1

Using Questionnaires and Surveys

Data collection is the first operational part of the ROI process model. Data are collected in different time frames and from different sources. This is the first of four chapters on data collection methods. Collectively, these four chapters will provide a variety of ways to meet any application, budget, or time constraint.

Probably the most common data collection method is the questionnaire (Alreck and Settle, 1995). Ranging from short reaction forms to detailed follow-up tools, questionnaires can be used both to obtain subjective information about participants and to document objective, measurable impact results for an ROI analysis. Because of this versatility, the questionnaire is the preferred method for capturing data at Levels 1, 2, 3, and 4 in some organizations.

A survey is a specific type of questionnaire with several applications in measuring program success. Surveys are used in situations in which only attitudes, beliefs, and opinions are captured; questionnaires are much more flexible, capturing a wide range of data from attitudes to specific improvement statistics. The principles of survey construction and design are similar to those of questionnaire design. This chapter explains how to develop both types of instruments.

Types of Questions

In addition to the types of data sought, the types of questions distinguish surveys from questionnaires. Surveys may elicit yes-or-no responses, if absolute agreement or disagreement is required, or they may solicit a range of responses, often on a five-point scale from "strongly agree" to "strongly disagree."

A questionnaire may contain any or all of these types of questions:

- *Open-ended questions* allow unlimited answers. Questions are followed by ample blank space for the responses.
- *Checklists* provide a list of items, and the participant is asked to check those that apply in the situation.
- *Two-way questions* limit answers to a pair of alternative responses, such as yes and no.
- *Multiple-choice questions* provide several possible answers, and the participant is asked to select the one that is most applicable.
- *Ranking scales* require the participant to rank a list of items.

Questionnaire Design Steps

Nothing is more confusing, frustrating, and potentially embarrassing than a poorly designed or improperly worded questionnaire. Fortunately, with thought and planning, these problems can be easily avoided. Questionnaire design is a logical process that can be divided into simple steps. Use the following steps to help you develop a valid, reliable, and effective instrument (Robson, 2002).

Determine the Specific Information Needed

The first step in questionnaire design is reviewing the objectives, topics, skills, or attitudes presented in the program for potential questionnaire items. Developing this information in outline form is sometimes helpful so that related questions or items can be grouped.

At this time, also explore issues related to the application and impact of the program for inclusion in the questionnaire.

Involve Stakeholders in the Process

To the extent possible, stakeholders—clients, sponsors, supporters, or other interested parties—should be involved in the questionnaire design process. Ask those most familiar with the program to provide information on specific issues and concerns that might affect how the actual questions are framed for the questionnaire. In some cases, stakeholders may want to provide input on specific issues or items. Not only is stakeholder input useful in questionnaire design but it also builds ownership in the measurement and evaluation process and supports content validity.

Select the Types of Questions

From the five types of questions described previously, select the type or types that will result in the specific data needed. The planned data analysis and variety of data needed should be considered when deciding which types of questions to use.

Develop the Questions

The next step is to develop specific questions based on the type of questions selected and the information needed. Questions should be simple and straightforward, to avoid confusing the participants or leading them toward a desired response. Each question should address only one issue. If multiple issues need to be addressed, divide questions into multiple parts or develop separate questions for each issue. Avoid terms or expressions that might be unfamiliar to participants.

Check the Reading Level

To ensure that the questionnaire can be easily understood by the target audience, assess the reading level of the questionnaire. Many word processing programs have a function that can determine the reading difficulty of a text, indicating what grade level of education would be needed to read it. This important check ensures that the reading level of the questionnaire matches that of the target audience.

Test the Questions

Proposed questions should be tested to make sure that they will be correctly understood. Ideally, the questions should be tested on a sample group of participants. If this is not feasible, the sample group of employees should be at approximately the same job level as the participants. Seek feedback, critiques, and suggestions from the sample group so that the questionnaire design can be improved before it is administered to participants. Ensure that questions reflect program objectives and content.

Address the Anonymity Issue

Participants must feel free to respond openly to questions, without fear of reprisal. The confidentiality of their responses is of the utmost importance because there is usually a link between a questionnaire's anonymity and respondents' honesty. Therefore, questionnaires and surveys should be anonymous unless individuals must be identified for specific reasons. In situations in which participants must complete the questionnaire as a captive audience or submit a completed questionnaire directly to an individual, have a neutral third party collect and process the data, to ensure that participants' identities are not revealed. In cases in which individual identities must be known (for example, to compare output data with previous data or to verify the data), make every effort to keep respondents' identities from being revealed to those who might be biased by their responses. Confidentiality goes a long way when collecting data for current or future evaluation projects.

Design for Ease of Tabulation and Analysis

Consider how each potential question will affect data tabulation, data summary, and data analysis. If possible, outline and review the data analysis process at this point. This step will help you avoid problems of inadequate, cumbersome, or lengthy data analysis caused by improper wording or design of questionnaire items.

Develop the Completed Questionnaire and Prepare a Data Summary

Integrate and develop the questions into an attractive questionnaire with instructions that will allow it to be administered effectively. In addition, develop an analysis spreadsheet so that the data can be tabulated quickly for analysis. Developing the questionnaire and planning data analysis in tandem will ensure appropriate and efficient reporting in the end.

Improving the Response Rate for Questionnaires and Surveys

The items on a questionnaire represent a wide range of potential issues to explore. Obviously, asking all of the possible questions could result in a reduced response rate. The challenge, therefore, is to design and administer the questionnaire so as to maximize the response rate while ensuring reliable responses. Asking too many questions can reduce the number of questionnaires returned; asking too few can negatively affect the reliability of the results. Response rate management is a critical issue if the questionnaire is the primary data collection method and most of the evaluation hinges on the response of the participants. Taking the actions discussed in this section can help increase response rates.

Provide Advance Communication

If it is appropriate and feasible, communicate with participants in advance about the requirement of completing the questionnaire. Advance warning reduces some of the resistance to the process, provides an opportunity to explain in more detail the circumstances surrounding the evaluation, and positions the follow-up evaluation as an integral part of the program, not an add-on activity.

Communicate the Purpose

Make sure that participants understand the reason for the questionnaire, including who or what has initiated this specific evaluation and how the data from the questionnaire will be used. Participants should know whether the questionnaire—and the evaluation it is a part of—is the result of an ongoing systematic process or a special request for this program. Let the participants know who will see the data and the results of the questionnaire. If the questionnaire is anonymous, communicate clearly to participants the steps that will be taken to ensure anonymity. If senior executives will see the aggregate results, let participants know.

Describe the Data Integration Process

If other data are being collected for the same evaluation, help participants understand how the questionnaire results will be combined with those other data. The questionnaire may be only one of several data collection methods used. Participants should know how the data will be weighted and integrated into the final report.

Keep the Questionnaire as Simple as Possible

While a simple questionnaire does not always provide the full scope of data necessary for an ROI analysis, a simple approach should be a goal. When questions are developed and the total scope of the questionnaire is finalized, keep it as simple and brief as possible. But, as mentioned earlier, take care to design a questionnaire that provides reliable results as well as one that will ensure high response.

Simplify the Response Process

To the extent possible, responding to the questionnaire should be easy. If appropriate, a pre-addressed, stamped envelope should be included. Perhaps e-mail can be used to respond, if that is easier. In some situations, Web-based questionnaires are better. In still other situations, a response box can be provided near the participants' workstations.

Use Local Manager Support

Management involvement at the departmental or even functional level is critical to response rate success. Ask participants' managers to distribute the questionnaire, refer to the questionnaire in staff meetings, follow up to see whether the questionnaire has been completed, or generally show support for completing the questionnaire. Direct manager support will cause some participants to respond with usable data.

Let the Participants Know That They Are Part of a Sample

If it is appropriate, let participants know that they are part of a carefully selected sample and that their input will be used to make decisions that will affect a much larger target audience. This knowledge often appeals to participants' sense of responsibility, motivating them to provide usable, accurate data on the questionnaire.

Consider Incentives

A variety of incentives can be offered. Usually, incentives fall into three categories. The first type of incentive is provided in exchange for the completed questionnaire. For example, if participants return the questionnaire personally or through the mail, they receive a small gift, such as a mouse pad or coffee mug. If anonymity is an issue, a neutral third party can distribute the gifts.

The second type of incentive is provided to make participants feel guilty about not responding. Examples are a dollar bill (or equivalent international currency) clipped to the questionnaire or a pen enclosed in the envelope. Participants are asked to "take the money, buy a beverage, and fill out the questionnaire" or to "please use this pen to complete the questionnaire."

The third type of incentive is designed to obtain a quick response. This approach is based on the assumption that quick responses will ensure a greater response rate. If an individual puts off completing the questionnaire, the odds of completing it diminish. The initial group of participants who send in the questionnaire may receive a more expensive gift, or members of this group may be entered in a drawing for a gift. For example, in one study involving seventy-five participants, the first twenty-five who returned questionnaires were placed in a drawing for a $500 gift certificate. The next twenty-five were added to the first twenty-five for another drawing. After the first fifty, there was no incentive. The longer a participant waited, the lower his or her odds of winning were.

Have an Executive Sign the Introductory Letter

Participants are always interested in who signed the letter that accompanies a questionnaire. For maximum effectiveness, a senior executive who is responsible for a major area in which the participants work should sign the letter. Employees may be more willing to respond to a senior executive's request than a staff member's.

Use Follow-Up Reminders

Send a follow-up reminder one week after participants receive the questionnaire and another reminder two weeks after the questionnaire is received. In some situations, a third follow-up is recommended. Don Dillman (2006) suggests a tried-and-true approach that includes four follow-ups to an initial invitation to participate in the survey. Sometimes, it is effective to send the follow-ups through different media. For example, a questionnaire might be sent through the regular mail, the first follow-up reminder might be a telephone call, and a second follow-up reminder might be sent through e-mail.

Provide a Copy of the Results to the Participants

Make sure that participants see the results of the study, even if in an abbreviated form. More important, tell participants at the time they are asked to provide the data how and when they will receive a copy of the study. This promise often increases the response rate because some individuals want to see the results for the entire group.

Review the Questionnaire with Participants

The participants must understand the questionnaire. Seeing a copy in advance of the data collection can be helpful to them. Ideally, the questionnaire should be distributed and reviewed at the program launch or during the initial project meeting. Each question should be briefly discussed, and any issues or concerns about the questions should be clarified. This not only helps the response rate but also improves the quality and quantity of data.

Consider a Captive Audience

The best way to obtain a high response rate is to collect data from a captive audience. As part of a program follow-up session, a routine meeting, or a mandatory session designed for data collection, ask participants to provide input, usually during the first few minutes of the meeting. Sometimes, a routine meeting (such as a weekly sales meeting or staff meeting) provides the perfect setting for collecting data. This approach is ideal in a major program with a series of meetings; in that case, each subsequent meeting is an opportunity to collect data about the previous one.

Communicate the Timing of Data Flow

Give participants a specific deadline for completing the questionnaire. In addition, let them know when the results will be available. The best approach is to provide the date when the last questionnaires will be accepted and the date they will receive the results of the evaluation. It may also be prudent to advise participants when the sponsor will receive the results so that they can anticipate potential feedback, changes, or opportunities. Informing participants about specific points on the timetable builds respect for the entire evaluation process. This commitment of a timetable also builds accountability into management of the evaluation project.

Select the Appropriate Medium

It is important that the medium of the questionnaire (for example, paper, Web, or e-mail) match the culture of the participants. The medium should be selected for the convenience of the respondents, not the evaluator. Sometimes, an optional response medium can be offered in order to make responding more convenient for some participants.

Consider Anonymous or Confidential Input

Anonymous data are often more objective and, sometimes, more free-flowing than data not provided anonymously. If participants know that their input is anonymous, they will be more constructive and candid in their feedback, and their response rates will, in most situations, be higher. Sometimes, however, it is important to know who is responding. When this is the case, it is still important to ensure confidentiality. A confidentiality statement indicating that participants' names will not be revealed to anyone other than those collecting and analyzing data can play a positive role in gaining a high response rate. An explanation of how the confidentiality will be managed reinforces the commitment to keeps names separate from data.

Pilot Test the Questionnaire

Consider running a pilot test on a sample of the target audience. Conducting a pilot test is one of the best ways to ensure that a questionnaire is designed properly and that the questions flow adequately. Pilot testing can be accomplished quickly with a very small sample and can reveal problems with a questionnaire before it is administered to the whole audience. This will alleviate potential confusion, which sometimes negatively influences participants' willingness to respond.

Explain How Long Completing the Questionnaire Will Take

Participants need a realistic guideline on how long it will take them to provide the data. Although this issue seems simple, it should not be overlooked. Nothing is more frustrating than grossly underestimating how much time will be needed to complete a questionnaire. If the questionnaire is online, consider placing an indicator in a visible location on the screen in order to give the respondents an idea of how many more questions to expect. The pilot test should provide the information needed to allocate adequate time for participants to respond.

Personalize the Process

Participants usually respond well to personal messages and requests. Personalize the letter accompanying the questionnaire, if possible. In addition, if it is possible, use personal phone calls to deliver follow-up reminders. Calls may be made by the program facilitator, a manager or supervisor, an executive, or even the expert in the field being introduced to participants. A personal touch brings sincerity and a sense of responsibility to the process. It also further encourages participants to respond by explaining to them the importance of their data.

Provide an Update

In some cases, it may be appropriate to provide an update on current response totals and the progress of the evaluation project. If individuals understand how others are doing and how many responses have been returned, they may feel subtle pressure and be reminded to provide data by completing their questionnaire.

Used together, the steps in this section help boost response rates on follow-up questionnaires. Using all of these strategies can result in a 50 to 60 percent response rate, even for lengthy questionnaires that take forty-five minutes to complete.

Final Thoughts

This chapter has briefly described some of the issues involved in using questionnaires and surveys. More detail on questionnaire content will be given in the chapters that discuss the different levels of evaluation and examples of each type of questionnaire.

References

Alreck, P. L., and Settle, R. B. *The Survey Research Handbook: Guidelines and Strategies for Conducting a Survey*. (2nd ed.) New York: McGraw-Hill, 1995.

Dillman, D. A. *Mail and Internet Surveys: The Tailored Design Method.* (2nd ed.) New York: Wiley, 2006.

Robson, C. *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*. (2nd ed.) Malden, Mass.: Blackwell, 2002.