# Marketing Research: Methodological Foundations, 12<sup>th</sup> ed.

Dawn lacobucci and Gilbert A. Churchill, Jr.









Order directly from Amazon:

<u>Iacobucci & Churchill, Marketing Research:</u>
<u>Methodological Foundations, 12e.</u>

# Marketing Research: Methodological Foundations 12th ed.

Dawn Iacobucci Owen Graduate School of Management Vanderbilt University

Gilbert A. Churchill, Jr. Wisconsin School of Business University of Wisconsin–Madison

Order directly from Amazon:

<u>Iacobucci & Churchill, Marketing Research:</u>

<u>Methodological Foundations, 12e.</u>

## Acknowledgments

I'd like to thank Gil Churchill, a wonderful coauthor and mentor. I am also very grateful to Neeraj Arora, Anand Bodapati, Tanya Chartrand, Melissa Cinelli, Curt Dommeyer, Marc Dotson, Kelly Goldsmith, Nino Hardt, Josh Eliashberg, Martin Klarmann, Qing Liu, Alison Lo, Alan Malter, Bernie Maroney, Blake McShane, Michelle Roehm, Michal Maimaran, Oleg Urminsky, Robert Zeithammer, and especially Deidre Popovich for their helpful feedback.

Over the years, Gil and I have also benefited from helpful comments from Mark Alpert, Robert L.Anderson, Gary Armstrong, Emin Babakus, Sri Beldona, Frank Carmone, Joseph Chasin, Imran Currim, Michael Czinkota, Albert DellaBitta, John Dickinson, James Engel, Peter Faynzilberg, Claes Fornell, Margot Griffin, Sachin Gupta, James Harvey, Vince Howe, Roy Howell, G. David Hughes, Dipak Jain, Robert Krapfel, Patrick Kurby, H. Bruce Lammers, Peter La Placa, Charles L. Martin, M. Dean Martin, David Mick, Carlos Moore, David J. Moore, Carl Obermiller, Christie Paksoy, Kalyan Ramon, C. P. Rao, Arno Rethans, Kenneth Roering, Abhijit Roy, Wiliam Rudelius, Alan G. Sawyer, Randall L. Schultz, Subrata Sen, Allan Shocker, David Szymanski, Sandra Teel, Robert Thomas, Rex Toh, David Urban, Elizabeth Wilson. We are very appreciative. Thank you! We also thank the Dryden, Southwest, Harcourt, Thompson and Cengage people for their support over the years.

Dawn Iacobucci

Writing a book is never the work of a single person, and when attempting to acknowledge the contributions of others, one always runs the risk of omitting some important contributions. Nonetheless, the attempt must be made, because this book has been helped immensely by the many helpful comments I have received along the way from users and interested colleagues. I especially wish to acknowledge those people who reviewed the manuscript for this or for one of the earlier editions of the book. While much of the credit for the strengths of the book is theirs, the blame for any weaknesses is strictly mine. Thank you one and all for your most perceptive and helpful comments.

My colleagues at the University of Wisconsin have my thanks for the intellectual stimulation they have always provided. Dr. B. Venkatesh was particularly instrumental in getting the first edition off the ground. My discussions with him were important in determining the scope and structure of the book.

I wish to thank the many assistants at the University of Wisconsin, especially Janet Christopher, who helped in the preparation of one or more versions of the manuscript. I also wish to thank students Tom Brown, Sara Evans, Margaret Friedman, Diana Haytko, Jacqueline Hitchon, Larry Hogue, Joseph Kuester, Jayashree Mahajan, Jennifer Markanen, Sara Pitterle, Kay Powers, and Frank Wadsworth for their help with many of the miscellaneous tasks on either this edition or one of the earlier editions. I also want to thank P.J. Ward of NFO for contributing the questionnaire, coding form, database, and the compatible problems and exercises using the database regarding coffee consumption that illustrate so nicely the statistical ideas discussed in the text.

I owe a special debt of thanks to my wife, Helen, and our three living children, Elizabeth, David, and Thomas, and our two deceased children, Carol and John. Their understanding, cooperation, and support through all editions of this book are sincerely appreciated. Finally, I wish to thank Dawn Iacobucci, a wonderful coauthor, for her many timely and insightful contributions to this book.

Gilbert A. Churchill, Jr.

© 2018, Dawn Iacobucci and Gilbert Churchill Nashville, TN: Earlie Lite Books, Inc.

All photographs in this text and on the cover were obtained via a Google image search in which the usage rights were set to the maximally liberal permissions setting for free and general use, "Free to use, share or modify, even commercially."

#### **Preface**

#### **Intended Market**

This book introduces marketing research to MBA students, Executive MBA students, and advanced undergraduates. It is also a trusted reference resource for marketing managers.

Marketing research is complicated—it requires answers to many questions and tough decisions are made at each step in the process, such as the techniques to be used to solve the research problem. In this book, we provide an over-arching framework so that students won't become overwhelmed by the bits and pieces, and they'll be able to see the relationship of the parts to the whole. This appreciation is important because decisions made at one stage in the marketing research process have consequences for other stages.

This book is intended to serve both the marketing manager and marketing researchers through its basic organization around the *stages of the research process*:

- 1. Formulate the problem
- 2. Determine the research design
- 3. Design the data collection method and forms
- 4. Design the sample and collect the data
- 5. Analyze and interpret the data
- 6. Prepare the research report.

Each stage is discussed in several chapters. Breaking the steps down allows the reader to see the forest for the trees, and it gives instructors latitude about what is covered. An instructor's decision on what to cover will depend, of course, on the background, interests, and preparation of the students, and on the time provided in the curriculum for marketing research.

# Organization

Part 1, on formulating the problem, consists of three chapters. Chapter 1 provides an overview of marketing research, including the kinds of problems for which it is used and who is doing research. Chapter 2 provides an overview of the various ways of gathering marketing intelligence. It emphasizes the increasingly important role played by marketing intelligence systems in providing business and competitive information. Chapter 3 overviews the research process in terms of the kinds of decisions to be made at each stage and then discusses in greater detail the problem formulation stage of the research process.

Part 2 consists of three chapters and deals with the nature of the research design. It emphasizes ensuring that the research addresses the appropriate questions and treats them in an efficient manner. Chapter 4 presents the varieties of research designs, and proceeds to exploratory research and qualitative data. Chapter 5 presents aspects of descriptive designs. Chapter 6 discusses the role of experiments and causal designs.

In Part 3, we discuss methods of data collection and the design of data collection forms. Chapter 7 focuses on secondary data as an information resource and includes a discussion of commercial marketing information services. Chapter 8 discusses the kinds of information we can gather, e.g., attitudes and behaviors, and the means by which we can gather that information, e.g., via observation or techniques that rely on forms of communication (e.g., interviews, surveys). Chapter 9 covers the construction of questionnaires. Chapter 10 explains the topic of attitude measurement using scales and discusses some common types of attitude scales, with an appendix that describes how to develop measures for marketing constructs.

Part 4 consists of three chapters concerned with the actual data collection. Chapter 11 discusses types of sampling plans that can be used to determine the population elements from which data should be collected. Chapter 12 treats the question of how many observations are needed, so that the problem can be answered with the required precision and confidence in the results. Chapter 13 discusses the types of errors that can arise in data collection, so managers can assess the quality of the information they receive from research.

Once data have been collected, the research process logically turns to data analysis, which amounts to searching for meaning in the collected information. The five chapters and several appendices in Part 5 overview these steps and questions. Chapter 14 reviews the preliminary analysis steps of editing, coding, and tabulating the data. The appendix covers chi-

squares and related approaches to analyzing categorical data. Chapter 15 provides a framework of basic questions that must be resolved before statistical examination of the data can begin.

Chapters 16, 17, and 18 review the statistical techniques most frequently used in the analysis of marketing data. Chapter 16 discusses the procedures appropriate for examining differences between groups; Chapter 17 covers the assessment of association—namely, correlation and regression, including conjoint analysis; and Chapter 18 examines the multivariate techniques of discriminant analysis, factor analysis, cluster analysis, and multidimensional scaling. The appendix to Chapter 18 introduces correspondence analysis, structural equations modeling, neural network models, and social networks.

Part 6 consists of one chapter and an epilogue. Chapter 19 discusses a critical part of the research process, the writing and creation of the research report, which often becomes the standard by which the research effort is assessed. The chapter discusses the criteria a research report should satisfy and the form it can follow to contribute positively to the research effort and subsequent marketing decisions. This chapter also discusses some of the graphical means that can be used to communicate the findings. The epilogue ties together the elements of the research process by demonstrating their interrelationships in a summary overview.

# Organizational Flexibility

Given the flexibility in structure of this book, *Marketing Research: Methodological Foundations* can be used in a variety of marketing research course sequences: one- or two-quarter sequences, semester courses, etc. For example, instructors with only a single, brief, introductory course in marketing research who hope their students will develop a basic appreciation might choose to overview the research process at an elementary level. One way to accomplish this would be to omit Chapters 6, 10, 12, and use only Chapter 14 from among the five analysis chapters. This approach would serve to present the basics.

In contrast, instructors who wish to emphasize, say, data analysis would have ample materials to do so. There are databases available to instructors for students to analyze to increase their comfort level with the statistical techniques discussed.

Each part of the book offers cases to illustrate the issues. The cases present actual situations, although many of them have disguised names and locations to protect the identity of the sponsors. Students can apply what they have learned by critically evaluating what others have done, thereby increasing their analytic skills.

# To Help Students, Professors Can Use These Resources:

- Cases at the end of each section to develop evaluation and analytical skills. The cases are diverse across industries, and raw data are available to let students try various analyses.
- Due to their popularity, we've retained the "Ethical Dilemmas" in each chapter and their discussion may be facilitated using the frameworks in the appendix to Ch.3. Scenarios are presented that arise when making marketing research choices, to challenge students to see the advantages and disadvantages of making certain choices and their social consequences.
- Also due to their popularity, we continue to update the **Research Realities**, which are extended examples to demonstrate to students "how they do it in the *real world*." Research Realities illustrate what is going on in the world of marketing research today, both in general and at specific companies. They cover many topics: international marketing research, customer relationship management (CRM) and loyalty, Amazon's MTurk system, Google trends, data privacy, mock juries, trade shows for interviews, qualitative data, ethnography, B2B panels, longitudinal data, test markets, experiments in marketing research, data-mining, M&Ms, the American Association for Public Opinion Research (AAPOR), the Center for Marketing and Opinion Research (CMOR) telephone standards, response rates by research methodology, asking sensitive questions, Values and Life Styles (VALS) data, cross-cultural survey design, web surveys, relationship between attitudes and behaviors, CEO compensation, product placement in movies, exponential smoothing, recommendation agents, Prizm clusters, and more!
- Questions and Problems at the end of chapters have students apply the concepts to real situations, to begin to understand the strengths and weaknesses of various techniques.

- Supplemental surveys and datasets. To provide students with more experience analyzing data, we also make available to professors three nice marketing research studies. The NFO Coffee Study, the Avery Sporting Goods case, and the Wendy's restaurants project. For each, the questionnaires, coding forms, and raw data are used to frame application problems. The data files allow students to work with real data in honing their skills in translating research problems into data analysis issues and in interpreting computer output.
- **Big data** is an inescapable term these days; we introduce it in Ch.1, discuss it in Ch.2 (as an information system approach), Ch.4 (on qualitative big data), and Ch.7 (secondary data sources). Our approach to big data is less "flash" and more grounded in content, so we discuss the issues of large sample sizes, deriving precisely from the bigness of big data, and the effects on power in statistical tests in Ch.12, the appendix to Ch.14, Ch.16, and Ch.17, and Ch.19 (data visualization).
- Students are so facile with **Excel** these days that we reference it where appropriate. For example, Ch.11 is on sampling design, and we show how to use Excel to generate random digits. Ch.19 is on writing a marketing research report, which typically includes the creation of figures and plots, and Excel offers a decent template for a large variety of plots. Finally, instead of providing static tables of **critical values** for statistical distributions, we provide instructions for obtaining the critical values or p-values in Excel.
- Finally, professors can find a lot of support in the supplemental materials we provide in our *Instructor's Manual* (data bases, slides, lecture ideas, case analysis and support, etc.). Email the first author. ©
  - o Lecture support and resources to help the instructor cover the material, depending on their desired emphases and time frames. For each chapter, there are: 1) learning objectives, 2) key terms, 3) detailed outline, 4) discussion suggestions, 5) answers to the application questions in the book, 6) more exercises for students (and answers for profs), 7) suggested cases, from our cases and from HBS.
  - Cases that cover a wide variety of applications: nonprofits and the arts, RFM (recency, frequency, monetary value), movies, health care, legalized marijuana and Cuba, qualitative data (open-ended questions to code), extreme sports and neural ad processing, a focus group transcript, an ethnography on ESPN Zone, brand naming, awareness and loyalty, online data, survey questionnaires (to critique), brand extensions, advertising databases, brand associations, new products leadusers, customer satisfaction and CRM, online marketing research samples, conjoint analysis of brand equity and pricing, segmentation. There are also case templates for conducting programs of marketing research studies on each of the marketing mix variables: new products, pricing, place or distribution, and promotion or advertising, as well as for brand equity.
  - o There are slides drawn from the book to facilitate classroom discussion.
  - There are 1100+ test questions (multiple-choice) in a test bank to enable instructors to preview and edit test questions, as well as add their own.
  - The raw data in the chapters and for the cases are available, which allows instructors and students to use them for analysis.

This book is intended to teach and, given its thoroughness, to serve as an extremely useful reference for the business school student's career for years to come. Given the thoroughness, the level and difficulty of material naturally varies within and across the chapters. Some sections are straightforward, while others are more abstract or technical, and more challenging for readers. You'll see sections in *Marketing Research: Methodological Foundations* that professors can teach through, or ask students to skip when reading. We do not shy away from topics simply because they can be challenging; that is, we didn't want to produce a marketing research text that is fluff. We also didn't want to provide a book decipherable only by highly motivated techno-geeks. We hope that the reader finds the material clearly presented.

# **Table of Contents**

Part 1: Ma	arketing Research, the Research Process, and Problem Definition	
	hapter 1: Marketing Research: It's Everywhere!	1
C	hapter 2: Alternative Approaches to Marketing Intelligence	13
	hapter 3: The Research Process and Problem Formulation	23
	Appendix 3: Marketing Research Ethics	38
C	ases for Part 1	46
	termine Research Design	<b>5</b> 2
	hapter 4: Research Design, Exploratory Research, and Qualitative Data	53
	hapter 5: Descriptive Research	80
	hapter 6: Causal Designs	92
C	ases for Part 2	114
Part 3: De	sign Data Collection Method and Forms	
C	hapter 7: Data Collection: Secondary Data	138
	Appendix 7: Secondary Data Sources	162
C	hapter 8: Data Collection: Primary Data	167
C	hapter 9: Survey Questionnaires and Data Collection Forms	191
C	hapter 10: Attitude Measurement	214
	Appendix 10: Psychological Measurement	230
C	ases for Part 3	240
Part 4: Sa	mple Design and Data Collection	
	hapter 11: Sampling Procedures	258
	hapter 12: Sample Size	284
	hapter 13: Collecting Data: Field Procedures and Nonsampling Errors	297
	ases for Part 4	309
Part 5: De	ata Analysis and Interpretation	
	hapter 14: Preprocessing Data and Cross-Tabs	315
C	Appendix 14: Chi-Square, Cross-Tabs, Log-Linear Models, Logits	340
C	hapter 15: Data Analysis: Basic Questions	350
C	Appendix 15: Stats Review and Hypothesis Testing	361
C	hapter 16: Data Analysis: Examination of Differences	369
C	Appendix 16: Analysis of Variance	382
C	hapter 17: Investigation of Association: Correlation and Regression	393
	Appendix 17: Conjoint Analysis	413
C	hapter 18: Multivariate Data Analysis	424
	Appendix 18: More Multivariate Statistical Techniques	474
C	ases for Part 5	480
Part 6. Th	e Research Report	
	hapter 19: The Research Report	494
	pilogue	508
D <sub>i</sub>	r	500
Appendic	es: $z$ , t, $\chi^2$ , and F Distributions	511
Glossary	Glossary	
Index		531

## **About the Authors**

Dawn Iacobucci is the E. Bronson Ingram Professor of Marketing at the Owen Graduate School of Management, Vanderbilt University. Previously she was the Senior Associate Dean for Owen (2008-2010), Professor of Marketing at the Kellogg School of Management, Northwestern University (1987-2004), the Coca-Cola Distinguished Professor of Marketing, Professor of Psychology and Head of the Marketing Department of the University of Arizona (2001-2002), and the John Pomerantz Professor of Marketing at Wharton, of the University of Pennsylvania (2004 to 2007). Her research focuses on social networks and methodological questions. She has published in the *Journal of Consumer Psychology*, *Journal of Marketing, Journal of Marketing Research, Journal of Service Research, Harvard Business Review, Marketing Science, International Journal of Research in Marketing, Psychometrika, Psychological Bulletin*, and *Social Networks*. Iacobucci teaches Marketing Management, Marketing Research, Marketing Models, and Services Marketing to MBA and executive MBA students, and multivariate statistics and methodological topics in Ph.D. seminars. She was editor of both the *Journal of Consumer Research* and *Journal of Consumer Psychology*. She edited *Networks in Marketing, Handbook of Services Marketing and Management, Kellogg on Marketing, Kellogg on Integrated Marketing*, and authored *Mediation Analysis*, *MM1-4*, and *Marketing Management* 5<sup>th</sup> ed.

Gilbert A. Churchill, Jr., received his DBA from Indiana University in 1966 and joined the University of Wisconsin faculty in 1966. Professor Churchill was named Distinguished Marketing Educator by the American Marketing Association in 1986—only the second individual so honored. The lifetime achievement award recognizes and honors a living marketing educator for distinguished service and outstanding contributions in the field of marketing education. Professor Churchill was also awarded the Academy of Marketing Science's lifetime achievement award in 1993 for his significant scholarly contributions. In 1996, he received a Paul D. Converse Award, which is given to the most influential marketing scholars, as judged by a national jury drawn from universities, businesses, and government. Also in 1996, the Marketing Research Group of the American Marketing Association established the Gilbert A. Churchill, Jr., lifetime achievement award, which is to be given each year to a person judged to have made significant lifetime contributions to marketing research. In 2002, he received the Charles Coolidge Parlin lifetime achievement award for his substantial contributions to the ongoing advancement of marketing research practice.

Professor Churchill is a past recipient of the William O'Dell Award for the outstanding article appearing in the *Journal of Marketing Research* during the year. He has also been a finalist for the award five other times. He is a coauthor of the most and third most influential articles of the past century in sales managements as judged by a panel of experts in the field. He was named Marketer of the Year by the South Central Wisconsin Chapter of the American Marketing Association in 1981. He has served as consultant to a number of companies, including Oscar Mayer, Western Publishing Company, and Parker Pen.

Professor Churchill's articles have appeared in such publications as the *Journal of Marketing Research, Journal of Marketing, Journal of Consumer Research, Journal of Retailing, Journal of Business Research, Decision Sciences, Technometrics,* and *Organizational Behavior and Human Performance*, among others. He is coauthor of several books, including *Basic Marketing Research*, 8<sup>th</sup> ed. (Cengage) *Marketing: Creating Value for Customers*, 2<sup>nd</sup> ed. (McGraw-Hill), *Sales Force Management: Planning, Implementation, and Control*, 6<sup>th</sup> ed. (Irwin/McGraw-Hill), and *Salesforce Performance* (Lexington Books), in addition to his coauthorship of *Marketing Research: Methodological Foundations*, 12<sup>th</sup> ed. He is a former editor of the *Journal of Marketing Research* and has served on the editorial boards of the *Journal of Marketing Research, Journal of Marketing, Journal of Business Research, Journal of Health Care Marketing*, and the *Asian Journal of Marketing*. Professor Churchill is a past recipient of the Lawrence J. Larson Excellence in Teaching Award.

Dedication
To my wife and children;
and in memory of my grandmother,
dad, mother, and our children Carol and John
GAC

# PART 1: MARKETING RESEARCH AND THE RESEARCH PROCESS

We begin with two basic questions: What is marketing research? And Why is it important?

- Chapter 1 illustrates the enormous variety of business and marketing questions that marketing research can address and the types of business people who require a working knowledge—marketing researchers and marketing managers of course, but also consultants, entrepreneurs, even financial analysts—anybody who seeks an edge in understanding customers in competitive market environments.
- Chapter 2 discusses alternative ways of providing marketing intelligence, namely, projects designed to investigate specific issues, or information technologies for ongoing data collection and analytical systems.
- Chapter 3 presents the research process that forms the backbone of this book and discusses in detail the problem formulation stage of that process.

Order directly from Amazon:

<u>Iacobucci & Churchill, Marketing Research:</u>
<u>Methodological Foundations, 12e.</u>

# CHAPTER 1: MARKETING RESEARCH: IT'S EVERYWHERE!

Questions to guide your learning:

 $Q_1$ : What is marketing research?

Q2: What kinds of questions can marketing research answer?

 $Q_3$ : Why is marketing research important?

 $Q_4$ : What is the relationship among marketing, marketing research, the rest of the firm?

 $Q_5$ : Who does marketing research?

Many people think that marketing research is about asking consumers what they think about a brand. That's true, but it's so much more. Consider these examples (each of which is discussed in greater detail in later chapters).

- In "A/B" tests, marketing researchers run experiments:
  - O To compare advertisement A to ad B to see which makes the featured brand most attractive.
  - O To compare sales discount promotions run in city A to price bundling promotions in city B to see which marketing mix will yield optimal **ROI**.
- Before investing millions to launch a new product, marketing researchers conduct "concept testing" to get consumer reactions via focus groups. Increasingly, focus group are run online using Skype-like video technology. Managers like the costsavings (e.g., minimal travel expenses) and participants like the convenience (e.g., they can log in from all over the world). Participants can see each other so the online forum simulates fairly well a traditional focus group (where everybody's in the same room).
- Customer satisfaction surveys are pervasive—surveys are popular because customers like giving their opinions on just about anything. Surveys also supplement a firm's own "big data" of its customers' purchase transaction histories, their contact information, and basic demographics. The big data tell what the customer has bought, and the survey helps provide an understanding as to the customer's motivations. The integration of these data sources in a Customer Relationship Management system (CRM) enables the company to tailor direct marketing offerings to the customer.
- Marketing researchers use "data mining" of big data to analyze consumer purchases and preferences and "predictive analytics" to forecast sales, market shares, and growth figures.

Good decisions require good information.

- Marketing researchers monitor social networks, blogs, and searches (e.g., via Google Trends) using text analytics for "sentiment analysis"—how frequently do comments pop up about a focal brand, and are the comments generally positive. Online brand and affinity communities offer efficient samples of highly involved consumers. For example:
  - o Text analyses of movie scripts can predicted their later commercial success.<sup>1</sup>
  - Marketing researchers have shown that online sharing communities have given rise to an increase in consumers posting photos of their culinary achievements. Google analytics show that lots of people spend hours surfing "food porn."
- Marketing researchers watched hours of tapes observing consumers as they entered
  retail outlets (department stores, grocery stores, banks) and found that the first 30 feet
  from the entrance is a "decompression zone" in which shoppers are merely getting

<sup>&</sup>lt;sup>1</sup> Eliashberg, Hui, and Zhang, "Assessing Box Office Performance Using Movie Scripts," *IEEE Transactions on Knowledge and Data Engineering*, 26 (11), 2639-2648.

<sup>&</sup>lt;sup>2</sup> Kozinets, Patterson, and Ashman, "Networks of Desire," *Journal of Consumer Research*, 43, 659-682.

oriented to the store layout and are not inclined to pick up merchandise for purchase. Thus, marketers advise against elaborate store displays in entrances—the investment will not pay off. <sup>3</sup>

- A new frontier are physical measures, from **eye-tracking** to **neuroscience**.
  - O By using eye-tracking glasses, a grocery chain learned that shoppers look more at the product (94%) than price (6%) for cereals. The difference for yogurts was slightly less (85% and 15%), suggesting greater price sensitivity.<sup>4</sup>
  - Sometimes consumers cannot articulate reasons for their decisions or preferences and technologies like functional magnetic resonance imaging (fMRI) point to emotional reactions.<sup>5</sup>

These examples begin to illustrate the scope of marketing research. Obtaining customer insights via marketing research is a pervasive activity that takes many forms. The choice of marketing research tools depends on the problem to be solved. The basic purpose of marketing research is to help managers make better decisions. Marketing research gives managers and CEOs an edge that is useful in competitive markets and enhances profitability.<sup>6</sup>

#### ROLE OF MARKETING RESEARCH

Every day, marketing managers are called upon to make decisions, and whether large or small, every decision is better-informed with the intelligent use of marketing research.

Effective decision making depends on quality input, and marketing research translates data into useful information. Any business seeking an edge in attracting and retaining customers in competitive market environments turns to marketing. Marketing can create strategies to enhance attraction and retention, if the business understands its customers. This understanding comes through marketing research. It is not unusual for a young marketer

Marketing Research turns data into information.

to find himself or herself involved in marketing research projects, and when progressing to more senior corporate positions, to be commissioning and evaluating marketing research.



Beyond marketing researchers and marketers, a working knowledge of marketing research helps anybody's business career. For example, much of management consulting is fundamentally marketing research. Entrepreneurs enhance their likelihood of success by understanding their customer base. Financial analysts need to understand the perceptions of their customers to sell their products.

Organizations that are not businesses can also benefit. For example, government land developers choose site locations for office buildings and parks using marketing research. Politicians and trial lawyers use marketing research to test spin strategies. Nonprofits use marketing research to select donor targets.

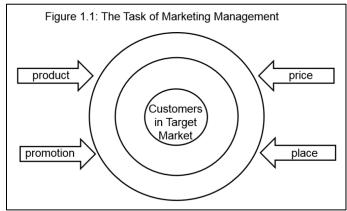
<sup>&</sup>lt;sup>3</sup> Underhill, Why We Buy: The Science of Shopping (Simon & Schuster).

<sup>&</sup>lt;sup>4</sup> Hendrickson, Kirk, "Using Eye-Tracking to Understand Price Sensitivity," quirks.com/articles.

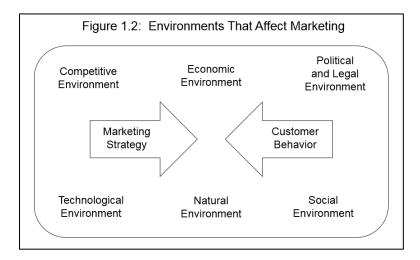
<sup>&</sup>lt;sup>5</sup> Green and Holbert, "Gifts of the Neuro-Magi," *Marketing Research*, 24 (1), 10-15; Janska, "Two Paths to the Same Place," *Quirk's Marketing Research*, 29 (1), 34-39.

<sup>&</sup>lt;sup>6</sup> Aberdeen Group says more than half of the "Best in Class" companies are increasing their budgets for customer analytics ("Most Best-in-Class Companies to Raise Analytics Budgets," marketingcharts.com).

The principal task of marketing is to create value for customers. Customers will make purchases when (1) the benefits exceed the costs, and (2) the products or services offer superior value compared to alternatives. Marketing managers generally focus their efforts on the elements of the marketing mix, i.e., the four Ps—the product or service, its price, its placement or the channels in which it is distributed, and its promotion or communications mix (see Figure 1.1).



Marketing managers adjust elements of the marketing mix, but the results can be somewhat uncertain because of uncontrollable factors in the environment (see Figure 1.2). Consequently, the marketing manager has a continuous need for information—and marketing research provides it.



The American Marketing Association's (AMA) definition of marketing research emphasizes its role in linking marketing managers to information about their customers (marketingpower.com or ama.org):

Marketing research is the function that links the consumer, customer, and public to the marketer through information—information used to identify and define marketing opportunities and problems; generate, refine, and evaluate marketing actions; monitor marketing performance; and improve understanding of marketing as a process.

Marketing research helps managers: (1) specify what information is needed; (2) collect and analyze the information; and (3) interpret the information with respect to the objectives that motivated the study in the first place.

Marketing research can be used to assist all aspects of marketing, such as:

• Product (concept testing for new products, monitor brand equity, assess test markets, select package designs)

- Pricing (price elasticity, market demand, sales forecasting)
- Distribution (web site testing, channel performance, coverage, convenience)
- Promotion (media and ad copy effectiveness, sales force compensation and territories)
- Buyer behavior (segmentation, awareness, satisfaction, preferences, purchase behavior, online "liking" propensities)
- General corporate research (market trends, diversification opportunities, perceptions about competitor positioning).

Table 1.1 shows the numerous ways that marketing research can help management in planning, problem solving, and monitoring, and Figure 1.3 shows the frequency of different kinds of marketing research applications.

# TABLE 1.1: Kinds of Questions Marketing Research Can Help Answer

# Planning

- A. Segmentation: What kinds of people buy our products? Where do they live? How much do they earn? How many of them are there?
- B. Demand estimation: Are the markets for our products increasing or decreasing? Are there promising markets that we have not yet reached?
- C. Environmental assessment: Are the channels of distribution for our products changing? What should our presence be overseas?

#### **Problem Solving**

#### A. Product

- 1. In testing new products and product-line extensions, which product design is likely to be the most successful? What features do consumers value most?
- 2. What kind of packaging should we use?
- 3. What are the sales forecasts? How might we energize its life cycle?

#### B. Price

- 1. What price should we charge for our products?
- 2. How sensitive to price changes is our target segment?
- 3. Given the life-time value assessment of our segment, should we be discounting or charging a premium to our most valued customers?
- 4. As production costs decline, should we lower our prices or try to develop higher quality products?

#### C. Place

- 1. Where are our products being sold? Where should our products be sold?
- 2. What kinds of incentives should we offer the trade to push our products?
- 3. Are our relationships with our suppliers and distributors satisfactory?

### D. Promotion

- 1. How much should we spend on promotion? How should it be allocated across products and to geographic areas?
- 2. Which ad copy should we run in our markets? With what frequency and media expenditures?
- 3. What combination of media—newspapers, radio, television, magazines, banners—should we use?
- 4. What is our consumer coupon redemption rate?

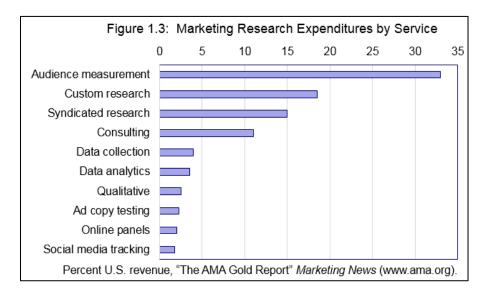
#### Monitoring

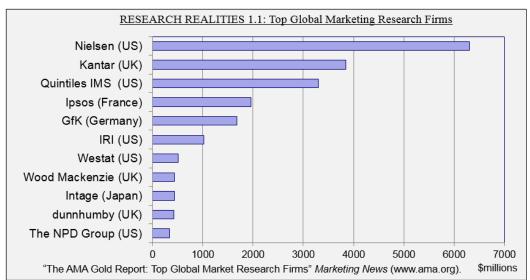
- A. What is our market share overall? In each geographic area? By each customer type?
- B. Are customers satisfied with our products? How is our service? Are there many returns? Do levels of customer satisfaction vary with segment?
- C. Are our employees satisfied? Do they feel able to assist our customers?
- D. How does the public perceive our company? What is our reputation with the trade?

#### WHO DOES MARKETING RESEARCH?

Most large firms have a formal marketing research department, or at least a person in charge of marketing research. Marketing research departments are prevalent among industrial and consumer manufacturing companies. Advertising agencies have research departments devoted to studying the effectiveness of ad copy and optimizing the frequency of exposures of customers to ads. Media companies conduct or buy marketing research to generate audience statistics and demographic profiles so they can sell advertising space and time. Financial service companies use marketing research to forecast market potential and analyze sales.

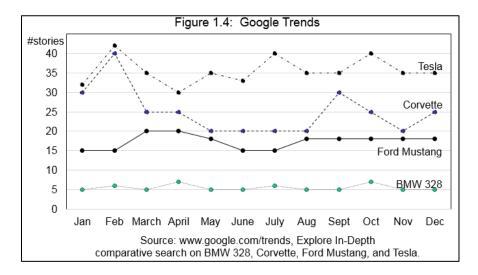
Marketing research is also conducted by specialized marketing research and consulting firms, government agencies, and universities. Research Realities 1.1 shows the revenues of the largest global marketing research firms. Some firms provide syndicated research—they collect certain information on a regular basis, which they then sell to interested clients. These firms include A.C. Nielsen, which provides product movement data for grocery stores and drugstores, and the NPD Group, which operates a consumer panel. The syndicated services research is not custom designed (except that the firms will perform special analyses for the client on the data it regularly collects). Other research firms specialize in custom-designed research. Some of these provide only a field service—collecting data for the research sponsor, whereas others collect and analyze the data for the client, and still others are full-service research suppliers, helping the client in the design of the research as well as in collecting and analyzing data.





Other organizations also provide marketing information, e.g., the U.S. federal government is the largest producer of domestic marketing facts through its census data. Marketing faculty at business schools report their research in marketing journals, and their counterparts in marketing research firms similarly produce in-house white papers. Consulting companies like Bain, BCG, and McKinsey and large software providers like SAS and SPSS similarly post white papers on marketing research issues. Still other firms, such as Google, are finding themselves in the role of data provision, even if that had not been their primary business

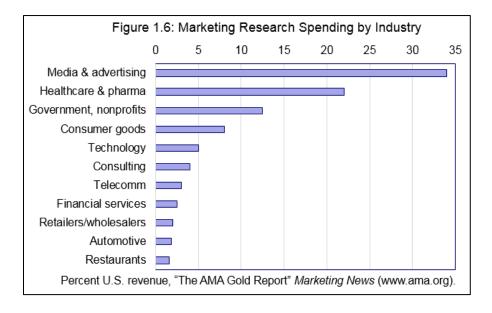
focus. For example, see Figure 1.4 for a comparative tracking of news stories searched on four models of sports cars.



Marketing research has become ever more important in today's highly competitive global economy. Figure 1.5 shows a glimpse of the industry worldwide. The U.S. numbers dominate, along with the U.K., Germany, and France.



Figure 1.6 cuts the data differently, representing the amount of research conducted in a variety of industries. Media and advertising, and health care and pharmaceuticals dominate.



Managers sometimes lament the cost of marketing research or the time to execute the projects. Those short-term costs and delays can certainly be avoided. However, without good marketing information to guide decisions, less optimal decisions will be made and the results will be more costly and longer-term.

Arthur C. Nielsen, a founder of modern marketing research said, "The price of light is less than the cost of darkness."

# ORGANIZATION OF MARKETING RESEARCH

The organizational form of marketing research depends largely on the size and structure of the individual company. In small firms, one person might handle all the organization's research needs, and report to the marketing manager. Larger research units can take a variety of organizational forms:

- 1. By application, e.g., by product line, brand, market segment, geographic area.
- 2. By marketing function performed, e.g., sales analysis, advertising research, product planning, e-commerce and electronic forms of research.
- 3. By technique, e.g., statistical models, interviews, focus groups, surveys.

The centralization of the firm also affects the organization of the marketing research function. In decentralized companies, the question is whether each operating unit should have its own marketing research group, or should a single department in central headquarters serve all divisions. The advantages of centralization are greater coordination and control, economy, and greater usefulness to corporate management in planning. The advantage of a group-level location is that it allows research personnel to acquire valuable knowledge about divisional markets, products, practices, and problems.

Naturally, it's not unusual in practice to see a mixed arrangement to try to secure the advantages of each. Specifically, many companies combine a centralized and a decentralized marketing research function such that the people in the divisions work directly with managers of those business units, whereas the centralized group is responsible for staying on top of industry trends and changing technology, and competitive analysis.

Other companies view research as a "line" function performed by all involved in the decision process rather than as a "staff" function performed by professional marketing researchers. Job rotation is valued in training new hires to understand the entire corporation. Thus, anyone involved in a decision team may play a role in gathering and interpreting information. The hope is that with a more integrated organizational structure, the overall view of the customer experience is enhanced, rather than a narrow focus on some feature in isolation.

The organization of the marketing research function is dynamic. It depends on the scale and complexity of the research activities to be conducted, and the firm's philosophy as to how marketing research should interface with the firm's decision making. Large firms tend to spend a larger proportion of their marketing budgets on research than do small firms. As the firm's size and market position change, the emphasis and organization of the marketing research function must also change so that it continues to suit the firm's information needs.

#### EMPLOYMENT OPPORTUNITIES IN MARKETING RESEARCH

In addition to marketing managers, brand managers, advertising VPs, etc., many types of business people (e.g., consultants, entrepreneurs) frequently find themselves conducting and using marketing research to enhance their business efforts. Thus, if your heart is set on one of these career paths, you must think creatively about how to incorporate marketing research into your corporate responsibilities.

"CMO is ideal training for CEO!"

Even if you're not going to be a marketing researcher, it is important to be a knowledgeable and discerning consumer of marketing research. That is, whether you conduct the research or commission it, it is important to be able to evaluate the quality of the research and its implications or caveats.

The best CEOs do not forget that marketing research helps them understand their customers. Marketing research is the premier means to find and sustain competitive advantages. The CMO role is ideal training for the CEO position.

Marketing research opportunities abound—they might be called "marketing analytics, "big data analyst," "customer insights," but it's all marketing research. Harvard Business *Review* proclaimed the **data scientist** will be "the sexiest job of the 21st century!" McKinsey concurs, saying marketing analytics help companies compete and grow.8 With these endorsements, clearly career opportunities will thrive. The career paths depend upon the type, size, organizational structure, and philosophy of the firm. They also depend upon whether the person works for a research supplier or for a consumer of research information.

In consumer goods companies (e.g., Kraft, General Motors, Procter & Gamble), marketing researchers begin as Brand Analysts. While learning the characteristics and details of the industry, the analyst receives on-thejob training from a research manager. The usual progression is to Senior Analyst and Research Manager for a specific brand, and then a group of brands. Research Realities 1.2 lists a variety of job titles and functions.

Marketing research: 1 of top 10 careers, 20% job growth rate!

# RESEARCH REALITIES 1.2: Marketing Research Job Titles and Responsibilities

- Research Director/Vice-President of Marketing Research: The senior position in research. Responsible for the entire research program in the company. Accepts assignments from superiors, clients, and may take initiative to develop research. Employs personnel, supervises research department. Presents findings to clients, company executives.
- Analytically Skilled Methodologists
  - Statistician/Data Processing Specialist: expert consultant on theory and application of statistical technique to specific research problems. Responsible for experimental design and data processing.
  - Qualitative Specialist: Some firms have a person specifically assigned to oversee interview techniques and focus groups.
- Analysts
  - Senior Analyst: Helps to plan research projects and directs execution of projects. Minimum supervision. Prepares questionnaires. Selects analytical techniques. Writes final report. Responsible for budget and meeting time schedules.
  - o Analyst: handles the bulk of the work of research projects. Assists in survey preparation, pretests questionnaires, and makes preliminary analyses of results.
  - Junior Analyst: handles routine assignments, editing and coding of questionnaires, statistical calculations above the clerical level, and library research.
- **Data Collection Specialists** 
  - Field Work Director: hires, trains, and supervises field interviewers.
  - o Full-Time Interviewer: conducts personal interviews. Often outsourced.
- Support Staff
  - o Clerical Help: tabulates results.
  - o Clerical Supervisor: central handling and processing of surveys and data.
  - Librarian: builds and maintains reference sources.
- Some recent job postings:
  - Product Manager, MCAT Test Preparation: conduct analyses, interpret data, contribute to price, promotion, distribution of MCAT products.
  - Product Manager, Google: analyze large data sets, address enterprise research problems, communicate recommendations to senior leadership.
  - Media and Social Engagement Manager, Porsche Cars North America: Use Google Analytics, WiredMind, etc. to trend results from marketing programs.
  - Business Director, GBN Architects: new business development feasibility, client retention

At research suppliers (e.g., ACNielsen, Information Resources, NPD), marketing researchers begin as Research Analysts, to gain exposure to studies in which the supplier specializes, and the procedures that are followed in completing them. They may conduct

<sup>&</sup>lt;sup>7</sup> Davenport and Patil, "Data Scientist: The Sexiest Job of the 21st Century," *HBR*, 90 (10), 70-76.

<sup>&</sup>lt;sup>8</sup> "Using Marketing Analytics to Drive Superior Growth," mckinsey.com/insights/marketing\_sales.

interviews, code data-collection forms, or assist with analyses. With such wide exposure, when promoted to Account Rep, they can be responsive to client needs for information.

Increasingly, there is a need for technically skilled marketing researchers—high-level data crunchers with titles like marketing scientist, data scientist, big data analyst. Their skills are crucial to the excellence of a marketing research firm, and they are in short supply. Usually they have training in several of the following areas: statistics, psychometrics, marketing research, buying behavior, microeconomics, marketing management, and business communications. They stay current by subscribing to academic journals and by attending conferences such as the American Marketing Association meetings and the Advanced Research Techniques Forum. Without these talented professionals, many analyses would be implemented by people with no understanding of models or consumers, yielding erroneous results detrimental to the research buyer, and ultimately impacting the research supplier.

A successful marketing researcher needs human relations, communication, conceptual, and analytical skills. Marketing researchers should be able to communicate well both orally and in writing, e.g., to tell colleagues and clients what the results are and what they mean. They need to understand business in general and marketing in particular because they'll deal with brand managers, advertisers, and sales people. Successful marketing researchers realize that marketing research is conducted for one reason—to help make better marketing decisions.

#### **SUMMARY**

This chapter presented an overview of marketing research, its usefulness in marketing decision making, a sense of how marketing research gets used and by what types of companies. Marketing research is the function that links the consumer, customer, and public to the marketer through information, which is used to identify and define marketing opportunities and problems; to generate, refine, and evaluate marketing actions; to monitor marketing performance; and to improve understanding of marketing as a process.

Marketing research is a pervasive activity. It is used in every domain of marketing management.

The form of the marketing research function is organized to reflect the specific organization's unique needs. Two factors that are important are the firm's size and the degree of centralization of its operations.

Job opportunities in marketing research are good and getting better. There is great variety in the positions available and in the skills needed for them. Most positions require analytical, communication, and human relations skills.

#### **OUESTIONS**

- 1. What is marketing management's task? What is marketing research's task? What is the relation between the two?
- 2. How is marketing research defined? What are the key elements of this definition?
- 3. Who does marketing research? What are the primary kinds of research done?
- 4. What factors influence the internal organization of the marketing research department and its reporting location within the company?
- 5. What are the necessary skills for employment in a junior or entry-level marketing research position? Do the skills change as one changes job levels? If so, what new skills are necessary at these higher levels?
- 6. How might your responsibilities vary if you conducted marketing research at the following places: a) a marketing research firm, b) an ad agency, c) a large consumer packaged goods manufacturer, d) an Internet startup company.

#### APPLICATIONS AND PROBLEMS

1. Discuss whether marketing research would be valuable for the types of organizations that follow. If you believe that marketing research would be valuable, describe in detail how it would be used to aid in decision making.

-

<sup>&</sup>lt;sup>9</sup> We discuss "big data" throughout this book—what makes data big data, and what effect they can have on analyses, etc.

- a. A bank
- b. A multinational oil company
- c. A retail shoe store chain
- d. A Mercedes dealership in LA, in NY, in Iowa City?
- e. A candidate for the U.S. Congress, representing a district in Chicago
- f. The L.A. Lakers
- g. A distributor of large-screen televisions operating in Miami
- h. The English Department at your university
- i. A wheat farmer in Nebraska with 850 acres

#### 2. What do the two following research situations have in common?

Situation I: The SprayIt Company marketed a successful insect repellent. The product was effective and a leader in the market. The product was available in blue aerosol cans with red caps. The instructions were clearly specified on the container, in addition to a warning to keep the product away from children. Most of the company's products were also produced by competitors in similar containers. The CEO was worried because of declining sales and shrinking profit margins. In addition, companies such as his were being criticized by government and consumer groups for their use of aerosol cans. The CEO contacted the company's advertising agency and asked it to do the necessary research to find out what was happening.

Situation II: This past April, the directors of a nearby university were considering expanding the business school because of increasing enrollment during the past 10 years. Their plans included constructing a new wing, hiring new faculty members, and increasing the number of scholarships from 100 to 150. The funding for this project was to be provided by private sources, internally generated funds, and the state and federal governments. However, a previous research study completed five years earlier, using a sophisticated forecasting method, indicated that student enrollment would have peaked last year, and that universities could expect gradual declining enrollments for the near future. A decision to conduct another study was made to determine likely student enrollment.

#### 3. What do the two following research situations have in common?

Situation I: The sales manager of CanAl, an aluminum can manufacturing company, was wondering whether the company's new cans, which would be on the market in two months, should be priced higher than the traditional products. He confidently commented to the VP of marketing, "Nobody in the market is selling aluminum cans with screw-on tops; we can get a small portion of the market and yet make substantial profits." The product manager disagreed with this strategy. In fact, she was opposed to marketing these new cans. The cans might present problems in preserving the contents. She thought, "Aluminum cans are recycled, so nobody is going to keep them as containers." There was little she could do formally because these cans were the company president's own idea. She strongly recommended to the VP that the cans should be priced in line with the other products. The VP thought a marketing research study would resolve this issue.

Situation II: A large toy manufacturer was in the process of developing a tool kit for children from 5 to 10 years old. The tool kit included a small saw, screwdriver, hammer, chisel, and drill. This tool kit was different from the competitors', in that it included an instruction manual, "101 Things to Do." The product manager was concerned about the safety of the kit and recommended the inclusion of a separate booklet for parents. The sales manager recommended that the tool kit be made available in a small case, as this would increase its marketability. The advertising manager recommended a special promotional campaign be launched to distinguish this tool kit from the competition. The vice president thought that all the recommendations were worthwhile but the costs would increase drastically. She consulted the marketing research manager, who further recommended that a study be conducted.

#### 4. Evaluate the research in the following example:

The HiFlyer Airline company was interested in altering the interior layout of its aircraft to suit the tastes and needs of business travelers. Management was considering reducing the number of seats and installing small tables to enable people to work during long flights. Prior to the renovation, management decided to do some research to ensure

that these changes would suit the needs of the passengers. To keep expenses to a minimum, the following strategy was employed:

Questionnaires were completed by passengers during a flight. Because they were easy to administer and collect, the questionnaires were distributed only on the short flights (those less than one hour). The study was conducted during the 2<sup>nd</sup> and 3<sup>rd</sup> weeks of December, because that was when flights were full. To increase the response rate, each flight attendant was responsible for a certain number of questionnaires. The management thought this was a good time to acquire as much information as possible, so the questionnaire included issues apart from the new seating arrangement. As a result, the questionnaire took 20 minutes to complete. After the study, management decided that the study would not be repeated, because the information was insightful enough.

5. Specify some useful sources of marketing research information for the following situation:

Dissatisfied with the availability of ingredients for his favorite dishes, Albert Lai would like to open his own retail ethnic grocery store. Based on the difficulty of finding many specialty ingredients, Albert realizes the need for a local wholesale distributor specializing in hard-to-find ethnic foodstuffs. He envisions carrying items commonly used in Asian and Middle-Eastern recipes.

With the help of a local accountant, Albert prepared a financial proposal that revealed the need for \$150,000 in start-up capital for Lai's Asian Foods. The proposal was presented to a local bank for review by its commercial loan committee, and Albert subsequently received the following letter from the bank:

Dear Mr. Lai:

We have received and considered your request for start-up financing for your proposed business. The basic idea is sound, but we find that your sales projections are based solely on your own experience and do not include any hard documentation concerning the market potential for the products you propose to carry. Until such information is made available for our consideration, we have no choice but to reject your loan application.

Albert does not wish to give up on his business idea because he truly believes that there is a market for these ethnic food products. Given his extremely limited financial resources, what types of information might be useful? Where and how might he obtain the needed information?

6. Suppose that you have decided to pursue a career in the field of marketing research, marketing, or marketing and management consulting. In general, what types of courses should you take in order to help achieve your goal? Why? What types of part-time jobs, internships, and volunteer work would look good on your resume? Why?

For more! Order directly from Amazon: <u>Iacobucci & Churchill, Marketing Research:</u> <u>Methodological Foundations, 12e.</u>