1. Record Nr. UNINA9910686772103321

Autore	Hodeghatta Umesh R.
Titolo	Practical Business Analytics Using R and Python : Solve Business Problems Using a Data-driven Approach / / by Umesh R. Hodeghatta, Umesha Nayak
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2023
ISBN	9781484287545 1484287541
Edizione	[2nd ed. 2023.]
Descrizione fisica	1 online resource (716 pages)
Disciplina	658.4012028553
Soggetti	Decision making - Data processing Business planning - Data processing R (Computer program language) Python (Computer program language)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Section 1: Introduction to Analytics -- Chapter 1: Business Analytics Revolution -- Chapter 2: Foundations of Business Analytics -- Chapter 3: Structured Query Language (SQL) Analytics -- Chapter 4: Business Analytics Process -- Chapter 5: Exploratory Data Analysis (EDA) -- Chapter 6: Evaluating Analytics Model Performance -- Section II: Supervised Learning and Predictive Analytics -- Chapter 7: Simple Linear Regressions -- Chapter 8: Multiple Linear Regressions -- Chapter 9: Classification -- Chapter 10: Neural Networks -- Chapter 11: Logistic Regression -- Section III: Time Series Models -- Chapter 12: Time Series – Forecasting -- Section IV: Unsupervised Model and Text Mining -- Chapter 13: Cluster Analysis -- Chapter 14: Relationship Data Mining -- Chapter 15: Mining Text and Text Analytics -- Chapter 16: Big Data and Big Data Analytics -- Section V: Business Analytics Tools -- Chapter 17: R programming for Analytics -- Chapter 18: Python Programming for Analytics.
Sommario/riassunto	This book illustrates how data can be useful in solving business problems. It explores various analytics techniques for using data to discover hidden patterns and relationships, predict future outcomes,

optimize efficiency and improve the performance of organizations. You'll learn how to analyze data by applying concepts of statistics, probability theory, and linear algebra. In this new edition, both R and Python are used to demonstrate these analyses. Practical Business Analytics Using R and Python also features new chapters covering databases, SQL, Neural networks, Text Analytics, and Natural Language Processing. Part one begins with an introduction to analytics, the foundations required to perform data analytics, and explains different analytics terms and concepts such as databases and SQL, basic statistics, probability theory, and data exploration. Part two introduces predictive models using statistical machine learning and discusses concepts like regression, classification, and neural networks. Part three covers two of the most popular unsupervised learning techniques, clustering and association mining, as well as text mining and natural language processing (NLP). The book concludes with an overview of big data analytics, R and Python essentials for analytics including libraries such as pandas and NumPy. Upon completing this book, you will understand how to improve business outcomes by leveraging R and Python for data analytics. You will: Master the mathematical foundations required for business analytics Understand various analytics models and data mining techniques such as regression, supervised machine learning algorithms for modeling, unsupervised modeling techniques, and how to choose the correct algorithm for analysis in any given task Use R and Python to develop descriptive models, predictive models, and optimize models Interpret and recommend actions based on analytical model outcomes.