Survey Data Collection Methods

Practitioner Viewpoint

Marketing research, with its many resources, continues to design and develop measurements that provide and support a more complex and sophisticated marketplace that is quickly evolving into a global market. As a visionary and pioneer, Opinion One stands with a handful of other pioneers, continuing to create interviewing solutions and data collection methodologies that improve the ability of researchers, scientists, statisticians, marketers, advertisers, media, and others to make accurate decisions and forecasts. Improved and advanced data collection and sampling techniques and methods are required to form an infrastructure for the industry's thirst for and responsibility to communicate with consumers and understand consumer needs and trends in different geographic areas.

Internet-based data collection technologies have provided promises for the market research industry. However, the greatest promise and threat to researchers and data collectors is the industry’s ability to improve its capability to communicate with respondents throughout the world regardless if the respondent lives in a penthouse on Park Avenue in New York City or in a hut outside of New Delhi. Interviewing and collecting information from a specified population group can be enhanced with new and existing data collection methodologies and technologies. Opinion One is assisting the global market research community with these efforts through its pioneering work in creating the first new interviewing methodology in 30 years, Computer-Assisted Visual Interviewing (CAVI™). Our vision is to provide the industry with communication methodologies that enable researchers throughout the world to secure and improve respondent cooperation and get closer to the truth. I strongly believe that my vision, goal, and pioneering efforts will help to guide the industry into the future.

“JJ” Klein
Chief Executive, Opinion One, LP
Jstreetdata.com Streamlines Physician Surveys with Its Online Panel and Three Wizards

It is estimated that over $1 billion is spent annually in the United States on researching the medical market. In the past, a typical medical market research project was priced in the $35,000–$45,000 range and required up to two months of activities such as study design; recruiting respondents; data collection via fax, mail, or telephone interview; and data analysis.

Jstreetdata.com, a medical market research specialist, realized that an online panel greatly accelerates the entire research process with a 20 percent to 30 percent savings. This company has recruited 6,000 physicians of all specialties, including some who are very difficult to access such as cardiologists, who have agreed to respond to e-mail invitations to fill out a questionnaire posted on the jstreetdata.com Web site.

Jstreetdata.com uses three online wizards for its services. The Survey Wizard™ walks a researcher through the steps of constructing an online questionnaire. The Survey Wizard™ has a number of question formats that permit yes–no questions, numerical and graphical scales, multiple-choice questions, or open text. When the researcher is satisfied with his or her questionnaire, it is posted on the Web site. The Recruitment Wizard™ is then used to identify specific medical personnel types, such as cardiovascular surgeons, who are on the panel. With this wizard, the researcher sends out a mass e-mail invitation to all eligible panelists. Of course, the 24/7 feature of jstreetdata.com’s online surveys is very advantageous as physicians work long hours, and they need this time flexibility to fill out and submit the online questionnaire quickly. During the survey, the researcher can view graphical presentations of survey results, and at the end of the survey, the full data set can be downloaded by the researcher for extensive analysis. The Focus Wizard™ is the third wizard, which is an online chat feature where researchers can conduct online focus groups with targeted panelists.1

There are three general ways of obtaining primary data in marketing research—survey, observation, and experiment. Although exact figures are not available, it is well known that surveys are the most widely used method of data collection in commercial marketing research. They are also used extensively in monitoring public opinion, noting social trends, and even being used as evidence in court cases.2 The bulk of marketing research surveys is sometimes called cross-sectional studies or surveys of large cross sections of populations. Alternatively, the survey may be very targeted such as the online medical research service of jstreetdata.com described earlier. Consequently, we devote much attention to collecting data via surveys in this chapter. First, we note the advantages of surveys. Next, we describe the pros and cons of the three basic survey modes: (1) person-administered surveys, (2) computer-assisted surveys, and (3) self-administered surveys. After these, we give descriptions of several commonly used data collection methods such as mall intercepts, telephone interviews, and mail surveys. Finally, we discuss factors a market researcher should consider when deciding which data collection method to use.
Key advantages of surveys include standardization, ease of administration, ability to tap the "unseen," suitability to tabulation and statistical analysis, and sensitivity to subgroup differences. Mail surveys are self-administered, the simplest form of administration for researchers.

Advantages of Surveys

Compared to observation or other qualitative methods, survey methods allow the collection of significant amounts of data in an economical and efficient manner, and they typically allow for much larger sample sizes. There are five advantages of using survey methods: (1) standardization, (2) ease of administration, (3) ability to tap the "unseen," (4) suitability to tabulation and statistical analysis, and (5) sensitivity to subgroup differences (see Table 9.1).

Standardization

Because questions are preset and organized in a particular arrangement on a questionnaire, survey methods ensure that all respondents are asked the same questions and are exposed to the same response options for each question. Moreover, the researcher is assured that every respondent will be confronted with questions that address the complete range of information objectives driving the research project.

Ease of Administration

Sometimes an interviewer is used, and survey modes are easily geared to such administration. On the other hand, the respondent may fill out the questionnaire unattended. In either case, the administration aspects are much simpler than, for instance, conducting a focus group or utilizing depth interviews. Perhaps the simplest case is a mail survey in which questionnaires are sent to prospective respondents. There is no need for tape recording, taking notes, or analyzing projective or physiological data; there is not even a need to read the questions to the respondent. All the researcher needs to do is mail the questions to prospective respondents.

Ability to Tap the "Unseen"

The four questions of what, why, how, and who help uncover "unseen" data. For instance, we can ask a working parent to tell us how important the location of a preschool was in his or her selection of the child's preschool. We can inquire as to how many different preschools he or she seriously considered before deciding on one, and we can easily gain an understanding of the person's financial or work circumstances with a few questions on income, occupation, and family size. Much information is unobservable and requires direct questions.

<table>
<thead>
<tr>
<th>Advantage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardization</td>
<td>All respondents react to questions worded identically and presented in the</td>
</tr>
<tr>
<td></td>
<td>same order. Response options (scales) are the same, too.</td>
</tr>
<tr>
<td>Administration ease</td>
<td>Interviewers read questions to respondents and record their answers quickly</td>
</tr>
<tr>
<td></td>
<td>and easily. In some cases, the respondents fill out the questionnaires</td>
</tr>
<tr>
<td></td>
<td>themselves.</td>
</tr>
<tr>
<td>Tap the &quot;unseen&quot;</td>
<td>It is possible to ask questions about motives, circumstances, sequences of</td>
</tr>
<tr>
<td></td>
<td>events and mental deliberations.</td>
</tr>
<tr>
<td>Tabulation/analysis</td>
<td>Large sample sizes and computer processing allow quick tallies, cross-</td>
</tr>
<tr>
<td></td>
<td>tabulations, and other statistical analyses.</td>
</tr>
<tr>
<td>Subgroup differences</td>
<td>Respondents can be divided into segments or subgroups for comparisons in</td>
</tr>
<tr>
<td></td>
<td>the search for meaningful differences.</td>
</tr>
</tbody>
</table>
Three Alternative Data Collection Modes

Suitability to Tabulation and Statistical Analysis
The marketing researcher ultimately must interpret the patterns or common themes sometimes hidden in the raw data he or she collects. Statistical analysis, both simple and complex, is the preferred means of achieving this goal, and large cross-sectional surveys perfectly complement these procedures. Qualitative methods, in contrast, prove much more frustrating in this respect because of their necessarily small samples, need for interpretation, and general approach to answering marketing managers’ questions. Increasingly, questionnaire design software includes the ability to perform simple statistical analyses, such as tabulations of the answers to each question, as well as the ability to create color graphs summarizing these tabulations.

Sensitivity to Subgroup Differences
Because surveys involve large numbers of respondents, it is relatively easy to “slice” up the sample into demographic groups or other subgroups and then to compare them for market segmentation implications. In fact, the survey sample design may be drawn up to specifically include important subgroups as a means of looking at market segment differences. In any case, the large sample sizes that characterize surveys facilitate subgroup analyses and comparisons of various groups existing in the sample.

THREE ALTERNATIVE DATA COLLECTION MODES
There are three major ways to collect information from respondents: (1) Have a person ask the questions, either face-to-face or voice-to-voice without any assistance from a computer. (2) Have a computer assist or direct the questioning in a face-to-face or voice-to-voice survey. (3) Allow respondents to fill out the questionnaire themselves, without computer assistance. We will refer to these three alternatives as

Questionnaire design programs include statistical analysis packages as a natural extension of survey research.

Three data collection modes are person-administered, computer-administered, and self-administered surveys.
person-administered, computer-administered, and self-administered surveys, respectively. Each one has special advantages and disadvantages that we describe in general before discussing the various types of surveys found within each category. Specific advantages and disadvantages on these various types are discussed later.

**Person-Administered Surveys (Without Computer Assistance)**

A person-administered survey is one in which an interviewer reads questions, either face-to-face or over the telephone, to the respondent and records his or her answers. It was the primary administration method for many years. However, its popularity has fallen off as communications systems have developed and computer technology has advanced. Nevertheless, person-administered surveys are still used, and we describe the advantages and disadvantages associated with these surveys next.

**Advantages of Person-Administered Surveys**

Person-administered surveys have four unique advantages: They offer feedback, rapport, quality control, and adaptability.

1. **Feedback.** Interviewers often must respond to direct questions from respondents during an interview. Sometimes respondents do not understand the instructions, or they may not hear the question clearly, or they might become distracted by some outside factor during the interview. A human interviewer may be allowed to adjust his or her questions according to verbal or nonverbal cues. When a respondent begins to fidget or look bored, the interviewer can say, “I have only a few more questions.” Or if a respondent makes a comment, the interviewer may jot it down as a side note to the researcher.

2. **Rapport.** Some people distrust surveys in general, or they may have some suspicions about the survey at hand. It is often helpful to have another human being present to develop some rapport with the respondent early on in the questioning process. Once a bridge of trust and understanding has been established, most respondents will become visibly more relaxed with the interview and will open up more to the various questions being posed.

3. **Quality control.** An interviewer sometimes must select certain types of respondents based on gender, age, or some other distinguishing characteristic. Personal interviewers may be used to ensure respondents are selected
Three Alternative Data Collection Modes

241

Personal interviewers can easily adapt to the needs and styles of different respondents.

Person-administered surveys are relatively slow and/or expensive.

Disadvantages of Person-Administered Surveys The drawbacks to using human interviewers pertain to exactly that, humans. That is, personal interviewers are slower; they are prone to errors; and although pictures, videos, and graphics can be handled by personal interviewers, they cannot accommodate them as easily. Often personal interviewers simply record respondents’ answers using pencil and paper, which necessitates a separate data-input step to build a computer data file. But increasing numbers of data collection companies have shifted to the use of laptop computers that immediately add the responses to a data file. Naturally, the use of a face-to-face interviewer is more expensive than mailing the questionnaire to respondents. Ideally, personal interviewers are highly trained and skilled and their use overcomes the expense factor. A less expensive person-administered survey is a telephone interview.

Computer-Administered Surveys

As our introductory example illustrates, computer technology represents a viable option with respect to survey mode, and new developments occur almost every day. Although person-administered surveys are still the industry mainstay, computer-administered survey methods are growing very rapidly and will rival person-administered surveys in the foreseeable future. Computer-assisted surveys are in an evolutionary state, and they are spreading to other survey types. For instance, a computer may house questions asked by a telephone interviewer, or a questionnaire may be posted on the Internet for administration. Basically, a computer-administered survey is one in which computer technology plays an essential role in the interview work. Here either the computer assists an interview or it interacts directly with the respondent. In the case of Internet-based questionnaires, the computer acts as the medium by which potential respondents are approached, and it is the means by which respondents submit their completed questionnaire. As with person-administered surveys, computer-administered surveys have their advantages and disadvantages.

Advantages of Computer-Administered Surveys There are variations of computer-administered surveys. At one extreme, the respondent answers the questions on his or her PC, often online, and the questions are tailored to his or her responses to previous questions, so there are no human interviewers. At the other end, there are computer programs in which a telephone or personal interviewer is prompted by the computer as to what questions to ask and in what sequence. Regardless of which variation is considered, at least five advantages of computer-administered surveys are evident: speed; error-free interviews; use of pictures, videos, and graphics; real-time capture of data; and reduction of “interview evaluation” concern in respondents.

1. Speed. The computer-administered approach is much faster than the human interview approach. Computers can quickly jump to questions
The real-time capture of data by computer-administered surveys is an important advantage of this data collection method.

The real-time capture of data by computer-administered surveys is an important advantage of this data collection method.

based on specific responses, they can rapidly dial random telephone numbers, and they can easily check on answers to previous questions to modify or otherwise custom-tailor the interview to each respondent’s circumstances. The speed factor translates into cost savings, and there is a claim that Internet surveys are about one-half the cost of mail or phone surveys.

2. **Error-free interviews.** Properly programmed, the computer-administered approach guarantees zero interviewer errors such as inadvertently skipping questions, asking inappropriate questions based on previous responses, misunderstanding how to pose questions, recording the wrong answer, and so forth. Also, the computer neither becomes fatigued nor cheats.

3. **Use of pictures, videos, and graphics.** Computer graphics can be integrated into questions as they are viewed on a computer screen. So rather than having an interviewer pull out a picture of a new type of window unit air conditioner, for instance, computer graphics can show it from various perspectives. CD-ROM disk capabilities allow high-quality video windows to appear so the respondent can see the product in use or can be shown a wide range of visual displays.

4. **Real-time capture of data.** Because respondents are interacting with the computer and not a human who is recording their answers on a questionnaire, the information is directly entered into a computer’s data storage system and can be accessed for tabulation or other analyses at any time. Once the interviews are finished, final tabulations can be completed in a matter of minutes. This feature is so beneficial that some interview companies have telephone interviewers directly linked to computer input when they conduct their interviews.

5. **Reduction of “interview evaluation” concern in respondents.** When involved in responding to questions in a survey, some people become anx-
Some types of computer-administered surveys incur relatively high setup costs, but others are very reasonable and easy to use.

**Disadvantages of Computer-Administered Surveys** Obviously, computer-assisted surveys must have some disadvantages; otherwise, more surveys would make use of computer technology. Although computers are relatively inexpensive at present, there are costs involved in computer design, programming, debugging, and setup, which must be incurred with each survey. Depending on what type of computer-administered survey is under consideration, these costs, including the time factor associated with them, can render computer-administered delivery systems for surveys less attractive relative to other data collection options. At the same time, there are a number of moderate to low-cost computer-administered options such as e-mail surveys or Web-based questionnaires with user-friendly development interfaces that are fueling the rush toward online research around the world.

**Self-Administered Surveys**

A self-administered survey is one in which the respondent completes the survey on his or her own. It is different from other survey methods in that there is no agent—human or computer—administering the interview. So, we are referring to the prototypical “pencil-and-paper” survey here. Instead, the respondent reads the questions and responds directly on the questionnaire. Normally, the respondent goes at his or her own pace, and in most instances he or she selects the place and time to complete the interview. He or she also may decide when the questionnaire will be returned. As with other survey methods, those that are self-administered have their advantages and disadvantages.

**Advantages of Self-Administered Surveys** Self-administered surveys have three important advantages: reduced cost, respondent control, and no interviewer-evaluation apprehension.

1. **Reduced cost.** By eliminating the need for an interviewer or an interviewing device such as a computer program, there can be significant savings in cost.
2. **Respondent control.** Respondents can control the pace at which they respond, so they may not feel rushed. Ideally, a respondent should be relaxed while responding, and a self-administered survey may affect this state.
3. **No interviewer-evaluation apprehension.** As we just noted, some respondents feel apprehensive when answering questions, or the topic may be sensitive, such as gambling, smoking, or dental work.

The self-administered approach takes the administrator, whether human or computer, out of the picture, and respondents may feel more at ease. Self-administered questionnaires have been found to elicit more insightful information than face-to-face interviews.

**Disadvantages of Self-Administered Surveys** As you can see, self-administration places control of the survey in the hands of the prospective respondent. Hence, this type of survey is subject to the possibilities that respondents will not complete the
survey, will answer questions erroneously, will not respond in a timely manner, or will refuse to return the survey at all.

The major reason for these drawbacks is that no opportunity exists to monitor or interact with the respondent during the course of the interview. For example, in conducting a survey for a mass-transit system, one question might be, “Have you used this city’s subway system to commute to and from work in the past three months?” The questionnaire may then instruct respondents who indicate “no” to skip the next set of questions, whereas those responding “yes” would continue on and answer questions about the subway’s cleanliness, the degree of crowding, its adherence to published schedules, and so on. If a respondent who indicated “no” somehow failed to realize that he or she should skip these questions, there is the possibility that he or she would become frustrated at the questions about the subway’s features and throw the questionnaire away. Alternatively, in conducting a survey of aspirin use, one question might ask the respondent to rank five different brands of aspirin from “most preferred” to “least preferred” by writing the rank number beside each brand. However, the respondent might misunderstand and just check off his or her most-preferred brand. In either case, if an interviewer were present, the error would be quickly spotted and resolved; but, because the interviewer is not present, the respondent may well commit numerous similar errors while fully believing that he or she has responded properly.

Due to the absence of the interviewer or an internal computer check system, the burden of respondent understanding falls on the questionnaire itself. It must have very clear instructions, examples, and reminders throughout. Although questionnaire design is a complete topic that we take up in Chapter 11, the point to remember here is that the respondent, not the interviewer, has control with self-administered surveys. Thus, the potential for error is very high, and market researchers must take great care to reduce this error factor.

## DESCRIPTIONS OF REPRESENTATIVE DATA COLLECTION MODES

Now that you have an understanding of the pros and cons of person-, computer-, and self-administered surveys, we can describe the various interviewing techniques used in each method. There are 11 different data collection methods used by marketing researchers (Table 9.2):

1. In-home interview
2. Mall-intercept interview
3. In-office interview
4. “Traditional” telephone interview
5. Central location telephone interview
6. Computer-assisted telephone interview (CATI)
7. Fully computerized interview
8. Online and other Internet-based surveys
9. Group self-administered survey
10. Drop-off survey
11. Mail survey

### Person-Administered Interviews

There are at least four variations of person-administered interviews, and their differences are largely based on the location of the interview. These variations include the in-home interview, the mall-intercept interview, the in-office interview, and the telephone interview (which includes the “traditional” and central location telephone interviews).
In-home interviews are conducted in the security and comfort of respondents’ homes.

In-home interviews facilitate interviewer–interviewee rapport.

In-Home Interviews Just as the name implies, an in-home interview is conducted in the home of the respondent. Two important factors justify the use of in-home interviews. First, the marketing researcher must believe that personal contact is essential to the success of the interview. Second, he or she must be convinced that the in-home environment is conducive to the questioning process.

Let us analyze these factors more completely. With respect to the first factor, the survey may incorporate a set of advertisements the researcher wants viewed, it might require the respondent to see and touch a product, the respondent may have to perform a complicated task such as sorting cards with brand names on them into piles, or it might be vital that the interviewer make visual confirmation of the respondent’s qualifying characteristics or nonverbal cues. On the second factor, it is often believed that conducting an interview in the home greatly improves the quality of responses and facilitates the rapport between interviewer and interviewee. When a respondent is in a secure, comfortable environment, the likelihood of distraction is
Mall-intercept interviews are conducted in large shopping malls, and they are less expensive per interview than are in-home interviews. Mall-intercept interview companies make this method easy and popular.

The representativeness of mall interview samples is always an issue.

Mall interview companies use rooms in their small headquarters areas to conduct private interviews in a relaxed setting.

Reduced, and it is believed that respondents take more care in responding to various questions. Also, most in-home interviews take considerable time, and by allowing the interview to take place in his or her home, the respondent is implicitly expecting it to take some time, certainly longer than would be expected for a telephone survey, for instance.

**Mall-Intercept Interviews** Although the in-home interview has important advantages, it has the significant disadvantage of cost. The expense of in-home interviewer travel is high, even for local surveys. Patterned after “man-on-the-street” interviews pioneered by opinion-polling companies and other “high-traffic” surveys conducted in settings where crowds of pedestrians pass by, the **mall-intercept interview** is one in which the respondent is encountered and questioned while he or she is visiting a shopping mall. A mall-intercept company generally has its offices located within a large shopping mall, usually one that draws from a regional rather than a local market area. Typically, the interview company negotiates exclusive rights to do interviews in the mall and, thus, forces all marketing research companies that wish to do mall intercepts in that area to use that interview company’s services. In any case, the travel costs are eliminated because the respondents incur the costs themselves by traveling to the mall.

Mall-intercept interviewing has acquired a major role as a survey method due to its ease of implementation. Shoppers are intercepted in the pedestrian traffic areas of shopping malls and either interviewed on the spot or asked to move to a permanent interviewing facility located in the mall office. Although some malls do not allow marketing research interviewing because they view it as a nuisance to shoppers, many do permit mall-intercept interviews and may rely on these data themselves to fine-tune their own marketing programs.

In addition to low cost, mall interviews have most of the advantages associated with in-home interviewing. Perhaps the most important advantage is the presence of an interviewer who can interact with the respondent. However, a few disadvantages are specifically associated with mall interviewing, and it is necessary to point them out here. First, sample representativeness is an issue, for most malls draw from a relatively small area in close proximity to their location. Some people shop at malls more frequently than others and, therefore, have a greater chance of being interviewed. Recent growth of nonmall retailing concepts such as catalogs and stand-alone discounters such as Wal-Mart mean that more mall visitors are recreational shoppers rather than convenience-oriented shoppers, resulting in the need to scrutinize mall-intercept samples as to what consumer groups they actually represent. Also, many shoppers refuse to take part in mall interviews for various reasons. Nevertheless, special selection procedures called quotas, which are described in Chapter 12, may be used to counter the problem of nonrepresentativeness.

A second shortcoming of mall-intercept interviewing is that a shopping mall does not have a comfortable home environment that is conducive to rapport and close attention to details. The respondents may feel uncomfortable because passersby stare at them; they may be pressed for time or otherwise preoccupied by various distractions outside the researcher’s control. These factors may adversely affect the quality of the interview. As we indicated earlier, some interview companies attempt to counter this problem by taking respondents to special interview rooms located in the interview company’s mall offices. This procedure minimizes distractions and encourages respondents to be more relaxed. One company, Opinion One, has innovated an oversized monitor with touchscreen technology that immerses respondents in the survey, thereby minimizing distractions and capturing the responses as they are given. In Marketing Research Insight 9.1 you can meet “JJ” Klein, the chief executive of Opinion One.
Meet a Marketing Researcher

"JJ" Klein, Chief Executive, Opinion One, LP

"JJ" Klein, chief executive of Opinion One, is a marketing and research professional with more than 25 years of experience in designing, developing, and implementing research methodologies and programs. Mr. Klein is Opinion One’s primary visionary.

Mr. Klein began his marketing and research career as a project director for Simmons Market Research Bureau, where he rose through a number of management positions to become associate executive vice president. He was involved in the design and development of the annual Simmons “Study of Selective Markets” and was director of the “Simmons Local Index.” In addition, he was instrumental in designing and developing the first online interactive data analysis and delivery system made available to a variety of markets, including advertisers and their agencies.

Mr. Klein left Simmons Research to form Three Sigma Research Center. As partner and chief operating officer, Mr. Klein created Three Sigma’s “Syndicated Study of Major Markets.” This was the first major syndicated-local market newspaper audience measurement system implemented in the United States. This syndicated program eventually became the Scarborough Report, based on more than 100,000 interviews, which continues to be an industry standard. Following the sale of Three Sigma, Mr. Klein joined Audits & Surveys Worldwide as a director, principal, and member of the senior management group. He was involved in developing a number of the company’s domestic and international businesses, including consumer marketing and retail audit and distribution tracking services.

Mr. Klein brings a unique blend of experience in developing local, national, and international marketing, sales, advertising, and retail information businesses. In addition, he is a member of the American Marketing Association (cofounder of the Gold Coast Chapter) and European Society for Opinion and Marketing Research. Mr. Klein is a frequent guest speaker at domestic and international conferences.

In-Office Interviews

In-Office Interviews  Although the in-home and mall-intercept interview methods are appropriate for a wide variety of consumer goods, marketing research conducted in the business-to-business or organizational market typically requires interviews with business executives, purchasing agents, engineers, or other managers. Normally, in-office interviews take place in person while the respondent is in his or her office, or perhaps in a company lounge area. Interviewing businesspersons face-to-face has essentially the same advantages and drawbacks as in-home consumer interviewing. For example, if Texas Instruments wanted information regarding user preferences for different features that might be offered in a new ultra-high-speed laser printer designed for business accounting firms, it would make sense to interview prospective users or purchasers of these printers. It would also be logical that these people would be interviewed at their places of business.

As you might imagine, in-office personal interviews incur relatively high costs. Those executives qualified to give opinions on a specific topic or individuals who would be involved in product purchase decisions must first be located. Sometimes names can be obtained from sources such as industry directories or trade association membership lists. More frequently, screening must be conducted over the telephone by calling a particular company that is believed to have executives of the type needed. However, locating those people within a large organization may be time
Advantages of telephone interviews are cost, quality, and speed. Once a qualified person is located, the next step is to persuade that person to agree to an interview and then set up a time for the interview. Finally, an interviewer must go to the particular place at the appointed time. Even with appointments, long waits are sometimes encountered and cancellations are not uncommon because businesspeople’s schedules sometimes shift unexpectedly. Added to these cost factors is the fact that interviewers who specialize in businessperson interviews are more costly in general because of their specialized knowledge and abilities. They have to navigate around gatekeepers such as secretaries, learn technical jargon, and be conversant on product features when the respondent asks pointed questions or even criticizes questions as they are posed to him or her.

**Telephone Interview** As we have mentioned previously, the need for a face-to-face interview is often predicated on the necessity of the respondent’s actually seeing a product, advertisement, or packaging sample. On the other hand, it may be vital that the interviewer watch the respondent to ensure correct procedures are followed or otherwise to verify something about the respondent or his or her reactions. If, however, physical contact is not necessary, telephone interviewing is an attractive option. There are a number of advantages as well as disadvantages associated with telephone interviewing.

The advantages of telephone interviewing are many, and they explain the popularity of phone surveys. First, the telephone is a relatively inexpensive way to collect survey data. Long-distance telephone charges are much lower than the cost of a face-to-face interview. A second advantage of the telephone interview is that it has the potential to yield a very high-quality sample. If the researcher employs random dialing procedures and proper callback measures, the telephone approach may produce a better sample than any other survey procedure. A third and very important advantage is that telephone surveys have very quick turnaround times. Most telephone interviews are of short duration anyway, but a good interviewer may complete several interviews per hour. Conceivably, a study could have the data collection phase executed in a few days with telephone interviews. In fact, in the political polling industry in which real-time information on voter opinions is essential, it is not unusual to have national telephone polls completed in a single night.

Unfortunately, the telephone survey approach has several inherent shortcomings. First, the respondent cannot be shown anything. This shortcoming ordinarily
eliminates the telephone survey as an alternative in situations requiring that the respondent view product prototypes, advertisements, packages, or anything else. A second disadvantage is that the telephone interview does not permit the interviewer to make the various judgments and evaluations that can be made by the face-to-face interviewer. For example, judgments regarding respondent income based on the home they live in and other outward signs of economic status cannot be made. Similarly, the telephone does not allow for the observation of body language and facial expressions, nor does it permit eye contact. On the other hand, some may argue that the lack of face-to-face contact is helpful. Self-disclosure studies have indicated that respondents provide more information in personal interviews, except when the topics are threatening or potentially embarrassing. Questions on alcohol consumption, contraceptive methods, racial issues, or income tax reporting will probably generate more valid responses when asked in the relative anonymity of the telephone than when administered face-to-face.¹⁰

A third disadvantage of the telephone interview is that the marketing researcher is more limited in the quantity and types of information that he or she can obtain. Very long interviews are inappropriate for the telephone, as are questions with lengthy lists of response options that respondents will have difficulty remembering when they are read over the telephone. Respondents short on patience may hang up during interviews, or they may utter short and convenient responses just to speed up the interview. Obviously, the telephone is a poor choice for conducting an interview with many open-ended questions.

A last problem with telephone interviews is the growing threat to its existence by the increased use of answering machines, caller recognition, and call-blocking devices being adopted by consumers.¹¹ The research industry is concerned about these gatekeeping methods, and it is just beginning to study ways around them.¹² Another difficulty is that legitimate telephone interviewers must contend with the negative impression people have of telemarketers.¹³

There are two types of telephone interviews: traditional and central location. As you can guess, telephone interviewing has been and continues to be greatly impacted by advances in telephone systems and communications technology. As you will see, the traditional telephone approach has largely faded away, whereas the central location approach has embraced technological advances in telephone systems.

**Traditional Telephone Interviewing.** Technology has radically changed telephone surveys; however, it is worthwhile to describe this form of telephone interviewing as a starting point. Prior to central location and computer-assisted telephone interviewing, these **traditional telephone interviews** were those that were conducted either from the homes of the telephone interviewing staff or, perhaps, from telephone stalls located in the data collection company’s offices. Everything was done mechanically. That is, interviewers dialed the telephone number manually, they read questions off a printed questionnaire, they were responsible for following special instructions on how to administer the questions, and they checked off the respondent’s answers on each questionnaire. Quality control was limited to training sessions, sometimes in the form of a dress rehearsal by administering the questionnaire to the supervisor or another interviewer, and to callback checks by the supervisor to verify that the respondent had taken part in the interview.

Obviously, the traditional telephone interview method offers great potential for errors. In addition to the possibilities of misdialing and making mistakes in administering the questions, there are potential problems of insufficient call-backs for not-at-homes, and a host of other problems. Also, because the actual hours worked
while performing telephone interviews are difficult to track, most interview companies opt for a “per completion” compensation system. That is, the interviewer is compensated for each questionnaire delivered to the office that is completely filled out. As you can imagine, there have been instances of dishonest interviewers turning in falsified results.

A concern with traditional telephone interviewing is interviewer cheating. Although most traditional telephone interviewers are honest, only minimal control and supervision can be used with this method. Consequently, there are temptations for cheating such as turning in bogus completed questionnaires or conducting interviews with respondents who do not qualify for the survey at hand. When traditional telephone interviewing is used, checks should be more extensive and may include the following:

1. Have an independent party call back a sample of each interviewer’s respondents to verify that they took part in the survey.
2. Have interviewers submit copies of their telephone logs to validate that the work was performed on the dates and in the time periods required.
3. If long-distance calls were made, have interviewers submit copies of their telephone bill with long-distance charges itemized to check that the calls were made properly.
4. If there is a concern about a particular interviewer’s diligence, request that the interviewer be taken off the project.

A researcher should always check the accuracy and validity of interviews, regardless of the data collection method used.

Central Location Telephone Interviewing. This form of telephone interviewing is in many ways the research industry’s standard. With central location telephone interviewing, a field data collection company installs several telephone lines at one location, and the interviewers make calls from the central location. Usually, interviewers have separate enclosed work spaces and lightweight headsets that free both hands so they can record responses. Everything is done from this central location. Obviously, there are many advantages to operating from a central location. For example, resources are pooled, and interviewers can handle multiple surveys, such as calling plant managers in the afternoon and households during the evening shift.

The reasons for the prominence of the central location phone interview are savings and control. Apart from cost savings, perhaps the most important reason is quality control. To begin, recruitment and training are performed uniformly at this location. Interviewers can be oriented to the equipment, they can study the questionnaire and its instructions, and they can simulate the interview among themselves over their phone lines. Also, the actual interviewing process can be monitored. Most telephone interviewing facilities have monitoring equipment that permits a supervisor to listen in on interviewing as it is being conducted. Interviewers who are not doing the interview properly can be spotted and the necessary corrective action taken. Ordinarily, each interviewer will be monitored at least once per shift, but the supervisor may focus attention on newly hired interviewers to ensure they are doing their work correctly. The fact that each interviewer never knows when the supervisor will listen in guarantees more overall diligence than would be seen otherwise. Also, completed questionnaires are checked on the spot as a further quality control check. Interviewers can be immediately informed of any deficiencies in filling out the questionnaire. Finally, there is control over interviewers’ schedules. That is, interviewers report in and out and work regular hours, even if they are evening hours, and make calls during the time periods stipulated by the researcher as appropriate interviewing times.
Computer-Administered Interviews

Computer technology has impacted the telephone data collection industry significantly. There are two variations of computer-administered telephone interview systems. In one, a human interviewer is used, but in the other, a computer, sometimes with a synthesized or tape-recorded voice, is used. At the same time, there are important computer-assisted interview methods that have recently emerged, which we describe in this section as well.

Computer-Assisted Telephone Interview (CATI) The most advanced companies have computerized the central location telephone interviewing process; such systems are called computer-assisted telephone interviews (CATI). Although each system is unique, and new developments occur almost daily, we can describe a typical situation. Here each interviewer is equipped with a hands-free headset and is seated in front of a computer screen that is driven by the company’s computer system. Often the computer dials the prospective respondent’s telephone automatically, and the computer screen provides the interviewer with the introductory comments. As the interview progresses, the interviewer moves through the questions by pressing a key or a series of keys on the keyboard. Some systems use light pens or pressure-sensitive screens. The questions and possible responses appear on the screen one at a time. The interviewer reads the question to the respondent, enters the response code, and the computer moves on to the next appropriate question. For example, an interviewer might ask if the respondent owns a dog. If the answer is “yes,” there could appear a series of questions regarding what type of dog food the dog owner buys. If the answer is “no,” these questions would be inappropriate. Instead, the computer program skips to the next appropriate question, which might be “Do you own a cat?” In other words, the computer eliminates the human error potential that would exist if this survey were done in the traditional paper-and-pencil telephone interview mode. The human interviewer is just the “voice” of the computer.

The computer can even be used to customize questions. For example, in the early part of a long interview you might ask a respondent the years, makes, and models of all cars he or she owns. Later in the interview you might ask questions about each specific car owned. The question might come up on the interviewer’s screen as follows: “You said you own a Lexus. Who in your family drives this car most often?” Other questions about this car and others owned would appear in similar fashion. Questions like this can, of course, be dealt with in a traditional or central location manual interview, but they are handled much more efficiently in the computerized version because the interviewer does not need to physically flip questionnaire pages back and forth or remember previous responses.

The CATI approach also eliminates the need for editing completed questionnaires and creating computer data files by later manually entering every response with a keyboard. There is no checking for errors in completed questionnaires because there is no physical questionnaire. More to the point, in most computerized interview systems it is not permitted to enter an “impossible” answer. For example, if a question has three possible answers with codes “A,” “B,” and “C,” and the interviewer enters a “D” by mistake, the computer will ask for the answer to be reentered until an acceptable code is entered. If a combination or pattern of answers is impossible, the computer will not accept an answer, or it may alert the interviewer to the inconsistency and move to a series of questions that will resolve the discrepancy. Data entry for completed questionnaires is eliminated because data are entered directly into a computer file as the interviewing is completed.

This second operation brings to light another advantage of computer-assisted interviewing. Tabulations may be run at any point in the study. Such real-time
CATI’s popularity may fall as online surveys and panels rise in use.

CATS eliminates the need for a human interviewer.

With fully computerized interviewing, respondents interact directly with the computer and enter their responses manually.

Several varieties of computer-assisted interview formats are available.

CATI’s popularity may fall as online surveys and panels rise in use.

CATS eliminates the need for a human interviewer.

Several varieties of computer-assisted interview formats are available.

reporting is impossible with pencil-and-paper questionnaires in which there can be a wait of several days following interviewing completion before detailed tabulations of the results are available. Instantaneous results available with computerized telephone interviewing provide some real advantages. Based on preliminary tabulations, certain questions may be dropped, saving time and money in subsequent interviewing. If, for example, over 90 percent of those interviewed answered a particular question in the same manner, there may be no need to continue asking the question.

Tabulations may also suggest the addition of questions to the survey. If an unexpected pattern of product use is uncovered in the early interviewing stages, questions can be added to further delve into this behavior. So the computer-administered telephone survey affords an element of flexibility unavailable in the traditional paper-and-pencil survey methods. Finally, managers may find the early reporting of survey results useful in preliminary planning and strategy development. Sometimes survey project deadlines run very close to managers’ presentation deadlines, and advance indications of the survey’s findings permit managers to organize their presentations in advance rather than all in a rush the night before. The many advantages and quick turnaround of CATI and CAPI (computer-assisted personal interviewing) make them mainstay data collection methods for many syndicated omnibus survey services.14,15

In sum, computer-administered telephone interviewing options are very attractive to marketing researchers because of the advantages of cost savings, quality control, and time savings over the paper-and-pencil method.16 Looming on the horizon, however, is a serious challenge to CATI, especially for global marketing research. For example, Opinion One has developed a proprietary system called CAVI™, which stands for Computer-Assisted Visual Interviewing, that “. . . includes the integration of many components including but not limited to understanding eye movement and direction, color, text, sound and motion, etc. Opinion One’s CAVI™ screen designs are attractive, engaging and provide respondents with an enjoyable experience. This leads to better respondent cooperation.”17 This innovative approach was referred to in our Practitioner Viewpoint by “JJ” Klein, chief executive at Opinion One, in the introduction to this chapter. Read Marketing Research Insight 9.2 to learn about why CATI’s importance to the marketing research world may diminish very rapidly.

Fully Computerized Interview (Not Online) Some companies have developed fully computerized interviews, in which the survey is administered completely by a computer, but not online. With one such system, a computer dials a phone number and a recording is used to introduce the survey. The respondent then uses the push buttons on his or her telephone to make responses, thereby interacting directly with the computer. In the research industry, this approach is known as completely automated telephone survey (CATS). CATS has been successfully employed for customer satisfaction studies, service quality monitoring, election day polls, product/warranty registration, and even in-home product tests with consumers who have been given a prototype of a new product.18

In another system, the respondent sits or stands in front of the computer unit and reads the instructions off the screen. Each question and its various response options appear on the screen, and the respondent answers by pressing a key or touching the screen. For example, the question may ask the respondent to rate how satisfied, on a scale of 1 to 10 (where 1 is very unsatisfied and 10 is very satisfied), he or she was the last time he or she used a travel agency to plan a family vacation. The instructions would instruct the respondent to press the key with the number appropriate to his or her degree of satisfaction. So, the respondent might press a “2” or a “7,” depending on his or her experience and expectations. If, however, a “0” or
Despite the efficiencies and other advantages of its computerized system, computer-assisted telephone interviewing still has an Achilles’ heel, namely, telephone interviewers. Although the computer can take care of virtually every other aspect of a telephone interview, there remains the need to have a human interviewer to conduct the interview over the telephone. The human interviewer factor becomes complicated in global studies when there is a need for translation of the questionnaire, and call centers are located in various countries. The necessary communication between call centers, training, interviewing, and client service invariably takes many hours of work.

Recently, Raymond Pettit, president of ERP Associates, and Robert Monster, CEO of Global Market Insite, compared CATI to two online data collection methods for a 10-minute survey of 1,000 respondents in 10 different countries. One online method used lists of respondent prospects who were bulk e-mailed invitations to take the survey, whereas the other online method used target e-mail invitations to a panel of individuals who had agreed to fill out online surveys. Here are the startling findings.

<table>
<thead>
<tr>
<th>Item</th>
<th>Global CATI</th>
<th>Online with List</th>
<th>Online with Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals contacted</td>
<td>138,889</td>
<td>1,111,111</td>
<td>17,544</td>
</tr>
<tr>
<td>Incidence rate</td>
<td>30%</td>
<td>30%</td>
<td>95%</td>
</tr>
<tr>
<td>Cooperation rate</td>
<td>24%</td>
<td>3%</td>
<td>50%</td>
</tr>
<tr>
<td>Person-hours elapsed</td>
<td>11,574</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>Data processing hours elapsed</td>
<td>170</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Time to completion</td>
<td>10–12 weeks</td>
<td>5–7 days</td>
<td>4–5 days</td>
</tr>
<tr>
<td>Approximate data collection cost</td>
<td>$175,000</td>
<td>$35,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Approximate total survey cost</td>
<td>$225,000</td>
<td>$85,000</td>
<td>$100,000</td>
</tr>
</tbody>
</table>

Pettit and Monster comment that with worldwide cooperation rates falling, online survey with panels are becoming more and more attractive for global research. The only factor preventing the immediate demise of global CATI research is the small number of online panels around the globe.

Online and Other Internet-Based Interviews

Online research may take on any of a number of faces, but the Internet-based questionnaire in which the respondent answers questions online is becoming the industry standard for online surveys. For example, Procter & Gamble, which spends $150 million to conduct thousands of surveys each year, conducted 15 percent of its surveys online in 1999, and increased that number to 50 percent in 2001. Plans are to continue this trend. Internet-based questionnaires are fast, easy, and inexpensive. These questionnaires accommodate all of the standard question formats, and they are very flexible, including the ability to present pictures, diagrams, or displays to respondents. In fact, this ability is a major reason why researchers tracking advertising effects prefer online surveys to
telephone surveys, which have been a standard data collection for advertising tracking for a great many years. The researcher can check the Web site for current tabulations whenever he or she desires, and respondents can access the online survey at any time of the day or night. Online data collection is and will continue to profoundly change the marketing research landscape. For instance, in the case of customer satisfaction instead of “episodic” research in which a company does a large study one time per year, it allows for “continuous market intelligence” in which the survey is posted permanently on the Web and modified as the company’s strategies are implemented. Company managers can click up tabulated customer reactions on a daily basis. Some researchers refer to this advantage of online surveys as “real-time research.”

Are online surveys better than other survey types? This question can be answered by inspecting Figure 9.1, which is a comparison created by Dr. William H. MacElroy, president of Socratic Technologies, and his associates, presenting the various aspects of a survey on a grid. One axis of the grid is how important the feature is to the researcher, identified as moderately or highly important, whereas the other axis is how online surveys compare to traditional surveys such as telephone interviews, face-to-face interviews, or mail surveys. The second axis is separated into gradations of the better or worse performance of online surveys relative to the traditional types. Figure 9.1 clearly shows that online surveys have important advantages of speed and low cost, plus real-time access of data; however, there are drawbacks of sample

![Figure 9.1 Online Data Collection Methods Have Significant Advantages, But They Have Some Drawbacks, Too](image-url)
Descriptions of Representative Data Collection Modes

representativeness, respondent validation, and difficulty in asking probing types of questions. Sample representativeness is most troublesome when global market research is involved, and firms are finding that considerable investments are required to achieve this goal. Read Marketing Research Insight 9.3 to see why. Nevertheless, as Internet connectivity becomes more widespread and integrated into daily life, and as software advances to provide more flexibility and features on Web-based questionnaires, online surveys will undoubtedly become the most prevalent data collection mode. In fact, companies such as Knowledge Networks, Inc. are overcoming the sample representativeness problem by recruiting online panels whose demographic and purchasing profiles are consistent with target markets. These online panels provide accurate research data very quickly.

A Global Perspective

Global Internet Penetration Differences: An Opportunity or a Challenge for Online Surveys?

Nielsen//NetRatings, the premier Internet penetration authority, periodically releases statistics on its measurement of the Internet audience worldwide. As you would expect, the penetration varies considerably in total numbers and in percentages of each country’s population. With regard to total number of individuals with home PC Internet connection, Nielsen//NetRatings has provided the following graph.

The percentages show a very different situation, however, as can be seen in the following table.

<table>
<thead>
<tr>
<th>Country</th>
<th>% Access at Home</th>
<th>% Access at Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>43</td>
<td>28</td>
</tr>
<tr>
<td>Austria</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Belgium/Luxembourg</td>
<td>32</td>
<td>20</td>
</tr>
<tr>
<td>Denmark</td>
<td>47</td>
<td>35</td>
</tr>
<tr>
<td>Finland</td>
<td>43</td>
<td>37</td>
</tr>
<tr>
<td>France</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Germany</td>
<td>23</td>
<td>18</td>
</tr>
<tr>
<td>Ireland</td>
<td>33</td>
<td>22</td>
</tr>
<tr>
<td>Italy</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>Netherlands</td>
<td>48</td>
<td>26</td>
</tr>
<tr>
<td>New Zealand</td>
<td>44</td>
<td>28</td>
</tr>
<tr>
<td>Norway</td>
<td>53</td>
<td>40</td>
</tr>
<tr>
<td>Singapore</td>
<td>50</td>
<td>22</td>
</tr>
<tr>
<td>Spain</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Sweden</td>
<td>49</td>
<td>36</td>
</tr>
<tr>
<td>Switzerland</td>
<td>39</td>
<td>41</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>42</td>
<td>24</td>
</tr>
</tbody>
</table>

These figures reveal that even in some heavily industrialized countries, such as Germany, online surveys will eliminate, at minimum, 50 percent and in some countries close to 90 percent of a country’s residents because they do not have ready Internet access. In other words, these penetration percentages suggest that online surveys fail to represent large segments of practically every country’s consumers.
Chapter 9 Survey Data Collection Methods

Several variations of drop-off surveys exist. Group self-administered surveys economize in time and money because a group of respondents participates at the same time.

Self-Administered Surveys
You may be having a bit of difficulty with the “self-administered” designation as online surveys are taken by respondents alone, but the following survey modes are, for the most part, all paper-and-pencil situations in which the respondent fills out a static copy of the questionnaire. Probably the most popular type of self-administered survey is the mail survey; however, there are other variations—the group self-administered surveys and drop-off surveys—that are discussed first.

Group Self-Administered Survey Basically, a group self-administered survey entails administering a questionnaire to respondents in groups, rather than individually, for convenience or to gain certain economies. One way to be more economical is to have respondents self-administer the questions. For example, 20 or 30 people might be recruited to view a TV program sprinkled with test commercials. All respondents would be seated in a viewing room facility, and a videotape would run on a large television projection screen. Then they would be given a questionnaire to fill out regarding their recall of test ads, their reactions to the ads, and so on. As you would suspect, it is handled in a group context primarily to reduce costs and to provide the ability to interview a large number of people in a short time.

Variations for group self-administered surveys are limitless. Students can be administered surveys in their classes; church groups can be administered surveys during meetings; social clubs and organizations, company employees, movie theater patrons, and any other group can be administered surveys during meetings, work, or leisure time. Often the researcher will compensate the group with a monetary payment as a means of recruiting the support of the group’s leaders. In all of these cases, each respondent works through the questionnaire at his or her own pace. Granted, a survey administrator may be present, so there is some opportunity for interaction concerning instructions or how to respond, but the group context often discourages the respondents from asking all but the most pressing questions.

Drop-Off Survey Another variation of the self-administered survey is the drop-off survey, in which the survey representative approaches a prospective respondent, introduces the general purpose of the survey to the prospect, and leaves it with the respondent to fill out on his or her own. Essentially, the objective is to gain the prospective respondent’s cooperation. The respondent is told the questionnaire is self-explanatory, and it will be left with him or her to fill out at leisure. Perhaps the representative will return to pick up the questionnaire at a certain time, or the respondent may be instructed to complete and return it by prepaid mail. Normally, the representative will return on the same day or the next day to pick up the completed questionnaire. In this way, a representative can cover a number of residential areas or business locations in a single day with an initial drop-off pass and a later pick-up pass. Drop-off surveys are especially appropriate for local market research undertakings in which travel is necessary but limited. They have been reported to have quick turnaround, high response rates, minimal interviewer influence on answers, and good control over how respondents are selected; plus, they are inexpensive. Variations of the drop-off method include handing out the surveys to people at their places of work, asking them to fill them out at home, and then to return them the next day. Some hotel chains have questionnaires in their rooms with an invitation to fill them out and turn them in at the desk on checkout. Stores sometimes have short surveys on customer demographics, media habits, purchase intentions, or other information that customers are asked to fill out at home and return on their next shopping trip. A gift certificate drawing may even be used as an incentive to participate. As you can see, the term “drop-off” can be stretched to cover any situa-
Descriptions of Representative Data Collection Modes

Mail Survey A mail survey is one in which the questions are mailed to prospective respondents who are asked to fill them out and return them to the researcher by mail. Part of its attractiveness stems from its self-administered aspect: There are no interviewers to recruit, train, monitor, and compensate. Similarly, mailing lists are readily available from companies that specialize in this business, and it is possible to access very specific groups of target respondents. For example, it is possible to obtain a list of physicians specializing in family practice who operate clinics in cities larger than 500,000 people. Also, one may opt to purchase computer files, printed labels, or even labeled envelopes from these companies. In fact, some list companies will even provide insertion and mailing services. There are a number of companies that sell mailing lists, and most, if not all, have online purchase options. If you want to see an example, look at the guided tour on the USADeata Web site (www.usadata.com/). On a per-mailed respondent basis, mail surveys are very inexpensive. In fact, they are almost always the least expensive survey method in this regard. But mail surveys incur all of the problems associated with not having an interviewer present, which we discussed earlier in this chapter.

Despite the fact that the mail survey is described as “powerful, effective, and efficient” by the American Statistical Association, the mail survey is plagued by two major problems. The first is nonresponse, which refers to questionnaires that are not returned. The second is self-selection bias, which means that those who do respond are probably different from those who do not fill out the questionnaire and return it and, therefore, the sample gained through this method is nonrepresentative of the general population. To be sure, the mail survey is not the only survey method that suffers from nonresponse and self-selection bias. Failures to respond are found in all types of surveys, and marketing researchers must be constantly alert to the possibilities that their final samples are somehow different from the original list of potential respondents because of some systematic tendency or latent pattern of response. Whatever the survey mode used, those who respond may be more involved with the product, they may have more education, they might be more or less dissatisfied, or they may even be more opinionated in general than the target population of concern.

When informing clients of data collection alternatives, market researchers should inform them of the nonresponse problems and biases inherent in each one being considered. For example, mail surveys are notorious for low response, and those respondents who do fill out and return a mail questionnaire are likely to be different from those who do not. At the same time, there are people who refuse to answer questions over the telephone, and consumers who like to shop are more likely to be encountered in mall-intercept interviews than are those who do not like to shop. Each data collection method has its own nonresponse and bias considerations, and a conscientious researcher will help his or her client understand the dangers represented in the methods under consideration.

Thus, nonresponse and the subsequent danger of self-selection bias is greatest with mail surveys, for typically mail surveys of households achieve response rates of less than 20 percent. Researchers have tried various tactics to increase the response rate. There are eight of these tactics listed in Table 9.3. Take the true-false test in the table to see if you can guess the mail survey experience of Toyota Motor Sales, USA.

Although Toyota’s experience is probably typical, despite a great deal of academic research, we still do not have a clear understanding of the effectiveness and efficiency of these various techniques. Despite this situation, mail surveys are
Table 9.3  A Researcher’s True-or-False Test on Ways to Increase Mail Survey Response

Mr. David Fish, strategic research manager at Toyota Motor Sales USA, Inc., has created this test. Answers are found at the end of this chapter.

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>CIRCLE YOUR ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The use of color will increase mail survey response rates.</td>
<td>True  False</td>
</tr>
<tr>
<td>2. Stamps on the return envelope will have a greater response rate than preprinted postage-paid envelopes.</td>
<td>True  False</td>
</tr>
<tr>
<td>3. A mail survey questionnaire’s length greatly affects the response rate.</td>
<td>True  False</td>
</tr>
<tr>
<td>4. A recognizable brand name will increase the response rate.</td>
<td>True  False</td>
</tr>
<tr>
<td>5. Monetary and other incentives used to increase mail survey response rates are cost-effective.</td>
<td>True  False</td>
</tr>
<tr>
<td>6. Money works better than nonmonetary incentives.</td>
<td>True  False</td>
</tr>
<tr>
<td>7. The response rate will increase if you prenotify respondents with a postcard.</td>
<td>True  False</td>
</tr>
<tr>
<td>8. “Reminder” postcards will increase the response rate.</td>
<td>True  False</td>
</tr>
</tbody>
</table>

To cope with low response to mail surveys, some companies have turned to mail panels. In selecting a data collection mode, the researcher balances quality against cost and time. A short deadline may dictate which data collection method to use.

CHOICE OF A PARTICULAR SURVEY METHOD

At the outset of the discussion of the various types of interviewing used in marketing research, we made the comment that the marketing researcher is faced with the problem of selecting the one survey mode that is optimal in a given situation. Each data collection method has unique advantages, disadvantages, and special features, and we have summarized them for you in Table 9.4. How do you decide which is the best survey mode for a particular research project? When answering this question, the researcher should always have quality as a foremost objective. He or she should strive to choose a survey mode that achieves the highest quality of data allowable with the cost, time, and other special considerations involved with the research project at hand. We will discuss the time horizon, researcher’s budget, and special considerations in turn.

The Survey Data Collection Time Horizon

Regardless of its nature, every marketing management decision has a deadline when it must be resolved, and this deadline directly impacts the amount of time allowed, or the time horizon, for a particular marketing research survey. In some instances, the deadline is distant, and the marketing researcher is allowed the luxury of choosing his or her data collection methods. Frequently, however, the time period is compressed, and the researcher is forced into choosing a data collection method that may not be his or her first choice but is one that does a reasonable job within the permissible time horizon.
As we described the various interviewing methods, you probably realized intuitively that some approaches, such as mail surveys, door-to-door interviews, and personal interviews, require long time periods; whereas others, principally telephone studies and mall-intercept surveys, typically take much less time. An example will help you understand the impact of time deadlines on the choice of survey method.

The marketing director of a large bank was informed on Tuesday by the bank president that a number of complaints had been telephoned in by anonymous callers. The complaints focused on a new advertising campaign that used an old Tom Petty tune called “Runin’ Down a Dream,” and the callers felt that it promoted irresponsible drinking and driving. The advertising schedule allowed for a two-week radio ad before the television spots appeared, meaning that the television spots would begin in 10 days. The marketing director, under pressure from the president, thought of inviting people to view the prospective television ads along with other ads and to ask their opinions, but there was insufficient time to recruit respondents and run them through the viewings. The local mall-intercept firms were booked up for the next week, so this method was eliminated. About the only method left was

### Table 9.4 Key Advantages and Disadvantages of Alternative Data Collection Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Key Advantages</th>
<th>Key Disadvantages</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-home interview</td>
<td>Conducted in privacy of the home, which facilitates interviewer–respondent</td>
<td>Cost per interview can be high; interviewers must travel to respondent’s home</td>
<td>Often much information per interview is gathered</td>
</tr>
<tr>
<td></td>
<td>rapport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mall-intercept interview</td>
<td>Fast and convenient data collection method</td>
<td>Only mall patrons are interviewed; respondents may feel uncomfortable answering</td>
<td>Mall-intercept company often has exclusive interview rights for that mall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>questions in the mall</td>
<td></td>
</tr>
<tr>
<td>In-office interview</td>
<td>Useful for interviewing busy executives</td>
<td>Relatively high cost per interview; gaining access is sometimes difficult</td>
<td>Useful when respondents must examine prototypes or samples of products</td>
</tr>
<tr>
<td>Central location telephone</td>
<td>Fast turnaround; good quality control; reasonable cost</td>
<td>Restricted to telephone communication</td>
<td>Long-distance calling is not a problem</td>
</tr>
<tr>
<td>interview</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CATI</td>
<td>Computer eliminates human interviewer error; simultaneous data input to</td>
<td>Setup costs can be high</td>
<td>Losing ground to online surveys and panels</td>
</tr>
<tr>
<td></td>
<td>computer file; good quality control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fully computerized interview</td>
<td>Respondent responds at his or her own pace; computer data file results</td>
<td>Respondent must have access to a computer or be computer literate</td>
<td>Many variations and an emerging data collection method with exciting prospects</td>
</tr>
<tr>
<td>Online questionnaire</td>
<td>Ease of creating and posting; fast turnaround; computer data file results</td>
<td>Respondent must have access to the Internet</td>
<td>Fastest-growing data collection method; very flexible; online analysis available</td>
</tr>
<tr>
<td>Group self-administered</td>
<td>Cost of interviewer eliminated; economical for assembled groups of</td>
<td>Must find groups and secure permission to conduct the survey</td>
<td>Prone to errors of self-administered surveys; good for pretests or pilot tests</td>
</tr>
<tr>
<td>survey</td>
<td>respondents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drop-off survey</td>
<td>Cost of interviewer eliminated; appropriate for local market surveys</td>
<td>Generally not appropriate for large-scale national surveys</td>
<td>Many variations exist with respect to logistics and applications</td>
</tr>
<tr>
<td>Mail survey</td>
<td>Economical method; good listing companies exist</td>
<td>Low response rates; self-selection bias; slow</td>
<td>Many strategies to increase response rate exist</td>
</tr>
</tbody>
</table>

By their very nature, some survey data collection methods take longer than others.
telephone surveys, which disallowed visual exposures. Because the complaints had all been leveled at the radio spots, it was decided to use the telephone and to have respondents listen to the ad over the telephone. Then their reactions could be solicited even if they had not heard the ad on the radio. They quickly generated a list of respondents from bank customer files, and the interviewing was completed in two evenings. It turned out that no one objected strongly to the theme, and the marketing director concluded that the complaints were competitors trying to unsettle the president. The television ads were shown on schedule without incident. In this example, the short survey time horizon disqualified certain survey data collection modes. In other instances, the time horizon may be longer, which would permit consideration of modes that require more time to implement and complete.

The Survey Data Collection Budget

The commercial marketing researcher frequently encounters situations in which the budget available for a study greatly influences the survey method used. In truth, the budget alone does not dictate the choice of a survey interviewing method; rather, the budget constraints in combination with other considerations influence the survey mode choice. For example, if a researcher wanted to have a final sample of 500 respondents, and the data collection portion of the budget was $5,000, it would not be feasible to hire personal interviewers if the going rate was in excess of $20 per completed interview because the interviewing bill alone would be $10,000. On the other hand, mall-intercept, telephone, and self-administered methods are more within the expense limit for this example. Budgets are sometimes set more arbitrarily than we would prefer, and a budget constraint such as the one described here must be dealt with by selecting a workable data collection mode if the survey is to be done. As you would suspect, a reason for the popularity of online research is its low cost. The questionnaire can be designed easily, and there are no interviewers to train and compensate.

Special Considerations

Time and budget are important factors in the choice of a survey mode, but sometimes one or more special considerations affect the survey, and the researcher must take these into account in this decision. For instance, there may be tasks such as card sorting or examining an ad portfolio that require extensive instructions that can only be delivered by a personal interviewer. Or there may be a great many questions, and this consideration may preclude a mode such as the telephone that is normally of short duration. There may be respondent considerations to factor in. For instance, children have short attention spans, elderly consumers have difficulty with written instructions, recent immigrants may have language barriers, and heavy Internet shoppers may rarely visit a shopping mall.

The selection of a particular survey mode is accomplished by simultaneously considering all of the previously mentioned factors. Of course, certain considerations will take priority over others. Sometimes the deadline for completing the research is close, and this disallows consideration of personal interviews or a mail survey, for instance, which take more time than a telephone interview. On the other hand, there may be a great number of complicated questions and tasks that are involved in a survey, and telephone administration is eliminated from consideration for this reason. At the same time, a researcher may have a favored survey mode with which he or she feels especially comfortable, and this factor may largely determine the selection. It is important that the manager allow the marketing researcher to decide on the survey mode because he or she has a unique understanding of how question characteristics, respondent characteristics, and survey resources and objectives come into play. Choice of survey method can be made by answering the ques-
tion “What data collection method will generate the most complete and generalizable information within the time horizon and without exceeding the allowable expenditure for data collection?”

Here is how our Blue Ribbon Panel members answered our question about online versus traditional data collection methods.

Q: *When designing a research project, what are the key factors that would indicate the use of online survey research? What are the key indicators that would indicate the use of traditional data collection methods (mail, telephone, mall, etc.)?*

Note: To learn about the panel members, see the Preface of this book.

A: First and foremost in the decision as to whether to use an online method or not is the population being studied. At Socratic Technologies we have a rule of thumb that unless 60 percent of the population can be reasonably expected to be found “online,” the study should be done either by traditional methods or a hybrid mix of both online and off-line techniques. We resist “data transformation” schemes in which data collected online are “manipulated” to weight opinions of some sample attributes in order to simulate off-line responses. Our experience is that these methods are not stable (e.g., can’t be reliably reproduced) and produce systematic errors. One key distinguishing factor between online survey takers and off-line participants is that the online group tends to be more technology friendly and tend to be early adopters. For some studies, these psychographic characteristics can’t be weighted out of an online sample in order to come up with a total U.S. population opinion projection.

A: For an increasing number of companies, choosing to conduct research online is a forgone conclusion. They have e-mail addresses of customers (or other members of the target population) and the cost and timing advantages of online research are too compelling to use other methods. People with Internet access also tend to prefer the convenience of taking surveys online, so using online methods alone or in conjunction with more traditional methods can reduce potential nonresponse bias and result in stronger relationships with respondents.

Online research should not be used as the sole survey method when the individuals who will respond via the Internet will not represent the whole population to be studied. In some cases, there will not be available online sample sources that will represent the populations of interest, but the project requires showing visual or multimedia stimuli that cannot be adequately presented via mail or telephone research. In these cases, an online survey might be programmed but traditional recruitments methods will be used. People can be called or sent a letter inviting them to go to a survey Web site, for example, or computers for research can be set up at mall facilities.

A: Most research projects under 15 to 18 minutes in length, without requirements to immediately taste or touch things are well suited for online research projects. Studies with visual or audio stimuli are ideal, too.

The online population continues to be more reflective of the general population but quota controls may be required, especially if the characteristics may influence or interact with the survey subject. For example, a study about potential online services may require quotas based on online usage to assure light users are adequately represented.
**Chapter 9  Survey Data Collection Methods**

**A:** We would rely on empirical data coupled with cost–benefit analysis to decide whether to recommend moving forward with the online approach. We would also exercise good judgment. For instance, if the aim of the research were to understand why people do not participate in online surveys, we would not mount online research. And if the aim of the research were to estimate the incidence of homelessness in Chicago, we would quite likely dispatch a core of live interviewers into targeted areas within Chicago, after developing a suitable definition of homelessness, which is by no means a simple or straightforward task.

**A:** Often many research professionals view online research as a way to execute projects quickly and inexpensively. Although it is true that certain online projects do provide cost and timing advantages when compared to off-line research, it is best to think that online research now makes the impossible possible. Projects that were once too costly or time consuming to conduct are now feasible when conducted online.

The Internet does afford a degree of anonymity, which is an important point to consider when conducting a study that involves sensitive subject matters. Respondents are more likely to answer these types of questions online.

**A:** Previously, online research was limited to situations when fast answers were needed and the target audience was well represented online. With the growing penetration of the Internet and the convergence of the online population to the general U.S. population, there are few, if any, situations that would require the use of mail, telephone, or other traditional research methods.

**A:** The three principal considerations should be (1) what is the nature of the interaction with the consumer; (2) are there any considerations concerning the selection of consumers to participate dictating one method of contact over another; and (3) is there anything in the task consumers are to perform that dictates one method over another. For example, the need to show pictures or offer a multimedia experience would usually make telephone or mail less appropriate and favor online or in-person interviewing. An example with regard to the second consideration might be if consumers were to drive a new car and then report on their reactions to certain features of the car. Online and telephone surveys would offer little advantage since the research company would have to either bring the consumer to the cars or the cars to the consumer. With regard to the third factor, there are studies in which it is essential that the researcher make visual, objective assessment of the respondent and the circumstances of the interview. This could dictate a personal interview.

**SUMMARY**

This chapter described the various methods available to marketing researchers to survey respondents. Surveys provide the important advantages of standardization, easy administration, getting at motives for behaviors, simple tabulation, and ability to investigate sub groupings of respondents. We noted that personal interviews are advantageous because they allow feedback, permit rapport building, facilitate certain quality controls, and capitalize on the adaptability of a human interviewer. However, they are slow and prone to human errors. Computer-administered interviews, on the other hand, are faster, error free, may have pictures or graphics capabilities, allow for real-time capture of data, and may make respondents feel more at ease because another person is not listening to their answers.
We described 11 different survey data collection methods: (1) in-home interviews, which are conducted in respondents' homes; (2) mall-intercept interviews, conducted by approaching shoppers in a mall; (3) in-office interviews, conducted with executives or managers in their places of work; telephone interviews, either conducted (4) by an interviewer working in his or her home, or (5) from a central location telephone interviews, conducted by workers in a telephone interview company's facilities; (6) computer-assisted telephone interviews, in which the interviewer reads questions off a computer screen and enters responses directly into the program; (7) fully computerized interviews, in which the respondent interacts directly with a computer; (8) online and other Internet-based surveys; (9) group self-administered surveys, in which the questionnaire is handed out to a group for individual responses; (10) drop-off surveys, in which the questionnaire is left with the respondent to be completed and picked up or returned at a later time; and (11) mail surveys, in which questionnaires are mailed to prospective respondents who are requested to fill them out and mail them back. The specific advantages and disadvantages of each data collection mode were discussed.

Researchers must take into account several considerations when deciding on a survey data collection mode. The major concerns are (1) the survey time horizon, (2) the researcher's budget, and (3) special considerations. The research project deadline, money available for data collection, and desired quality of data are taken into consideration. Ultimately, the researcher will select a data collection mode with which he or she feels comfortable and one that will result in the desired quality and quantity of information without exceeding time or budget constraints.

**KEY TERMS**

Person-administered survey (p. 240)  
Computer-administered survey (p. 241)  
Self-administered survey (p. 243)  
In-home interview (p. 245)  
Mall-intercept interview (p. 246)  
In-office interviews (p. 247)  
Traditional telephone interviews (p. 249)  
Central location telephone interviewing (p. 250)  
Computer-assisted telephone interviews (CATI) (p. 251)  
Fully computerized interviews (p. 252)  
Completely automated telephone survey (CATS) (p. 252)  
Internet-based questionnaire (p. 253)  
Group self-administered survey (p. 256)  
Drop-off survey (p. 256)  
Mail survey (p. 257)  
Nonresponse (p. 257)  
Self-selection bias (p. 257)

**REVIEW QUESTIONS/APPLICATIONS**

1. List the major advantages of survey research methods over qualitative methods. Identify the major drawbacks.
2. What aspects of computer-administered surveys make them attractive to marketing researchers?
3. What are the advantages of person-administered surveys over computer-administered ones?
4. Indicate the differences between (a) in-home interviews, (b) mall-intercept interviews, and (c) in-office interviews. What do they share in common?
5. Why are telephone surveys popular?
6. Indicate the pros and cons of self-administered surveys.
7. What advantages do online surveys have over other types of self-administered surveys?
8. How does a drop-off survey differ from a mail survey?
9. What are aspects of the researcher’s resources and objectives that have considerable influence in the determination of which survey mode will be used? How does each one affect the decision?
10. Is a telephone interview inappropriate for a survey that has as one of its objectives a complete listing of all possible advertising media a person was exposed to in the last week? Why or why not?
11. NAPA Car Parts is a retail chain specializing in stocking and selling both domestic and foreign automobile parts. It is interested in learning about its customers, so the marketing director sends instructions to all 2,000 store managers telling them that whenever a customer makes a purchase of $150 or more, they are to write down a description of the customer who made that purchase. They are to do this just for the second week in October, writing each description on a separate sheet of paper. At the end of the week, they are to send all sheets to the marketing director. Comment on this data collection method.
12. Discuss the feasibility of each of the types of survey modes for each of the following cases:
   a. Fabergé, Inc. wants to test a new fragrance called “Lime Brut.”
   b. Kelly Services needs to determine how many businesses expect to hire temporary secretaries for those who go on vacation during the summer months.
   c. The Encyclopedia Britannica requires information on the degree to which mothers of elementary school-aged children see encyclopedias as worthwhile purchases for their children.
   d. AT&T is considering a television screen phone system and wants to know people’s reaction to it.
13. With a telephone survey, when a potential respondent refuses to take part or is found to have changed his or her telephone number or moved away, it is customary to simply try another prospect until a completion is secured. It is not standard practice to report the number of refusals or noncontacts. What are the implications of this policy for the reporting of nonresponse?
14. Compu-Ask Corporation has developed a stand-alone computerized interview system that can be adapted to almost any type of survey. It can fit on a palm-sized computer, and the respondent directly answers questions using a stylus once the interviewer has turned on the computer and started up the program. Indicate the appropriateness of this interviewing system in each of the following cases:
   a. A survey of plant managers concerning a new type of hazardous waste disposal system.
   b. A survey of high school teachers to see if they are interested in a company’s videotapes of educational public broadcast television programs.
   c. A survey of consumers to determine their reactions to a nonrefrigerated variety of yogurt.
15. A researcher is pondering what survey mode to use for a client who markets a home security system for apartment dwellers. The system comprises sensors that are pressed onto all of the windows and magnetic strips that are glued to each door. Once plugged into an electric socket and activated with a switch box, the system emits a loud alarm and simulates a barking guard dog when an intruder trips one of the sensors. The client wants to know how many apartment dwellers in the United States are aware of the system, what they think of it, and how likely they are to buy it in the coming year. Which consid-
eration factors are positive and which ones are negative for each of the following survey modes: (a) in-home interviews, (b) mall intercepts, (c) online survey, (d) drop-off survey, and (e) CATI survey?

**INTERACTIVE LEARNING**

Visit the Web site at [www.prenhall.com/burnsbush](http://www.prenhall.com/burnsbush). For this chapter, work through the Self-Study Quizzes, and get instant feedback on whether you need additional studying. On the Web site, you can review the chapter outlines and case information for Chapter 9.

**CASE 9.1 FAW-VW of the PRC**

With the dawn of the twenty-first century, the People’s Republic of China (PRC) represents what is perhaps the greatest phenomenon in marketing history as it transitions from a communist/agrarian economy into a free enterprise/industrial country. The shift has given rise to classes of hardworking upper-management personnel and entrepreneurs who are acquiring wealth at a rapid pace. These consumers are rushing to adopt Western, European, and other world goods and services, and many companies from these counties are joint-venturing with Chinese companies or the Chinese government to deliver them to these eager consumers. Despite the relatively high incomes of these Chinese consumers, only a small percentage of them can afford to own a car.

FAW-VW (First Auto Works-Volkswagen) is one such joint venture with its manufacturing facility located in northeastern China. The Chinese automobile market growth potential is immense. With only about 2.3 million cars registered, there are estimates that this number will increase by 1 or 2 million per year through 2010. To meet this demand, FAW-VW manufactures and markets the following models: Audi, Bora (introduced in 2001), and Jetta and sells these models through its dealer network with locations in 20 major Chinese cities such as Beijing, Shanghai, Nanjing, and Guangzhou. For the past several years, FAW-VW has been one of the market share leaders, and it intends to hold or improve its position through 2010. In order to keep tabs on the fast-growing sedan market, FAW-VW intends to conduct an annual automobile image and intentions survey. This survey will consist of 5,000 respondents. It will assess the image of each FAW-VW model as well as the images of each competing sedan model, and it will gather information on Chinese consumer automobile buying intentions useful for planning and market segmentation.

Major Chinese cities have transitioned or are in the process of transitioning themselves into modern urban centers with greatly improved road systems, modern apartment buildings, good communications, including cellular phones, and shopping malls. Internet penetration is low but growing rapidly. In contrast to Western consumers, PRC consumers have not been assailed by telemarketers, nor have they been deluged with junk mail.

1. What data collection modes do you think are viable candidates, and why? Why are the others not viable?
2. FAW-VW is considering the use of a central telephone interviewing company that has facilities in most of the major Chinese cities. The telephone interviewers will call phone numbers at random. Is this a good choice? Why or why not?
3. If the FAW-VW PRC consumer car image and buying intentions survey is to be conducted annually for the next 10 years, should the same data collection method be used every year, or should the data collection method change from year to year?

**CASE 9.2 METREC**

METREC is an acronym for Metropolitan Recreation Services, which operates all public park and recreation facilities and programs in the greater metropolitan area. The facilities it maintains and the programs it runs annually include 20 playgrounds, each with organized playgroups for
Chapter 9
Survey Data Collection Methods

children 3 to 5 years old, six 18-hole golf courses, two 18-hole disc golf courses, a BMX race-
way, air gun and archery ranges, a cycling velodrome, a horse activity area for equestrian and
other riding activities, five family fitness centers, two mountain bike trails, six tennis court areas,
seven outdoor swimming pools, 15 senior citizen activity centers, six nature areas, including
MetroZoo, and two art galleries. In addition, METREC operates junior, adult, and masters sports
leagues for softball, basketball, soccer, volleyball, and bowling.

Although METREC has a large budget for maintenance of its many facilities, it does not
have a sufficient budget for personnel, so it relies very heavily on volunteers, and particularly
involved with its organized team sports where coaches, officials, and support personnel are
vital. Obviously, constant and good communication from METREC to these volunteers is critical
to the smooth operation of the multitude of organized sports leagues throughout the year.
Recently METREC has been thinking about expanding its organized team sports services, and
the METREC director has decided to conduct two surveys, one with the players in the various
sports leagues, and the other with the volunteers. The purposes of the research are to find (1)
additional organized team sports activities that the participants enjoy and (2) volunteers’ opin-
ions of the quality and quantity of information being supplied to them by METREC. METREC
has budgeted $3,000 to accomplish both surveys.

There are approximately 300 organized sports teams across the five different sports leagues
with six age groups (7–10; 11–14; 15–18; 20–29, 30–39, masters). During the sport’s season,
each team meets anywhere from three to five times each week to get organized, practice, and
play its games.

Approximately 7,500 volunteers have been involved with METREC over the past 10 years.
There is a list with all 7,500 names in the department’s headquarters. METREC estimates that
about one-quarter of the volunteers are currently actively working with some organized sports
league. The remaining three-fourths either have permanently stopped volunteering either
because their children no longer compete in METREC sports, or they are temporarily involved
with other work and may become active volunteers in the future.

Answer the following questions by reviewing the selection factors discussed in the textbook,
and be sure to note important strengths or weaknesses of the method you have chosen in
each case.

1. What data collection method do you think is appropriate for the volunteers assuming
   that only active volunteers’ opinions are desired?
2. What data collection method do you think is appropriate for the METREC sports
   leagues participants?

CASE 9.3 Your Integrated Case

The Hobbit’s Choice Restaurant

This is your integrated case described on pages 42–43.

Cory Rogers presented his interpretations of the focus groups he had subcontracted for
Jeff Dean’s The Hobbit’s Choice Restaurant to get a feel for what patrons wanted in the décor,
atmosphere, entrées, specialty items, and other aspects of the restaurant’s operation. Jeff
was impressed with the amount of information that had been collected from just three focus
groups. “Of course,” noted Cory, “we have to take all of this information as tentative because we
talked with so few folks, and there is a good chance that they are just a part of your target mar-
ket. But we do have some good exploratory research that will guide us in the survey.”

Jeff agreed with Cory’s assessment and asked, “What’s next?” Cory said, “I need to think
about how we will gather the survey data. There are several options that I must consider in
order to make the best choice to survey the entire metropolitan area.”

1. Is a mail survey a good choice? Why or why not?
2. Should Cory recommend a telephone survey? What are the pros and cons of telephone
data collection for The Hobbit’s Choice Restaurant survey?
3. What about an online survey? Compare the use of an online survey to a telephone sur-
veY, and indicate which one you recommend that Cory use.
ANSWERS TO THE TRUE-FALSE TEST IN TABLE 9.3, PAGE 258.

False
False
True
True
False
True
False*
True*

*However you need to balance the added cost with the expected increase in response.