1. Record Nr. UNINA9910151592903321 Autore Sharda Ramesh Titolo Business intelligence and analytics: systems for decision support // Ramesh Sharda, Dursun Delen, Efraim Turban; with contributions by J. E. Aronson, Ting-Peng Liang, David King Boston, [Massachusetts]:,: Pearson,, 2014 Pubbl/distr/stampa 2014 **ISBN** 1-292-00926-8 9781292009209 9781292009261 Edizione [Tenth edition.] Descrizione fisica 1 online resource (689 pages): illustrations, tables Collana Always Learning Disciplina 658.403 Soggetti Decision support systems Expert systems (Computer science) Business intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Global Edition." Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Cover -- Title Page -- Contents -- Preface -- About the Authors --Nota di contenuto Part I Decision Making and Analytics: An Overview -- Chapter 1 An Overview of Business Intelligence, Analytics, and Decision Support --1.1 Opening Vignette: Magpie Sensing Employs Analytics to Manage a Vaccine Supply Chain Effectively and Safely -- 1.2 Changing Business Environments and Computerized Decision Support -- The Business Pressures-Responses-Support Model -- 1.3 Managerial Decision Making -- The Nature of Managers' Work -- The Decision-Making Process -- 1.4 Information Systems Support for Decision Making -- 1.5 An Early Framework for Computerized Decision Support -- The Gorry and Scott-Morton Classical Framework -- Computer Support for

Structured Decisions -- Computer Support for Unstructured Decisions -- Computer Support for Semistructured Problems -- 1.6 The Concept of Decision Support Systems (DSS) -- DSS as an Umbrella Term -- Evolution of DSS into Business Intelligence -- 1.7 A Framework for Business Intelligence (BI) -- Definitions of BI -- A Brief History of BI --

A Multimedia Exercise in Business Intelligence -- Application Case 1.1 Sabre Helps Its Clients Through Dashboards and Analytics -- The DSS-BI Connection -- 1.8 Business Analytics Overview -- Descriptive Analytics -- Application Case 1.2 Eliminating Inefficiencies at Seattle Children's Hospital -- Application Case 1.3 Analysis at the Speed of Thought -- Predictive Analytics -- Application Case 1.4 Moneyball: Analytics in Sports and Movies -- Application Case 1.5 Analyzing Athletic Injuries -- Prescriptive Analytics -- Application Case 1.6 Industrial and Commercial Bank of China (ICBC) Employs Models to Reconfigure Its Branch Network -- Analytics Applied to Different Domains -- Analytics or Data Science?. 1.9 Brief Introduction to Big Data Analytics -- What Is Big Data? --Application Case 1.7 Gilt Groupe's Flash Sales Streamlined by Big Data Analytics -- 1.10 Plan of the Book -- Part I: Business Analytics: An Overview -- Part II: Descriptive Analytics -- Part III: Predictive Analytics -- Part IV: Prescriptive Analytics -- Part V: Big Data and Future Directions for Business Analytics -- 1.11 Resources, Links, and the Teradata University Network Connection -- Resources and Links --Vendors, Products, and Demos -- Periodicals -- The Teradata University Network Connection -- The Book's Web Site -- Chapter Highlights -- Key Terms -- Questions for Discussion -- Exercises --End-of-Chapter Application Case Nationwide Insurance Used BI to Enhance Customer Service -- References -- Chapter 2 Foundations and Technologies for Decision Making -- 2.1 Opening Vignette: Decision Modeling at HP Using Spreadsheets -- 2.2 Decision Making: Introduction and Definitions -- Characteristics of Decision Making -- A Working Definition of Decision Making -- Decision-Making Disciplines -- Decision Style and Decision Makers -- 2.3 Phases of the Decision-Making Process -- 2.4 Decision Making: The Intelligence Phase --Problem (or Opportunity) Identification -- Application Case 2.1 Making Elevators Go Faster! -- Problem Classification -- Problem Decomposition -- Problem Ownership -- 2.5 Decision Making: The Design Phase -- Models -- Mathematical (Quantitative) Models -- The Benefits of Models -- Selection of a Principle of Choice -- Normative Models -- Suboptimization -- Descriptive Models -- Good Enough, or Satisficing -- Developing (Generating) Alternatives -- Measuring

The Architecture of BI -- Styles of BI -- The Origins and Drivers of BI --

Support for the Intelligence Phase -- Support for the Design Phase --Support for the Choice Phase -- Support for the Implementation Phase -- 2.9 Decision Support Systems: Capabilities -- A DSS Application --2.10 DSS Classifications -- The AIS SIGDSS Classification for DSS --Other DSS Categories -- Custom-Made Systems Versus Ready-Made Systems -- 2.11 Components of Decision Support Systems -- The Data Management Subsystem -- The Model Management Subsystem --Application Case 2.2 Station Casinos Wins by Building Customer Relationships Using Its Data -- Application Case 2.3 SNAP DSS Helps OneNet MakeTelecommunications Rate Decisions -- The User Interface Subsystem -- The Knowledge-Based Management Subsystem --Application Case 2.4 From a Game Winner to a Doctor! -- Chapter Highlights -- Key Terms -- Questions for Discussion -- Exercises --End-of-Chapter Application Case Logistics Optimization in a Major Shipping Company (CSAV) -- References -- Part II Descriptive Analytics -- Chapter 3 Data Warehousing -- 3.1 Opening Vignette: Isle of Capri Casinos Is Winning with Enterprise Data Warehouse -- 3.2 Data

Outcomes -- Risk -- Scenarios -- Possible Scenarios -- Errors in Decision Making -- 2.6 Decision Making: The Choice Phase -- 2.7 Decision Making: The Implementation Phase -- 2.8 How Decisions Are

Supported.

Warehousing Definitions and Concepts -- What Is a Data Warehouse? -- A Historical Perspective to Data Warehousing -- Characteristics of Data Warehousing -- Data Marts -- Operational Data Stores --Enterprise Data Warehouses (EDW) -- Metadata -- Application Case 3.1 A Better Data Plan: Well-Established TELCOs Leverage Data Warehousing and Analytics to Stay on Top in a Competitive Industry --3.3 Data Warehousing Process Overview -- Application Case 3.2 Data Warehousing Helps MultiCare Save More Lives -- 3.4 Data Warehousing Architectures -- Alternative Data Warehousing Architectures -- Which Architecture Is the Best? -- 3.5 Data Integration and the Extraction, Transformation, and Load (ETL) Processes -- Data Integration. Application Case 3.3 BP Lubricants Achieves BIGS Success -- Extraction, Transformation, and Load -- 3.6 Data Warehouse Development --Application Case 3.4 Things Go Better with Coke's Data Warehouse --Data Warehouse Development Approaches -- Application Case 3.5 Starwood Hotels & Resorts Manages Hotel Profitability with Data Warehousing -- Additional Data Warehouse Development Considerations -- Representation of Data in Data Warehouse --Analysis of Data in the Data Warehouse -- OLAP Versus OLTP -- OLAP Operations -- 3.7 Data Warehousing Implementation Issues --Application Case 3.6 EDW Helps Connect State Agencies in Michigan --Massive Data Warehouses and Scalability -- 3.8 Real-Time Data Warehousing -- Application Case 3.7 Egg Plc Fries the Competition in Near Real Time -- 3.9 Data Warehouse Administration, Security Issues, and Future Trends -- The Future of Data Warehousing -- 3.10 Resources, Links, and the Teradata University Network Connection --Resources and Links -- Cases -- Vendors, Products, and Demos --Periodicals -- Additional References -- The Teradata University Network (TUN) Connection -- Chapter Highlights -- Key Terms --Questions for Discussion -- Exercises -- End-of-Chapter Application Case Continental Airlines Flies High with Its Real-Time Data Warehouse -- References -- Chapter 4 Business Reporting, Visual Analytics, and Business Performance Management -- 4.1 Opening Vignette:Self-Service Reporting Environment Saves Millions for Corporate Customers -- 4.2 Business Reporting Definitions and Concepts -- What Is a Business Report? -- Application Case 4.1 Delta Lloyd Group Ensures Accuracy and Efficiency in Financial Reporting -- Components of the Business Reporting System -- Application Case 4.2 Flood of Paper Ends at FEMA -- 4.3 Data and Information Visualization. Application Case 4.3 Tableau Saves Blastrac Thousands of Dollars with Simplified Information Sharing -- A Brief History of Data Visualization -- Application Case 4.4 TIBCO Spotfire Provides Dana-Farber Cancer Institute with Unprecedented Insight into Cancer Vaccine Clinical Trials -- 4.4 Different Types of Charts and Graphs -- Basic Charts and Graphs -- Specialized Charts and Graphs -- 4.5 The Emergence of Data Visualization and Visual Analytics -- Visual Analytics -- High-Powered Visual Analytics Environments -- 4.6 Performance Dashboards --Application Case 4.5 Dallas Cowboys Score Big with Tableau and Teknion -- Dashboard Design -- Application Case 4.6 Saudi Telecom Company Excels with Information Visualization -- What to Look For in a Dashboard -- Best Practices in Dashboard Design -- Benchmark Key Performance Indicators with Industry Standards -- Wrap the Dashboard Metrics with Contextual Metadata -- Validate the Dashboard Design by a Usability Specialist -- Prioritize and Rank Alerts/Exceptions Streamed to the Dashboard -- Enrich Dashboard with Business Users' Comments -- Present Information in Three Different Levels -- Pick the Right Visual Construct Using Dashboard Design Principles -- Provide for Guided Analytics -- 4.7 Business Performance Management -- Closed-Loop

BPM Cycle -- Application Case 4.7 IBM Cognos Express Helps Mace for Faster -- 4.8 Performance Measurement -- Key Performance Indicator (KPI) -- Performance Measurement System -- 4.9 Balanced Scorecards -- The Four Perspectives -- The Meaning of Balance in BSC -- Dashboards Versus Scorecards -- 4.10 Six Sigma as a Performance Measurement System -- The DMAIC Performance Model -- Balanced Scorecard Versus Six Sigma -- Effective Performance Measurement -- Application Case 4.8 Expedia.com's Customer Satisfaction Scorecard -- Chapter Highlights -- Key Terms -- Questions for Discussion.

Sommario/riassunto

Decision Support and Business Intelligence Systems provides the only comprehensive, up-to-date guide to today's revolutionary management support system technologies, and showcases how they can be used for better decision-making. The 10th edition focuses on Business Intelligence (BI) and analytics for enterprise decision support in a more streamlined book.