# Chapter VIII Overcoming Challenges to Conducting Online Surveys

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#### **ABSTRACT**

The widespread use of personal computers in the work place and at home has created a new opportunity of conducting research. With the increasing accessibility of the Internet and e-mail, using the new medium to distribute surveys is gaining popularity among researchers. The online survey, however, is a "double-edged sword," with the ability to access a large number of respondents at low costs, but the risk of increasing difficulties to evaluate the quality of the research (Couper, 2000). Concerns over response rates, sampling, and controlling the data collection environment have posed serious challenges to online survey researchers. The purpose of the present chapter is to offer suggestions for addressing these concerns. After a brief discussion on the formats of online surveys, the author will outline the challenges of conducting online surveys, and provide some strategies to overcome these challenges.

#### INTRODUCTION

#### Formats of Online Surveys

Internet-based research may appear in various forms, but generally there are two formats for online surveys: e-mail surveys and Web-based surveys.

*E-mail surveys.* According to Bachmann, Elfrink, and Vazzana (1996), e-mail questionnaires appeared almost simultaneously with the introduction of e-mail. E-mail surveys used to be restricted to population samples from within a company or a university. With the increasing number of e-mail users, e-mail surveys have been adopted by more

business and academic communities. Conducting an e-mail survey involves several steps. First of all, researchers need to collect e-mail addresses of prospective respondents based on their research purposes. For example, some researchers used the technique of collecting e-mail addresses from listserves or newsgroups (Berge & Colins, 1996; Parks & Floyd, 1996). Then, questionnaires are sent by e-mails to users. Receivers can read the message, answer questions, and send the survey back to the researcher via e-mail.

Web-based surveys. One important feature of Web sites are forms that allow the user to select an option by clicking in small circles or boxes, or to type responses in a box. In a Web-based study,

respondents are directed to a Web page containing a form (a questionnaire). They can fill out the form and then select an option to submit their answers. The answers then will be automatically passed to a program for scores, or sent to the researcher's e-mail. Compared to e-mail surveys, Web-based surveys are more standardized and convenient for users.

## Challenges to Conducting Online Surveys and Improvement Strategies

Online surveys can be an effective and economic way to collect data. Miller and colleagues (Miller, Neal, Roberts, Baer, Cressler, Metrik, & Marlatt, 2002) noted that the superiority of Internet-based research to traditional methods lies in that "it potentially provides increased accessibility; capability for dynamic and interactive forms, which eliminate the viewing of irrelevant questions; and customized feedback tailored to the content of the responses" (p.56). When researchers use an online survey, they can enjoy a number of benefits linked to the Internet. However, they should also be prepared to face several challenges resulting from response rates, sampling, and control for data collection environment.

#### **Response Rates**

For surveys that do not identify the frame population: "the set of persons for whom some enumeration can be made prior to the selection of the sample" (Groves, 1989, p.82), it is impossible to find out response rates. However, e-mail surveys or Web-based surveys that use e-mails, or other personal contact methods to recruit respondents, have shown that an inadequate level of participation is very common for online surveys.

During the early stage of Internet research, the response rate of online surveys was its strength. At that time, online surveys were still limited to certain organizations. Sproull (1986) found that electronic mail surveys had response rates 20%

higher than paper surveys. As more and more researchers are targeting a wider range of Internet users, the response rate is increasingly becoming a problem. The response rates of Parks and Floyd's (1996) survey and Parks and Robert's (1998) survey on friendships formed on the Internet were only 35% and 20% respectively. Some marketing research achieved even lower response rates.

Researchers have used a variety of strategies to increase response rates. The following are some major strategies summarized from different studies:

Adopt recruiting tactics. Recruiting tactics are crucial to motivate people to participate in online surveys. Electronic prenotice has proven effective in increasing response rates. An e-mail that delivers the survey request can build trust and reduce uncertainty. An electronic reminder is another useful way to facilitate survey participation. Some people may not take the survey right after receiving the recruiting message. Researchers will get increased responses when they send follow-up e-mail reminders with the survey links included. Studies have suggested that sending follow-ups after initial survey requests may generate new waves of replies, even though the number of replies returned reduce with each follow-up (Zhang, 1999). Monetary or nonmonetary incentives can also have a positive effect in raising response rates. Depending on the nature of the study, incentives may range from small tokens or gift cards to Web shopping sites to free personal computers (Cho & LaRose, 1999). Prenotice, reminder, and incentives may be combined in a survey recruiting process to obtain the optimal result of response rates (Mehta & Sivadas, 1995)

In addition, the framing of the recruiting message also deserves deliberation. Dillman (2000) noted that personalized a e-mail invitation is positively related to response rates. One limitation of this technique is that names and titles of subscribers remain unknown (Zhang, 1999). This limitation may be decreased to a certain degree by carefully designed recruiting messages. Porter

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