BUSINESS
RESEARCH METHODS

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SEVENTH EDITION

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Business Research Methods

SEVENTH EDITION

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Irwin

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To my sons, Ryan and Paul Cooper

For your love, support, and courage.

Courage is not simply one of the virtues,
but the form of every virtue at the
testing point.

—C.S. Lewis

Donald R. Cooper

To my life's partner, Bill

Your humor, understanding, willing acceptance of
new demands and ever-changing roles made the
sustained effort enjoyable. And the talent, caring
and giving that transformed a room into a creative
and productive workspace made it possible. If I could,
I would give you the moon and the stars, but you'll have
to accept ever-expanding love as
your compensation.

Pamela S. Schindler

Preface

Author teams are in some respects like a couple—it takes time for them to mesh their ideas and styles to make an interesting whole. We hope you'll find that the more established marriage of our ideas has resulted in a fresh approach for teaching research methods, one that breathes life into a subject that educators and practitioners find—exciting—but that many students find dry or (heaven forbid!) dull.

So we set out with the seventh edition, our second together, to transform the study of research into a process as exciting and challenging as the decisions that make it a critical managerial process. And, we hope you'll agree we've made the study of research stimulating and enjoyable!

Fulfilling Faculty Fantasies! Spectacular Student Simulation!

Learning-Enhanced Organization

You asked us to rethink the organization and content of several chapters. We did and our detailed table of contents tells the story.

- Sampling issues are now in Chapter 7, bumped up two slots for those of you that wanted that coverage earlier.

- Data mining has found a new home with Exploring Secondary Data in Chapter 10.

- We've split Data Preparation and Analysis into two more easily digestible chapters, Chapter 15: Data Preparation and Description and Chapter 16: Exploring, Displaying, and Examining Data.

- Statistical Process Control has moved forward to join Geographic Information Systems and other display techniques in the new Chapter 16.

We've listened to each of our reviewers and adopters' suggestions. So you'll find the following great improvements in every chapter.

Shortened, Enriched Vignettes

Students and faculty alike said they appreciate our opening vignettes, *BRINGING RESEARCH TO LIFE,* featuring Jason and Myra, who struggle with their differing perspectives and responsibilities as they find workable solutions to MindWriter issues. Of course, Jason, as an independent research contractor, has other clients, not just MindWriter. So you'll find some vignettes venture into new decision making arenas. A few reviewers said, "Our students sometimes skip the vignettes." Others told us, "These are the gems that make the learning experience rich. We found ourselves chuckling." Who said learning had to be a somber, serious experience? So, we've tightened our Bringing Research to Life feature stories, packed them full of rich detail from the original research on which they are based, and integrated them more fully into each chapter. You'll find these vignettes discussed within the chapter, showcased in exhibits, and linked to end-of-chapter discussion questions that direct the student to revisit the story and mine for all that rich research detail.

Examples, Examples, Examples!

"But where," some reviewers asked, "are the real research examples?" We were confounded! After all, we spent countless hours imbedding real research within each chapter, each case, each vignette, and even the end-of-chapter questions. Sure, we disguised the names of some companies. Research is proprietary information. Everyone understands a company's reticence to be named—or so we thought! So you want names. You want details. What you want is the inside scoop you don't always read or hear in the business press. Well, we've delivered that in the seventh edition! One new feature, our *SNAPSHOT,* gives you mini-capsules of real research driven by real management dilemmas. We're indebted to the companies that shared their reams of data, proposals, research reports, and methodology with us, and to the busy executives who gave of their time to make each *SNAPSHOT* come to life. You'll find the list of companies whose research is

featured in this edition in another new feature: the *EXAMPLES INDEX*.

Another way to breathe life, and interest, into research is to "capture" research as it happens. For this feature we turned to the world's largest research organizations, as well as small and medium sized ones. We asked for visuals with descriptive captions. The result is another new feature: images depicting what research companies do. We've tied each research visual to its context, and linked each to the company conducting the research (and we've provided each company's *Web URLs* to encourage students to explore the company further). Our intent is to make our students, who are prospective purchasers of research services as well as self-researchers, familiar with a variety of research companies.

Of course, some of those companies still want their identity to be concealed. We've honored their request by giving them fictitious names—this doesn't, however, make their research any less real. For a total listing of examples used within the seventh edition, all the real research examples contained in chapter text, Snapshots, Exhibits, visuals or cases, by company (real or disguised), check out our *EXAMPLES INDEX*.

New Cases and Returning Favorites

Some of the research efforts shared with us were too rich for the brief visit afforded by the Snapshot, so we've created six new *FULL-LENGTH CASES* for the seventh edition. Yes, we've kept those cases that accompanied our last edition. And now all written cases are contained within a single section, *CASES*, not as a separate supplement as in the sixth edition. Several cases have data sets on the CD bound to the text's back cover. Some cases contain the actual research instruments. And as a plus with the seventh edition we've included *VIDEO CASES*. Ten vignettes accompany this text on the instructor's videotape cassette. All cases share real decision-making dilemmas with the students and student–managers studying in the business and public administration programs that use our text.

Tips for Researchers, from Researchers!

In collecting all this fresh information about actual research and conferring with numerous research professionals, we've had reinforced how valuable experience is to those who supervise or purchase research. So

we've added yet another new feature, the research *TIP*. These insights will make buying and doing research easier, as they capture the suggestions of experienced researchers.

More and Better Student Learning Aids!

We've taken special care to strengthen the learning tools designed for students.

- Our bundled student CD contains the PowerPoint *KEY CONCEPTS SLIDE-SET* we've designed for faculty. Each chapter's slide-set covers the critical concepts—a handy tool our own students asked us to include.

- And in this quick reference age, we've added a *GLOSSARY* of text-bolded terms, with each term keyed to its relevant chapter(s).

- With so many students bringing computers to campus, and even taking their research course on-line, students will also find a *SEARCHABLE GLOSSARY* on the bundled CD.

- We've also added a *SEARCHABLE EXHIBITS INDEX* on the CD, so you can identify the location of a prior exhibit you want to refer to once again.

- Instructor's can opt to have *SPSS* bundled with their text.

- End-of-chapter *DISCUSSION QUESTIONS* are divided by type of review and analytical processes requested of the student:

  - *TERMS IN REVIEW* questions plumb for definitional understanding.

  - *MAKING RESEARCH DECISIONS* present students with real management dilemmas in which research has a role in the manager's decision-making.

  - *BRINGING RESEARCH TO LIFE* questions revisit the chapter-opening vignettes, linking the research in these stories to key terms and concepts.

  - *FROM CONCEPT TO PRACTICE* questions will reveal a student's level of understanding of critical exhibits.

  - *WWW EXERCISES* cater to students' need to be agile information finders. You'll find these on our web site (www.mhhe.com/business/cooper7/), where we can regularly manage the environment

of changing links, keeping to a minimum those frustrating error messages one gets when links are no longer active.

- Chapter 10 and Appendix A were rewritten for the web-savvy researcher in recognition of the web's rapid growth and information dominance, and given a researcher's need for efficient secondary data searching.

- You'll also find an even more comprehensive list of *SEARCHABLE BUSINESS REFERENCE SOURCES* on the CD, and we'll update, as necessary, the links relevant to this list on our web site.

Special Gratitude for Unflagging Support!

Family, both real and extended, are always the foundation of any effort this large. So we send a very special thank you to the following:

- Judith Violette, Director, Helmuth Library, Indiana University-Purdue University-Fort Wayne, who brought Chapter 10 fully into the information age.

- Sarah Arntsen, Class of 2000, Student Director, Wittenberg University Center for Applied Management, who created the PowerPoint Slide Set.

- Kelly Maguire, Class of 2001, Staff Assistant, Wittenberg University Center for Applied Management, who took on all those numerous, often thankless, detail tasks, and who created one of the large data sets on your CD.

- Paul Cooper, Graphic Designer at Virtacon, for another powerful and unifying cover design.

Our reviewers bring us incredible insights that seed new ideas and inspire us to rethink old ones. Thank you, John Ballard, College of Mount St. Joseph; Larry Banks, University of Phoenix; Caroll M. Belew,

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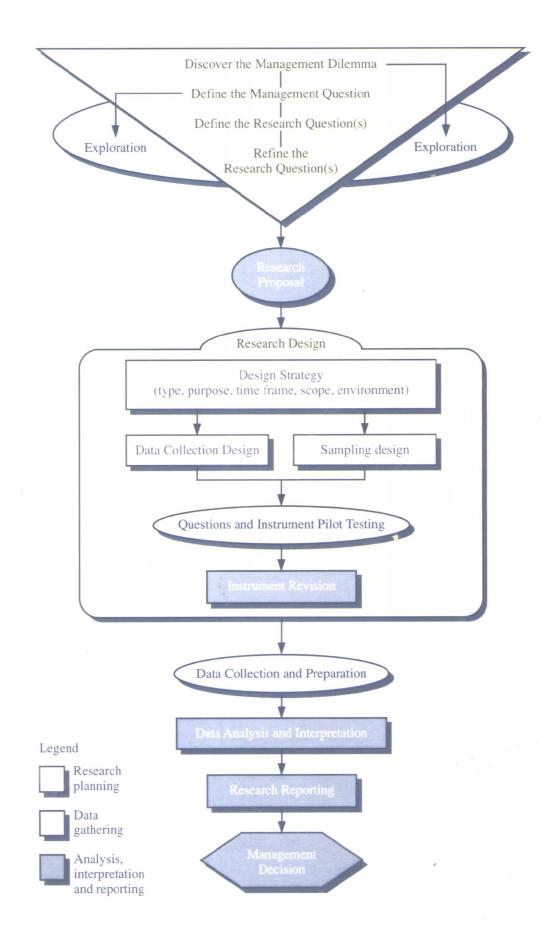
Like all ongoing creative projects, this book has evolved because of past contributions. We recognize J. K. Bandyopedyay, Phillip Beukema, Alan D. Carey, Francis Connelly, Thomas J. Dudley, William J. Evans, Hamid Falatoon, Robert Fetter, Stewart E. Fleige, Frederick A. Grodecki, John Hanke, Claude McMillan, Ralph J. Melaragno, Jay S. Mendell, Hamid Noori, Walter Nord, J. Paul Peter, Harold F. Rahmlow, Elizabeth E. Regimbal, Perri J. Stinson, Craig Swenson, Alexander Voloatta, and Richard A. Wald.

Synergy and Energy

All in all, we kept the best of what you liked in the sixth edition and enriched it with the color, relevance, unity, and meaning you asked for. The Irwin-McGraw Hill team made that goal a reality: Scott Isenberg, Senior Sponsoring Editor, who does magical things for us in the corporate decision arena and Gail Korosa, Senior Developmental Editor, who creates with us, chides and encourages us, and coordinates with remarkable results. Thank you Scott and Gail. We also extend our gratitude to Zina Craft, Marketing Manager; Jim Labeots, Project Manager; Matthew Baldwin, Designer; Michael McCormick, Production Supervisor; Mark Sienicki, Supplement Coordinator; and Ed Przyzycki, New Media.

We hope you'll find the intertwining of our skills and interests rewarding in the classroom.

Donald R. Cooper
Pamela S. Schindler

Discover the Management Dilemma

Define the Management Question

Define the Research Question(s)

Refine the Research Question(s)

Exploration

Exploration

Research Proposal

Research Design

Design Strategy
(type, purpose, time frame, scope, environment)

Data Collection Design

Sampling design

Questions and Instrument Pilot Testing

Instrument Revision

Data Collection and Preparation

Data Analysis and Interpretation

Research Reporting

Management Decision

Legend

Research planning

Data gathering

Analysis, interpretation and reporting

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This CD contains:

- Business Reference Sources, printed and electronic (Word 97); searchable by business discipline, type of source, or key term.
- Glossary (Word 97-table); searchable by concept, key term (within definition field), chapter, or exhibit number.
- Key Concepts (PowerPoint 97) Slide Set, one for each chapter in the text; searchable by key term.
- Data Files (Excel 97) for all files depicting the data set icon; easily importable to data analysis software (like SPSS).
- Exhibits Index; searchable by key term or exhibit number.

Brief Contents

Contents