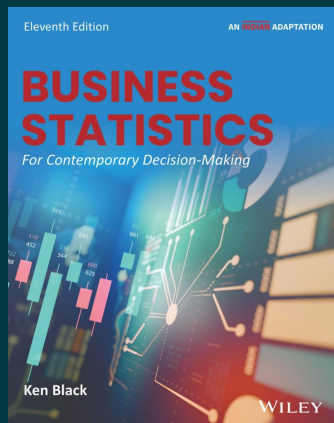




Business Statistics: For Contemporary Decision Making, 11ed (An Indian Adaptation)

By [Ken Black](#)

Paperback

9789370602571

[NOT PROVIDED]
publication_date

₹1,189.00

Pages : 836 pages

Description

Business Statistics uses current real-world data to equip students with the business analytics techniques and quantitative decision-making skills required to make more thoughtful, information-based decisions in today's workplace. Helping the student understand business analytics and the role that business statistics plays in it, the book has infused the language of business analytics along with its definitions, approaches, and explanations throughout the text.

Continuing the tradition of presenting and explaining business statistics using clear, complete, and student-friendly pedagogy, this Indian edition includes new chapter cases reinforcing the vibrancy and relevance of statistics. In addition, topical changes have been made in select chapters and problems have been revised in all the chapters.

About the Author

Ken Black

Ken Black, is currently professor of quantitative management in the College of Business at the University of Houston-Clear Lake.

Table of Contents

1 Introduction to Statistics and Business Analytics

Decision Dilemma: Statistics Describe the State of Business in India's Countryside

1.1 Basic Statistical Concepts

1.2 Data Measurement

1.3 Introduction to Business Analytics

Thinking Critically About Statistics in Business Today

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: DiGiorno Pizza: Introducing a Frozen Pizza to Compete with Carry-Out

Big Data Case

Endnotes

2 Visualizing Data with Charts and Graphs

Decision Dilemma: Container Shipping Companies

2.1 Frequency Distributions

2.2 Measures of Variability

2.3 Qualitative Data Graphs

Thinking Critically About Statistics in Business Today

2.4 Charts and Graphs for Two Variables

2.5 Visualizing Time-Series Data

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Southwest Airlines

Big Data Case

Endnotes

3 Descriptive Statistics

Decision Dilemma: Laundry Statistics

3.1 Measures of Central Tendency

3.2 Measures of Variability

Thinking Critically About Statistics in Business Today

Thinking Critically About Statistics in Business Today

3.3 Measures of Shape

3.4 Business Analytics Using Descriptive Statistics

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Economic Dynamism and Rubber Output of Malaysia: The Largest Gloves-Producing Country

Big Data Case

Endnotes

4 Probability

Decision Dilemma: Sexual Equity in the Workplace

4.1 Introduction to Probability

4.2 Structure of Probability

4.3 Marginal, Union, Joint, and Conditional Probabilities

Thinking Critically About Statistics in Business Today

4.4 Addition Laws

4.5 Multiplication Laws

4.6 Conditional Probability

Thinking Critically About Statistics in Business Today

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Electric Vehicle (EV) Cars in Germany: Prospects and Challenges

Big Data Case

5 Discrete Random Variables and Their Probability Distributions

Decision Dilemma: Life with a Cell Phone

5.1 Discrete Random Variables

5.2 Describing a Discrete Distribution

5.3 Binomial Distribution

Thinking Critically About Statistics in Business Today

5.4 Poisson Distribution

Thinking Critically About Statistics in Business Today

5.5 Geometric Distribution

5.6 Hypergeometric Distribution

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Nestlé in Argentina

Big Data Case

Endnote

6 Continuous Random Variables and Normal Distributions

Decision Dilemma: CSX Corporation

6.1 Continuous Random Variables

6.2 The Uniform Distribution

6.3 Normal Distribution

Thinking Critically About Statistics in Business Today

6.4 Using the Normal Curve to Approximate Binomial Distribution Problems

Thinking Critically About Statistics in Business Today

6.5 Exponential Distribution

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: USAA

Big Data Case

Endnotes

7 Sampling and Sampling Distributions

Decision Dilemma: Toro

7.1 Sampling

Thinking Critically About Statistics in Business Today

Thinking Critically About Statistics in Business Today

7.2 Sampling Distribution of the Sample Mean

7.3 Sampling Distribution of a Sample Proportion

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: 3M

Big Data Case

Endnotes

8 Statistical Inference: Estimation for Single Populations

Decision Dilemma: Batteries and Bulbs: How Long Do They Last?

8.1 Estimating the Population Mean Using the z Statistic (σ Known)

8.2 Estimating the Population Mean Using the t Statistic (σ Unknown)

Thinking Critically About Statistics in Business Today

8.3 Estimating the Population Proportion

Thinking Critically About Statistics in Business Today

8.4 Estimating the Population Variance

8.5 Estimating Sample Size

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: The Container Store

Big Data Case

Endnotes

9 Statistical Inference: Hypothesis Testing for Single Populations

Decision Dilemma: Valero Energy

9.1 Introduction to Hypothesis Testing

Thinking Critically About Statistics in Business Today

9.2 Testing Hypotheses About a Population Mean Using the z Statistic (σ Known)

9.3 Testing Hypotheses About a Population Mean Using the t Statistic (σ Unknown)

9.4 Testing Hypotheses About a Proportion

Thinking Critically About Statistics in Business Today

9.5 Testing Hypotheses About a Variance

9.6 Solving for Type II Errors

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Taiwan's Dominance of the Semiconductor Industry

Big Data Case

Endnotes

10 Statistical Inferences About Two Populations

Decision Dilemma: L.L. Bean

10.1 Hypothesis Testing and Confidence Intervals About the Difference in Two Means Using the z Statistic (Population Variances Known)

10.2 Hypothesis Testing and Confidence Intervals About the Difference in Two Means: Independent Samples and Population Variances Unknown

Thinking Critically About Statistics in Business Today

10.3 Statistical Inferences for Two Related

10.4 Statistical Inferences About Two Population Proportions, $p_1 - p_2$

10.5 Testing Hypotheses About Two Population Variances

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: FTSE 100 Versus Gold Price for Portfolio Investment

Big Data Case

Endnotes

11 Analysis of Variance and Design of Experiments

Decision Dilemma: Job and Career Satisfaction of Foreign Self-Initiated Expatriates

11.1 Introduction to Design of Experiments

11.2 The Completely Randomized Design (One-Way ANOVA)

11.3 Multiple Comparison Tests

Thinking Critically About Statistics in Business Today

11.4 The Randomized Block Design

11.5 A Factorial Design (Two-Way ANOVA)

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: The Clarkson Company: Developer of High-Performance Knife-Gate Valves

Big Data Case

Endnotes

12 Simple Regression Analysis and Correlation

Decision Dilemma: Predicting International Hourly Wages by the Price of a Big Mac

12.1 Correlation

12.2 Introduction to Simple Regression Analysis

12.3 Determining the Equation of the Regression Line

12.4 Residual Analysis

12.5 Standard Error of the Estimate

12.6 Coefficient of Determination

12.7 Hypothesis Tests for the Slope of the Regression Model and Testing the Overall Model

Thinking Critically About Statistics in Business Today

12.8 Estimation

12.9 Using Regression to Develop a Forecasting Trend Line

12.10 Interpreting the Output

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Caterpillar, Inc.

Big Data Case

Endnote

13 Multiple Regression Analysis

Decision Dilemma: Are You Going to Hate Your New Job?

13.1 The Multiple Regression Model

13.2 Significance Tests of the Regression Model and Its Coefficients

13.3 Residuals, Standard Error of the Estimate, and R^2

Thinking Critically About Statistics in Business Today

13.4 Interpreting Multiple Regression Computer Output

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Starbucks Introduces Debit Card

Big Data Case

14 Building Multiple Regression Models

Decision Dilemma: Predicting CEO Salaries

14.1 Nonlinear Models: Mathematical Transformation

14.2 Indicator (Dummy) Variables

Thinking Critically About Statistics in Business Today

14.3 Model-Building: Search Procedures

14.4 Multicollinearity

14.5 Logistic Regression

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems/ Exploring the Databases with Business Analytics

Chapter Case: Virginia Semiconductor

Big Data Case

Endnotes

15 Time-Series Forecasting and Index Numbers

Decision Dilemma: Forecasting Air Pollution

15.1 Introduction to Forecasting

15.2 Smoothing Techniques

Thinking Critically About Statistics in Business Today

15.3 Trend Analysis

15.4 Seasonal Effects

15.5 Autocorrelation and Autoregression

15.6 Index Numbers

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: DeBourgh Manufacturing Company

Big Data Case

16 Analysis of Categorical Data

Decision Dilemma: Selecting Suppliers in the Electronics Industry

16.1 Chi-Square Goodness-of-Fit Test

16.2 Contingency Analysis: Chi-Square Test of Independence

Thinking Critically About Statistics in Business Today

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Foot Locker in the Shoe Mix

Big Data Case

17 Nonparametric Statistics

Decision Dilemma: How Is the Doughnut Business?

17.1 Runs Test

17.2 Mann-Whitney U Test

17.3 Wilcoxon Matched-Pairs Signed Rank Test

17.4 Kruskal-Wallis Test

Thinking Critically About Statistics in Business Today

17.5 Friedman Test

17.6 Spearman's Rank Correlation

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Schwinn

Big Data Case

18 Statistical Quality Control

Decision Dilemma: Italy's Piaggio Makes a Comeback

18.1 Introduction to Quality Control

Thinking Critically About Statistics in Business Today

18.2 Process Analysis

18.3 Control Charts

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formulas / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Standard Motor Products

Big Data Case

Endnotes

19 Decision Analysis

Decision Dilemma: Decision-Making at the CEO Level

19.1 Revision of Probabilities: Bayes' Rule

19.2 The Decision Table and Decision-Making Under Certainty

19.3 Decision-Making Under Uncertainty

Thinking Critically About Statistics in Business Today

19.4 Decision-Making Under Risk

19.5 Revising Probabilities in Light of Sample Information

Decision Dilemma Solved

Ethical Considerations

Summary / Key Terms / Formula / Supplementary Problems / Exploring the Databases with Business Analytics

Chapter Case: Fletcher-Terry: On the Cutting Edge

Big Data Case

APPENDIX A Tables

APPENDIX B Answers to Selected Problems

GLOSSARY

INDEX

To purchase this product, please visit:

<https://wiley.indiafin.com/business-statistics-for-contemporary-decision-making-11ed-an-indian-adaptation.html>



Scan to buy

