

1. Record Nr.	UNINA9910154948603321
Autore	Levine David M. <1946->
Titolo	Business statistics : a first course / / David M. Levine, Kathryn A. Szabat, David F. Stephan
Pubbl/distr/stampa	Boston : , : Pearson, , [2016] ©2016
ISBN	1-292-09602-0
Edizione	[Seventh, Global edition.]
Descrizione fisica	1 online resource (604 pages) : illustrations (some color), tables
Collana	Always learning
Disciplina	519.5
Soggetti	Commercial statistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover -- Dedication -- About the Authors -- Brief Contents -- Contents -- Preface -- Getting Started: Important Things to Learn First -- Using Statistics: "You Cannot Escape from Data" -- GS.1 Statistics: A Way of Thinking -- GS.2 Data: What is it? -- Statistics -- GS.3 The Changing Face of Statistics -- Business Analytics -- "Big Data" -- Integral Role of Software in Statistics -- GS.4 Statistics: An Important Part of Your Business Education -- Making Best Use of This Book -- Making Best Use of the Software Guides -- References -- Key Terms -- Excel Guide -- EG.1 Getting Started with Microsoft Excel -- EG.2 Entering Data -- Minitab Guide -- MG.1 Getting Started with Minitab -- MG.2 Entering Data -- Chapter 1: Defining and Collecting Data -- Using Statistics: Beginning of the End ... Or the End of the Beginning? -- 1.1 Defining Variables -- Classifying Variables by Type -- 1.2 Collecting Data -- Data Sources -- Populations and Samples -- Structured Versus Unstructured Data -- Electronic Formats and Encodings -- Data Cleaning -- Recoding Variables -- 1.3 Types of Sampling Methods -- Simple Random Sample -- Systematic Sample -- Stratified Sample -- Cluster Sample -- 1.4 Types of Survey Errors -- Coverage Error -- Nonresponse Error -- Sampling Error -- Measurement Error -- Ethical Issues About Surveys -- Think About This: New Media Surveys/Old Sampling Problems -- Using Statistics: Beginning of the End... Revisited -- Summary -- References -- Key Terms -- Checking Your Understanding -- Chapter Review Problems --

Cases for Chapter1 -- Managing Ashland MultiComm Services -- CardioGood Fitness -- Clear Mountain State Student Surveys -- Learning with the Digital Cases -- Chapter 1 Excel Guide -- EG1.1 Defining Variables -- EG1.2 Collecting Data -- EG1.3 Types of Sampling Methods -- Chapter 1 Minitab Guide -- MG1.1 Defining Variables -- MG1.2 Collecting Data. MG1.3 Types of Sampling Methods -- Chapter 2: Organizing and Visualizing Variables -- Using Statistics: The Choice is Yours -- 2.1 Organizing Categorical Variables -- The Summary Table -- The Contingency Table -- 2.2 Organizing Numerical Variables -- The Ordered Array -- The Frequency Distribution -- Classes and Excel Bins -- The Relative Frequency Distribution and the Percentage Distribution -- The Cumulative Distribution -- Stacked and Unstacked Data -- 2.3 Visualizing Categorical Variables -- The Bar Chart -- The Pie Chart -- The Pareto Chart -- The Side-by-Side Bar Chart -- 2.4 Visualizing Numerical Variables -- The Stem-and-Leaf Display -- The Histogram -- The Percentage Polygon -- The Cumulative Percentage Polygon (Ogive) -- 2.5 Visualizing Two Numerical Variables -- The Scatter Plot -- The Time-Series Plot -- 2.6 Organizing and Visualizing a Set of Variables -- Multidimensional Contingency Tables -- Data Discovery -- 2.7 The Challenge in Organizing and Visualizing Variables -- Obscuring Data -- Creating False Impressions -- Chartjunk -- Best Practices for Constructing Visualizations -- Using Statistics: The Choice is Yours, Revisited -- Summary -- References -- Key Equations -- Key Terms -- Checking Your Understanding -- Chapter Review Problems -- Cases for Chapter 2 -- Managing Ashland MultiComm Services -- Digital Case -- CardioGood Fitness -- The Choice is Yours Follow-Up -- Clear Mountain State Student Surveys -- Chapter 2 Excel Guide -- EG2.1 Organizing Categorical Variables -- EG2.2 Organizing Numerical Variables -- EG2.3 Visualizing Categorical Variables -- EG2.4 Visualizing Numerical Variables -- EG2.5 Visualizing Two Numerical Variables -- EG2.6 Organizing and Visualizing a Set of Variables -- Chapter 2 Minitab Guide -- MG2.1 Organizing Categorical Variables -- MG2.2 Organizing Numerical Variables. MG2.3 Visualizing Categorical Variables -- MG2.4 Visualizing Numerical Variables -- MG2.5 Visualizing Two Numerical Variables -- MG2.6 Organizing and Visualizing a Set of Variables -- Chapter 3: Numerical Descriptive Measures -- Using Statistics: More Descriptive Choices -- 3.1 Central Tendency -- The Mean -- The Median -- The Mode -- 3.2 Variation and Shape -- The Range -- The Variance and the Standard Deviation -- The Coefficient of Variation -- Z Scores -- Shape: Skewness -- Shape: Kurtosis -- 3.3 Exploring Numerical Data -- Quartiles -- The Interquartile Range -- The Five-Number Summary -- The Boxplot -- 3.4 Numerical Descriptive Measures for a Population -- The Population Mean -- The Population Variance and Standard Deviation -- The Empirical Rule -- The Chebyshev Rule -- 3.5 The Covariance and the Coefficient of Correlation -- The Covariance -- The Coefficient of Correlation -- 3.6 Descriptive Statistics: Pitfalls and Ethical Issues -- Using Statistics: More Descriptive Choices, Revisited -- Summary -- References -- Key Equations -- Key Terms -- Checking Your Understanding -- Chapter Review Problems -- Cases for Chapter 3 -- Managing Ashland MultiComm Services -- Digital Case -- CardioGood Fitness -- More Descriptive Choices Follow-up -- Clear Mountain State Student Surveys -- Chapter 3 Excel Guide -- EG3.1 Central Tendency -- EG3.2 Variation and Shape -- EG3.3 Exploring Numerical Data -- EG3.4 Numerical Descriptive Measures for a Population -- EG3.5 The Covariance and the Coefficient of Correlation -- Chapter 3 Minitab Guide -- MG3.1 Central Tendency -- MG3.2

Variation and Shape -- MG3.3 Exploring Numerical Data -- MG3.4 Numerical Descriptive Measures for a Population -- MG3.5 The Covariance and the Coefficient of Correlation -- Chapter 4: Basic Probability -- Using Statistics: Possibilities at M&R Electronics World. 4.1 Basic Probability Concepts -- Events and Sample Spaces -- Contingency Tables and Venn Diagrams -- Simple Probability -- Joint Probability -- Marginal Probability -- General Addition Rule -- 4.2 Conditional Probability -- Computing Conditional Probabilities -- Decision Trees -- Independence -- Multiplication Rules -- Marginal Probability Using the General Multiplication Rule -- 4.3 Bayes' Theorem -- Think About This Divine Providence and Spam -- 4.4 Counting Rules -- 4.5 Ethical Issues and Probability -- Using Statistics: Possibilities at M&R Electronics World, Revisited -- Summary -- References -- Key Equations -- Key Terms -- Checking Your Understanding -- Chapter Review Problems -- Cases for Chapter 4 -- Digital Case -- CardioGood Fitness -- Clear Mountain State Student Surveys -- Chapter 4 Excel Guide -- EG4.1 Basic Probability Concepts -- EG4.2 Conditional Probability -- EG4.3 Bayes' Theorem -- EG4.4 Counting Rules -- Chapter 4 Minitab Guide -- MG4.1 Basic Probability Concepts -- MG4.2 Conditional Probability -- MG4.3 Bayes' Theorem -- MG4.4 Counting Rules -- Chapter 5: Discrete Probability Distributions -- Using Statistics: Events of Interest at Ricknel Home Centers -- 5.1 The Probability Distribution for a Discrete Variable -- Expected Value of a Discrete Variable -- Variance and Standard Deviation of a Discrete Variable -- 5.2 Binomial Distribution -- 5.3 Poisson Distribution -- Using Statistics: Events of Interest at Ricknel Home Centers, Revisited -- Summary -- References -- Key Equations -- Key Terms -- Checking Your Understanding -- Chapter Review Problems -- Cases for Chapter 5 -- Managing Ashland MultiComm Services -- Digital Case -- Chapter 5 Excel Guide -- EG5.1 The Probability Distribution for a Discrete Variable -- EG5.2 Binomial Distribution -- EG5.3 Poisson Distribution -- Chapter 5 Minitab Guide. MG5.1 The Probability Distribution for a Discrete Variable -- MG5.2 Binomial Distribution -- MG5.3 Poisson Distribution -- Chapter 6: The Normal Distribution -- Using Statistics: Normal Downloading at MyTVLab -- 6.1 Continuous Probability Distributions -- 6.2 The Normal Distribution -- Computing Normal Probabilities -- Finding X Values -- Visual Explorations: Exploring the Normal Distribution -- Think About This What is Normal? -- 6.3 Evaluating Normality -- Comparing Data Characteristics to Theoretical Properties -- Constructing the Normal Probability Plot -- Using Statistics: Normal Downloading at MyTVLab, Revisited -- Summary -- References -- Key Equations -- Key Terms -- Checking Your Understanding -- Chapter Review Problems -- Cases for Chapter 6 -- Managing Ashland MultiComm Services -- Digital Case -- CardioGood Fitness -- More Descriptive Choices Follow-up -- Clear Mountain State Student Surveys -- Chapter 6 Excel Guide -- EG6.1 Continuous Probability Distributions -- EG6.2 The Normal Distribution -- EG6.3 Evaluating Normality -- Chapter 6 Minitab Guide -- MG6.1 Continuous Probability Distributions -- MG6.2 The Normal Distribution -- MG6.3 Evaluating Normality -- Chapter 7: Sampling Distributions -- Using Statistics: Sampling Oxford Cereals -- 7.1 Sampling Distributions -- 7.2 Sampling Distribution of the Mean -- The Unbiased Property of the Sample Mean -- Standard Error of the Mean -- Sampling from Normally Distributed Populations -- Sampling from Non-normally Distributed Populations-The Central Limit Theorem -- Visual Explorations: Exploring Sampling Distributions -- 7.3 Sampling Distribution of the Proportion -- Using Statistics: Sampling Oxford Cereals, Revisited -- Summary -- References -- Key

Equations -- Key Terms -- Checking Your Understanding -- Chapter Review Problems -- Cases for Chapter 7 -- Managing Ashland MultiComm Services.  
Digital Case.

---

Sommario/riassunto

Statistics is essential for all business majors, and this text helps students see the role statistics will play in their own careers by providing examples drawn from all functional areas of business. Guided by principles set by major statistical and business science associations (ASA and DSI), plus the authors' diverse experiences, the Seventh Edition of Levine/Szabat/Stephan's Business Statistics: A First Course continues to innovate and improve the way this course is taught to all students. This brief version, created to fit the needs of a one-semester course, is part of the established Berenson/Levine series. MyStatLab not included. Students, if MyStatLab is a recommended/mandatory component of the course, please ask your instructor for the correct ISBN and course ID. MyStatLab should only be purchased when required by an instructor. Instructors, contact your Pearson representative for more information. MyStatLab is an online homework, tutorial, and assessment product designed to personalize learning and improve results. With a wide range of interactive, engaging, and assignable activities, students are encouraged to actively learn and retain tough course concepts..

---