Contents

Preface xvii

Chapter 1 Introducing Marketing Research 2

The Relationship of Marketing Research to Marketing 4

The Importance of Philosophies and the Philosophy We Call "The Marketing Concept" 6

The "Right Marketing Strategy" 8

Defining Marketing Research? 9

What Is the Purpose of Marketing Research? 10

What Are the Uses of Marketing Research? 12

Identifying Market Opportunities and Problems 12

Generate, Refine, and Evaluate Potential Marketing Actions 13

Monitor Marketing Performance 13

Improve Marketing as a Process 13

Classifying Marketing Research Studies 13

The Marketing Information System (MIS) 15

Components of an MIS 15

Becoming Familiar with This Book 17

Summary 17 • Key Terms 18 • Review Questions/Applications 18

Case 1.1 Marketing Research and the Movie Industry: Starlight Films 19

Case 1.2 Your Integrated Case: Advanced Automobile Concepts 20

Chapter 2 Explaining the Marketing Research Process 22

The Marketing Research Process 24

The Process: 11 Steps 24

Step-by-Step Process: Some Words of Caution 25

Introducing "Where We Are" 25

Step 1: Establish the Need for Marketing Research 25

Company Policy Regarding the Use of Marketing Research 26

When Is Marketing Research Not Needed? 27

Step 2: Define the Problem 29

Step 3: Establish Research Objectives 30

Step 4: Determine Research Design 30

Step 5: Identify Information Types and Sources 31

Step 6: Determine Methods of Accessing Data 32

Step 7: Design Data-Collection Forms 34

Step 8: Determine Sample Plan and Size 34

Step 9: Collect Data 34

Step 10: Analyze Data 35

Step 11: Prepare and Present the Final Research Report 36

Some Final Comments on the Marketing Research Process 36

Summary 36 • Key Terms 37 • Review Questions/Applications 37

Case 2.1 Is there a Hybrid Automobile in Your Future? 38

Case 2.2 Your Integrated Case: Advanced Automobile Concepts 39
Consequences of the Alternatives 98
Identify the Manager’s Assumptions About the Consequences of the Alternatives 98
Assess the Adequacy of Information on Hand to Specify Research Objectives 99

Research Objectives 100
Defining Research Objectives 100
Completing the Process 104

Action Standards 104

Impediments to Problem Definition 105
Failure to Change Behavior for Problem-Definition Situations 105
Differences between Managers and Researchers 107

Formulate the Marketing Research Proposal 107
Problem Statement 107
Research Objectives 107
Detail the Proposed Research Method 108
Timetable and Proposed Budget 108

Summary 108 • Key Terms 109 • Review Questions/Applications 109
Case 4.1 The Civic Agency Initiatives Project 110
Case 4.2 Your Integrated Case: Advanced Automobile Concepts 112

Chapter 5 Understanding Research Design 114
Research Design 117
The Significance of Research Design 117
Three Types of Research Designs 117
Research Design: A Caution 118
Exploratory Research 118
Uses of Exploratory Research 119
Methods of Conducting Exploratory Research 120
Descriptive Research 123
Causal Research 129

Experiments 130
Experimental Design 131
How Valid Are Experiments? 133
Types of Experiments 135

Test Marketing 137
Types of Test Markets 137
Consumer Versus Industrial Test Markets 139
“Lead Country” Test Markets 140
Selecting Test Market Cities 140
Pros and Cons of Test Marketing 141

Summary 142 • Key Terms 142 • Review Questions/Applications 143
Case 5.1 Quality Research Associates 144
Case 5.2 Your Integrated Case: Advanced Automobile Concepts 145

Chapter 6 Using Secondary Data and Online Information Databases 146
Secondary Data 148
Primary Versus Secondary Data 148
Uses of Secondary Data 148
Classification of Secondary Data 150
Internal Secondary Data 150
CONTENTS

Internal Databases 150
External Secondary Data 152

**Advantages of Secondary Data 154**
- Secondary Data Are Obtained Quickly 154
- Secondary Data Are Inexpensive Relative to Primary Data 154
- Secondary Data Are Usually Available 155
- Secondary Data Enhance Primary Data 155
- Secondary Data May Achieve the Research Objective 155

**Disadvantages of Secondary Data 155**
- Incompatible Reporting Units 155
- Measurement Units Do Not Match 157
- Class Definitions Are Not Usable 157
- Data Are Outdated 157

**Evaluating Secondary Data 157**
- What Was the Purpose of the Study? 158
- Who Collected the Information? 158
- What Information Was Collected? 159
- How Was the Information Obtained? 160
- How Consistent Is the Information with Other Information? 160

**Locating Secondary Data Sources 161**
- Search Strategies Used for Searching Online Information Databases 164
- Boolean Logic 164
- Field Searching 164
- Proximity Operators 165
- Truncation 165
- Nesting 165
- Limiting 165

**Key Sources of Secondary Data for Marketers 166**
- The Census of the Population 166
- Census 2010 168
- The American Community Survey 168
- Other Government Publications 168
- North American Industry Classification System (NAICS) 168
- Survey of Buying Power 170
- Lifestyle Market Analyst 171

Summary 171  Key Terms 172  Review Questions/Applications 173
Case 6.1 Apple Supermarkets, Inc. 174
Case 6.2 Your Integrated Case: Advanced Automobile Concepts 175

**Chapter 7 Comprehending Standardized Information Sources 176**

What Is Standardized Information? 178

Advantages and Disadvantages of Standardized Information 179
- Syndicated Data 179
- Standardized Services 180

Applications of Standardized Information 180
- Measuring Consumer Attitudes and Opinion Polls 180
- Defining Market Segments 181
- Conducting Market Tracking 191
- Monitoring Media Usage and Promotion Effectiveness 193
Chapter 8  Utilizing Exploratory and Qualitative Research Techniques 206
Quantitative, Qualitative, and Pluralistic Research 209
Observation Techniques 211
Appropriate Conditions for the Use of Observation 214
Advantages of Observational Data 214
Limitations of Observational Data 215
Focus Groups 215
How Focus Groups Work 216
Online Focus Groups 218
Advantages and Disadvantages of Focus Groups 218
When to Use Focus Groups 219
Some Objectives of Focus Groups 220
Operational Consideration 220
Other Qualitative Research Techniques 223
Depth Interviews 223
Protocol Analysis 224
Projective Techniques 224
Ethnographic Research 229
Physiological Measurement 231
Other Qualitative Research Techniques 232
Summary 233  Key Terms 234  Review Questions/Applications 234
Case 8.1 The College Experience 235
Case 8.2 Your Integrated Case: Advanced Automobile Concepts 237

Chapter 9  Evaluating Survey Data-Collection Methods 238
Advantages of Surveys 241
Surveys Provide for Standardization 241
Surveys are Easy to Administer 241
Surveys Get "Beneath the Surface" 242
Surveys are Easy To Analyze 242
Surveys Reveal Subgroup Differences 242
Understanding New Survey Data-Collection Methods 243
Four Alternative Modes of Data Collection 243
Person-Administered Surveys (With No or Minimal Computer Assistance) 245
Computer-Administered Surveys 247
Self-Administered Surveys (Without Computer Assistance) 248
Mixed-Mode Surveys 249
Comparisons of the Four Data-Collection Modes 251
Descriptions of Data-Collection Methods 252
Person-Administered Interviews 253
Computer-Administered Interviews 258
Self-Administered Surveys 261
Chapter 10 Understanding Measurement in Marketing Research 272

Basic Question–Response Formats 274
- Open-Ended Response Format Questions 274
- Categorical Response Format Questions 275
- Scaled-Response Questions 275

Considerations in Choosing a Question–Response Format 276
- Nature of the Property Being Measured 276
- Previous Research Studies 276
- Ability of the Respondent 276
- Scale Level Desired 276

Basic Concepts in Measurement 277

Scale Characteristics 278
- Description 278
- Order 278
- Distance 279
- Origin 279

Levels of Measurement Scales 279
- Nominal Scales 279
- Ordinal Scales 280
- Interval Scales 280
- Ratio Scales 282

Why the Measurement Level of a Scale Is Important 283

Workhorse Scales Used in Marketing Research 285
- The Intensity Continuum Underlying Workhorse Scales 285
- The Likert Scale 286
- The Lifestyle Inventory 287
- The Semantic Differential Scale 288
- Other Synthetic Scaled-Response Question Formats 290
- Issues in the Use of Synthetic Scaled-Response Formats 290

What Scale to Use When 292

Reliability and Validity of Measurements 293

Summary 296  Key Terms 296  Review Questions/Applications 297

Case 10.1 Metro Toyota 298
Case 10.2 Extreme Exposure Rock Climbing Center Faces The Krag 299
Case 10.3 Your Integrated Case: Advanced Automobile Concepts 300
Chapter 11  Developing Questions and Designing the Questionnaire  302
The Functions of a Questionnaire  304
The Questionnaire Design Process  304
Developing Questions  306
  Four “Do’s” of Question Wording  308
  Four “Do Not’s” of Question Wording  309
Questionnaire Organization  315
  The Introduction  316
  Question Flow  318
Computer-Assisted Questionnaire Design  322
  Questionnaire Creation  322
  Data Collection and Creation of Data Files  322
  Data Analysis and Graphs  323
  How to Use Qualtrics  323
Coding the Questionnaire  326
Performing the Pretest of the Questionnaire  328
Summary  330  □ Key Terms  330  □ Review Questions/Applications  331
Case 11.1 Park Place Psychiatric Hospital  332
Case 11.2 The SteakStop Restaurant: What is Wrong with These Questions?  333
Case 11.3 Your Integrated Case: Advanced Automobile Concepts  334

Chapter 12  Determining How to Select the Sample  336
Basic Concepts in Samples and Sampling  338
  Population  338
  Census  339
  Sample and Sample Unit  340
  Sample Frame and Sample Frame Error  340
  Sampling Error  341
Reasons for Taking a Sample  342
Probability Versus Nonprobability Sampling Methods  342
  Probability Sampling Methods  343
  Nonprobability Sampling Methods  354
Online Sampling Techniques  362
  Random Online Intercept Sampling  362
  Invitation Online Sampling  362
  Online Panel Sampling  362
  Other Online Sampling Approaches  363
Developing A Sample Plan  363
  Step 1: Define the Population  363
  Step 2: Obtain a Listing of the Population (Sample Frame)  364
  Step 3: Design the Sample Plan (Size and Method)  364
  Step 4: Draw the Sample  365
  Step 5: Validate the Sample  365
  Step 6: Resample If Necessary  366
Summary  366  □ Key Terms  366  □ Review Questions/Applications  366
Case 12.1 Peaceful Valley Subdivision: Trouble in Suburbia  368
Chapter 13  Determining the Size of a Sample  372

Sample Size Axioms  375
The Confidence Interval Method of Determining Sample Size  376
Sample Size and Accuracy  376
p and q: The Concept of Variability  378
The Concept of a Confidence Interval  379
How Population Size (N) Affects Sample Size  382

The Sample Size Formula  383
Determining Sample Size via the Confidence Interval Formula  383

Practical Considerations in Sample Size Determination  386
How to Estimate Variability in the Population  386
How to Determine the Amount of Acceptable Sample Error  387
How to Decide on the Level of Confidence  387
How to Balance Sample Size with the Cost of Data Collection  388

Other Methods of Sample Size Determination  389
Arbitrary "Percent Rule of Thumb" Sample Size  390
Conventional Sample Size Specification  390
Statistical Analysis Requirements Sample Size Specification  390
Cost Basis of Sample Size Specification  391

Two Special Sample Size Determination Situations  392
Sampling from Small Populations  392
Sample Size Using Nonprobability Sampling  394

Summary  395  ■ Key Terms  395  ■ Review Questions/Applications  395
Case 13.1 Peaceful Lake Subdivision Revisited: Sample Size  398
Case 13.2 Target: Deciding on the Number of Telephone Numbers  398
Case 13.3 Your Integrated Case: Advanced Automobile Concepts  399

Chapter 14  Dealing with Field Work and Data Quality Issues  400

Data Collection and Nonsampling Error  403
Possible Errors in Field Data Collection  403
Intentional Fieldworker Errors  403
Unintentional Fieldworker Errors  405
Intentional Respondent Errors  407
Unintentional Respondent Errors  409

Field Data-Collection Quality Controls  410
Control of Intentional Fieldworker Error  410
Control of Unintentional Fieldworker Error  412
Control of Intentional Respondent Error  412
Control of Unintentional Respondent Error  413
Final Comment on the Control of Data-Collection Errors with Traditional Surveys  414

Nonresponse Error  414
Refusals to Participate in the Survey  415
Break-Offs During the Interview  416
Refusals to Answer Specific Questions (Item Omission)  416
What is a Completed Interview?  417
Measuring Nonresponse Error in Surveys  418
Reducing Nonresponse Error  421
Adjusting Results to Reduce the Effects of Nonresponse Error  421
Hypothesis Tests 480
  Test of the Hypothesized Population Parameter Value 483
  Directional Hypotheses 487
  How to Interpret Hypothesis Testing 487

Advanced Automobile Concepts: How to Use SPSS to Test a Hypothesis for a Percentage 488

Advanced Automobile Concepts: How to Use SPSS to Test a Hypothesis for a Mean 488

Reporting Hypothesis Tests to Clients 490
Summary 496  Key Terms 496  Review Questions/Applications 496

Case 16.1 The Pets, Pets, and Pets Team Project (Part 1) 497
Case 16.2 The Hobbit's Choice Restaurant Survey Inferential Analysis 499
Case 16.3 Your Integrated Case: The Advanced Automobile Concepts Survey Generalization Analysis 499

Chapter 17 Implementing Basic Differences Tests 502
Why Differences Are Important 504
Small Sample Sizes: The Use of a \( t \) test or a \( z \) test and How SPSS Eliminates the Worry 507

Testing for Significant Differences Between Two Groups 508
  Differences Between Percentages with Two Groups (Independent Samples) 508
  Using SPSS for Differences Between Percentages of Two Groups 513
  Differences Between Means with Two Groups (Independent Samples) 513

Advanced Automobile Concepts: How to Perform an Independent Samples Significance of Differences between Means Test with SPSS 515

Testing for Significant Differences in Means Among More Than Two Groups: Analysis of Variance 517
  Basic Logic in Analysis of Variance 519
  How to Determine Statistically Significant Differences Among Group Means 521

Advanced Automobile Concepts: How to Run Analysis of Variance with SPSS 521
  Interpreting ANOVA (Analysis of Variance) 522
  \( n \)-Way ANOVA 523

Reporting Group Differences Tests to Clients 523
Differences Between Two Means Within the Same Sample (Paired Sample) 523

The Advanced Automobile Concepts Survey: How to Perform a Paired Samples Significance of Differences Between Means Test with SPSS 525
Summary 526  Key Terms 527  Review Questions/Applications 527
Case 17.1 The Pets, Pets, and Pets Team Project (Part II) 528
Case 17.2 The Hobbit's Choice Restaurant Survey Differences Analysis 529
Case 17.3 Your Integrated Case: The Advanced Automobile Concepts Survey Differences Analysis 530

Chapter 18 Making Use of Associations Tests 532
Types of Relationships Between Two Variables 534
  Nonmonotonic Relationships 535
  Monotonic Relationships 536
  Linear Relationships 536
  Curvilinear Relationships 537
Characterizing Relationships Between Variables 537
  Presence 537
  Direction (or Pattern) 537
  Strength of Association 538

Cross-Tabulations 539
  Cross-Tabulation Analysis 539
  Types of Frequencies and Percentages in a Cross-Tabulation Table 539

Chi-Square Analysis 541
  Observed and Expected Frequencies 541
  The Computed $\chi^2$ Value 542
  The Chi-Square Distribution 544
  How to Interpret a Chi-Square Result 545

Advanced Automobile Concepts: Analyzing Cross-Tabulations for Significant Associations by Performing Chi-Square Analysis with SPSS 547

Reporting Cross-Tabulation Findings to Clients 549

Correlation Coefficients and Covariation 551
  Rules of Thumb for Correlation Strength 552
  The Correlation Sign: The Direction of the Relationship 553
  Graphing Covariation Using Scatter Diagrams 553

The Pearson Product Moment Correlation Coefficient 554

Advanced Automobile Concepts: How to Obtain Pearson Product Moment Correlation(s) with SPSS 557

Reporting Correlation Findings to Clients 560

Summary 561 • Key Terms 561 • Review Questions/Applications 561

Case 18.1 The Pets, Pets, and Pets Team Project (Part III) 563
Case 18.2 The Hobbit's Choice Restaurant Survey Associative Analysis 565
Case 18.3 Friendly Market versus Circle K 565
Case 18.4 Your Integrated Case: The Advanced Automobile Concepts Survey Associative Analysis 567

Chapter 19 Understanding Regression Analysis Basics 568

Understanding Prediction 570
  Two Approaches to Prediction 570
  How to Determine the "Goodness" of Your Predictions 571

Bivariate Linear Regression Analysis 572
  Basic Concepts in Bivariate Regression Analysis 573
  A Step-by-Step Method to Evaluating Regression Findings 575

Advanced Automobile Concepts: How to Run and Interpret Bivariate Regression Analysis with SPSS 577
  How to Improve a Regression Analysis Finding 583

Multiple Regression Analysis 583
  An Underlying Conceptual Model 583
  Multiple Regression Analysis Described 586

Advanced Automobile Concepts: How to Run and Interpret Multiple Regression Analysis with SPSS 588
  Special Uses of Multiple Regression Analysis 591

Stepwise Multiple Regression 594
  How to do Stepwise Multiple Regression with SPSS 594

Three Warnings Regarding Multiple Regression Analysis 596
Chapter 20 Preparing the Research Report and Presentation 608

The Importance of the Marketing Research Report 611
Improving the Efficiency of Report Writing 611

Organizing the Written Report 612
Front Matter 614
Title Page 614
Letter of Authorization 616
Letter/Memo of Transmittal 616
Table of Contents 616
List of Illustrations 616
Abstract/Executive Summary 616
Body 617
Introduction 619
Method 619
Method or Methodology? 619
Results 620
Limitations 621
Conclusions and Recommendations 621
End Matter 621

Guidelines and Principles for the Written Report 622
Form and Format 622
Visuals 622
Style 622

Using Visuals: Tables and Figures 625
Tables 625
Pie Charts 625
Bar Charts 628
Line Graphs 628

Producing an Accurate and Ethical Visual 630

Presenting Your Research Orally 632

Endnotes 636
Credits 655
Name Index 656
Subject Index 661