

# Chapter XI

## Electronic vs. Conventional Surveys

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### ABSTRACT

*This chapter discusses the outcomes of two data collection methods involving questionnaires distributed to members of an organization. One group received a paper survey through the post, whilst the second group was asked to complete the survey online. The results indicated that although response rates were higher for the online group, there were no significant differences in the responses of the two groups. These results suggest that for targeted groups of the type involved in this study, either method can be used with confidence, but that the online method may result in higher return. However, the additional benefits of speed, convenience, and cost make the online method appealing.*

### INTRODUCTION

This study reviews Web-based surveys as a data collection method in comparison to paper-based surveys. This comparison is important at this point as, with the growth of the Internet and its availability, more and more researchers are looking to Web-based surveys as an additional means of research (Cobanoglu, Warde, & Moreo, 2001). Trends show that traditional paper-based surveys have declining response rates so "researchers must consider new ways to generate sufficient, valid data" (Griffis, Goldsby, & Cooper, 2003).

The chapter presents some results comparing responses to conventional survey methods with online survey methods involving participants with a common focus.

### BENEFITS OF WEB-BASED SURVEYS

According to Perkins (2004), the benefits of Web-based surveys are

- **Instrument**
  - permits text, image, and sound
  - possibility of filtering questions
- **Sampling:** Can access larger and geographically broader samples
- **Human Resources:** Requires less resources, for example, no photocopying, folding, coding, verifying
- **Time Resources:** Improved, survey available 24-7, and shorter delivery time
- **Material Resources:** Requires less materials, for example, paper and stamps
- **Reduced Costs:** Less human and material resources required
- **Analysis**
  - Direct transmission of data, including coding and analysis
  - More complete replies to open-ended questions
  - Potential for customized feedback

Larger sample-size availability and time efficiencies were also supported by Eaton and Struthers (2002) and by Roztocki and Lahri (2003). Benefits such as reduced costs have been widely recognized by other authors in literature (Cobanoglu et al., 2001; Coderre, Mathieu, & St-Laurent, 2004; Eaton & Struthers, 2002; Griffis et al., 2003; McDonald & Adam, 2003; Roztocki & Lahri, 2003; Wilson & Laskey, 2003). These cost savings can increase significantly in larger sample sizes, for example, 500 plus (Cobanoglu et al., 2001; Wilson & Laskey, 2003).

In Web-based surveys, there is improved data capture and analysis because there is no need to enter the data manually. With manual data entry, there are risks of input errors (Griffis et al., 2003). Web-based surveys can be useful when traditional data collection methods are not feasible, for example, sensitive issues (Eaton & Struthers, 2002), or for targeted groups such as teenagers and business people (Wilson & Laskey, 2003).

Significant timesavings through response speed were identified in most literature (Cobano-

glu et al., 2001; Griffis et al., 2003; McDonald & Adam, 2003; Mehta & Sivadas, 1995; Sheehan & McMillan, 1999) except for Tse et al. (1995), who found no significant differences in response speed when the delivery methods were timed so that the participants received the surveys at the same time.

Another benefit mentioned by Griffis et al. (2003) and Cobanoglu et al. (2001), when comparing methods within a targeted group, was an improved response rate for Web-based surveys over mail surveys. Researchers consider response rate very important because a high response rate increases confidence in the survey's accuracy and thus, generalizability (Cobanoglu et al., 2001). In regard to improved response rates, however, many other authors in the literature disagreed. Dommeyer et al. (Dommeyer, Baum, & Hanna, 2002), McDonald and Adam (2003), Mehta and Sivadas (1995), Sheehan and McMillan (1999), Tse et al. (1995), and Wilson and Laskey (2003) all mentioned paper-based surveys as having a better response rate in comparison to Web-based surveys. Given the importance of the response rate to research, lower response rates are a major concern.

Response rates have been improved when a "mixed mode" (traditional data collection methods and Web-based combined) is used (Cobanoglu et al., 2001). There is even more improvement when the researcher combines the "mixed mode" with prenotification of the survey (Mehta & Sivadas, 1995; Sheehan & McMillan, 1999).

## **Issues Involving Web-Based Surveys**

One of the main issues is the lower response rate with Web-based surveys. This problem could worsen once the "novelty" of the Web survey wears off (McDonald & Adam, 2003).

Another way of increasing response rates is to include some form of incentive, but this is more

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