# CONTENTS

Preface xiii  
About the Author xx  

## PART 1 INTRODUCTION 1

### CHAPTER 1  
THE ROLE OF BUSINESS RESEARCH 2  
Scope of Business Research 5  
Business Research Defined 6  
Basic Research and Applied Research 7  
Managerial Value of Business Research 8  
Identifying Problems or Opportunities 8  
Diagnosing and Assessing Problems or Opportunities 8  
Selecting and Implementing a Course of Action 9  
Evaluating the Course of Action 10  
When Is Business Research Needed? 12  
Time Constraints 12  
Availability of Data 12  
Nature of the Decision 12  
Benefits versus Costs 12  
Major Topics for Research in Business 14  
Cross-Functional Teams 14  
Business Research in the 21st Century 16  
Global Business Research 16  
Growth of the Internet 16  
Summary 17  

### CHAPTER 2  
INFORMATION SYSTEMS AND KNOWLEDGE MANAGEMENT 20  
Data, Information, and Knowledge Management 21  
Global Information Systems 22  
Decision Support Systems 22  
Database Systems 23  
Software 25  
Input Management 26  
Computerized Data Archives 26  
Networks and Electronic Data Interchange 29  
What Is the Internet? 29  
Navigating the World Wide Web 31  
Interactive Media and Environmental Scanning 33  
Information Technology 36  
Intranets 37  
Knowledge from Experts—Experience and Expertise  Databases 37  
Internet2 37  
Summary 38  

### CHAPTER 3  
THEORY BUILDING 40  
What Are the Goals of Theory? 41  
The Meaning of Theory 41  
Concepts 41  
Nature of Propositions 43  
The Scientific Method 43  
An Example of a Theory 44  
Verifying Theory 45  
How Are Theories Generated? 46  
Overview of the Scientific Method 47  
Practical Value of Theories 50  
Summary 50  

### CHAPTER 4  
THE RESEARCH PROCESS: AN OVERVIEW 52  
Decision Making 53  
Certainty 53  
Uncertainty 53  
Ambiguity 53  
Types of Business Research 54  
Exploratory Studies 54  
Descriptive Research 55  
Causal Research 56  
Influence of Uncertainty on Type of Research 58  
Stages in the Research Process 59  
Decision Alternatives in the Research Process 60  
Discovering and Defining the Problem 60  
Planning the Research Design 65  
Sampling 70  
Collecting Data 72  
Processing and Analyzing Data 72  
Drawing Conclusions and Preparing a Report 73  
Research Project Versus Research Program 73  
Summary 74  

### CHAPTER 5  
ETHICAL ISSUES IN BUSINESS RESEARCH 77  
Ethical Questions Are Philosophical Questions 78  
General Rights and Obligations of Concerned Parties 78
PART 2: BEGINNING STAGES OF THE RESEARCH PROCESS 81

CHAPTER 6
PROBLEM DEFINITION AND THE RESEARCH PROPOSAL 92
The Nature of the Business Problem 93
Importance of Proper Problem Definition 93
The Process of Problem Definition 94
Ascertain the Decision Maker’s Objectives 94
Understand the Background of the Problem 96
Isolate and Identify the Problem, Not the Symptoms 96
Determine the Unit of Analysis 96
Determine the Relevant Variables 97
State the Research Questions and Research Objectives 98
How Much Time Should Be Spent Defining the Problem? 102

The Research Proposal 102
Anticipating Outcomes 104

Summary 106

CHAPTER 7
EXPLORATORY RESEARCH AND QUALITATIVE ANALYSIS 109
Exploratory Research: What It Is and What It Is Not 110
Why Conduct Exploratory Research? 111
Diagnosing a Situation 111
Screening Alternatives 112
Discovering New Ideas 114

Categories of Exploratory Research 114
Experience Surveys 114
Secondary Data Analysis 115

PART 3: RESEARCH METHODS FOR COLLECTING PRIMARY DATA 173

CHAPTER 9
SURVEY RESEARCH: AN OVERVIEW 174
The Nature of Surveys 175
Survey Objectives: Type of Information Gathered 175
Advantages of Surveys 175

Errors in Survey Research 176
Random Sampling Error 176
Systematic Error 177

Respondent Error 177
Nonresponse Error 178
Response Bias 178

Administrative Error 184
Data-Processing Error 184
Sample Selection Error 184

Interviewer Error 185
Interviewer Cheating 185
Rule-of-Thumb Estimates for Systematic Error 185
What Can Be Done to Reduce Survey Error? 185
Classifying Survey Research Methods 186
Structured and Disguised Questions 186
Classifying Surveys on a Temporal Basis 186

Total Quality Management and Satisfaction Surveys 188
What Is Quality? 188
Internal and External Customers 189

Implement Total Quality Management 189
Every Organization Can Use Business Research for TQM 192

Summary 195
CHAPTER 10
SURVEY RESEARCH: BASIC METHODS OF COMMUNICATION WITH RESPONDENTS 197

Media Used to Communicate with Respondents 198
Human-Interactive Media and Electronic Interactive Media 198
Noninteractive Media 198

Personal Interviews 199
Advantages of Personal Interviews 199
Door-to-Door Interviews 202
Intercept Interviews in Malls and Other High-Traffic Areas 203
Disadvantages of Personal Interviews 203

Telephone Interviews 207
Central Location Interviewing 207
Computer-Assisted Telephone Interviewing 207
The Strengths and Weaknesses of Telephone Interviews 208
Computerized, Voice-Activated Telephone Interviews 211
Global Considerations 211

Self-Administered Questionnaires 212
Mail Questionnaires 212
Global Considerations 219
Self-Administered Questionnaires That Use Other Forms of Distribution 219

Selecting the Appropriate Survey Research Design 227
Pretests 229
Ethical Issues in Survey Research 229
Summary 230

CHAPTER 11
OBSERVATION METHODS 234

When Is Observation Scientific? 235
What Can Be Observed? 235
The Nature of Observation Studies 236
Observation of Human Behavior 237
Supplementary Evidence 237
Direct Observation 238
Errors Associated with Direct Observation 239
Response Latency 240
Scientifically Contrived Observation 240
Observing Social Settings 243

PART 4 MEASUREMENT CONCEPTS 281

CHAPTER 13
MEASUREMENT AND SCALING CONCEPTS 292

What Is to Be Measured? 293
Concepts 294
Operational Definitions 294
Rules of Measurement 295
Types of Scales 296

Nominal Scale 296
Ordinal Scale 297
Interval Scale 298
Ratio Scale 298
Mathematical and Statistical Analysis of Scales 298
Index Measures 299
Three Criteria for Good Measurement 300
Reliability 300
CHAPTER 14
ATTITUDE MEASUREMENT 307
Attitude Defined 308
Attitude as a Hypothetical Construct 308
Techniques for Measuring Attitudes 308
Physiological Measures of Attitudes 309
Attitude Rating Scales 310
Simple Attitude Scales 310
Category Scales 311
Summated Ratings Method: The Likert Scale 312
Semantic Differential 314
Numerical Scales 315
Constant-Sum Scale 315
Stapel Scale 317
Graphic Rating Scales 318
Thurstone Equal-Appearing Interval Scale 318
Scales Measuring Behavioral Intentions and Expectations 320
Behavioral Differential 321
Ranking 321
Paired Comparisons 322
Sorting 322
Other Methods of Attitude Measurement 323
Selecting a Measurement Scale: Some Practical Decisions 323
Is a Ranking, Sorting, Rating, or Choice Technique Best? 324
Should a Monadic or a Comparative Scale Be Used? 324
What Type of Category Label, If Any, Will Be Used for the Rating Scale? 324
How Many Scale Categories or Response Positions Are Needed? 324

CHAPTER 15
QUESTIONNAIRE DESIGN 329
A Survey Is Only As Good As the Questions It Asks 330
Questionnaire Design: An Overview of the Major Decisions 330
What Should Be Asked? 330
Questionnaire Relevancy 331
Questionnaire Accuracy 331
Phrasing Questions 331
Open-Ended Response versus Fixed-Alternative Questions 331
Phrasing Questions for Self-Administered, Telephone, and Personal Interview Surveys 335
The Art of Asking Questions 336
Avoid Complexity: Use Simple, Conversational Language 336
Avoid Leading and Loaded Questions 336
Avoid Ambiguity: Be as Specific as Possible 339
Avoid Double-Barreled Items 341
Avoid Making Assumptions 343
Avoid Burdensome Questions That May Tax the Respondent's Memory 343
What Is the Best Question Sequence? 344
What Is the Best Layout? 348
Layout of Traditional Questionnaires 348
Layout of Internet Questionnaires 351
How Much Pretesting and Revising Are Necessary? 359
Designing Questionnaires for Global Research 360
Summary 361

PART 5 SAMPLING AND FIELDWORK 367

CHAPTER 16
SAMPLE DESIGNS AND SAMPLING PROCEDURES 368
Sampling Terminology 369
Why Sample? 369
Pragmatic Reasons 369
Accurate and Reliable Results 369
Destruction of Test Units 371
Practical Sampling Concepts 372
Defining the Target Population 373
The Sampling Frame 373
Sampling Frames for International Business Research 375
Sampling Units 375
Random Sampling Error and Nonsampling Error 376
Less Than Perfectly Representative Samples 379
Probability versus Nonprobability Sampling 379
Nonprobability Sampling 380
Convenience Sampling 380
Quota Sampling 383
Snowball Sampling 384
Probability Sampling 384
Simple Random Sampling 384
Selecting a Simple Random Sample 385
CHAPTER 17
DETERMINATION OF SAMPLE SIZE: A REVIEW OF STATISTICAL THEORY 401

Reviewing Some Basic Terminology 402
- Descriptive and Inferential Statistics 402

Population Parameters and Sample Statistics 402
- Making Data Usable 403
  - Frequency Distributions 403
    - Proportions 404
      - Central Tendency 404
        - Measures of Dispersion 406
          - The Normal Distribution 411

Population Distribution, Sample Distribution, and Sampling Distribution 415
- Central-Limit Theorem 417
- Estimation of Parameters 419

CHAPTER 18
FIELDWORK 434

The Nature of Fieldwork 435
- Who Conducts the Fieldwork? 435

In-House Training for Inexperienced Interviewers 437
- Making Initial Contact and Securing the Interview 437
  - Asking the Questions 439
  - Probing 440
  - Recording the Responses 441
  - Terminating the Interview 442

Principles of Good Interviewing 442
- The Basics 442
- Required Practices 444

Fieldwork Management 445
- Briefing Session for Experienced Interviewers 445
  - Training to Avoid Procedural Errors in Sample Selection 446
  - Supervision of Fieldworkers 446

Summary 449

PART 6 DATA ANALYSIS AND PRESENTATION 451

CHAPTER 19
EDITING AND CODING: BEGINNING TO TRANSFORM RAW DATA INTO INFORMATION 452

An Overview of the Stages of Data Analysis 453
- Editing 453
  - Field Editing 454
  - In-House Editing 454
  - Facilitating the Coding Process 456
  - Pitfalls of Editing 457
  - Pretesting Edit 457
- Coding 457
  - The Data Matrix 458
  - Code Construction 458
  - Precoding Fixed-Alternative Questions 460
  - Coding Open-Ended Response Questions 461
  - Devising the Coding Scheme 463
  - Code Book 465
  - Production Coding 466
  - Editing and Coding Combined 467
  - Computerized Data Processing 467
  - Recoding 469
  - Error Checking 470

Summary 470
CHAPTER 25
COMMUNICATING RESEARCH RESULTS: REPORT, PRESENTATION, AND FOLLOW-UP 597

Insights from the Communications Model 598
The Report in Context 599
Report Format 600
Tailoring the Format to the Project 601
Parts of the Report 603
Effective Use of Graphic Aids 606
Tables 607

PART 7 VIDEO CASES

Video Case 1 Polaroid I-Zone 628
Video Case 2 WBRU 629
Video Case 3 Ben & Jerry’s 629
Video Case 4 Fossil—A Watch for Every Wrist 630
Video Case 5 IBM: Enterprise Resource Planning 631
Video Case 6 Fisher-Price Rescue Heroes 632
Video Case 7 Upjohn’s Rogaine 633

PART 8 CRITICAL THINKING CASES

Case 1 The Atlanta Braves 638
Case 2 Harvard Cooperative Society 639
Case 3 Tulsa’s Central Business District (A): Developing a Research Project 640
Case 4 Hamilton Power Tools (A) 642
Case 5 Middlemist Precision Tool Company 646
Case 6 EZPass 646
Case 7 Today’s Man 647
Case 8 Behavioral Science Research of Coral Gables, Florida 648
Case 9 Tulsa’s Central Business District (B) 649
Case 10 The Greeting Card Study 653
Case 11 The Evergreen Company 654
Case 12 Tulsa’s Central Business District (C) 655
Case 13 The Pretesting Company 656
Case 14 Professional Recruiters 658
Case 15 Hamilton Power Tools (B) 659
Case 16 The Cleveland Clinic Foundation in Jacobs Field 660

Case 17 Flyaway Airlines 663
Case 18 Wall Street Journal/Harris Interactive Business School Survey 665
Case 19 Omar’s Fast Freight 667
Case 20 Canterbury Travels 670
Case 21 United States Postal Service 673
Case 22 Schönbrunn Palace in Vienna 678
Case 23 The Business Forms Industry 680
Case 24 Zagorski Field Services 686
Case 25 The Multiplex Company 687
Case 26 Survey on Americans and Dietary Supplements 690
Case 27 Old School versus New School Sports Fans 695
Case 28 Fidelity Investments 696
Case 29 LastDance Health Care Systems 697
Case 30 Sunbelt Energy Corporation 702
Case 31 Employees Federal Credit Union 705
Case 32 Values and the Automobile Market 710