

# Walkthrough

## Behind the Scenes 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 Visionary Insights, 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.

### >behindthescenes

The questionnaire is the most common data collection instrument in marketing research. Crafting one is part science and part art. To start, a researcher needs to have a solid idea of what type of analysis will be done for the project. Based on this desired analysis plan, the researcher will need to know what type of scale is needed before a single question can be drafted. In Chapter 11, Visionary Insights had captured a new project for Albany Outpatient Laser Clinic. We join Jason Henry and Sara Armstrong as they proceed through the survey creation process for this new project.

"How is the Albany survey coming?" asks Jason as he enters Sara's office.

"The client approved the investigative questions this morning. So we are ready to choose the measurement questions and then write the questionnaire," shares Sara, glancing up from her computer screen. "I was just checking our bank of pretested questions. I'm looking for questions related to customer satisfaction in the

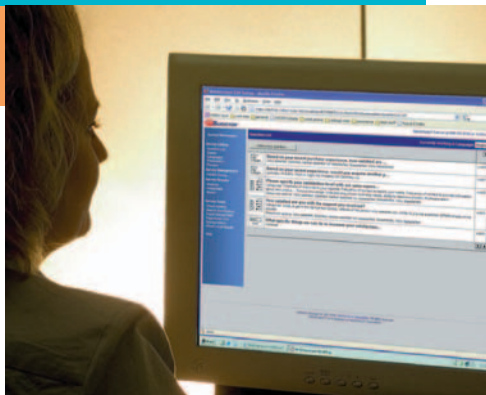
"Custom designing a question is expensive. Before you make that choice," offers Jason, "run another query using *CardioQuest* as a keyword. Right after I joined Visionary, we did a study for that large cardiology specialty in Orlando. I'm sure it included an overall satisfaction scale. It might be worth considering."

Sara types *CardioQuest* and *satisfaction*, and then waits for the computer to process her request. "Sure enough, he's right again," murmurs Sara. "How do you remember all the details of prior studies done cons ago?" she asks, throwing the purely hypothetical question at Jason. But Sara swivels to face Jason, all senses alert when she hears his muffled groan.

Jason frowns as he comments, "You have far more analytical diagnostics planned than would be standard for a project of this type and size, Sara. For example, are Tables 2, 7, and 10 really necessary?" Jason pauses but doesn't allow time for Sara to answer. "To stay within budget, we are going to have to whittle down the analysis phase of the project to what is essential. Let's see if we can reduce the analysis plan to something that Chance will accept. Now, walk me through what you think you'll reveal by three-way cross-tabulating these two attitudinal variables with the education variable."

## >chapter 15

### Questionnaires and Instruments



### >learningobjectives

After reading this chapter, you should understand . . .

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

## Learning Objectives serve as memory flags.

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

## Special tools for today's visual learner.

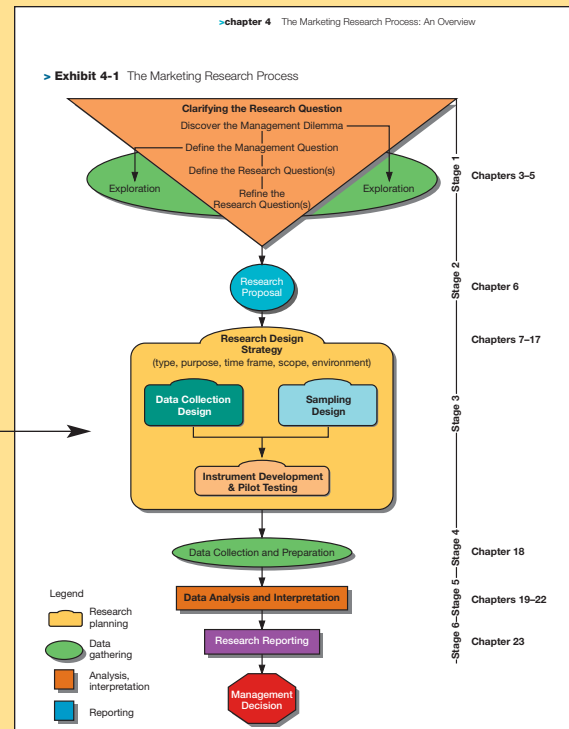
A transformation is taking place in many of our classrooms. During the last decade, more and more of our students have become visual—not verbal—learners. Verbal learners learn primarily from reading text. Visual learners need pictures, diagrams, and graphs to clarify and reinforce what the text relates.

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

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

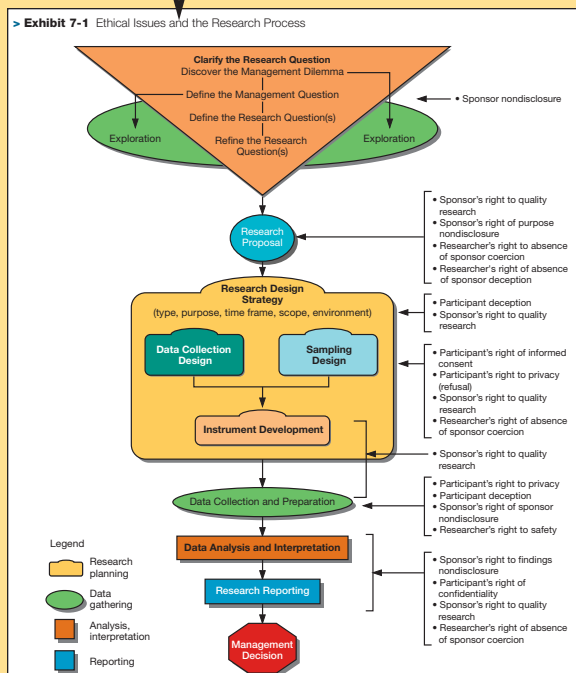
Within our array of exhibits is a very special series of **30 fully integrated research process exhibits**. Each exhibit in this series shares symbols, shapes, and colors with others in the series.

Exhibit 4-1 is the overview exhibit of the research process, to which all other exhibits related to the process will link.



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

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

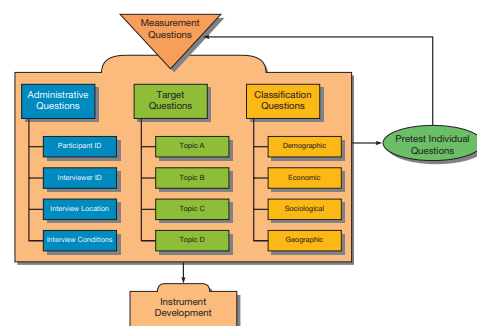


your preliminary analysis plan). In Phase 3 you must address topic and question sequencing. We discuss these topics sequentially, although in practice the process is not linear. For this discussion, we assume the questions are structured.

The order, type, and wording of the measurement questions, the introduction, the instructions, the transitions, and the closure in a quality communication instrument should accomplish the following:

- Encourage each participant to provide accurate responses.
- Encourage each participant to provide an adequate amount of information.
- Discourage each participant from refusing to answer specific questions.
- Discourage each participant from early discontinuation of participation.
- Leave the participant with a positive attitude about survey participation.

**Exhibit 15-4** Flowchart for Instrument Design: Phase 2



You'll find more than 260 exhibits to aid student understanding within this text.

Some topics deserve more attention—  
with their own chapter!

## Ethical issues get the attention they deserve.

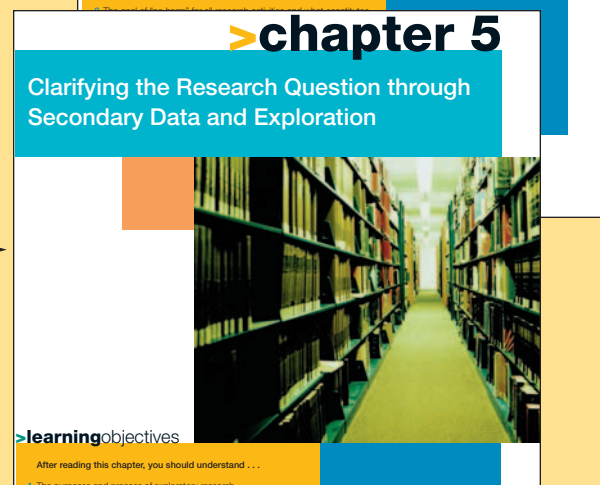
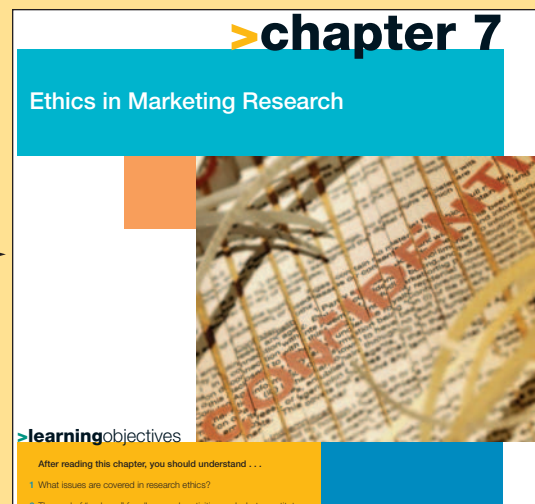
Ethical issues abound in marketing research but may go unnoticed by students who need a framework to discuss and understand these issues. We devote a chapter to building that framework. Then in subsequent chapters we highlight when an ethical issue might be present with a special icon.

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

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

## Qualitative research steps out from the background.

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



## >snapshot

### Covering Kids: The Management-Research Question Hierarchy

Robert Wood Johnson Foundation (RWJF), a health care philanthropy, sponsors the Covering Kids initiative for one reason: millions of children in low- to moderate-income families who are eligible for the State Children's Health Insurance Program (SCHIP) are not enrolled. RWJF initially became involved because it was concerned that the federal government and the states were not actively or effectively publicizing Medicaid and SCHIP. The initial goal of RWJF's involvement was to make eligible families aware of SCHIP and Medicare and encourage enrollment. To this end, RWJF obtained the services of advertising agency GMMB, research firm Wirthlin Worldwide, and veteran social marketer Elaine Bratic Arkin.

The Foundation initially asked, "What must be done to enroll the largest percentage of eligible children in Medicaid and SCHIP?" Before GMMB could move forward, the team needed to determine whether the communication program needed to correct misconceptions, communicate benefits, overcome perceived process complexities, or some combination of these. Early exploratory research sought answers to, "What keeps eligible families from taking advantage of the prescription and doctor-visit programs of SCHIP and Medicaid?" The team also asked, "Is a negative stigma attached to participation in government health care programs?" When research indicated the answer to this question was "No," subsequent efforts focused on identifying other critical factors that discouraged families from enrolling. After research revealed that most working parents did not realize their children were eligible for a government program, the management question was refined to, "What must be communicated to parents of eligible children to get them to enroll their children in these programs?"

Ultimately a creative combination of research design and data analysis revealed: (1) the winning communications frame-



work: Being a good parent means raising happy, healthy children, and enrolling in a program offering low-cost or free health care is a smart choice for families, and (2) every communication must give working parents an easy, foolproof way to determine if their children were eligible while reinforcing the logic that making the call to enroll their children would address parents' innate desire to be good parents.

[www.wirthlin.com](http://www.wirthlin.com); [www.gmm.com](http://www.gmm.com); [www.rwjf.org](http://www.rwjf.org).

> We discuss the usefulness of various qualitative techniques, many of which are used during exploration, in Chapter 9.

research question(s) is the objective of the research study.

An unstructured exploration allows the researcher to develop and revise the management question and determine what is needed to secure answers to the proposed question.

### The Research Question

Using his or her understanding of the basic theoretical concepts, the researcher's task is to assist the manager in formulating a research question that fits the need to resolve the management dilemma. A **research question** best states the objective of the marketing research study. It is a more specific management question that must be answered. It may be more than one question or just one. A marketing research process that answers this more specific question provides the manager with the information necessary to make the decision he or she is facing. Incorrectly defining the research question is the fundamental weakness in the marketing research process. Time and money can be wasted studying an alternative that won't help the manager rectify the original dilemma.

Students learn by and deserve the best examples.

**Snapshots are research examples from the researcher's perspective.**

Snapshots are like mini-cases: They help a student understand a concept in the text by giving a current example. As mini-cases they are perfect for lively class discussion. Each one focuses on a particular part of the research process as it applies to a particular firm and project. You'll find more than 80 of these timely research examples throughout the text, several in each chapter, some from well-known companies but many from research firms that until now you've had no reason to get to know.

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

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

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



Some examples are so rich in detail that one Snapshot or exhibit just isn't sufficient. One of Visionary Insights' clients is MindWriter, 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 VI is doing for MindWriter.

Two award-winning research programs appear in several chapters and on the student DVD:

Covering Kids Research Program



Lexus SC 430 Research Program



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



## The Close-Up 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 Close-Up from Chapter 23 reveals two pages from a complete annotated client research report.

>chapter 23 Presenting Insights and Findings: Written and Oral Reports
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672
>part IV Analysis and Presentation of Data

**>closeupcont'd**

*Question 6 shows the respondents' overall impression of CompleteCare. It would be an ideal dependent variable for a regression study in which questions 1 through 5 were the independent variables (see Chapters 21 and 22).*

**Question 6. Overall Impression of CompleteCare's Effectiveness.** CompleteCare has increased the number of truly satisfied respondents with 46 percent (versus 43 percent in November) in the exceeded expectations category. The top-box score has increased to 75 percent of respondents (against 70 percent in November).

Overall Impression of CompleteCare's Effectiveness

Expectations	Percentage
Met few	2%
Met some	6%
Met most	17%
Met all	29%
Exceeded	46%

Mean score: 4.14 Standard deviation: 0.98 Valid cases: 169

*Question 8a is another question for more detailed research. It allows the researcher to connect the variables that describe the service/repair experience with repurchase intentions.*

**Question 8a. Likelihood of Repurchasing MindWriter Based on Service/Repair Experience.** Respondents' average scores (4.02) for this likelihood scale are the highest this month since measurement began. Improvement of the courier service's arrangements with customers and the resolution of the problem that prompted service appear to be the best predictors of repurchase at this time.

**>closeupcont'd**

*Using regression, it was possible to identify two key influences for this question.*

*Question 8b (not shown) is similar, asking about the relation of product performance to repurchase intention.*

Likelihood of Repurchasing MindWriter Based on Service/Repair Experience

Likelihood	Percentage
Very unlikely	7%
Unlikely	5%
Neither likely nor unlikely	8%
Likely	43%
Very likely	38%

Mean score: 4.02 Standard deviation: 1.10 Valid cases: 165

**Patterns in the Open-Ended Questions**

The following categories were found when the comments and suggestions were analyzed. The ratio of negative to positive comments was 1.7 to 1. Pickup problems continue to be "courier only" problems and coordination between MindWriter's telephone support and the courier. Customers complain of holding on the phone for long periods and being transferred between support people. Problems with service are split between large problems that have not been fixed and small, nuisance problems that customers are prepared to live with. Positive comments commend turnaround and service and also praise specific technical operators.

*The questionnaire has one open-ended question that encourages respondents to make comments or suggestion.*

*Content analysis is used to distill the responses (see Chapter 18).*

## PicProfile offers a memory visual to enhance an example.

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

318
>part II The Design of Marketing Research

**picprofile**

Researchers know that as many as 60 percent of purchase decisions are made in the store. Thus marketers aggressively seek in-store space to place temporary displays, shelf-talkers, and instant coupons, as well as ceiling signs and banners. Even the floor is contested real estate. So the ability to demonstrate the effectiveness of promotional materials is critical. FLOORGraphics, Inc., uses a longitudinal design, tracking sales of products in matched groups of stores (test and control groups). After test stores receive the FLOORrad, relative sales in both groups are again compared to pre-ad performance and to each other. Research shows the FLOORrad effect (the percentage sales increase directly due to the FLOORrad) can lift sales 20 to 40 percent depending on the product category. [www.floorgraphics.com](http://www.floorgraphics.com)

In this design, we can deal with the seven major internal validity problems fairly well, although there are still some difficulties. Local history may occur in one group and not the other. Also, if communication exists between people in test and control groups, there can be rivalry and other internal validity problems.

Maturation, testing, and regression are handled well because one would expect them to be felt equally in experimental and control groups. Mortality, however, can be a problem if there are different dropout rates in the study groups. Selection is not a problem if random assignment is used.

The record of this design is not as good on external validity, however. There is a chance for a reactive effect from testing. This might be a substantial influence in attitude change where pretests introduce unusual topics and content. Nor does this design ensure against reaction between selection and the experimental variable. Even random selection may be defeated by a high decline rate among participants. This would result in using a disproportionate share of people who are essentially volunteers and who may not be typical of the population. If this occurs, we will need to replicate the experiment several times with other groups under other conditions before we can be confident of external validity.

# Learning aids cement the concepts.

## Discussion questions and Web exercises that go one step farther.

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

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

### External Research Suppliers

Within the category "marketing research specialists," more than 2,000 research firms operate in the United States.<sup>10</sup>

### Marketing Research Companies

**Full-Service Firms** Full-service marketing researchers include some of the largest marketing research firms in the world and some of the smallest. Exhibit 2-2 identifies some of the largest firms. Full-service firms are often involved in research planning for their clients from the moment of discovery of the management dilemma or, at the very least, from the definition of the management question. Such firms usually have expertise in both quantitative and qualitative methodologies, and they often have at their disposal multifaceted facilities capable of serving a wide variety of research designs, including both fieldwork and laboratory operations. Some are capable of working in worldwide venues, while others offer their services to only one industry or one geographic region. While these firms may have one or more areas of noteworthy expertise, they are truly multidimensional in

**full-service marketing researcher** a firm with both quantitative and qualitative methodology expertise that conducts all phases of research from planning to insight development.

scope. In a research environment where clients insist on a high degree of control, full-service firms are often a ration. NFO WorldGroup is an example of a firm that is "marketing minds who specialize in another full-service firm. It describes wledge with research expertise in our cross-

is "ad hoc research" or "custom-designed re- search reporting, these firms are often a ration. NFO WorldGroup is an example of a firm that is "marketing minds who specialize in another full-service firm. It describes wledge with research expertise in our cross-

**custom researcher** crafts a research design unique to the marketing decision maker's dilemma.

**proprietary methodology** a research program or technique that is owned by a single firm.

**gamma** ( $\gamma$ ) uses a preponderance of evidence of concordant pairs versus discordant pairs to predict associations; the gamma value is the proportional reduction of error when prediction is done using preponderance of evidence (values from -1.0 to +1.0).

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**key research** research see exploration.  
**key study** study see exploration.  
**key statement** a statement that describes without attempting to be.  
**key presentation** a conversation-style oral presentation made from minimal notes or an outline.  
**key validity** when an observed causal relationship can be traced across persons, settings, and times.  
**key observation** the recording of vocal, temporal, and verbal stylistic behaviors of human participants.  
**key variable (EV)** variable to assume (because it has effect or its impact is randomized) or exclude from a study.  
**key network** a private network that uses the Internet protocols and public telecommunication system to share a business's information, data, or operations with external suppliers, vendors, and customers.  
**key test** a statistical comparing measurements of  $k$  independent groups.  
**key independent variable (IV)** in an experiment, are divided into treatment levels for the experiment.  
**key analysis** a technique for discovering patterns among the data to determine if an underlying combination of the variables (a factor) can summarize the original set.  
**key scales** types of scales that deal with multidimensional and underlying dimensions, such as scalogram, factor cluster analyses, and metric and nonmetric multidimensional scaling.  
**key factor analysis** the result of transforming a set of variables into a new set of composite variables, these factors are linear and not correlated with each other.

### Glossary

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**format** how the information is presented and how easy it is to find a specific piece of information within a secondary source; one of five factors used to evaluate the value of a secondary source.

**forward selection** in modeling and regression, sequentially adds the variables to a regression model that results in the largest  $R^2$  increase; see also *backward elimination* and *stepwise selection*.

**free-response question** a measurement question where the participant chooses the words to frame the answer; a.k.a. *open-ended question* (nominal, ordinal, or ratio data).

**frequency distribution** ordered array of all values for a variable.

**frequency table** arrays category codes from lowest value to highest value, with columns for count, valid percent, percent and cumulative percent.

**full-service marketing researcher** a firm with both quantitative and qualitative methodology expertise that conducts all phases of research from planning to insight development, often serving as both research firm and consultant.

**funnel approach** a type of question sequencing that moves the participant from general to more specific questions and is designed to learn the participant's frame of reference while extracting full disclosure of information on the topic (nominal, ordinal, interval or ratio data).

**gamma** ( $\gamma$ ) uses a preponderance of evidence of concordant pairs versus discordant pairs to predict associations; the gamma value is the proportional reduction of error when prediction is done using preponderance of evidence (values from -1.0 to +1.0).

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