; Initialization: Selection: Reproduction: Termination: Pseudo-Code Algorithm; Benefits of Genetic Algorithms; Influences in Competitive Industries; Genetic Algorithms Solving Business Problems; Summary;

Chapter 4: The Analytical Approach; Introduction to Analytical

Modeling: The Competitive-Intelligence Cycle: Data: Information: Knowledge: Intelligence: Experience: Summary Chapter 5: Knowledge Applications That Solve Business Problems Customer Behavior Segmentation; Collection Models; Insolvency Segmentation; Collection Notice Recovery; Anticipating Revenue from Collection Actions; Insolvency Prevention; Bad-Debt Classification: Avoiding Taxes; Fraud-Propensity Models; New Fraud Detection; Classifying Fraudulent Usage Behavior; Summary; Chapter 6: The Graph Analysis Approach: Introduction to Graph Analysis: Graphs Structures. Network Metrics, and Analyses Approaches; Network Metrics; Types of Subgraphs; Summary; Chapter 7: Graph Analysis Case Studies Case Study: Identifying Influencers in Telecommunications Background in Churn and Sales; Internal Networks; Customer Influence; Customer Influence and Business Event Correlation: Possible Business Applications and Final Figures in Churn and Sales; Case Study: Claim Validity Detection in Motor Insurance: Background in Insurance and Claims; Network Definition; Participant Networks; Group Analysis; Identifying Outliers; Final Figures in Claims; Visualizing for More Insight; Final Figures in Insurance Exaggeration; Case Study: Fraud Identification in Mobile Operations Background in Telecommunications Fraud Social Networks and Fraud:

Background in Telecommunications Fraud Social Networks and Fraud; Community Detection; Finding the Outliers within Communities; Rules and Thresholds for Community Outliers; Fraudster Visualization; Final Figures in Fraud; Summary; Chapter 8: Text Analytics; Text Analytics in the Competitive-Intelligence Cycle; Information Revisited; Knowledge Revisited; Linguistic Models; Text-Mining Models; Intelligence Revisited; Experience Revisited; Summary; Bibliography; Index

Sommario/riassunto

A practical guide to deploying mathematical and statistical models when performing analytics The Heuristics in Analytics describes analytic processes and how they fit into the heuristic world around us. In spite of the strong heuristic characteristics of the analytical processes, this important book emphasizes the need to have the proper tools to engage analytics. It describes the analytical process from the exploratory analysis in respect to business scenarios and corporate environments, to model developments; and from statistics, probability, stochastic, mathematics, and arti