

TWELFTH EDITION

# BUSINESS RESEARCH METHODS

DONALD R. COOPER | PAMELA S. SCHINDLER

# > **business research methods**



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# > **business** research **methods**

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**twelfth**edition

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**To Kelli Cooper, my wife, for her love and support.**

Donald R. Cooper

**To my soulmate and husband, Bill, for his unwavering support and sage advice.**

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.

### > bringing research to life

Jason Henry and Sara Arens, partners in Henry & Associates, are just wrapping up a Web-based briefing on the MindWriter project. Jason and Sara are in Boca Raton, Florida. Myra Wines, MindWriter's director of consumer affairs is participating from Atlanta, as are others, including Jean-Claude Malraison, MindWriter's general manager, who joined from Delhi, India, and Gracie Uhura, MindWriter's marketing manager, and her staff, who joined from a conference room in their Austin, Texas, facility.

"Based on the poll results that are on your screen, you have reached a strong consensus on your first priority. The research strongly supports that you should be negotiating stronger courier contracts to address the in-transit damage issues. Congratulations," concluded Jason.

"That wraps up our briefing, today. Sara and I are happy to respond to any e-mail questions any of you might have after reading the summary report that has been delivered to your e-mail. Our e-mail address is on screen, and it is also on the cover of the report. Myra, I'm handing control of the meeting back to you."

As Myra started to conclude the meeting, Sara was holding up a sign in front of Jason that read. "Turn off your microphone." Jason gave a thumbs-up sign and clicked off his mic.

"Thank you, Jason," stated Myra. "The research has clarified some critical issues for us and you have helped us focus on some probable solutions. This concludes the meeting. I'll be following up soon with an e-mail that contains a link to the recorded archive of this presentation, allowing you to share it with your staff. You will also be asked to participate in a brief survey when you close the Web-presentation window. I'd really appreciate your taking the three minutes it will take to complete the survey. Thank you all for attending."

As soon as the audience audio was disconnected, Myra indicated, "That went well, Jason. The use of the Q&A tool to obtain their pre-report ideas for action was a stroke of genius. When you posted the results as a poll and had them indicate their first priority, they all over the board. It helped them understand that

one purpose of the research and today's meeting was to bring them all together."

"Sara gets the credit for that stroke of genius," claimed Jason after removing his microphone and clicking on his speakerphone. "She is a strong proponent of interaction in our briefings. And she continually invents new ways to get people involved and keep them engaged."

"Kudos, Sara," exclaimed Myra. "Who gets the credit for simplifying the monthly comparison chart?"

"Those honors actually go to our intern, Sammy Grayson," shared Sara. "I told her while it was a suitable graph for the written report; it was much too complex a visual for the presentation. She did a great job. I'll pass on your praise."

"Well," asked Myra, "where do we go from here?"

"Jason and I will field any questions for the next week from you or your staff," explained Sara. "Then we will consider this project complete—until you contact us again."

"About that," Myra paused. "I've just received an e-mail from Jean-Claude. He wants to meet with you both about a new project he has in mind. He asks if he could pick you up at the Boca airport on Friday, about 2:30 P.M. He says his flying office will have you back in time for an early dinner."

Sara consulted her iPhone and indicated she was available. Jason looked at his own calendar and smiled across the desk at Sara. "Tell Jean-Claude we'll meet him at the airport. Any idea what this new project is about?"

"Not a clue!"

## > chapter 2

### Ethics in Business Research

#### > learning objectives

After reading this chapter, you should understand . . .

- 1 What issues are covered in research ethics.
- 2 The goal of "no harm" for all research activities and what constitutes "no harm" for participant, researcher, and research sponsor.
- 3 The differing ethical dilemmas and responsibilities of researchers, sponsors, and research assistants.
- 4 The role of ethical codes of conduct in professional associations.

## 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.

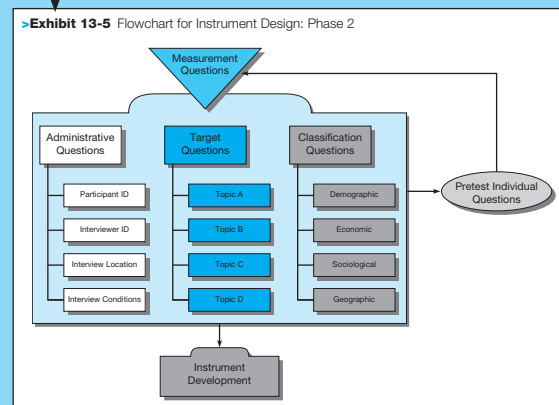
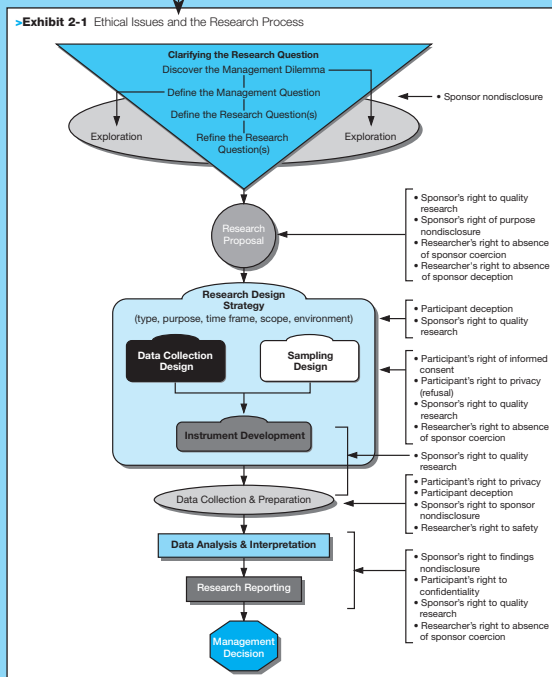
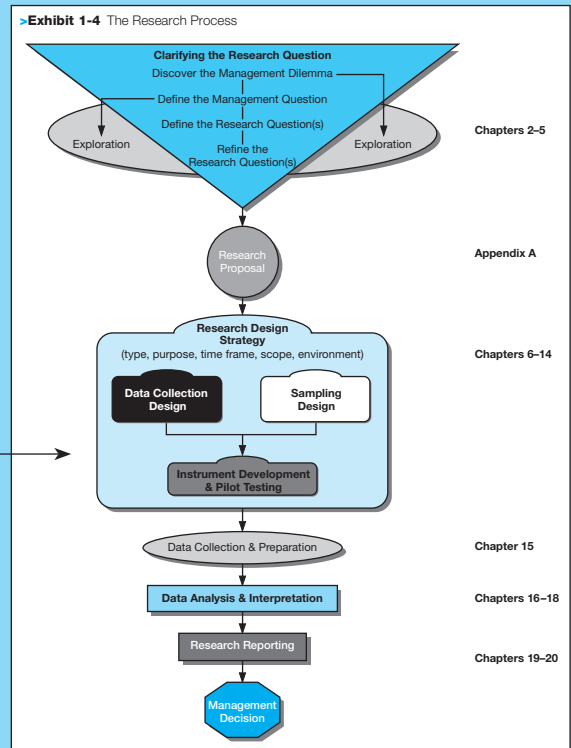
Every textbook has exhibits. We use these tables and line drawings to bring key concepts to life and make complex concepts more understandable.

Within our array of exhibits is a very special series of **32 fully integrated research process exhibits**. Each exhibit in this series shares symbols, shapes, and colors with others in the series.

Exhibit 1-3 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).





Some topics deserve more attention – with their own chapter!

## An emphasis on presentation.

Increasingly, researchers are making oral presentations of their findings through Web-driven technologies. We address this and other oral presentation formats and issues with a separate chapter.

**>chapter 20**  
Presenting Insights and Findings:  
Oral Presentations

**>learning objectives**  
After reading this chapter, you should understand ...

- 1 How the oral research presentation differs from and is similar to traditional public speaking.
- 2 Why historical rhetorical theory has practical influence on business presentation skills in the 21st century.
- 3 How to plan for the research presentation.
- 4 The frameworks and patterns of organizing a presentation.
- 5 The uses and differences between the types of materials designed to support your points.
- 6 How proficiency in research presentations requires designing good visuals and knowing how to use them effectively.
- 7 The importance of delivery to getting and holding the audience's attention.
- 8 Why practice is an essential ingredient to success and how to do it, and, what needs to be assembled and checked to be certain that arrangements for the occasion and venue are ready.

## All researchers increasingly need qualitative skills.

Researchers increasingly admit that quantitative research can't reveal all they need to know to make smart business decisions. We capture the best of the current qualitative methods and reveal where and how they are used.

**>chapter 7**  
Qualitative Research

**>learning objectives**  
After reading this chapter, you should understand ...

- 1 How qualitative methods differ from quantitative methods.
- 2 The controversy surrounding qualitative research.
- 3 The types of decisions that use qualitative methods.
- 4 The variety of qualitative research methods.

## Help in moving from management dilemma to research design.

This is where talented people can steer research in the wrong or right direction. We devote a chapter to providing students with a methodology for making the right decisions more often.

**>chapter 5**  
Clarifying the Research Question through  
Secondary Data and Exploration

**>learning objectives**  
After reading this chapter, you should understand ...

- 1 The purposes and process of exploratory research.
- 2 Two types and three levels of management decision-related secondary sources.
- 3 Five types of external information and the five critical factors for evaluating the value of a source and its content.
- 4 The process of using exploratory research to understand the management dilemma and work through the stages of analysis necessary to formulate the research question (and, ultimately, investigative questions and measurement questions).
- 5 What is involved in internal data mining and how internal data-mining techniques differ from literature searches.

## 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.

**>chapter 2**  
Ethics in Business Research

**>learning objectives**  
After reading this chapter, you should understand ...

- 1 What issues are covered in research ethics.
- 2 The goal of "no harm" for all research activities and what constitutes "no harm" for participant, researcher, and research sponsor.
- 3 The differing ethical dilemmas and responsibilities of researchers, sponsors, and research assistants.
- 4 The role of ethical codes of conduct in professional associations.

“Today, it would be remiss to say that the privacy profession is anything but flourishing. Companies are increasingly hiring privacy officers and even elevating them to C-suite positions; the European Commission has proposed a statute in its amended data protection framework that would require data protection officers at certain organizations, and at the International Association of Privacy Professionals (IAPP) membership recently hit 10,000 worldwide.”

Angelique Carson, CIPP/US,  
International Association of Privacy Professionals

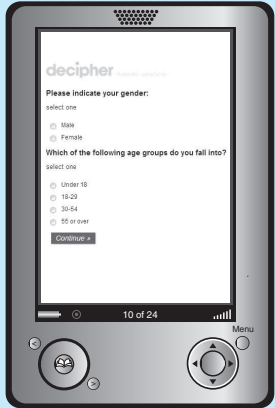
**>snapshot**

### The Challenges and Solutions to Mobile Questionnaire Design

"As researchers, we need to be sensitive to the unique challenges respondents face when completing surveys on mobile devices," shared Kristin Luck, CEO of Decipher. "Small screens, inflexible device-specific user input methods, and potentially slow data transfer speeds all combine to make the survey completion process more difficult than on a typical computer. Couple those hindrances with reduced attention spans and a lower frustration threshold and it's clear that, as researchers, we must be proactive in the design of both the questionnaire and user-interface in order to accommodate mobile respondents and provide them with an excellent survey experience."

Decipher researchers follow key guidelines when designing surveys for mobile devices like smart phones and tablets.

- **Ask 10 or fewer questions**
  - Minimize page refreshes—longer wait times reduce participation.
  - Ask few questions per page—many mobile devices have limited memory.
- **Use simple question modes—to minimize scrolling**
  - Keep question and answer text short—due to smaller screens.
  - If unavoidable, limit scrolling to one dimension (vertical is better than horizontal).
  - Use single-response or multiple-response radio button or checkbox questions rather than multidimension grid questions.
  - Limit open-end questions—to minimize typing.
  - Keep answer options to a short list.
  - For necessary longer answer-list options, use drop-down box (but limit these as they require more clicks to answer).
- **Minimize all non-essential content**
  - If used, limit logos to the first or last survey page.
  - Limit privacy policy to first or last survey page.



- Debate use of progress bar—it may encourage completion but also may require scrolling.
- **Minimize distraction**
  - Use simple, high-contrast color schemes—phones have limited color palettes.
  - Minimize JavaScript due to bandwidth concerns.
  - Eliminate Flash on surveys—due to incompatibility with iPhone.

Luck is passionate about making sure that researchers recognize the special requirements of designing for mobile as mobile surveys grow in use and projected use. S shares her expertise at conferences worldwide. [www.decipherinc.com](http://www.decipherinc.com)

be asked of participants. Four questions, covering numerous issues, guide the instrument designer in selecting appropriate question content:

- Should this question be asked (does it match the study objective)?
- Is the question of proper scope and coverage?
- Can the participant adequately answer this question as asked?
- Will the participant willingly answer this question as asked?


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 application of the research process as it applies to a particular firm and project. You'll find more than 82 of these timely research examples throughout the text and more in the Instructor's Manual.

**Web addresses** speed secondary data searches on companies involved with the example.

**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.

# 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 16 reveals two pages from a discussion on tabular data.

>closeup
>closeupcont'd

### Using Tables to Understand Data

Because the researcher's primary job is to discover the message revealed by the data, he or she needs every tool to reveal the message. Authors Sally Bigwood and Melissa Spore in their book *Presenting Numbers, Tables, and Charts* suggest that the table is the ultimate tool for extracting knowledge from data.

The presence of any number within a table is for comparison with a similar number—from last year, from another candidate, from another machine, against a goal, and so forth. Using the author's rules for table creation, a researcher exploring data by constructing a table should:

- Round numbers.**
  - Rounded numbers can be most easily compared, enabling us to more easily determine the ratio or relationship of one number to another.
  - If precision is critical to the number (e.g., you are researching taxes or design specifications or drug interactions), don't round the numbers.
- Arrange the numbers to reveal patterns.**
  - Order numbers from largest to smallest number.
    - In a vertically arranged table, order the largest number at the top.
    - In a horizontal arrangement, order the largest numbers on the left.
  - When looking for changes over time, order the numbers by year, from most distant (left or top) to most recent.
- Use averages, totals, or percentages to achieve focus.**
  - An average provides a point for comparison.
    - Don't use an average if the raw data reveal a bimodal distribution.
  - Totals emphasize the big picture.
  - Percentages show proportionate relationships more easily than raw data.
- Compare like scales in a single table.**
  - Convert numbers to a common scale when the numbers reflect different scales (e.g., grams versus ounces of cereal consumption, monthly salary data versus hourly wage data).
- Choose simplicity over complexity.**
  - Several smaller tables reveal patterns better than one large, complex table.
  - Complex tables are used as a convenient reference source for multiple elements of data.
- Use empty space and design to guide the eye to numbers that must be compared and to make patterns and exceptions stand out.**
  - Design a table with a smaller number of columns than rows.
  - Single-space numbers that must be compared.
  - Use gridlines to group numbers within a table; avoid gridlines between numbers that must be compared.
  - Use empty space to create gutters between numbers in simple tables.
  - Right-align column headers and table numbers.
- Summarize each data display.**
  - Write a phrase or sentence that summarizes your interpretation of the data presented; don't leave interpretation to chance.
    - Summary statements might be used as the title of a table or chart in the final research report.
    - The summary need not mention any numbers.
- Label and title tables for clarity of message.**
  - Titles should be comprehensive: include what (subject of the title or message), where (if data have a geographic base), when (date or time period covered), and unit of measure.
  - Include common information in the title: it lengthens a title but shortens the table's column headings.
  - Avoid abbreviations in column headings unless well known by your audience.
  - Avoid footnotes; if used, use symbols—like the asterisk—rather than numbers (numbers used as footnotes can be confused with the content numbers of the table).
  - For reference, provide an understandable source line for later reference.

#### AN EXAMPLE

Assume you were determining whether to expand into western Europe with distribution facilities to service online purchases of your specialty goods company.

**Table 1** Spending by Internet Users in Selected Western European Countries 2010 (EUROS in Billions)

	Annual Spending	Annual Purchases
France	Euro 664.5	16
Germany	Euro 658.0	20
Italy	Euro 345.5	14
Spain	Euro 560.1	10
United Kingdom	Euro 2284.9	36

We start with the above table that presents data developed from several studies on online shopping and purchasing behavior in selected countries in western Europe. The data are ordered alphabetically by country. While arranging in alphabetical order may be ideal for randomization or reduction of bias, it isn't a logical choice for clarity of data presentation.

What data might you need to help you make your decision about distribution facilities? Do you need to know the average transaction size? If you don't know the conversion rate of the euro to the dollar, can you interpret the table? Should you put your investment in the United Kingdom or elsewhere?

**Table 2** E5 Per Capita One-Year Online Spending (2010)

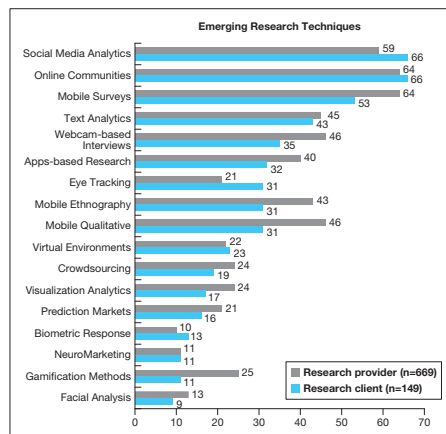
	Annual Spending (EUROS)	Average Annual Purchases	Annual Spending (US\$)
United Kingdom	2284.9	36	1736.2
Germany	658.0	20	500.0
France	664.5	16	505.0
Italy	345.5	14	262.6
Spain	560.1	10	425.6

Currency Exchange Rate: 1 US\$ = 1.316 EURO

Table 2 recasts the data using Bigwood and Spore's guidelines. First the table title has changed; now the annual period on which the spending data are based is more obvious, as well as the fact that we are looking at spending per capita for the top 5 European Union performers, known as the E5. We've also changed the column headers to reflect currency, and we have right-justified the headers and the numbers. We've rearranged the table by Average Spending (EURO) in descending order and interpreted the (EURO) column by adding a dollar conversion column. We might not need the rightmost column if we were euro spenders ourselves but, if we are more familiar with another currency, the addition of this column helps us interpret the data. With this arrangement, does Germany look attractive? While it might not currently appear to be as strong a contender as the United Kingdom, we know it is fiscally strong and located in a more central location to the other countries being considered.

# 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.



>picprofile

According to the 2012 Greenbook Research Industry Trends (GRIT) report, the top four emerging techniques, among both research buyers and providers all involve Internet use. "A big climber, from actual 2011 to expected 2012, is Mobile Surveys, with clients/buyers jumping from a current 17% to an expected 53% and vendors expecting the increase to be from 24% to 64%." Some speculate that the mobile survey may be approaching its tipping point. Other methodologies, like Mobile Qualitative, Mobile Ethnography, and Gamification, are getting a lot of buzz in the industry, but have yet to capture buyer/client support to the same degree that they have earned researcher interest. As in previous studies, researcher interest tends to lead on methodology. <http://www.greenbook.org/PDFs/GRIT-S12-Full.pdf>

Source: "Spring 2012 Greenbook Research Trends Report," GreenBook | New York AMA Communication Services Inc., February 2012, p. 22. Leonard Murphy, "GRIT Sneak Peek: What Emerging Research Techniques Will Be Used in 2012?" Greenbook, posted February 20, 2012. Downloaded April 18, 2012, <http://www.greenbookblog.org/2012/02/20/grit-sneak-peek-what-emerging-research-techniques-will-be-used-in-2012/>.

## Learning aids cement the concepts.

# Discussion questions that go one step further.

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

### >discussionquestions

#### Terms in Review

- 1 How does qualitative research differ from quantitative research?
- 2 How do data from qualitative research differ from data in quantitative research?
- 3 Why do senior executives feel more comfortable relying on qualitative data than quantitative data? How might a qualitative research company lessen the senior-level executive's skepticism?
- 4 Distinguish between structured, semistructured, and unstructured interviews.

#### Making Research Decisions

- 5 Assume you are a manufacturer of small kitchen electric, like Hamilton Beach/Proctor Silex, and you want to determine if some innovative designs with unusual shapes and colors developed for the European market could be successfully marketed in the U.S. market. What qualitative research would you recommend, and why?
- 6 NCR Corporation, known as a world leader in ATMs, point-of-sale (POS) retail checkout scanners, and check-in kiosks at airports, announced in June 2009 that it would move its world headquarters from Dayton (OH)

### >keyterms

bibliography 98	handbook 99	primary sources 96
data marts 102	index 98	research question(s) 112
data mining 102	individual depth interview (IDI) 94	secondary sources 96
data warehouse 102	investigative questions 113	source evaluation 100
dictionary 98	literature search 94	tertiary sources 97
directory 100	management question 108	
encyclopedia 98	measurement questions 118	
expert interview 94	custom-designed 118	
exploratory research 94	predesigned 118	

Key terms indexed at the end of the chapter and defined in the glossary.

### >discussionquestions

#### Terms in Review

- 1 Explain how each of the five evaluation factors for a secondary source influences its management decision-making value.

- a Purpose
- b Scope
- c Authority
- d Audience

- 6 You have been approached by the editor of *Gentleman's Magazine* to carry out a research study. The magazine has been unsuccessful in attracting shoe manufacturers as advertisers. When the sales reps tried to secure advertising from shoe manufacturers, they were told men's clothing stores are a small and dying segment of their business. Since *Gentleman's Magazine* goes chiefly to men's clothing stores, the manufacturers reasoned that it was, therefore, not a good vehicle for their advertising. The editor believes that a survey (via mail questionnaire) of men's clothing stores in the United States will probably show that these stores are important outlets for men's shoes and are not declining in importance as shoe outlets. He asks you to develop a proposal for the study and submit it to him. Develop the management-research question hierarchy that will help you to develop a specific proposal.
- 7 Develop the management-research question hierarchy for a management dilemma you face at work or with an organization to which you volunteer.
- 8 How might you use data mining if you were a human resources officer or a supervising manager?

#### Bring Research to Life

- 9 Using the MindWriter prototyping packaging alternative as the research question, develop appropriate investigative questions within the question hierarchy by preparing an exhibit similar to Exhibit 5-8.
- 10 Using Exhibits 5-6, 5-8, 5b-1, and 5b-2, state the research question and describe the search plan that Jason should have conducted before his transforming sessions with Myra Wines. What government sources should be included in Jason's search?

Glossary reinforces the importance of learning the language of research.

**mail survey** a relatively low-cost self-administered study both delivered and returned via mail.  
**main effect** the average direct influence that a particular treatment of the IV has on the DV independent of other factors.  
**management dilemma** the problem or opportunity that requires a decision; a symptom of a problem or an early indication of an opportunity.  
**management question** the management dilemma related in question format; categorized as "choice of objectives," "generation and evaluation of solutions," or "troubleshooting or control of a situation."  
**management report** a report written for the nontechnically oriented manager or client.  
**management-research question hierarchy** process of sequential question formulation that leads a manager or researcher from management dilemma to measurement questions.  
**manuscript reading** the verbatim reading of a fully written presentation.  
**mapping rules** a scheme for assigning numbers to aspects of an empirical event.  
**marginals** a term for the column and row totals in a cross-tabulation.  
**matching** a process analogous to quota sampling for assigning participants to experimental and control groups by having participants match every descriptive characteristic used in the research; used when random assignment is not possible; an attempt to eliminate the effect of confounding variables that group participants so that the confounding variable is present proportionally in each group.  
**MDS** see **multidimensional scaling**.  
**mean** the arithmetic average of a data distribution.  
**mean square** the variance computed as an average or mean.  
**measurement** assigning numbers to empirical events in compliance with a mapping rule.  
**measurement questions** the questions asked of the participants on the observations that must be recorded.  
**measures of location** term for measure of central tendency in a distribution of data; see also **central tendency**.  
**measures of shape** statistics that describe the departures from the symmetry of a distribution; a.k.a. **moments**, **skewness**, and **kurtosis**.  
**measures of spread** statistics that describe how scores cluster or scatter in a distribution; a.k.a. **dispersion** or **variability** (variance, standard deviation, range, interquartile range, and

**interview**  
**minigroup** a group interview involving two to six people.  
**missing data** information that is missing about a participant or data record; should be discovered and rectified during data preparation phase of analysis; e.g., miscoded data, out-of-range data, or extreme values.  
**mode** the most frequently occurring value in a data distribution; data may have more than one mode.  
**model** a representation of a system that is constructed to study some aspect of that system or the system as a whole.  
**moderating variable (MV)** a second independent variable, believed to have a significant contributory or contingent effect on the originally stated IV-DV relationship.  
**moderator** a trained interviewer used for group interviews such as focus groups.  
**monitoring** a classification of data collection that includes observational studies and data mining of organizational databases.  
**motivated sequence** a presentation planning approach that involves the ordering of ideas to follow the normal processes of human thinking; motivates an audience to respond to the presenter's purpose.  
**multicollinearity** occurs when more than two independent variables are highly correlated.  
**multidimensional scale** a scale that seeks to simultaneously measure more than one attribute of the participant or object.  
**multidimensional scaling (MDS)** a scaling technique to simultaneously measure more than one attribute of the participant or object; results are usually mapped; develops a geometric picture or map of the locations of some objects relative to others on various dimensions or properties; especially useful for difficult-to-measure constructs.  
**multiple sampling** see **double sampling**.  
**multiple-choice, multiple-response scale** a scale that offers the participant multiple options and solicits one or more answers (nominal or ordinal data); a.k.a. **checkboxlist**.  
**multiple-choice question** a measurement question that offers more than two category responses but seeks a single answer.  
**multiple-choice, single-response scale** a scale that poses more than two category responses but seeks a single answer, or one that seeks a single rating from a gradation of preference, interest, or agreement (nominal or ordinal data); a.k.a. **multiple-choice question**.  
**multiple comparison tests** compare group means following the finding of a statistically significant *F* test.

### >cases

## Marcus Thomas LLC Tests Hypothesis for Troy-Bilt Creative Development

### >Abstract

Troy-Bilt® works with Marcus Thomas LLC to develop marketing communications, including television advertising campaigns. As part of its creative development, Marcus Thomas needed to understand what motivated the yardwork enthusiast, and what makes television advertising most effective within the lawn and garden industry. Marcus Thomas developed a hypothesis that "consumers who are in the market to purchase a product process television advertising differently than those who are not in the market for lawn and garden equipment." It used an online survey employing a control group, with embedded video, to test this hypothesis and develop the subsequent ad campaign. [www.marcusthomasllc.com](http://www.marcusthomasllc.com); [www.troybilt.com](http://www.troybilt.com)

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

On the book's Online Learning Center ([www.mhhe.com/cooper12e](http://www.mhhe.com/cooper12e)), students will find cases (like this new one) and data sets, a research proposal, a sample student project, and supplemental material for several chapters, including templates for charting data, how the research industry works, bibliographic databases searching tips, complex experimental designs, test markets, pretesting, and multivariate analysis. You'll also find 34 cases, nine of which are full video cases. Also, several written cases have video components included.

For undergraduate students just learning about research methods or graduate students advancing their research knowledge, each new edition of *Business Research Methods* promises—and has continually delivered—not only a teachable textbook but a valued reference for the future. As a mark of its worldwide acceptance as an industry standard, *Business Research Methods* is available in nine international editions and four languages.

When you are creating a 12th edition, you don't want to tinker too much with what has made instructors adopt your textbook for their students or what has prompted researchers to use it as a valuable shelf reference. But to ignore change in the research environment would be negligent.

## Leading

We used the 2012 GreenBook Research Industry Trends (GRIT) Report as a starting point for creating the 12th edition. This large study of research suppliers and research clients gave us clear direction on emerging techniques and how the research field was changing. We focused our efforts on obtaining examples of these changes and they are included in content throughout the book and in Snapshots and PicProfiles—both contentwise and visually.

## Responsive . . . to Students and Faculty

Snapshots, PicProfiles, and CloseUps are the way we reveal what is timely and current in research. We wait until such issues are more mainstream before giving the topic a permanent place within the text. In fact, of the 82 Snapshots and PicProfiles featured, 35 are completely new and one-half of the CloseUps had major updates. Of these new examples, you will find topics dealing with biometrics, eye tracking via the Web, mobile surveys, online communities, listening tours, location-based tracking, talent analytics, incentivizing participants, data visualization, mixed mode surveys, mixed access recruiting, charting, as well as Internet research, cloud computing, using Excel in data analysis and presentation, Smartphone research, dirty data, gut hunches, wildcat surveys, and more. And you'll discover research stories that relate to such organizations or brands as Mercedes-Benz, TNS-Infratest, NTT Communications, Next Generation Market Research, Interactive Advertising Bureau, Groupon, TrustE, Decipher, Living Social, Troy-Bilt, among numerous others.

There are currently about 200 images and text art supporting our learning objectives; you will discover that over one-quarter are new to this edition. We've updated our "From the Headlines" discussion questions, covering

product introductions, employee issues, legal proceedings, advertising campaigns, and many more topics and added more research examples to the Instructor's Manual, for use in class discussions or testing.

Our book is designed for a one-semester course although under no circumstance is it imagined that the entire book be covered. In an effort to make the book more user friendly yet give faculty members tremendous flexibility in choosing materials for the theme they set for their course, we have created an Online Learning Center for the text. Analogous to cloud computing, we stored regularly used data on McGraw-Hill's servers that can be easily accessed through the Internet. Central to that design, we moved material from chapter appendices to the Online Learning Center thereby reducing the physical size of the book that our own students often carry with them. Among those items available at the Online Learning Center are How the Industry Works, Bibliographic Database Searches, Advanced Bibliographic Searches, Complex Experimental Designs, Test Markets, and Pretesting Options and Discoveries. Since many research methods courses for undergraduates don't use multivariate statistics, we've moved our chapter "Multivariate Analysis: An Overview" to the Online Learning Center for the benefit of graduate students. You'll also find written and video cases, questionnaires, data sets, a sample student project, and digital support materials related to some of our Snapshots and CloseUps in the Online Learning Center.

We continue to use chapter and end-of-text appendices for information that, given the differing skills and knowledge of their students, instructors may want to emphasize. We retained end-of-chapter appendices related to Crafting Effective Measurement Questions and Determining Sample Size, as well as end-of-book appendices related to a sample proposal, a focus group guide, non-parametric statistics, and statistical tables.

## Fine-Tuned

**Process Series of Exhibits** The core pedagogy of *Business Research Methods* is based on an understanding that student learners are of three types: visual, auditory, and kinesthetic. These exhibits offer a detailed, graphical map of the research process or a more detailed breakout of each subprocess, perfect for hands-on projects. Each of these exhibits is linked to others in the series with a consistent use of shape and color. You'll find 32 of these exhibits throughout the text. Changes in process exhibits, other exhibits, and embedded tables resulted in twenty-three major modifications using new information, data, or graphs throughout the text.

**Online Learning Center** There is a wealth of information, samples, templates, and more in this Web depository.

**Written Cases.** Cases offer an opportunity to tell research stories in more depth and detail. You'll find a new case, *Marcus Thomas LLC Tests Hypothesis for Troy-Bilt Creative Development*, complete with its online questionnaire, at the Online Learning Center. You'll also find cases about hospital services, lotteries, data mining, fundraising, new promotions, and website design, among other topics, featuring organizations like Akron Children's Hospital, Kelly Blue Book, Starbucks, Yahoo!, the American Red Cross, and more.

**Video Cases.** We are pleased to continue to make available a first in video supplements, several short segments drawn from a two-hour metaphor elicitation technique (MET) interview. These segments should be invaluable in teaching students to conduct almost any type of individual depth interview and to explain the concept of researcher-participant rapport. Four of our video cases were written and produced especially to match the research process model in this text and feature noted companies: Lexus, Starbucks, Wirthlin Worldwide (now Harris Interactive), Robert Wood Johnson Foundation, GMMB, Visa, Bank One, Team One Advertising, U.S. Tennis Association, Vigilante New York, and the Taylor Group.

**Web Exercises.** It is appropriate to do Web searches as part of a research methods course, so each chapter offers one or more exercises to stimulate your students to hone their searching skills. Due to the ever-changing nature of Web URLs, however, we offer these exercises in the Instructor's Manual.

**Articles, Samples, and Templates.** Students often need to see how professionals do things to really understand, so you'll find a sample EyeTrackShop report, a Nielsen report of using U.S. Census data, an Excel template for generating sample data displays, and more.

**Sample Student Project.** Visualization of the finished deliverable is crucial to creating a strong research report.

## Collaborative

When revising an edition, many individuals and companies contribute. Here are some who deserve special recognition and our gratitude.

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Through this 12th edition, we hope you and your students discover, or rediscover, how stimulating, challenging, fascinating, and sometimes frustrating this world of research-supported decision making can be.

**Pamela Schindler  
Donald Cooper**

# >detailedchangestothisedition

In its 12th edition, *Business Research Methods*, all chapters have been evaluated for currency and accuracy. Revisions were made to accommodate new information and trends in the industry. The book has a new structure and the Online Learning Center has been enhanced.

- The book chapter structure was changed by moving *Multivariate Analysis: An Overview* to the Online Learning Center, and renumbering the last two chapters, making the book 20 chapters in all, and by moving several end-of-chapter appendices to the Online Learning Center, as noted in the for-each-of-the-chapters section below.
- We've removed the feature we called a *pulsepoint*—the pullout statistic drawn from a research project—to streamline the appearance of the chapter, and because this element was not a reviewer favorite.
- The *Cases* section contains the abstract for the new case: *Marcus Thomas LLC Tests Hypothesis for Troy-Bilt Creative Development*, and an updated case-by-chapter suggested use chart.
- Appendix A includes the newly redesigned Mind-Writer CompleteCare online survey.
- The 2012 Online Learning Center has new material including: a new case, *Marcus Thomas LLC Tests Hypothesis for Troy-Bilt Creative Development*, complete with instrument; the permissioned report *Business Uses of Census Data and Nielsen Company Capabilities*; EyeTrackShop's example report *Visual Effectiveness Research on McDonald's YouTube Ad*; the following appendices: *Appendix 1a: How the Research Industry Works* (updated), *Appendix 5a: Bibliographic Database Searches*, *Appendix 5b: Advanced Database Searches* (updated), *Appendix 9a: Complex Experimental Designs*, *Appendix 9b: Test Markets*, *Appendix 13b: Pretesting Options and Discoveries*; and the chapter *Multivariate Analysis: An Overview*.
- The *Instructor's Manual* contains new research examples for discussion or testing, as noted below.

**For Each of the Chapters.** A detailed listing of chapter-by-chapter changes is provided here for your convenience.

- **Chapter 1** The following elements are new to this edition: the chapter-opening pull quote; opening paragraph expounding on the theme relating to cloud technology and research; three new Snapshots: on Mercedes-Benz Snapshot of the Stars Insight online

research community, on the client perspective of consultancy skills needed by researchers, and on pattern thinking at YUM!; updates to the factors that encourage the studying of research methods; new NTT Communications ad with caption relating to the importance of information to business; a PicProfile on NextGen Marketing Research blog and website screenshot, related to blogs as an online training source for researchers; a new exhibit Where Business Collects Research Information and modifications to two Exhibits: the research process and what guarantees good research; and a new from-the-headlines discussion question. Additionally, content and data updates have been made as needed to reflect the most current information available. The following element was moved to a different chapter: Snausages (PicProfile to Chapter 12). The following elements have been moved to the Instructor's Manual (IM) as additional discussion opportunities: Mary Kay (Snapshot) and MinuteMaid research model (Exhibit). The following items were removed: Maritz Research ad, Yahoo Banner ads (Snapshot). The following end-of-chapter appendix moves to the Online Learning Center: *Appendix 1a: How the Research Industry Works*.

- **Chapter 2** The following elements are new to this edition: the chapter-opening pull quote; two new Snapshots: on privacy issues related to location-based services, and on ethics related to mobile surveys and ESOMAR and CASRO. Statistical updates have been made in the Snapshot *Has Trust Trumped Privacy?* New images have been added related to privacy issues related to children and to privacy related to hard-to-reach sample subjects. We added a new from-the-headlines discussion question and made changes and additions to Exhibit 2-5: Resources for Ethical Awareness. The following elements were moved to the IM: Snapshots related to TrustE (*Engendering Trust Online*) and tracking online behavior (*Google: Tracking Search Patterns*).
- **Chapter 3** The following elements are new to this edition: the chapter-opening pull quote; a new PicProfile related to what influences online purchasers to abandon; the images related to the use of observation research and curiosity; and a new from-the-headlines discussion question. The following items were moved to the IM: the Snapshot related to researching emerging issues (*Forrester Research: Can an Auto Dealership Go Lean?*). The Synovate ad was removed.
- **Chapter 4** The following elements are new to this edition: the chapter-opening pull quote; new



Snapshot related to embedding feedback mechanisms in websites on The Container Store and OpinionLab; new PicProfile relating to emerging techniques in research from the GRIT report; new Snapshot related to use of video and online research involving new and expecting moms; new Decipher ad relating methodology choice to avoiding the favored-technique syndrome; and a new from-the-headlines discussion question. Modifications were made to Exhibit 4-1: The Research Process to reflect the new chapter structure, and changes to the text related to the ongoing study of CompleteCare. A making-research-decisions discussion question was eliminated and replaced with an Apple-related question. The iThink Meet your Focus Group ad was removed. The following elements were moved to the IM: the Snapshots *Should Companies Hire Teens?* and *Covering Kids: The Management-Research Question Hierarchy*, and the PicProfile related to research for Kraft cheese.

- **Chapter 5** The following elements are new to this edition: the chapter-opening pull quote; new screenshot of USA.gov website; a new Snapshot on Odin Text, a text analytics software for do-it-yourself researchers; a new from-the-headlines discussion question. A major change that is reflected in this and other chapters is the repurposing of the MindWriter CompleteCare research project as an online survey; this resulted in significant changes to the CloseUp: *Proposing Research for MindWriter and the Exploration Phase*. Additionally, modifications were made to the Snapshot *Blogs: Gold Mine or Land Mine?* to reflect current statistics and trends, and to the Snapshot *Surfing the Deep Web* to update sources, and to the Snapshots *How Will Cloud Computing Affect Research?*, *Mining the Web for Feelings?*, and *The Online Professional Community as a Source of Business Information* to reflect current thinking and new examples. A making-research-decisions discussion question was eliminated and replaced with a TJMaxx-related question. The following element was moved to the IM: the Snapshot *\$1 Million Data Analysis Prize Improves Netflix Movie Predictions*. The following appendices were moved to the Online Learning Center: *Appendix 5a: Bibliographic Database Searches* (with updates to Exhibits 5a-2 and 5a-3) and *Appendix 5b: Advanced Database Searches*.
- **Chapter 6** The following elements are new to this edition: the chapter-opening pull quote; text changes to reflect the repurposing of the CompleteCare research as an online survey and new statistics on qualitative research; a new Snapshot with image on the McDonald's listening tour research; a new Luth Research image related to permission-based online tracking research; a new image and caption related to sample selection; and a new from-the-headlines discussion question on Kraft renaming of its international snack food business. The following elements were moved to the IM: the Snapshots *Cheskin Knows Teens*, *Smith Barney's Benchmark Job Environment Research*, and *The Ohio Lottery Initiates a Two-Stage Study*, and the PicProfile on the United States Tennis Association; a discussion question on Tide Basics. The Zoomerang ad was removed.
- **Chapter 7** The following elements are new to this edition: the chapter-opening pull quote; text changes to reflect new statistics on qualitative research and emerging or strengthening methodologies; new source for Exhibit 7-2; a new PicProfile on Hallmark's storybooks; a new Snapshot of mystery shopping at Office Depot; a new from-the-headlines discussion question on Pepsi's "Live for Now" campaign. The following elements were modified: the Snapshot *What Does Cyberspace Offer for Performance Review Research?* was changed to reflect a change in company name and add a new example. The NCR discussion question was moved to the making-research-decisions section. The following elements were moved to the IM: the Snapshots *Hamilton Beach: Right Blend(er) for Mexico, but Not for Europe* and *Hallmark: Qualitative Research Enriches Sinceramente Hallmark*. The following element was eliminated: a making-research-decisions discussion question related to the removed Hallmark Snapshot.
- **Chapter 8** The following elements are new to this edition: the chapter-opening pull quote; a new Snapshot related to neuroscience and PET scan in business research; a new Snapshot on Web-based eye tracking research; a new image included with the Snapshot *When Physicians and Their Patients Are Research Subjects*; and a new from-the-headlines discussion question on Walmart. Modifications were made to the following elements: the Snapshot *Walmart Boosts RFID Technology for Observation*; adjustment to discussion question 6. The following elements were moved to the IM: the Snapshots *People Meters Go Personal*, *New Mexico's Longitudinal Observation Study of Seatbelt Use*, and *SizeUSA*.
- **Chapter 9** The following elements are new to this edition: the chapter-opening pull quote; new Snapshot on Wendy's new burger test market; new Snapshot on a beverage message experiment; and a new from-the-headlines discussion question related to mergers. The following elements were changed: new graphic within the Snapshot *Online Dating Industry Claims Vs. Kissing a Lot of Frogs*

to reflect new data. The following elements were moved to the Online Learning Center: *Appendices 9a: Complex Experimental Designs* and *9b: Test Markets*. The following elements were moved to the IM: PicProfile on Best Buy; and Snapshots *T.G.I. Friday's Experiments with Smaller Portions* and *A Nose for Problem Odors*.

- **Chapter 10** The following elements are new to this edition: the chapter-opening pull quote; a new Snapshot on gamification in research; PicProfile related to interview methodology use over time; in-text changes related to updating statistics and, within Exhibits, company name changes; a new PicProfile related to mixed-mode research; statistics updates within the Snapshot *Are Cell Phones and Smartphones Ready for Research?*; a new PicProfile on telephone research response rates; in-text changes related to the repurposed MindWriter CompleteCare project; a new from-the-headlines discussion question related to voice-of-consumer (VoC) research; a reference in the case listing for the new case: *Marcus Thomas LLC Tests Hypothesis for Troy-Bilt Creative Development*. The following elements were moved to the IM: the Snapshots *Starwood Hotels Measures the Power of Comments, Radio and Research*, and *Aleve: Personal Interviews Provide Relief*. The following elements were eliminated: PicProfile on RTI call center.
- **Chapter 11** The following elements are new to this edition: the chapter-opening pull quote; new image related to the in-text example; new image and new in-text changes about nominal scales related to that image; a new Snapshot related to talent analytics in HR; replacement of discussion question 8 and a new from-the-headlines discussion question. The following element was moved to the IM: the Snapshot *Measuring Attitudes about Copyright Infringement*. The image of LeBron James was removed.
- **Chapter 12** The following elements are new to this edition: the chapter-opening pull quote; the iThink image related to online focus groups; the Snausages PicProfile; a new Snapshot related to Maritz and how it measures customer satisfaction; a new PicProfile related to branching questions executed with SurveyMonkey online software; new image related to shopping research; changes to the CloseUp related to the MindWriter CompleteCare project due to repurposing the study as an online survey; and a new from-the-headlines discussion question related to the iPad. The following element was moved to the IM: the Snapshot *Measuring Respect*.
- **Chapter 13** The following elements are new to this edition: the chapter-opening pull quote; a new Verint dashboard image related to managing information from different sources; a new Exhibit 13-3 on factors affecting respondent honesty; a new Snapshot relating to challenges and Solutions to Mobile Questionnaires; updates to Exhibit *Sources of Questions*; updates to *Sample Components of Communication Instruments* to reflect online surveys; and major change to the *CloseUp: Instrument Design for MindWriter* to include the new online survey for the CompleteCare research project; a new from-the-headlines discussion question related to the employment; and a reference in the case listing for the new case: *Marcus Thomas LLC Tests Hypothesis for Troy-Bilt Creative Development*. The following element was moved to the IM: the Snapshot *A Survey Cold as Ice*. The following element was moved to the Online Learning Center: *Appendix 13b: Pretesting Options and Discoveries*.
- **Chapter 14** The following elements are new to this edition: the chapter-opening pull quote; a new Serta image; a new Snapshot on using charitable donations to incentivize participation; a new Snapshot on mixed-access sampling; in-text changes to Chinese cell phone use statistics; a new from-the-headlines discussion question about Nike product introductions; and a reference in the case listing for the new case: *Marcus Thomas LLC Tests Hypothesis for Troy-Bilt Creative Development*. The following elements were moved to the IM: the Snapshots *Creating Samples: Then and Now* and *New Product Research Blind Spot*.
- **Chapter 15** The following elements are new to this edition: the chapter-opening pull quote; new image related to data quality; a new image for XSight software; a new caption related to the IBM® SPSS® image; a new from-the-headlines discussion question related to data sourcing solutions. The following element was modified: a statistical change to the Snapshot *CBS: Some Labs Are Extraordinary*.
- **Chapter 16** The following elements are new to this edition: the chapter-opening pull quote; a new Snapshot on Novations data visualization; Exhibits 16-2 and 16-3 are new and relate to social media use and text references to these Exhibits have been changed as well; all the tables within the *CloseUp Using Tables to Understand Data* are new; a new geospatial image from RealtyTrac; a new Snapshot on digital natives; and a new from-the-headlines discussion question related to tablet apps. The following modifications were made: the Snapshot *Internet-Age Researchers: Building Critical Transferable Skills* was moved within the chapter; art modifications to the graph within the Snapshot *Empowering Excel*; the Snapshot *Internet-Age Researchers: Building Critical Transferable Skills*

has moved to later in the chapter. The following elements were moved to the IM: the Snapshot *Extensive Research Launches Starbucks Card Duetto™ Visa*. The following element was eliminated: The DDW image.

- **Chapter 17** The following elements are new to this edition: the chapter-opening pull quote; a new Prius image and caption with updated information; a new Snapshot about hypothesis testing; new Snapshot on A/B testing; and a new from-the-headlines discussion question on aptitude tests. The following elements were moved to the IM: the Snapshot *Direct-to-Consumer Ads under Heavy Fire*; the Snapshot *Research beyond the Clip*. The following elements were modified: the Snapshot *Testing a Hypothesis of Unrealistic Drug Use in Movies*.
- **Chapter 18** The following elements are new to this edition: the chapter-opening pull quote; a new Snapshot about the Oscars; a new image with the Constellation Wines PicProfile; and a new from-the-headlines discussion question related to correlation and the building of skyscrapers. This following elements were moved to the IM: the Snapshot *What's a Business Education without Wine?* The following elements were modified: the Snapshot *Envirosell: Studies Reveal Left-Hand Retail* was moved later in the chapter; updates were made to the Snapshot *Advanced Statistics Increase Satisfaction and Release More Funds through ATMs*.
- **Chapter 19** This was previously Chapter 20. The following elements are new to this edition: the chapter-opening pull quote; a new image related to proofing; changes to the *CloseUp MindWriter Written Report* to reflect the redesigned project as an online survey; new in-text content under Semi-Tabular and Tabular headings; new content in *Exhibit 19-5 Sample Tabular Finding*; new data and graphs for *Exhibit 19-8: U.S. Truck Sales*; and a new from-the-headlines discussion question related to small business optimism. The following elements were modified: *Exhibit 19-7: Cable Subscribers*.
- **Chapter 20** This was previously Chapter 21, which was totally new in the last edition. The following elements are new to this edition: the chapter-opening pull quote; new image related to online presentations; new information in Exhibit 20-13: Using Key Word Prompts as a Substitute for Notes; new in-text table related to business jargon; a new PicProfile related to the use of pictographs in oral presentations; and a new from-the-headlines discussion question related to a famous trial. The following elements were modified: 10 Exhibits (20-2, 20-3, 20-4, 20-5, 20-6, 20-7, 20-8, 20-10, 20-11, and 20-15) to enhance understanding through a different use of color or design.

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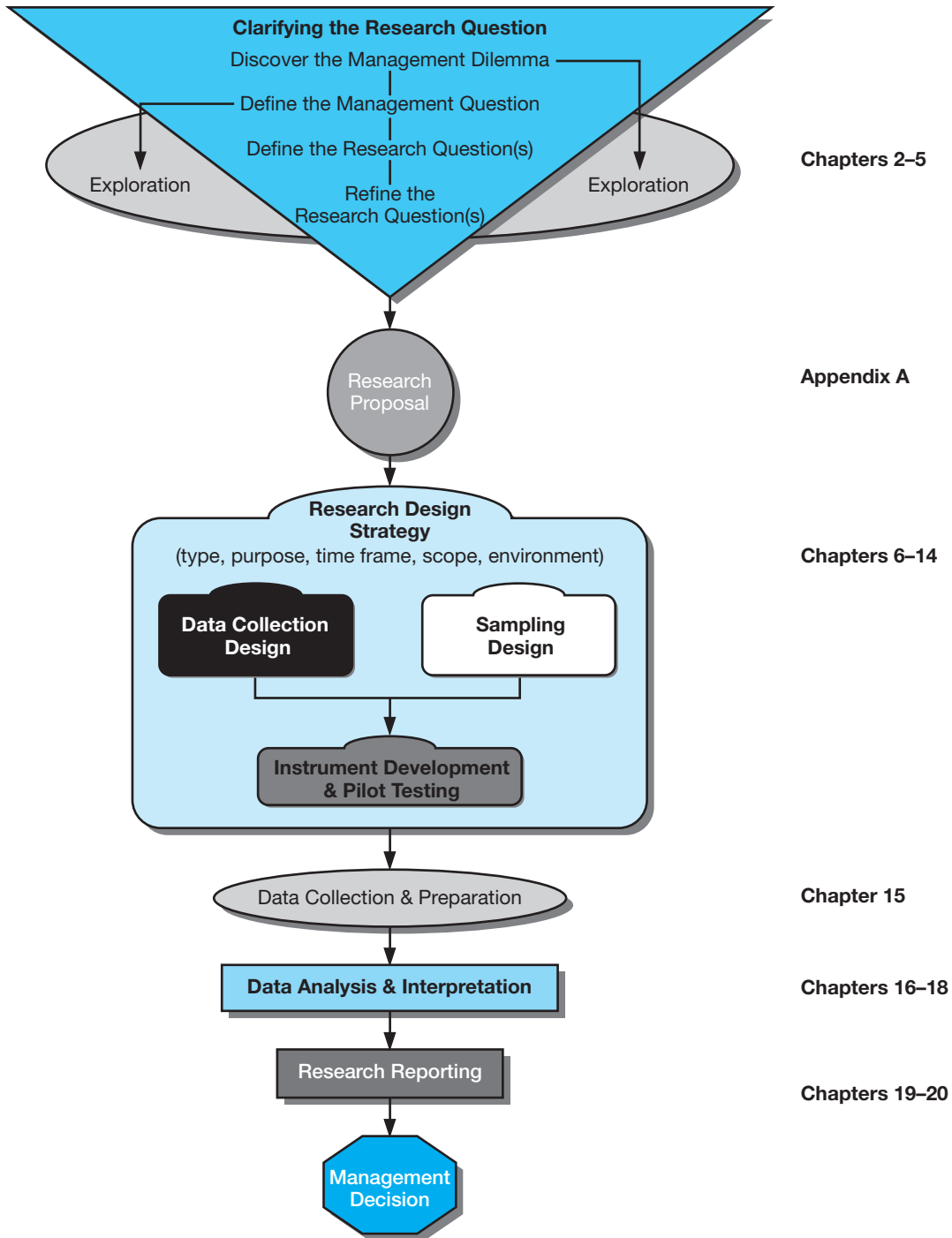
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# > part I

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Chapter 2 **Ethics in Business Research**

Chapter 3 **Thinking Like a Researcher**

Chapter 4 **The Research Process: An Overview**

Chapter 5 **Clarifying the Research Question  
through Secondary Data  
and Exploration**

**Introduction to Business Research**

# >chapter 1

## Research in Business

### >learning objectives

After reading this chapter, you should understand . . .

- 1 What business research is and how it differs from decision support systems and business intelligence systems.
- 2 The trends affecting business research and the emerging hierarchy of research-based decision makers.
- 3 The different types of research studies used in business.
- 4 The distinction between good business research and that which falls short of professional quality.
- 5 The nature of the research process.

“Forward-thinking executives recognize that analytics may be the only true source of sustainable advantage since it empowers employees at all levels of an organization with information to help them make smarter decisions.”

Wayne Eckerson,  
director of research, business applications and architecture group,  
TechTarget

Myra Wines, director of consumer affairs for MindWriter, Inc., has been charged with the task of assessing MindWriter's CompleteCare program for servicing laptops. As a result, she sent several well-respected research firms a *request for proposal (RFP)*, and she and her team are interviewing the last of those firms, Henry & Associates.

Newly promoted to her position, Wines has a TV journalism and government public relations background. She has been a MindWriter laptop owner since it came on the market decades earlier and has never personally experienced a problem. She wants a research supplier from whom she can learn, as well as one whom she can trust to do appropriate, high-quality research.

The last interviewee is Jason Henry, managing partners, Henry & Associates. H&A comes highly recommended by a professional colleague in a different industry. H&A has gained a reputation for merging traditional methodologies with some creative new approaches. Myra is interested in exploring the firm's methodology for customer satisfaction studies. As Wines approaches Henry in the waiting area, she extends her hand. "Welcome to MindWriter, Jason. I'm Myra Wines."

Henry rises, clasping Wines's hand in a firm hand shake. "Pleased to meet you, Myra."

Myra directs Jason's attention to a long corridor. "My team members are gathered in our conference room just down this hall. Let's join them, shall we?"

The interview process starts with Henry's short presentation on H&A and its capabilities. As the interview progresses, Henry shares some impressive results accomplished for former clients in noncompetitive industries. The last slide in his presentation features a top industry award H&A recently won for its customer satisfaction methodology.

During the Q&A that follows, Henry demonstrates current knowledge of the computer industry (he's obviously read numerous articles), confidence, and expertise, at a level that Wines initially had not expected given his relatively youthful appearance. At the conclusion of the interview, Wines is leaning toward hiring Henry & Associates, but wants to confer with her team.

The next day, Myra calls Jason at his office. "We've chosen Henry & Associates for the MindWriter CompleteCare assessment contract. Congratulations."

"Thank you," accepts Jason. "You've made the right choice."

"I've got two seats on a flight to Austin next Wednesday," shares Myra. "Can you join me? This will be my first look at the CompleteCare facility and my first face-to-face contact with its manager. I'd like someone along who can lay the groundwork for the project and understand the number crunching that's already been done."

The phone goes silent as Jason pauses to consult his BlackBerry. Two internal meetings will need to be shifted, but MindWriter is an important new client. "Yes, I can work that in as long as we're back by 7 p.m. I've got an evening commitment."

"Shouldn't be a problem," shares Myra. "Those seats I mentioned are on the corporate jet. We'll be back by 5:30. I'll meet you in the lobby at the county airstrip at 8 a.m. Wednesday then."

"A quick question," interrupts Jason before Myra can disconnect. "I need some idea of what's happening at this meeting."

"The meeting is to get you started. I'll introduce you to other people you will be working with and share more details about the concerns we have with the CompleteCare program," shares Myra.

"Fine. Can you arrange a third seat? It would be best to include Sara Arens from the very beginning. Her expertise will be crucial to the success of the assessment program."

"Yes, you mentioned her before. That shouldn't be a problem, but I'll check and get back to you."

"Then, Wednesday, Sara and I will plan on asking probing questions and listening to discover exactly what

facts management has gathered, what the managers are concerned about, what the problem is from their point of view, what the problem really is at various levels of abstraction . . .”

“Listening to people. Discussing. Looking at things from different viewpoints. Those are things I am also very good at,” shares Myra.

“Good. After we hear them out, we come to what H&A is good at: Measurement. Scaling. Project design. Sampling. Finding elusive insights. May I assume we’ll be collaborating on the report of results?”

“Absolutely. I’ll call you back within 10 minutes about that third seat.”

## > Why Study Business Research?

One of the fundamental shifts in organizational management in the last 10 years has been the purposeful integration of the Internet by managers at every level of decision making. It might be as simple as tracking project management through SharePoint sites or email messages, or as complex as call routing to various worldwide service centers to ensure the shortest wait time or using GPS to route delivery trucks to eliminate left turns. This integration wasn’t purposeful at the beginning of the last decade. Some have said that managers, many trained in lower-technology approaches, were actually dragged all but kicking and screaming into using the Internet as a workspace. But the speed of technology change, and newer generations who have been raised with smart phones and tablet computers, have forced organizations to be more purposeful in their technology integration. Researchers, as part of those organizations, have been pulled along—some reluctantly, but increasingly with enthusiasm.

By the Internet, we mean not just the company-generated content of the World Wide Web where information (and non-information) expands at an alarming rate, but also the rapid advance of user-generated content in social media. As data sources expand managers experience increasing pressure to make some sense of the massive amount of data generated. The Internet has also influenced the way in which we collaborate to define problems and opportunities, as well as our processes for information collection and analysis brought about by the technologies that make up the space known as the “cloud.” It is in this space that research is experiencing fundamental change, not just the tools of researchers but also the methodology of research. Thus we chose our cloud cover design to represent the theme of this edition: researchers are turning to new spaces to understand what motivates people and organizations, and understand processes and machines. They are using new tools to search for new business models, and to understand fundamental shifts in human behaviors, emotions, and attitudes.

You are about to begin your study of business research, both the process and the tools needed to reduce risk in managerial decision making. **Business research**, as we use it in this text, is a systematic inquiry that provides information to guide managerial decisions. More specifically, it is a process of planning, acquiring, analyzing, and disseminating relevant data, information, and insights to decision makers in ways that mobilize the organization to take appropriate actions that, in turn, maximize performance. A variety of different types of research projects are grouped under the label “business research,” and we will explore them later in this chapter.

Assume for the moment that you are the manager of your favorite full-service restaurant. You are experiencing significant turnover in your waiter/waitress pool, and some long-time customers have commented that the friendly atmosphere, which has historically drawn them to your door, is changing. Where will you begin to try to solve this problem? Is this a problem for which research should be used?

Perhaps you are the head of your state’s department of transportation, charged with determining which roads and bridges will be resurfaced or replaced in the next fiscal year. Usually you would look at the roads and bridges with the most traffic in combination with those representing the most economic disaster, if closed. However, the state’s manager of public information has expressed concern about the potential for public outcry if work is once again directed to more affluent regions of the state. The manager suggests using research to assist in making your decision, because the decision is one with numerous operational, financial, and public relations ramifications. Should you authorize the recommended research?



## Mercedes-Benz and TNS Infratest Develop Stars Insight

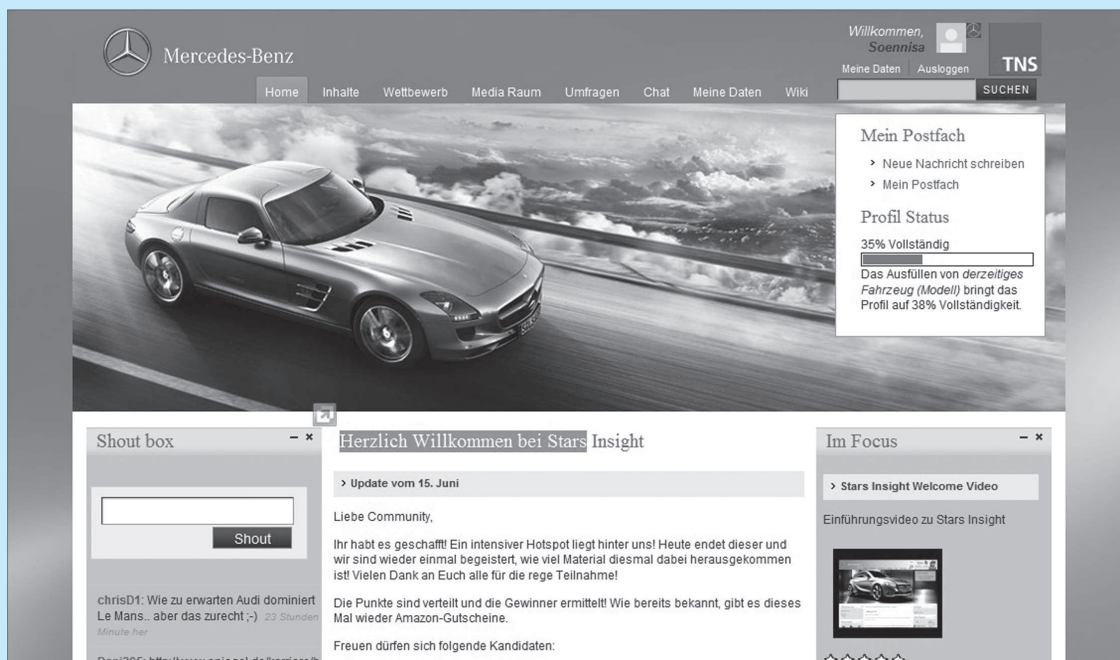
Stars Insight is an online research collaboration between Mercedes-Benz (MB) and TNS Infratest (TNS). “The original purpose of Stars Insight is capturing insights on needs, values, and attitudes of the important 20- to 45-year-old compact car driver,” shared Christian Bauer, MP/MR customer insights for Daimler AG. The insights would be used to craft marketing initiatives.

TNS drew upon the strengths of Web 2.0 to deliver several key research assets: neutrality of moderation, researcher objectivity, data quality, and respondent anonymity while still allowing MB to narrow its focus to a particular target group of compact car owners. “Through a series of methods—including data from the recruiting screening process, statements from member’s profile pages, surveys (both preplanned and instantaneous), online discussions, participant blog posts, and hotspot creative competitions between community members—TNS is able to provide data that helps MB in several ways. Data create a picture of what a modern brand should be, identify future distribution channels, craft authentic target group communication measures by testing advertising, develop the ideal configuration of the desired automobile, identify target group purchase intention criteria, identify the price expectations in the compact-car segment, and understand modern mobility concepts,” explained Sandra Klaunzler, senior consultant automotive, TNS Infratest.

Interactivity is the hallmark of Stars Insight. For example, a “hotspot is a period of 2–3 weeks where the community members deal with one specific topic—for example, what are appropriate ways to target young customers who might not yet drive or want to buy a Mercedes,” shared Kai Blask, associate director automotive for TNS Infratest. “Within the hotspot we assign the community members one specific task. For example, develop a communication strategy for the market launch of model XY. The respondents work on this either alone or in groups. All participants upload their concepts to the community on a specific date.” Member uploads are usually high-quality Word, PowerPoint, or other digital files. “Afterwards, all other community members can evaluate the ideas and give 1 to 5 points for each idea, explained Blask. “The member’s idea with the best evaluations wins a specific prize or extra points,” as well as significant attention from Mercedes-Benz.

Overall MB has 1,700 members in Stars Insight. Sixty percent of the members own a compact car (not a Mercedes-Benz) and 40 percent own a Mercedes-Benz (no matter what model/segment). TNS won the 2011 Best Study award from the German Association for Marketing and Social Research for the development of the Mercedes-Benz process. It leveraged Acquia Commons social business software to build the award-winning Mercedes-Benz social community website.

[www.mercedes-benz.com](http://www.mercedes-benz.com); [www.stars-insight.com](http://www.stars-insight.com);  
[www.tns-infratest.com](http://www.tns-infratest.com); [www.acquia.com](http://www.acquia.com)



As the opening vignette and the early decision scenarios reveal, decision makers can be found in every type of organization: businesses, not-for-profit organizations, and public agencies. Regardless of where these decision makers are found or whether their resources are abundant or limited, they all rely on information to make more efficient and effective use of their budgets. Thus, in this book, we will take the broadest perspective of managing and its resulting application to business research.

At no other time in our history has so much attention been placed on measuring and enhancing **return on investment (ROI)**. At its most simplistic, when we measure ROI, we calculate the financial return for all expenditures. Increasingly, organizational managers want to know what strategies and tactics capture the highest return. In the last dozen years, as technology has improved our measurement and tracking capabilities, managers have realized they need a better understanding of employees, stockholders, constituents, and customer behavior in order to influence the desired metrics. Business research plays an important role in this new measurement environment. Not only does it help managers choose better strategies and tactics, but business research expenditures are increasingly scrutinized for their contribution to ROI.

The research methods course recognizes that students preparing to manage any function—regardless of the setting—need training in a disciplined process for conducting an inquiry of a **management dilemma**, the problem or opportunity that requires a management decision. Several factors should stimulate your interest in studying research methods:<sup>1</sup>

1. *Information overload.* Although the Internet and its search engines present extensive amounts of information, the information's quality and credibility must be continuously evaluated. The ubiquitous access to information has brought about the development of knowledge communities and the need for organizations to leverage this knowledge universe for innovation—or risk merely drowning in data.
2. *Technological connectivity.* Individuals, public-sector organizations, and businesses are adapting to changes in work patterns (real-time and global), changes in the formation of relationships and communities, and the realization that geography is no longer a primary constraint. With the increased acceptance and use of mobile technology, *information snacking*, short online visits to get specific answers, has become the norm for information gatherers. This could have a profound influence on information collection designed to serve the needs of managers who want quick, smaller chunks of information, each of which is more decision relevant. While this influence is expected in quantitative techniques such as surveys, qualitative research is also increasingly embracing smaller iterative engagements with research subjects to drive research.
3. *Shifting global centers of economic activity and competition.* The rising economic power of Asia and demographic shifts within regions highlight the need for organizations to expand their knowledge of consumers, suppliers, talent pools, business models, and infrastructures with which they are less familiar. This shift increases the value of research designs that can accommodate different norms, values, technologies, and languages. Some in the research industry believe innovation in research methodology will come from the developing world, not the developed economies, as countries in the developing world are already embracing mobile/social research methodologies to a greater degree.
4. *Increasingly critical scrutiny of big business.* The availability of information has made it possible for all a firm's stakeholders to demand inclusion in company decision making, while at the same time elevating the level of societal suspicion. Interconnected global systems of suppliers, producers, and customers have made the emergence and viability of megabusineses not only possible, but likely.
5. *More government intervention.* As public-sector activities increase, in order to provide some minimal or enhanced level of social services, governments are becoming increasingly aggressive in protecting their various constituencies by posing restrictions on the use of managerial and business research tools (e.g., Do-Not-Call List, Spyware Act).
6. *Battle for analytical talent.* Managers face progressively complex decisions, applying mathematical models to extract meaningful knowledge from volumes of data and using highly sophisticated software to run their organizations. The shift to knowledge-intensive industries puts greater demand

on a scarcity of well-trained talent with advanced analytical skills. The integration of global labor markets, with its infusion of new talent sources, is only a partial answer. Many believe the value of research may no longer be in collecting data, but rather in focusing on context, implications, and outcomes. Data collection and even some major elements of analysis may become the future domain of technologists and data scientists. Researchers will be forced to offer new value based on strategic consulting principles, as data collection becomes more of a commodity.

7. *Greater computing power and speed.*

- *Lower-cost data collection.* Computers and telecommunications lowered the costs of data collection, drastically changing knowledge about consumers both at store and household levels; employees at the position, team, and department levels; suppliers and distributors at the transaction, division, and company levels; and equipment at the part, process, and production-run levels.
- *Better visualization tools.* High-speed downloads of images allow us to help people visualize complex concepts; this enriches measurement capabilities.
- *Powerful computations.* Sophisticated techniques of quantitative analysis are emerging to take advantage of increasingly powerful computing capabilities.
- *More integration of data.* Computer advances permit business to create and manage large electronic storehouses of data that cross functional boundaries.
- *Real-time access to knowledge.* Today's computers and software offer the power to collect and analyze data and customize reporting in real time for much quicker decision making.

8. *New perspectives on established research methodologies.* Businesses are demonstrating a palpable hunger for breakthrough insights and more effective methods to get them. Businesses experiencing rapid technological and social change are looking for researchers who can help them keep not just current with the rapid pace of change but in front of it. Older tools and methodologies once limited to exploratory or qualitative research are gaining wider acceptance in dealing with a broader range of managerial problems.

To do well in such an environment, you will need to understand how to identify quality information and to recognize the solid, reliable research on which your high-risk managerial decisions can be based. You will need to know how to conduct such research. Developing these skills requires understanding the scientific method as it applies to the decision-making environment. Many students will also need to hire research suppliers or write an effective RFP (request for proposal). To facilitate that goal, Appendix 1a, available from the text Online Learning Center, describes how the research industry works. Appendix A, at the end of the book, describes how to effectively plan and document research requests and proposals. Along with other reference material provided throughout the book, we address your needs as information collector, processor, evaluator, and user.

## > Information and Competitive Advantage

Managers have access to information other than that generated by business research. Understanding the relationship between business research and these other information sources—decision support systems and business intelligence—is critical for understanding how information drives decisions relating to organizational mission, goals, strategies, and tactics.

### Goals

A local bakery would have different goals than Nabisco, but each likely has goals related to sales (membership), market share, return on investment, profitability, customer acquisition, customer satisfaction, customer retention, employee productivity, production efficiency, maximization of stock price (or owner's equity), and so on—whether codified in a written plan or detailed only in an entrepreneur's brain. To assist in making increasingly complex decisions on goals, strategies, and tactics, managers turn first to information drawn from the decision support system, combined with that generated by business intelligence on competitive and environmental activity.

FOOD  
AIR  
WATER  
DATA

Your Communication Lifeline.

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Today, information is everything. It's the core of your business and you can't exist without it. You have to have data in order for your business to thrive. At NTT Communications, we offer seamless connections throughout the world — with secure private networks for cloud computing, over 100 data centers worldwide, and a global tier 1 IP backbone boasting the industry's largest transpacific capacity. Our quality of service is highly rated among industry analysts, and our redundancy is considered to be the most reliable in its class. The combined resources and capabilities of our group companies allow us to provide innovative solutions for all your information and communication needs. We are NTT Communications, the global ICT partner for your communication lifeline. [www.ntt.com](http://www.ntt.com)

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As NTT Communications indicates, "Today, information is everything. It's the core of your business and you can't exist without it." NTT uses the private cloud for seamless and secure data access worldwide. [www.ntt.com](http://www.ntt.com)

## Decision Support

The need to complete one or many exchanges with its prospective customers, members, or constituents drives every organization. No matter how we define an *exchange*—a purchase, a vote, attendance at a function, a donation to a cause—each exchange, along with the strategic and tactical activities designed to complete it, generates numerous elements of data. If organized for retrieval, collectively these data elements constitute a **decision support system (DSS)**. During the last two and one-half decades, advances in computer technology made it possible to share this collected transactional data among an organization's decision makers over an intranet or an extranet.

Today, sophisticated managers have developed DSSs, where data can be accessed in real time (as transactions are completed). Catalog managers (e.g., casual clothing retailer Lands' End) know exactly what tactics generate a transaction from a particular individual within their prospect and customer databases, as well as just how profitable each customer is to the company and an estimate of that customer's lifetime value to the company. Such managers have a distinct advantage in strategic and tactical planning over those without real-time access to transactional data.

## Business Intelligence

Because no decision exists in a vacuum, the decision maker must have a broad knowledge of the firm's environment. A **business intelligence system (BIS)** is designed to provide the manager with ongoing information about events and trends in the technological, economic, political and legal, demographic, cultural, social, and, most critically, competitive arenas. Such information is compiled from a variety of sources, as is noted in Exhibit 1-1.

Often, data from a DSS or BIS stimulate the question "Should we do business research?" In the MindWriter example, this might be data collected about laptop problems needing repair; or, for our restaurant whose friendliness quotient is changing, it might be customer comments collected by the wait staff.

## Strategy

**Strategy** is defined as the general approach an organization will follow to achieve its goals. In an earlier example, a restaurant was receiving comments that the friendly atmosphere was changing. This perception may have been the result of a change in strategy. Perhaps the restaurant decided to switch from an atmosphere where patrons were encouraged to linger over their meal (occupying

>Exhibit 1-1 Some Sources of Business Intelligence

