

# CHAPTER 2

## Planning the Online Survey

**A** sound plan is essential to the success of any research endeavor. Survey research is a process, and each element impacts the others. Research objectives guide questionnaire format; questionnaire format determines the types of questions that may be used; the types of questions used determine data analysis; data analysis reflects research objectives; and all this is bound by time, budget, and ethical considerations.

The first step in the planning process is to articulate a plan for the survey. This plan will be a handy map to which you can continually return as you address the individual components of the survey planning process. These outlines are also particularly useful when the survey is part of a team research project.

In this chapter, we consider the major elements of a survey plan—namely, choosing the type of digital survey you will use, selecting survey software, writing clear project objectives, preparing timelines, and addressing ethical considerations important in the online survey environment.

### E-Mail Surveys

E-mail surveys can be economical and fast to create and deploy. When we refer to e-mail surveys, we mean surveys created using survey software and accessed by respondents through a link in an e-mail invitation. These are among the most common online surveys because anyone who has access to online survey software, such as SurveyMonkey, Zoomerang, or InstantSurvey, can create an e-mail survey.

According to an August 2010 report on the Pew Internet and American Life Project website, 79% of Americans use e-mail daily (Smith, 2010). This is a substantial proportion of the overall population and renders surveys

delivered by e-mail a viable option for many projects. However, percentages of e-mail users vary by age, racial/ethnic group, income, and educational attainment (see Table 2.1). It is, therefore, important to consult current data regarding the demographic makeup of individuals who use Internet and e-mail to make sure this distribution method is appropriate for the population you are considering surveying.

**Table 2.1** Internet Use in the United States by Demographic Characteristic

Characteristic	Percentage
Men	79
Women	79
<i>Race/Ethnicity</i>	
White, non-Hispanic	80
Black, non-Hispanic	71
Hispanic	82
<i>Age</i>	
18–29	95
30–49	87
50–64	78
65+	42
<i>Household Income</i>	
Less than \$30,000/year	63
\$30,000–\$49,000	84
\$50,000–\$74,999	89
\$75,000+	95
<i>Educational Attainment</i>	
Less than high school	52
High school	67
Some college	90
College+	96

(Continued)

Table 2.1 (Continued)

Characteristic	Percentage
<i>Community Type</i>	
Urban	81
Suburban	82
Rural	67

SOURCE: Based on data from the Pew Internet and American Life Project, <http://www.pewinternet.org/Static-Pages/Trend-Data/Whos-Online.aspx>.

NOTE: Data are based on telephone interviews with 2,258 adults living in the continental United States. Interviews were in English and Spanish.

The following are specific advantages and disadvantages of e-mail surveys.

### Advantages

- *Speed.* An e-mail questionnaire can be sent to hundreds or thousands of people by entering or importing a distribution list and hitting the *send* button. Responses typically are received quickly, and data can be described and distributed via the software tool in real time.
- *Economy.* Most e-mail software vendors (such as those mentioned earlier) offer free versions of their services. The free software often limits the number and types of questions and responses allowed. If these limitations pose a problem, a low-cost, monthly contract may be purchased that will expand the options and offer the survey creator the vendor's full suite of tools.
- *Convenience.* Online survey software allows researchers to create the questionnaire, write the e-mail invitation, upload a distribution list, and send reminders directly from the software. In most cases, it is a seamless approach that automatically inserts such elements as the survey link and a link for respondents to opt out of the survey if they so choose.
- *Simplicity.* Online survey software of the type we have been referencing does not require technical expertise on the part of the survey developer. Tools such as SurveyMonkey and Zoomerang are user-friendly, offer a selection of survey templates to jump-start the questionnaire creation process, and contain help features that include step-by-step instructions, tutorials, and online chats with support staff.

## Disadvantages

- *Availability of a sampling frame.* You must have access to an e-mail list for the population you wish to survey. If you do not have such a list, you must be able to purchase or compile one.
- *Unsolicited e-mail (i.e., spam).* Most e-mail programs use filters to flag unsolicited messages as junk mail. Some filters will not accept bulk e-mails. With the proliferation of e-mail surveys, e-mail marketing messages, online newsletters, and more, spam filters have become sophisticated and can permit users to block any message not from a preapproved sender. This often results in a large number of e-mail invitations bouncing back to the sender.
- *Gray- and Blacklisting.* Along with the ability to block unsolicited messages, many e-mail service providers use programs that search for patterns of bulk e-mails coming from one source and perform other functions, such as searching subject headings for certain key words or identifying the domain from which the e-mail messages originate. When potential spam is detected, the sender (in this case, the software vendor) may be placed on a gray- or blacklist. With **graylisting**, every time the e-mail service provider receives a message from an unknown sender, it rejects the mail with a “try again later” message. Spam software will *not* try again later, and legitimate messages will eventually make it to the intended recipient. However, messages may be delayed as much as 72 hours before finally arriving at their destination, undermining the advantage of collecting survey results quickly. In the extreme case, a sender’s server may be **blacklisted** and messages from that server will not be delivered at all. Surveyors can inquire about a vendor’s history with gray- and blacklisting and should ask about the mechanisms in place to combat this issue. This will help but will not guarantee success, because e-mail providers regularly upgrade their protocols for identifying potential spam.
- *Too many e-mail surveys.* Because online survey software is free or inexpensive, convenient, and easy to use, many people who otherwise would not have chosen to conduct a survey are opting to collect data via e-mail surveys. The large volume of e-mail surveys appearing in recipients’ inboxes has created a problem for the industry, as potential respondents experiencing e-mail survey overload are ignoring invitations.

## Internet/Intranet (Website) Surveys

Surveys posted on websites can be created using the same software applications used to create e-mail surveys. The difference is that, instead of e-mailing a link to a sample of respondents, these surveys appear on a webpage, either as a link posted somewhere on the page or as a pop-up

or crawl-in link. They have many of the speed and convenience advantages of e-mail surveys and offer all the same questionnaire features, plus the ability to collect data from individuals for whom you may not have a sampling frame.

## Advantages

- *Speed.* If posted on a popular website, a questionnaire can potentially gather thousands of responses within hours.
- *Audience.* You can post the link on numerous websites with the permission and cooperation of the sites' owners. This might broaden your audience, as the link could appear on sites whose users consist of researchers, teachers, children, students, employees, and so on.
- *Economy.* Compared with other modes of survey data collection, website surveys are the most economical means by which to collect data from large numbers of respondents who may be geographically dispersed. After the initial set-up expenses (software, web hosting, etc.), it costs no more to target large samples than small ones.
- *The ability to ask sensitive questions.* Website surveys are similar to other forms of self-administered surveys in that no researcher is present and participants complete the questionnaire at their own pace. This also is true of e-mail surveys; however, the survey that appears on a webpage is not linked to respondents' e-mail addresses and, therefore, affords participants an added measure of anonymity, allowing them to more freely and honestly answer the questions.
- *Ability to evaluate websites.* There is perhaps no better way to ask users to evaluate a website than to do so while they are navigating the site. If your research objectives include testing the usability of a webpage, for example, you could include a survey link on the page you wish to evaluate. Visitors can provide feedback about their experience while still on the site.

## Disadvantages

- *Limited populations.* Internet use is quickly becoming the norm in America, and the number of people using computers and accessing the Internet continues to increase each year. There is some disagreement about the exact number of households online; however, one fact is clear: The online population does not reflect the general population of the United States (see Table 2.1). An upward bias in socioeconomic status is evident among Internet users, and they are not evenly represented across racial/ethnic groups. This precludes the use of website surveys for projects focused on populations not well represented online.
- *Abandonment of the survey.* Respondents can easily quit in the middle of a questionnaire. To minimize the likelihood of respondents quitting, questionnaires should be as short as possible—that is, ask only questions related to

the project objectives. Avoid the temptation to add a few more questions because “you’re conducting the survey anyway.” It also helps if the questionnaire is easy to navigate and fun to complete. Pretesting the questionnaire will provide feedback about ease of navigation, and an understanding of the **target population** will aid in the inclusion of items that are interesting and relevant to the respondents. Offering incentives may help prevent abandonment of the survey.

- *Limited information about respondents.* Unlike an e-mail survey, for which you may have existing information about the respondents—for example, demographic characteristics, the department in which they work, their purchasing habits—this information will not be available for respondents to website surveys. Surveyors can, of course, collect this information on the website questionnaire, but the added questions will lengthen the survey and the validity of the data cannot be verified.
- *Limited sampling options.* The majority of surveys that appear on websites are of the volunteer opt-in variety. That is, any site visitor who happens across the link or clicks on the survey icon may participate. There are some opportunities to randomly present the survey to a subset of site visitors; however, for the most part, sampling for these surveys is limited to nonprobability sampling options. The most serious consequence of this limitation is the inability to generalize findings based on the survey results.

## Mobile Surveys

Several years ago, the term *mobile survey* referred primarily to a series of text messages sent to respondents’ mobile phones. Participants responded to these surveys by selecting from among a series of options. Open-ended questions were not used, and the ability to route respondents to different sets of questions based on previous answers was limited. The widespread adoption of easy-to-use **smartphones**—most notably the Apple iPhone—and other mobile devices, such as tablet computers, has resulted in a shift in the concept of mobile surveys. Obviously, researchers still conduct text-based mobile surveys, but this format is quickly being relegated to the realm of event-satisfaction and live-audience feedback polls.

The range of capabilities available on most smartphones and tablet PCs, combined with high-resolution displays and usable keyboards, has greatly expanded the options for mobile surveys. Software vendors have been quick to recognize the potential, and many now offer the ability to optimize just about any fully functioning online survey for smartphones and tablet PCs. As with the other two classes of online surveys, this opportunity to reach new audiences comes with some challenges.

## Advantages

- *Potential to reach new audience.* Survey participants who are not likely to respond to an e-mail or website survey may be more inclined to acknowledge and participate in a mobile survey.
- *Speed.* Because many individuals keep their mobile phones with them most of the time, in-the-moment surveys (e.g., during an event) are possible.
- *Questionnaires can be feature rich.* Surveys created for smartphones and tablet PCs can include images, multimedia features, and skip logic.
- *Use of device features.* Surveys can take advantage of the native features of mobile devices, such as cameras, sound recorders, and Global Positioning Satellite (GPS) locators.

## Disadvantages

- *Audience reach.* Smartphone adoption in the United States is projected to reach 50% by the end of 2011. Although an impressive proportion, it clearly does not include everyone in some target audiences. The socioeconomic factors associated with smartphone adoption and use limit the types of individuals who can be surveyed.
- *Number and types of questions.* Surveys designed for smartphones and tablet PCs are not limited to text. Technically, they can include many of the features you might include in any other online survey. However, the nature of the devices (i.e., they are mobile, and so are their users) dictates that surveys be short and question types be limited to those that can be answered quickly.
- *May be viewed as intrusive.* Mobile phone users consider many factors when selecting a particular device, but the ability to respond to surveys is probably not among those considerations. Annoying an organization's members or customers with survey requests to their mobile phones could result in participants permanently opting out of all surveys sent from the organization.

## Purchasing Survey Software and Selecting a Web Survey Host

To conduct an e-mail, website, or mobile survey, you will need software and the services of a web-based survey host. Hundreds of commercial software programs and web-based survey hosts are on the market. Web-based survey hosts (also known as application service providers, or ASPs) typically offer customers a full range of services, including the ability to create questionnaires, conduct surveys, analyze data, and produce and share reports, all via the company's website. Some **web survey** companies offer the option of purchasing software that can be used locally on the researcher's computer or local network; questionnaires can be uploaded to websites or sent to

respondents as a link in an e-mail invitation the same way that software is used on a vendor's hosted site. This option leaves researchers responsible for installing the software and providing their own technical support for the system. Many of the ASPs offer free or trial versions of their services, and most software vendors provide pared-down versions of their full packages for customers to try.

The multitude of commercial survey software packages and web-based survey hosts available, at many levels of complexity, greatly reduces the need for individuals or organizations to develop proprietary software applications for conducting surveys. Although in some situations a company may need specialized features or perhaps heightened security, most requirements can be addressed by working with the software vendor to customize existing software to meet the organization's needs. The challenge comes in selecting an appropriate software and online survey host for your needs and level of technical expertise. Although we will not evaluate specific vendors here, we will address some important considerations for choosing software and a survey host.

- *Expense.* Survey software and ASPs vary greatly in price. The range starts at \$0. As mentioned previously, the free software available online is typically limited; questionnaires can contain only a few questions (usually about 10), not all question types are available, and the number of completed surveys allowed in a given period of time is also limited. Providers such as SurveyMonkey and Zoomerang offer a variety of “premium” or “professional” subscriptions that range in price from about \$200 to \$800 annually. With this type of account, users generally have access to all available question types; the number of questions that can be included on a questionnaire and the number of responses that can be collected are unlimited; and semicustom features, such as the ability to manipulate questionnaire templates and redirect respondents to your website at the end of the survey, become available.

There is no upper limit when it comes to the price of survey software. The annual license fees can be as much as \$25,000 for highly complex software packages. This option allows for unlimited customization of the software, for which there is often additional expense. Although costly, the surveys created with semicustom or custom software will have the precise look and feel required, and custom programming will make available any question types and response options desired. Moreover, security concerns associated with the transfer of data can be addressed during the development process, and additional features, such as the ability to automatically update database tables with respondent information, can be added.

The issue of cost is usually one of finding a product that contains the features you will actually use for the lowest price. Custom software packages may be appropriate if your needs are specific and you have a lot of lead time and a large budget; however, you may find that an off-the-shelf product is adequate if your survey requires only basic features. Clearly, the more you pay, the more you get, but if you do not make use of those added features, they will slow down the questionnaire development process, as you will have to navigate around them.

- *Ease of use.* Look for survey software that has an easy-to-use design interface with drag-and-drop capabilities for questions and scales, notes, and other text. **Wizards** that walk users through the survey creation process and questionnaire templates can be useful if you are new to using survey software. You also should be able to save a survey you create as a template so that you may use it again in the future. Question libraries also can be valuable for new survey researchers. These libraries typically include standard demographic and opinion items and can speed up the creation of the questionnaire. A valuable feature is the ability to create your own question library that includes your commonly used questions and response sets. Using the free- or limited-trial version of the software will provide an opportunity to test the usability of the product. The full version will offer more features, but the user interface will be the same as that of the limited version.

- *Question number, formats, and response options.* Check for the capacity to ask a wide variety of questions using different **response options**. Question formats that should be included are single response, multiple response, scale response (i.e., agree–disagree; 1–5 points, etc.), and matrix response. Radio buttons, check boxes, and open-text boxes are basic and should be included in any online survey software package. Another useful feature allows surveyors to randomize the order in which response options and questions are presented to respondents; this is essential if you believe order effects may be associated with the way responses are selected. Also desirable is the ability to choose whether respondents will be allowed to skip questions or whether answers will be mandatory for continuation of the questionnaire. Forcing responses can lead to abandonment of the survey. The software should not limit the number of questions you place on a questionnaire; this choice should be guided by the survey objectives and a concern with respondent fatigue.

Visual questions (e.g., those that allow researchers to add photos or other images) and options such as response scale sliders, date pickers, card sorting, click maps, page turners, and highlighter tools can greatly enhance the look and interactivity of a questionnaire. For example, you might present a design

for a new advertisement and ask respondents to highlight the areas of the image that interest them the most. These features will add expense and development time and, therefore, are necessary only for surveyors who conduct complicated surveys on a regular basis.

- *Contingency questions.* Contingency questions (also called skip-logic questions) direct your respondents to a new set of questions based on their responses to previous questions. With online surveys, this means that participants are not forced to read and answer unnecessary questions. This is an important feature that will greatly contribute to the validity of the survey responses. Contingency questions vary in levels of complexity and are usually not available in free software. Purchasing a professional subscription will offer the user basic skip-logic questions (e.g., if “Male,” respondents are directed to question 3; if “Female,” they are sent to question 4). Multilevel contingency questions and related features such as piping (including responses from one question in the text of a subsequent question) and hiding or masking (presenting limited response options for a question based on responses to previous questions) are usually available only in higher-priced software.

- *Questionnaire options.* Less expensive software packages and ASPs sometimes limit the number of questions you can place on the questionnaire and the number of responses you can collect with any one survey. Other typical limitations include the inability to use tables, images, audio, video, and **ALT tags** on the survey. If you know you will be conducting simple surveys with small samples, these limitations may not pose a problem. If, however, you wish to expand to longer questionnaires or survey large samples of respondents, you will need to look for software without these limits.

- *Questionnaire appearance.* Evaluate the options for customizing questionnaires. Ask if the software allows you to include logos; also, investigate the ability to manipulate fonts and colors. If you will be surveying special populations, such as children or the elderly, this is especially important, as you will want to ensure that large font sizes are available. Most inexpensive software will offer the option of including logos and selecting from a limited number of color schemes and fonts. For specialized branding of questionnaire templates, however, you will need to select custom or semicustom software. Also, inquire about the configuration of navigation, progress bars, and automatic question numbering.

Similar consideration should be given to the appearance of e-mail invitations. That is, to what extent will you be able to customize the invitation? Can you add images such as a logo; change the font types, sizes, and colors; include links to an FAQ list or your website?

- *Sampling features.* If you do not have an e-mail distribution list, some web survey hosts will generate a sample for you, for a fee. Look for the ability to select random, stratified, systematic, and cluster samples. If you plan to place your survey on a website, you might be interested in sampling the site's visitors. Many vendors will offer the option of sampling every  $n$ th visitor, the first 500, or the first 100 every hour, and so on. Another common feature that some researchers find useful is the ability to automatically close the survey after a predetermined quota has been reached.

- *Distribution options.* Look for survey software that allows for different modes of survey delivery. Even if you are interested only in conducting e-mail surveys, you may want the option of placing your survey on a website, mobile device, or kiosk, or perhaps printing a paper copy as an alternative for respondents who have disabilities or prefer a hard copy.

- *Respondent lists.* Your survey software should allow you to import a respondent list from another software program or your e-mail address book. At a minimum, you should be able to upload a **comma-separated values** file with your respondents' e-mail addresses and first and last names. The ability to upload a few more fields of data, such as a membership number, customer or student identification, or respondents' geographic region or state, can be particularly helpful and will allow you to further customize your invitation and questionnaire.

- *Respondent mailings.* In addition to the e-mail invitations, software that allows you to send prenotification e-mail messages, a series of reminders, and thank-you messages is convenient and will greatly facilitate the survey process.

- *Tracking respondents.* In e-mail surveys, you will want to track who has responded and limit replies to one per recipient. A higher response rate means less error; effective survey software offers the option of follow-up reminders to **nonrespondents**. The software should give you the option of automatically filtering nonrespondents and respondents who have partially completed the questionnaire for reminders. Tracking these nonrespondents in the software application provides quick access for follow-up correspondence. In addition to tracking who replied, you also should be able to limit replies to one respondent. This is especially important for website surveys because multiple replies from one user can skew the data. The use of **cookies**, Internet protocol addresses, and randomly generated codes should be potential options for limiting responses to prevent multiple replies from a single user.

- *Reporting and analysis options.* It is important to choose software that allows you to analyze your data and provides user-driven views of the results. How much data analysis you want to conduct online will vary

according to your research purpose. Most survey software applications allow users to conduct descriptive analysis online and produce basic reports. For more complex analyses, look for software that provides the option of exporting data directly to a data analysis package such as **IBM SPSS Statistics\***; at the very least, data should be easy to export to Excel for later importing to the statistical software package of your choice. For individuals and businesses involved in frequent online data collection and intricate data analysis, an all-inclusive package may be the appropriate solution; STATPAC, for example, offers a reasonably priced product that includes software to create e-mail and web-based surveys and conduct basic and advanced statistical analysis (including analysis of open-ended survey questions) and provides free web hosting of surveys.

- *Sharing results.* You may want to post your results on a website or share them with the respondents or the study's sponsor. Many web hosts give researchers the option to share results with others by providing a **URL** for a webpage containing the results. These programs allow survey developers to post the URL on a website so that viewers can see the real-time or final responses, depending on when you post the URL. The developer also has the option to allow respondents to see the results immediately after they have completed the survey. Note that posting real-time poll results on a website will have implications for subsequent respondents who have not yet participated in the poll.

- *Accessibility.* You may require a web host that can create questionnaires in an accessible format for those with visual impairments. WebSurveyor, for example, can create surveys for respondents who use screen readers. Some web hosts, such as Zoomerang, will translate a survey into different languages and, if necessary, translate the responses. This service is provided for an additional fee.

- *Accounts and roles.* Some web-based survey hosts provide only one password and username for each account. Therefore, a company with 100 people and one account can have only one person at a time logged onto the web-based host. Other web-based hosts will provide more than one password and username for the price of one account. If multiple members of the research team will need access to the web host at the same time, it is important to investigate the vendor's account restrictions.

Further, if your organization will have different levels of survey creators—for example, administrators, authors, editors, and so on—you will need a system that allows you to assign roles to individuals who will be involved in

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\*IBM SPSS® Statistics was formerly called PASW® Statistics.

the research process. System administrators maintain rights to all elements of the software program and can assign rights to others. Survey authors program questionnaires and usually have permission to upload lists and deploy surveys. Editors have the ability to make changes to a questionnaire but may not be able to send surveys to the potential respondents. These designations vary from one software vendor to another. Some include an “observer” role, someone who cannot make changes to a survey but can review the work of other team members; others have an “approver” role, someone whose responsibility is to approve surveys before they are deployed. The labels are less important than the ability to assign individuals to different roles with varying levels of privileges depending on their function in the survey process.

- *Survey security.* Password protection of questionnaires inhibits unauthorized users from responding to a survey. Depending on the nature of the survey you will be creating, you may need to add a password to prevent anyone other than the intended respondent from responding.

- *Data security.* If you will be collecting sensitive information, such as financial or personal health information, the security of your survey data files is of paramount importance. To ensure that the vendor you choose maintains the appropriate level of data security, review their information security policy; if the vendor does not have an information security policy, eliminate them from consideration. Additionally, it is advantageous to ask the following questions, most of which concern the confidentiality and integrity of your data that will be stored on the vendor’s server. Reputable software vendors will have ready answers to these questions and will be willing to provide you with documentation to support their assertions. Researchers who will be routinely collecting sensitive, confidential information may need to go further and have the software evaluated by a network security consultant who can run vulnerability scans to determine where potential security threats exist.

### Questions to Ask Survey Software Vendors

1. What is the date of the last revision of the information security policy?
2. What is the process by which third parties are granted access to the data stored on your servers?
3. What security controls are in place to keep individual customer data separate from other customer data?
4. What is your screening process for employees, contractors, and third parties who will have access to the data stored on your servers?
5. Describe the location and physical space in which data is stored. What security mechanisms exist to prevent unauthorized access to your offices and data storage facilities?

6. How do you protect your systems from environmental hazards such as fire, smoke, water damage, and dust?
7. Who manages and maintains your data center?
8. How do you prevent end users from installing potentially malicious software?
9. Do you scan traffic coming into your network for viruses?
10. How are your systems backed up? What is the schedule for system backups?
11. How are software malfunctions handled?
12. What is your process for handling security breaches?
13. What is your protocol for encrypting data, both in transit and storage?

Secure Sockets Layer uses a cryptographic system to create a secure connection between the respondent's browser and the server to ensure all survey responses are sent securely and cannot be accessed or viewed during transmission. This system is supported in all modern browsers. Cryptography protects information by transforming it (i.e., *encrypting* it) into an unreadable format. Encryption refers to algorithmic schemes that encode plain text into nonreadable form, or cyphertext, providing privacy. The receiver of the encrypted text uses a "key" to decrypt the message, returning it to its original plain-text form. The key is the trigger mechanism to the algorithm. You may want to use this feature to obtain confidential information from your respondents, such as their Social Security numbers or residential addresses.

- *Customer support and training.* Be sure to evaluate the online help and customer support features of the survey software provider. Most applications come with help menus, and some are more helpful than others; it is advisable to test the software's help menus during the trial period. Also, look for toll-free customer service phone numbers, live online support, and on-site training options. Complex software systems should include training and ongoing support, at least during the first months or year of the contract. The exact number of hours of training and any limitations on the type or volume of support requests should be negotiated when making the decision to purchase the software.

## Ethics and Legal Issues

Sometimes, all the daily activities involved in conducting a research project cause us to forget about the "big-picture" issues related to surveys. Survey researchers frequently encounter situations that are open to a variety of interpretations. Situations requiring an ethical interpretation are no different.

Two individuals faced with an identical situation will likely perceive that situation in their own way and consider two different courses of action to be equally acceptable. As a result, organizations concerned with research (e.g., the American Psychological Association), and survey research in particular (e.g., the Council of American Survey Research Organizations and the American Association for Public Opinion Research, or AAPOR), have developed guidelines outlining researchers' ethical responsibilities. The AAPOR code of ethics is reprinted in Appendix A. We will discuss three of the major issues covered in most ethical guidelines: (a) informed consent, (b) ensuring respondent confidentiality and anonymity, and (c) ethical interpretation and reporting of results.

## Informed Consent

In almost all cases, respondents to online surveys will be volunteers. To make an informed decision about participating in the research, volunteers should be briefed on (a) the general nature of the survey, especially if sensitive or potentially embarrassing information will be addressed; (b) the identity of the sponsor of the research; (c) how the data will be used; (d) the average length of time to complete the survey, and if they will be contacted in the future with additional surveys; and (e) whether any risks are involved in participating in the survey, such as being asked to disclose uncomfortable or embarrassing information.

This information can be provided in the e-mail survey invitation or as part of the introduction to the questionnaire. Institutional review boards generally do not require signed consent forms for participants in surveys. If you are in doubt about requirements surrounding consent, you should consult with the appropriate review board representative at your institution. If gaining explicit consent is necessary, the task is normally accomplished by providing respondents the information about the survey, its sponsor, threats and benefits, and so on, either in the invitation or on the first page of the questionnaire, and asking them to check a box indicating their agreement to participate in the research. Those who choose the "do not agree" box are thanked and disqualified from participating in the study.

## Confidentiality and Anonymity

Perhaps one of the most stringent requirements in all social research is maintaining the confidentiality of participants. Frequently, the respondents to your survey will expect that the information they provide

will be confidential—that is, neither the fact of their participation nor the information they provide will be disclosed to third parties. If you have promised confidentiality, you have an ethical responsibility to ensure that participants' identification and information is protected. If you cannot (or will not) prevent the disclosure of respondent information, you must make this fact abundantly clear in the invitation to participate in the online survey so that respondents have the opportunity to refuse participation.

Often, the promise of anonymity is included in the same sentence that guarantees confidentiality, almost as if the two concepts were the same. The statement typically reads, "All your responses will remain strictly confidential and anonymous." Unfortunately, many people forget that anonymity extends beyond not requiring names and addresses on a questionnaire. Technically, responses to e-mail surveys are never truly anonymous because researchers know the respondents' e-mail addresses. Even without this information, it is easy to attach identifying code numbers to questionnaires or to link survey numbers to databases containing respondent information. As a result, many potential respondents are skeptical of electronic surveys offering anonymity. The important fact here is not that researchers *must* promise anonymity; rather, what is essential is that if the promise is made, the researcher is obligated to take the necessary steps to ensure that identifying information about survey respondents is kept separate from their responses.

Additionally, even if survey respondents know their anonymity is not guaranteed (e.g., so follow-up information can be gathered or so you can contact the respondent again in the future), you have a responsibility to the respondent to guarantee that subsequent contact is appropriate. For example, do not tell a potential respondent that he or she may be contacted to gather more information when you are really selling the name to a marketing company.

## Survey Reporting and Data Interpretation

The process of reporting survey results is fraught with situations that can jeopardize respondent confidentiality and the accurate interpretation and presentation of research results. When gathering demographic information that can identify respondents, the survey researcher is obligated to produce reports that cannot lead to the identification of individuals. For example, in an employee survey, it is reasonable to ask about gender and ethnic background to ensure that the needs of all employees are being met. If this information is gathered, be careful not to provide a report that can

lead to the identification of individual employees. For example, when providing information at the department level, do not present the data so the only male, Hispanic employee can be identified. A rule of thumb to avoid this problem is to produce results only for groups containing at least 10 individuals. This way, no individual can be singled out.

Data interpretation can present another set of problematic issues for survey researchers. Efforts should be made to fully and accurately represent the results gathered by the survey. Too often, people do not present enough information about the procedures used for gathering the data, the sampling strategy, the error and confidence levels, the response rates, or how the data were analyzed. Without this information, it is easy to misinterpret the results or over-interpret some findings, which will lead to erroneous conclusions.

Another situation arises when researchers are asked not to report data that present the host organization in an unfavorable manner. As mentioned previously, every effort should be made to present the results of the survey completely and accurately. This may mean presenting some information that suggests areas of discord or opportunities for improvement. These results should not be hidden or simply forgotten. Doing so would be a disservice to the organization and the people who responded to the survey, not to mention questionable ethics.

## Anti-Spam Compliance

The CAN-SPAM (Controlling the Assault of Non-Solicited Pornography and Marketing) Act was enacted in the United States in 2003. To comply with the Act, surveyors who wish to contact individuals with whom they have no established relationship must do three things:

1. Accurately explain the nature of the message in the e-mail subject line. The subject must relate to the body of the message, and the body must contain a valid physical address for the sender. Surveys about sexual topics must be labeled in the subject header as containing sexually explicit content.
2. Provide an “unsubscribe” link. All e-mail messages must contain a visible, working method for recipients to unsubscribe from your list. All opt-out requests must be processed within 10 days, and individuals who have opted out should not be contacted in the future.
3. Do not send messages through an open relay or with false headers. When sending messages from within the online survey software, this will not be an issue, as almost all hosted applications comply with this requirement. Moreover, messages cannot be sent to e-mail addresses harvested from webpages.

The penalty for failing to comply with the CAN-SPAM Act ranges from a misdemeanor charge to an aggravated offense. Keep in mind that this regulation is applicable to *unsolicited* messages sent to recipients with whom you have no prior relationship. Research surveys (as opposed to marketing surveys) are exempt, and contacting current or former members, customers, or employees is acceptable.

## Summary

In this chapter, we have addressed some foundational issues relevant to many online survey situations. We reviewed the advantages and disadvantages of the three major classes of online surveys: e-mail, website, and mobile surveys. We will return to this discussion when we evaluate online survey deployment options in Chapter 6. For now, this introduction should have provided you with enough information to make a decision about the type of survey you wish to conduct.

The list of factors to consider when purchasing software and signing up with a web survey host is lengthy, and some of the considerations can be complex. If you're in the enviable position of having a large budget with which to conduct your online surveys, you will most likely take your time evaluating multiple software vendors and choosing the one that best serves your needs. If, however, you're in the more common predicament of having a limited budget and a short timeline, your task will be to find as many relevant features as you can at the lowest price.

The practice of conducting online surveys is governed by many of the same ethical principles that guide other social research activities. The principles of informed consent, maintaining respondents' confidentiality and anonymity, and reporting survey results with integrity are just a few of the ethical considerations relevant to survey research. The AAPOR code of ethics provides greater detail on these and other ethical responsibilities and should be reviewed completely before undertaking your survey project.

## Exercises

The commissioner of Parks and Recreation in your city notices a decline in the number of residents using many of the city's parks. She suspects that lack of awareness of the parks might be the underlying issue. The commissioner has asked you to conduct an online survey of the city's residents.

1. What type of online survey would you recommend? Explain to the commissioner the advantages and disadvantages of the choice you recommend.
2. The Parks and Recreation Department has never conducted an online survey before; therefore, they have no software with which to create and deploy the survey. As the survey consultant, it will be your responsibility to evaluate software vendors and make a recommendation to the commissioner. Describe the criteria you would use to evaluate the vendors.
3. The survey you create will be sent to the city's residents. Assume that the potential respondents have not requested communication or surveys from the Parks and Recreation Department. What will you do to be ethically responsible and legally compliant as you design the survey and associated materials?