

# Chapter 50

## Internet Surveys: Opportunities and Challenges

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### ABSTRACT

*Internet surveys offer important advantages over traditional survey methods: they can accomplish large samples within a relatively short period of time, questionnaires may have visual and navigational functionalities impossible to implement in paper-and-pencil questionnaires, data is more efficiently processed since it already comes in electronic format and costs can be lower. But the use of the Internet for survey purposes raises important concerns related to population coverage, lack of suitable sampling frames and non-response. Despite its problems, Internet-based surveys are growing and will continue to expand presenting researchers with the challenge of finding the best way to adapt the methods and principles established in survey methodology to this new mode of data collection in order to make best use of it.*

*This chapter describes the positive features of the Internet for survey activity and examines some of the challenges of conducting surveys via the Internet by looking at methodological issues such as coverage, sample selection, non-response and data quality.*

### INTRODUCTION

Over the last ten years the use of the Internet has expanded into nearly every aspect of society, and survey research is no exception. Today, Internet-based surveys are used in a wide range of areas

both within science and also public and private organizations.

E-mail offers the possibility of nearly instantaneous transmission of surveys to recipients and avoids any postal costs.

The web provides an improved interface with the respondent and offers the possibility of multimedia and interactive surveys containing audio and video. The web also offers a way around

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the need to know respondents' e-mail addresses if convenience samples are found that meet the survey objectives. All of this has contributed to surveys becoming increasingly popular and widespread on the web.

However Couper (2000) alerts that Internet surveys are a double-edged sword for the survey industry. On the one hand, the power of internet surveys is that it makes survey data collection available to the masses. Not only can researchers get access to hitherto impossible numbers of respondents at lower costs than traditional methods, but virtually anyone of the general population can place survey questions on appropriate sites that offer free services, thus collecting data from potentially thousands of people. The ability to conduct large-scale data collection is no longer restricted to organizations. The relatively low cost of conducting internet surveys essentially puts the tool in the hands of almost every person with access to the Internet so that it potentially fully democratizes the survey-taking process.

On the other hand, a possible risk of internet surveys is that with the proliferation of such surveys it will become increasingly difficult to distinguish the good from the bad. Well designed, high-quality internet surveys may very well be overwhelmed by the mass of data gathering activities on the web. In short, although it may get systematically easier to conduct internet surveys (both cheaper and quicker), it may become increasingly difficult to carry out good internet surveys (as measured by accepted indicators of survey quality).

This chapter describes the positive features of the Internet for survey activity and examines some of the challenges of conducting surveys via the Internet by looking at methodological issues such as coverage, sample selection, non-response and data quality. The chapter is organized as follows. The next section presents an overview of the most common types of internet-based surveys currently being implemented. This is followed by a discussion of opportunities and challenges posed by the internet on survey activity. The future of internet

surveys is then discussed before summarizing the main conclusions.

## TYPES OF INTERNET SURVEYS

The essential idea of an "internet-based" survey is either 1) rather than mailing a paper survey, a respondent is given a hyperlink to a web site containing the survey – web survey - or, 2) a questionnaire is sent to a respondent via e-mail, possibly as an attachment – e-mail survey. However this is only the baseline idea because diversity is the key characteristic of internet-based surveys. Unlike other modes of data collection, where the method tells us something about both the sampling process and the data collection method, the term "internet survey" is too broad to give us much useful information about how the study was conducted.

In an effort to classify the most common types of internet-based surveys, Couper (2000) and Fricker Jr, (2006) have suggested a division based on the type of sampling methods – probabilistic or non-probabilistic - and the most generally used internet-based survey mode – the web or the e-mail.

The main distinguishing feature between probabilistic and non-probabilistic selection in internet surveys is whether or not the individual is left to choose to participate in the survey ("opt-in"). While in probabilistic selection the respondent is selected by a random procedure established by the survey researcher, for non-probabilistic selection, either a convenience sample is drawn or the survey is distributed/advertised in some manner and it is left up to those exposed to the survey to choose to opt in. Table 1 contains the main types of internet-based surveys and is followed by a brief description of each type of survey.

### List-Based Surveys

This type of survey is conducted in the same way as a traditional survey using a sampling frame. Simple random sampling in this situation

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