Web Surveys for IS Research: Opportunities and Hindrances

José Esteves - Univ. Politècnica de Catalunya, Barcelona, Spain, jesteves@lsi.upc.es
Joan Pastor - Univ. Internacional de Catalunya, Barcelona, Spain, jap@unica.edu
Josep Casanovas - Univ. Politècnica de Catalunya, Barcelona, Spain, josepk@fib.upc.es

Conventional surveys have been widely used for Information Systems (IS) purposes (Newsted al. 1998), and ISworld (http://www.ucalgary.ca/~newsted/surveys.html) has a useful site with information on this type of survey as a data collection technique for IS research purposes. Several researchers have described the benefits of using surveys in IS research, such as Galliers (1992), who thinks that surveys can be used to provide "a reasonably accurate description of real world situations from a variety of viewpoints". All of a sudden, along with the explosive growth of the WWW, a new kind of survey, Web surveys, are everywhere on the Internet. And it is not the case that survey professionals and large organizations are the only ones conducting surveys on the Web (Couper 2000). In 1999, in an informal search of Yahoo, Kay and Johnson (1999) identified over 2000 Web surveys in 59 different areas. The problem is that most of these Web surveys were not serious wrt. quality and rigour criteria and lacked any form of methodological approach.

The advantages of rigorous Web surveys have been quite well documented in the recent literature (e.g. Couper 2000, Dillman and Bowker 2001, Simsek and Veiga 2001, Schonlau et al. 2001). Couper (2000) stated that there is speculation on whether Web surveys will replace traditional methods of data collection. Data that had once been collected by other survey modes is now being collected with Web surveys (Dillman and Bowker 2001). Web surveys have their unique characteristics compared with other survey modes: Web surveys are self-administered questionnaires; navigation and flow are particularly important; respondents have control over how and even whether they read and comprehend each question; Web survey participants are less likely to take extreme positions in their responses than conventional survey respondents; Web surveys provide much more functionality opportunities and flexibility wrt. many issues, such as variety in design, question structure, layout, and proactive interaction.

However, so far little attention has been given to the use of Web surveys as a research tool in the mainstream IS literature, and thus, for the time being, Web-survey-based research efforts lack the same level and amount of guidance that is available to traditional paper survey designers, where there is a rich history of methodological research (Lang 2002). So far the methodological issues of Web surveys are poorly understood, even with the high level of interest expressed by many researchers in this technique (Lang 2002). Our study addresses the use of the Web survey technique, especially in IS. Based on literature review and in a practical and comprehensive case carried out by the authors, we attempt to identify the main interesting issues of this technique for IS research, while providing some emerging guidance related to its application.

We have focused the domain of our practical experience case on the clarification of the project sponsor and project manager roles in ERP implementation projects. We followed a qualitative research approach to answer the associated research questions. The reason to choose qualitative research was due to the fact that the main concerns of this research were organizational rather than technological. We started the research by reviewing the related literature and then we created a Web survey based in the appropriate research questions. The reasons for the Web survey choice were the low cost of this technique and the fact that it was the easiest way for us to access experts in the field and gather responses fast. Two new issues arose on our study: Web survey advertisement, and data collection timeframe. Our exploratory findings show the importance of a long period for data collection and the need to advertise the Web survey several times along the timeframe in order to achieve good response rates. From this experience and the background knowledge gained, we may now present some considerations regarding opportunities and hindrances in designing and conducting Web surveys particularly in IS domains, as well as drawing some implications for IS research.

We will also discuss on the use of Web surveys for enhance business case teaching effectiveness, for example by using ad-hoc Web surveys for planning, scripting, writing and discussing business cases, as well as for enriching teaching notes and business case teacher preparation.