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Nota di contenuto	Cover; Title Page; Copyright; Contents; Chapter 1 Overview of Predictive Analytics; What Is Analytics?; What Is Predictive Analytics?; Supervised vs. Unsupervised Learning; Parametric vs. Non-Parametric Models; Business Intelligence; Predictive Analytics vs. Business Intelligence; Do Predictive Models Just State the Obvious?; Similarities between Business Intelligence and Predictive Analytics; Predictive Analytics vs. Statistics; Statistics and Analytics; Predictive Analytics and Statistics Contrasted; Predictive Analytics vs. Data Mining; Who Uses Predictive Analytics? Challenges in Using Predictive Analytics; Obstacles in Management; Obstacles with Data; Obstacles with Modeling; Obstacles in Deployment; What Educational Background Is Needed to Become a Predictive Modeler?; Chapter 2 Setting Up the Problem; Predictive Analytics Processing Steps: CRISP-DM; Business Understanding; The Three-Legged Stool; Business Objectives; Defining Data for Predictive Modeling; Defining the Columns as Measures; Defining the Unit of Analysis; Which Unit of Analysis?; Defining the Target Variable; Temporal Considerations for Target Variable Defining Measures of Success for Predictive Models Success Criteria for Classification; Success Criteria for Estimation; Other Customized

Success Criteria; Doing Predictive Modeling Out of Order; Building Models First; Early Model Deployment; Case Study: Recovering Lapsed Donors; Overview; Business Objectives; Data for the Competition; The Target Variables; Modeling Objectives; Model Selection and Evaluation Criteria; Model Deployment; Case Study: Fraud Detection; Overview; Business Objectives; Data for the Project; The Target Variables; Modeling Objectives
Model Selection and Evaluation Criteria
Model Deployment; Summary;
Chapter 3 Data Understanding; What the Data Looks Like; Single Variable Summaries; Mean; Standard Deviation; The Normal Distribution; Uniform Distribution; Applying Simple Statistics in Data Understanding; Skewness; Kurtosis; Rank-Ordered Statistics; Categorical Variable Assessment; Data Visualization in One Dimension; Histograms; Multiple Variable Summaries; Hidden Value in Variable Interactions: Simpson's Paradox; The Combinatorial Explosion of Interactions; Correlations; Spurious Correlations; Back to Correlations; Crosstabs
Data Visualization, Two or Higher Dimensions
Scatterplots; Anscombe's Quartet; Scatterplot Matrices; Overlaying the Target Variable in Summary; Scatterplots in More Than Two Dimensions; The Value of Statistical Significance; Pulling It All Together into a Data Audit; Summary; Chapter 4 Data Preparation; Variable Cleaning; Incorrect Values; Consistency in Data Formats; Outliers; Multidimensional Outliers; Missing Values; Fixing Missing Data; Feature Creation; Simple Variable Transformations; Fixing Skew; Binning Continuous Variables; Numeric Variable Scaling; Nominal Variable Transformation
Ordinal Variable Transformations

Sommario/riassunto

Learn the art and science of predictive analytics - techniques that get results. Predictive analytics is what translates big data into meaningful, usable business information. Written by a leading expert in the field, this guide examines the science of the underlying algorithms as well as the principles and best practices that govern the art of predictive analytics. It clearly explains the theory behind predictive analytics, teaches the methods, principles, and techniques for conducting predictive analytics projects, and offers tips and tricks that are essential for successful p
