

Business Research Methods

Donald R. Cooper / Pamela S. Schindler

NINTH EDITION

>businessresearchmethods

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BUSINESS RESEARCH METHODS

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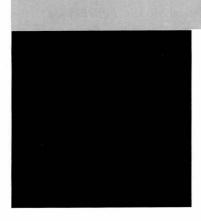
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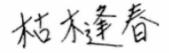
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To my sons, Ryan and Paul Cooper, for their love and courage; in memory of my daughter Chrissy; and to my Li Xiaoying for her gentle spirit, endless devotion, and loving care.



Donald Cooper

To Bill, my partner in the fullest sense of the word.

Pamela S. Schindler

Walkthrough

Bringing Research to Life reveals research in the trenches.

Much of research activity isn't obvious or visible. These opening vignettes are designed to take the student behind the door marked RESEARCH. Through the activities of the principals at Henry & Associates, students learn about research projects, many that were revealed to the authors off the record. The characters and names of companies are fictional, but the research activities they describe are real—and happening behind the scenes in hundreds of firms every day.

>bringingresearchtolife

Sally arrives for an analysis meeting with Jason and finds a round, bald little man sitting at Jason's desk, studying the screen of a laptop computer, stroking his gray beard and smiling broadly.

"Sally," says Jason, "meet Jack Adams, rising polit-

Jack, who seems to be caressing his laptop, grins broadly. "Hello, Sally," says Jack. "I wanted Jason to omputer has made me the marketing

ca Beach political scene."

ths I played golf in the morning and twice that in Gladeside." d played cards in the afternoon. For r neighbor Marty died and his wife

newspaper that the incidence of areighborhoods where the sheriff hap- down here." gher than in Gladeside."

Research hypothesis: Gladeside residents get special treatment when it comes to solving crimes and thus live in a safer environment due to their higher

Null hypothesis: Gladeside and Oceanside receive the same attention from the police.

	Gladeside	Oceanside
olice calls without arrest	46	40
olice calls resulting in arrest	4	10

"I doubt that Sandy would have paid attention, expainting business on Long Island to cept that in both neighborhoods the total number of pomoved to Boca Beach after his wife lice calls happened to be 50, which made it easy for him to see that in Oceanside the rate of arrests was

"Actually," says Sally, "I'm surprised there would en days, I did this. I was going crazy. be any police calls in such an upscale community."

"We are old," says Jack, "but not dead."

"In any case, Sandy's finely honed political instincts rough Boca Beach and stopped for a told him he was going nowhere by trying to turn the ed a statistical program, free from community against the sheriff. It would be much, much st say, statistics in college never gen- better to turn voters of Oceanside against those in tement as they have recently," grins Gladeside. So he complained about the disparate impact ise guy, Sandy Plover, a former elec- of arrests. While both the communities are roughly the n Jersey, who got himself into local same size, in Oceanside folks are mostly from Brooklyn, atural-born troublemaker, he waited and in Gladeside folks come from the Bronx."

"But the ethics . . ."

". . . meant nothing to Sandy. He told me, 'I think m police calls to Oceanside—the I'm gonna kick some butt and make a name for myself

> "The trouble with the police calls as an issue is that sheriffs' offices nowadays are well staffed with

>chapter 14 Questionnaires and Instruments

6 By using the Internet, you can show consumers pictures, show them packaging and even play videos. 9 9

>learningobjectives

After reading this chapter, you should understand . . .

- The link forged between the management dilemma and the communication instrument by the management-research question
- 2 The influence of the communication method on instrument design.
- 3 The three general classes of information and what each contributes
- 4 The influence of question content, question wording, response strategy, and preliminary analysis planning on question construction. 5 Each of the numerous question design issues influencing instrument quality, reliability, and validity.
- 7 The importance of pretesting questions and instruments

Learning Objectives serve as memory flags.

Learning objectives serve as a road map as students start their journey into the chapter. Read first, these objectives subconsciously encourage students to seek relevant material, definitions, and exhibits.

Special tools for today's visual learner.

A transformation is taking place in many of our classrooms. During the last decade, more and more of our students have become visual—not verbal—learners. Verbal learners learn primarily from reading text. Visual learners need pictures, diagrams, and graphs to clarify and reinforce what the text relates.

Integrated research process exhibits reveal a rich and complex process in an understandable way.

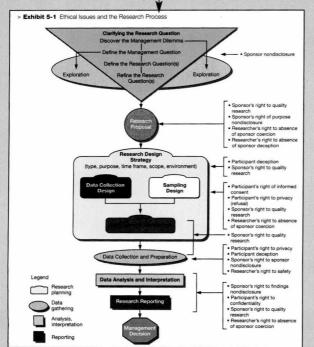
Every textbook has exhibits. We use these tables and line drawings to bring key concepts to life and make complex concepts more understandable.

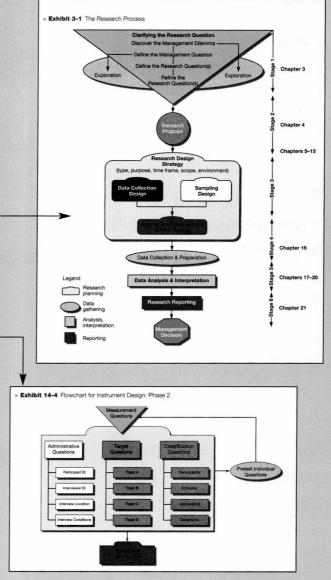
Within our array of exhibits is a very special series of 31 fully integrated research process exhibits. Each exhibit in this series shares symbols, shapes, and colors with others in the series.

Exhibit 3-1 is the overview exhibit of the research process, to which all other exhibits related to the process will link.

Subsequent exhibits (like this one for survey design) show more detail in a part of this process.

Another exhibit in the series might layer the main process exhibit with additional information (like this exhibit from the ethics chapter).





You'll find more than 300 exhibits within this text to aid student understanding.

Some topics deserve more attention—with their own chapter!

Ethical issues get the attention they deserve.

Ethical issues abound in business research but may go unnoticed by students who need a framework to discuss and understand these issues.

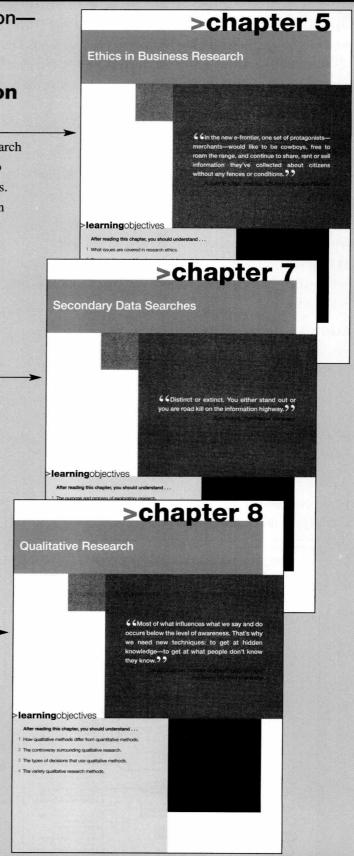
We devote a chapter to building that framework. Then in subsequent chapters we highlight when an ethical issue might be present with a special icon.

Help in moving from management dilemma to research design.

This is where talented people can steer research in the wrong direction. We devote a chapter to this difficult phase of research planning. And we introduce the student to a methodology for making the right decisions more often.

Qualitative research steps out from the background.

Researchers increasingly admit that quantitative research can't reveal all they need to know to make smart business decisions. In a special chapter, we capture the best of the current qualitative methods and reveal where and how they are used. Your students should know the qualitative methods beyond the perennial favorite—the focus group.



>snapshot

If you were Kraft and discovered that, while sales of sliced re increasing, your brand's sales were decre asing, you might turn to advertising to reverse the slide. But just what would you say—and how? Faced with this situation, Kraft sent ethnographers from Strategic Frameworking to talk with moms aged 25-64 who were fixing sandwiches in their kitchens. Focus groups then reinforced that moms feel good about giving their kids cheese because of its nutritional value. Focus groups also revealed that even though their kids preferred Kraft slices, a price difference could persuade moms to purchase a competitive brand. A subsequent phone survey by Market Facts revealed moms would buy the pricier Kraft slices due to extra calcium. "good-taste-plus-the-calcium-they-need" message. A spot featuring a straightforward message didn't score as high as one

calcium" message generated guilt, not positive purchase intentions. A revised commercial featured the cheese-scarfing kids while the Dairy Fairy (an animated cow) delivered the calcium message. Subsequently, Millward Brown Group discovered through copy-testing research that the dual message had finally gotten through. The TV commercial aired, delivering an 11.8 percent increase in sales and a 14.5 percent increase in base volume. Sixty-five percent of the growth in sales was attributed to the campaign.

www.marketfacts.com; www.millwardbrown.com;

problem from a multimethod, multistudy strategy, the advantages of several competing de-

signs should be considered before settling on a final one.

Jason's preference for MindWriter is to collect as much information as possible from an exploration of company records, company managers of various departments, and multiple phone surveys. Financial constraints, however, might force the substitution of a less expensive methodology: a self-administered study in the form of a postcard sent to each CompleteCare program user with his or her returned laptop, followed by phone contact with nonresponders

> Sampling Design

Another step in planning the design is to identify the target population and select the s ple if a census is not desired. The researcher must determine who and how many people to interview, what and how many events to observe, or what and how many records to inspect. A sample is a part of the target population, carefully selected to represent that population. When researchers undertake sampling studies, they are interested in estimating one or more

population values and/or testing one or more statistical hypotheses.

If a study's objective is to examine the attitudes of U.S. automobile assemblers about quality improvement, the population may be defined as the entire adult population of auto assemblers employed by the auto industry in the United States. Definition of the terms adult and assembler and the relevant job descriptions included under "assembly" and "auto industry" may further limit the population under study. The investigator may also want to restrict the research to readily identifiable companies in the market, vehicle types, or assembly processes.

We describe types of samples, sample frames, and the determination of sample size in Chapter 15 and

The sampling process must then give every person within the target population a known nonzero chance of selection if probability sampling is used. If there is no feasible alternative, a nonprobability approach may be used. Jason knows that his target population comprises MindWriter customers who have firsthand experience with the CompleteCare program. Given that a list of CompleteCare program users (a sample frame) is readily available each month, a probability sample is feasible.

Students learn by and deserve the best examples.

Snapshots are research examples from the researcher's perspective.

Snapshots are like mini-cases: They help a student understand a concept in the text by giving a current example. As mini-cases they are perfect for lively class discussion. Each one focuses on a particular part of the research process as it applies to a particular firm and project. You'll find more than 60 of these timely research examples throughout the text, several in each chapter, some from well-known companies but many from research firms that until now you've had no reason to get to know.

Web addresses speed secondary data searches for additional information on an example.

Margin notes reinforce and link the text discussion to prior or subsequent material.

Icons help students link parts of a richer, more complex example, told over a series of chapters.

Some examples are so rich in detail that one Snapshot or exhibit just isn't sufficient. MindWriter is a computer laptop manufacturer that prides itself on customer service, especially when it comes to laptop repair at its CompleteCare center. Each time you see this icon in the text, you'll be learning more about the customer satisfaction research that Henry & Associates is doing.

Two award-winning research programs appear in several chapters, on the student CD, and on video.

Covering Kids Research Program



Lexus SC 430 Research Program

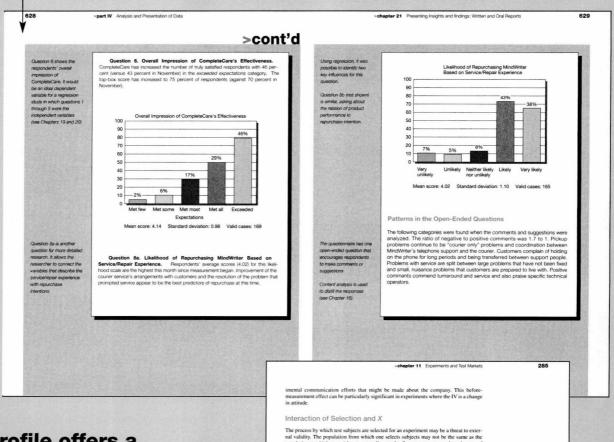


Other award-winning examples appear throughout the text. Watch for this icon to recognize these examples.



The Closeup offers a more in-depth examination of a key example.

Sometimes you just need more time and space to showcase all the detail of an example. This glimpse of the Closeup from Chapter 21 reveals two pages from a complete annotated client research report.



PicProfile offers a memory visual to enhance an example.

In research, as in life, sometimes a picture is worth more than words. Sometimes you need to see what is being described to fully understand the foundation research principle. That's the case with the research for FloorGraphics. You need to see the ad to understand how the research guided its development. These visuals are offered as memory teasers, to help students remember the research example.

The process by which test subjects are selected for an experiment may be a threat to external validity. The population from which one selects subjects may not be the same as the population to which one wishes to generalize results. Suppose you use selected group of workers in one department for a test of the piecework incentive system. The question may remain as to whether you can extrapolate those results to all production workers. Or consider a study in which you ask a cross section of a population to participate in an experiment but a substantial number refuse. If you conduct the experiment only with those who agree to participate (self-selection), can the results be generalized to the total population?

Other Reactive Factors

The experimental settings themselves may have a biasing effect on a subject's response to X. An artificial setting can obviously produce results that are not representative of larger populations. Suppose the workers who are given the incentive pay are moved to a different



>picprofile

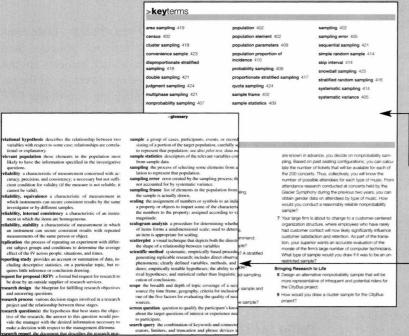
Resembers know that as many as 60 percent of purchase decisions are made in the store. Thus marketers agreeatively seek in-store agence to place temporary displays, shelf-stakes, and instant outpoors, as well as ceiling signs and panners. Even the floor is contested real estate. So the ability to demonstrate the effectiveness of promotional materials is critical. PCORgraphics, four, uses a inorphical desight, instabled groups of stores (test and control of the contro

Learning aids cement the concepts.

Discussion questions and Web exercises that go one step further.

Four types of discussion questions reveal differing levels of understanding—from knowing a definition to applying a concept.

The Web exercise asks students to search on the Web for something that they might need to do if they were acting the role of researcher.



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source evaluation—Conf.
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primary sources 165
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scope 169
purpose 169
scope 169

Ciscussionquestions

Terma in Review
1 Expan how each of the five evaluation factors for a secondary source influence its management decision-making value:
a Purpose
b Scope
c Authority
d Audience
b Scope
c Authority
d Audience
e Format
2 Define the distinctions between primary, secondary, and testary sources in a secondary search.
3 What is data mining?
4 Expain how internal data mining factoricquies differ from a flerature search.
5 Some researchers fird that their sole sources are secondary data. Why map the tib bit? Name some management questors for which secondary also sources are secondary data. Why map the tib bit? Name some management questors for which secondary also sources are secondary data. Why map the tib bit? Name some management questors for which secondary also sources are secondary data. Why map the tib bit? Name some management questors for which secondary also sources are probably the only ones feesible.

Making Research becidion

6 Assume you are asked to investigate the use of mathematical propriets and the secondary data sources are probably the only ones feesible.

Making Research becidion

6 Assume you are asked to investigate the use of mathematical propriets and the secondary data sources where the secondary data sources where well asked have conducted the secondary data sources are probably the only ones feesible.

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Glossary reinforce the importance of learning the language of research.

Supplements offer the tools students and faculty ask for . . . and more.



On the CD, students will find everything from cases and data sets to a directory of business information sources (with Web links), a research proposal, a sample student project, and supplemental material for many chapters.

Forty-eight cases are on the CD, from one-page focused cases to full-coverage, comprehensive cases. Four new video cases, filmed especially for this text, feature award-winning research programs and award-winning products and companies. You'll find 15 full-size written cases providing an intensive look at some noteworthy research written especially to reveal the concepts in this text—12 of these are so new they reflect ongoing research programs or those conducted within the year before publication.

>preface

Business Research Methods is designed to share the stimulating, challenging, fascinating, and sometimes frustrating world of research-supported decision making with undergraduate students preparing to be future managers. We have used our research and teaching experience and our numerous research industry contacts to create a textbook full of practical examples and researcher insights. For undergraduate students just learning about research methods or graduate students advancing their research knowledge, with each new edition Business Research Methods promises—and delivers—not only a teachable textbook but a valued reference for the future.

Four words summarize the changes made to this ninth edition of *Business Research Methods*—**expanded**, **reorganized**, **new**, and **collaboration**. You'll be happy to see that we've made these changes while keeping all those features on which you have come to rely—great coverage of the research process, especially the clarification of the research problem; great coverage of ethical issues; great coverage of survey research; and great coverage of research reporting.

What's Expanded?

Coverage of Qualitative Research You'll find a new chapter in Business Research Methods—"Qualitative Research." For several years research practitioners have been exhibiting increasing interest in qualitative research methodologies. In their search for insights, they are using these qualitative techniques more frequently. These tools took a back seat to the quantitative ones during the last 20 years, which may explain why many of our students think research is synonymous with survey. To correct this misconception, we've given students the "what and why" of numerous qualitative techniques in Chapter 8. Here we've expanded our coverage of the focus group (as it is the most frequently used qualitative technique), and we've also presented a rich array of other techniques being used. You'll notice that our Snapshots and cases also reveal an increasing use of qualitative techniques. And we've given students something most have never seen: a focus group discussion guide. Now you and your students can see how a 25-year veteran moderator structures a focus group. It's in Appendix A.

Process Series of Exhibits The core pedagogy of *Business Research Methods* is based on an understanding that students learn both verbally and visually. Our process series of exhibits has been expanded to cover every aspect of the research process. These exhibits offer an overview of a process or a more detailed breakout of a subprocess. And

each exhibit is linked to the others in the series with a consistency in use of shape and color. In all, three new exhibits have joined this series, and many of the others have been refined to make the research process easier to understand. You'll now find 31 of these exhibits throughout the text.

Coverage of Research Industry Structure Reviewers told us that many of their students won't ever do actual research themselves but will be more likely to hire specialists and need to supervise the process. As a result, we've added a section to Chapter 1 that describes how the research industry is structured and how research specialists work together to accomplish projects.

Coverage of Request for Proposals If students become managers who hire out research projects, then they need to know more about how such projects are put out for bid. Thus, we've expanded our coverage of the request for proposal—the RFP—including a complete RFP developed for an Ogilvy Research Award—winning project. By following the *Covering Kids* project from RFP, through the various Snapshots, the written case, and the video case, your students will fully understand the process so critical to quality research.

Coverage of Test Markets The most notable experiment in business research is the test market. We've added a section to Chapter 11 to give it the attention that this frequently used methodology deserves.

What's Reorganized?

Different Chapter Order You might first notice a different order of chapters. When we added Chapter 8, we asked reviewers to describe the order in which they cover material and the level at which they cover that material. This made us rethink the order of the chapters. The most notable changes are the "Secondary Data Searches" chapter—it has moved forward—and "Sampling," which we've moved to a later position. Both of these chapters are stand-alone chapters, however, that can be moved earlier or later depending on your particular teaching model. Our overview of data mining has also moved, to coincide with the observation methodology known as record analysis in Chapter 9.

Several Chapter Appendices Our reviewers all teach their research methods courses different ways. They cover the material in different order. Some cover material that others ignore. Their suggestions resulted in our

>preface Xiii

pulling into a free-standing chapter appendix some material previously embedded in the chapter. This will facilitate the process of using—or not using—the material in your specific course. Chapter appendices include the sample RFP on the *Covering Kids* project, complex experimental designs, crafting questions for questionnaires, calculating sample size, the pretesting of questions and questionnaires, and describing data statistically.

Clearer Writing within Each Chapter With a three-year cycle for each new edition, authors often don't get the opportunity to reexamine every word of every chapter. We took that opportunity with the ninth edition. So you may notice that some sections within your favorite chapters have been moved later or earlier within the chapter. Our student reviewers told us that this order change made material easier to understand. And you also may notice that some definitions are shorter and more tightly written or that where we had used complex sentences, we've rewritten the material in a simpler structure. Every change is designed to enhance student understanding before you devote valuable class time to the topic.

What's New?

Research Project Examples Examples are what make research methodology understandable. Some of our student reviewers told us that it is the Snapshots of real research that make them stop and consider what they have been reading. Others like to work with cases. We took their advice and enriched the ninth edition with numerous new examples—more than 60 of them—not only in the Snapshots but embedded in the text as well.

Video Cases We took award-winning research projects and with the help of the companies involved developed four new video cases to work with the pedagogy of the book. Lexus, Starbucks, Wirthlin Worldwide, Robert Wood Johnson Foundation, GMMB, Visa, Bank One, Team One Advertising, U.S. Tennis Association, Vigilante New York, and The Taylor Group are some of the firms involved with these research cases.

Written Cases Cases offer an opportunity to tell research stories in more depth and detail. Of course it helps that we have research contacts with really interesting stories to tell. You'll find stories from Ogilvy Research Award winners on children's health care initiatives, and you'll learn about the American Heart Association's first paid advertising campaign and the research behind it, as well as how the U.S. Tennis Association is revitalizing its sport and, in the process, conducting the largest research project ever related to sport. You'll see how Campbell-

Ewald uses research to measure the construct of *respect*. You'll learn how one man with a vision can move airlines as you follow the research being done by the Open Doors Organization in its attempt to substantiate the growing economic power of travelers with disabilities and how NetConversions helps Kelley Blue Book design the most powerful automotive site on the Web. You'll learn how Wirthlin Worldwide helped the American Red Cross use research to revitalize donations and how Starbucks, Bank One (now J.P. Morgan Chase), and Visa dreamed up a new financial product that won BusinessWeek's outstanding product honor. And you'll learn how the low-carbohydrate diet craze inspired Donatos Pizza and how Yahoo! and ACNielsen moved Web metrics a giant leap forward. These are research projects just completed or, in several instances, ongoing.

Content-Related Exhibits In all, you'll find 12 new exhibits and 3 new process series exhibits to make student learning easier. Some of these introduce the student to different types of research—like syndicated research studies and omnibus research—while others explain concepts and constructs, some detail error sources, and others offer examples of Web survey questions.

Web Exercises It's appropriate to do Web searches as part of a research methods course, so each chapter offers one or more new exercises to stimulate your students to hone their searching skills. And for those students without that skill, they will find all the help they need in Chapter 7, "Secondary Data Searches."

Sample Student Project We've replaced the student project of the last few editions with a more comprehensive one. You and your students will find it on the text CD.

Who Collaborated?

To birth a revision, you have to have help from many people. So we extend our sincere appreciation:

- To Judith Violette, Director, Helmke Library at Indiana University-Purdue University at Fort Wayne (Indiana), who worked to develop the comprehensive information sources files on the text CD and whose knowledge of information search is the foundation for the advanced searching Closeup in Chapter 7. She never fails to find more efficient and effective ways to help us search.
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We also hope you and your students discover, or rediscover, how interesting research can be.

> Pamela Schindler Donald Cooper

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