How To Implement Online Surveying And A Comparison With Traditional Surveys

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Abstract

This paper is divided into two parts. The first part will discuss the techniques needed to implement a web-based survey. Part two will present the results that the authors have obtained using web-based surveying verses the traditional return by mail/fax surveys.

A number of issues need to be addressed before a web-based survey can be implemented. Those issues are: selection of an Internet Service Provider, selection of server software, selection of Web creation software, building the web site, creating the form, and linking the website to a database.

The authors have conducted five major surveys over the last three years. The last three surveys have given the respondents the option of filling out the survey and mailing/faxing it back or responding online. The results reveal a bias against the web. We will discuss some of the reasons we believe this to be the case.

1. Motivation

bout four years ago, one of the authors started a research project investigating Strategic Alliances in various industries. His initial work involved the Food and Beverage Industry, and the Executive Recruiting Industry. Over eleven hundred surveys were sent and one hundred and fifty seven responses were received.

Industry	Surveys Sent	Surveys Received	
Food and Beverage	500	50	
Executive Recruiting	605	107	

Each survey was three pages long and contained twenty-two questions, many with multiple parts. Due to the lack of institutional support, the data was entered into an Excel spreadsheet by the authors. After many hours the data was ready to analyze. A more efficient methodology was sought.

2. Surveys

Surveys are usually conducted by interviewing a subject or having the subject fill out a form. This paper will focus on the form survey.

The surveys the authors conducted were mailed to the subjects. Conducting this type of survey can be a long and tedious task. Mailing lists need to be compiled. Surveys need to be developed. Cover letters must be written. Both the survey and letter need to be duplicated and placed in envelopes. Envelopes must be addressed and

stamped. Returned survey data needs to be entered into a database. On occasion the aforementioned tasks need to be done two or three times, to insure a sufficient sample size to make the survey results statistically significant.

There are a number of techniques that could be used to simplify the process. Mailing lists can be purchased. To simplify the data entry process, the survey results could be written on a scantron form. Unfortunately, the address databases might not be readily available. Not all surveys lend themselves to scantron forms.

Recently, a number of researchers have begun to use email to conduct surveys. The mechanics of sending out a mass emailing is a relatively simple task. But, email has its shortcomings. Depending on your subjects, it may be difficult to compile a database of appropriate email addresses. Getting people to respond is difficult. If the survey is contained in an attachment, people may be apprehensive to open an attachment from an unknown source that may contain a virus. People may be leery of clicking on a link to go to a web site that has the survey. Finally, there are people who will not open the email sent by an unknown addressee.

Linking the email to a web-based form and having the responder fill out a form online simplifies the data entry task.

Two years age the authors decided to investigate the state of Strategic Alliances in the Health Care and Chemical Industries. A similar surveying instrument was developed. Due to our prior experience, it was decided that the responders would have a choice of returning the survey via the mail, by faxing, or by filling the out the survey on line.

It was hoped that most people would respond to the survey online. The advantage of an online response is that the web form can be linked to a database. This eliminates the need for data entry, saving an inordinate amount of time.

To conduct the surveys a form letter and survey were created, and mailed to corporate executives. Each firm was assigned a code. If the firm decided to respond by mail or fax, they were required to place the code on the survey form. If they preferred to respond via the web, they went to our web site *www.tsarg.com* where they were directed to the survey page for their industry. They were asked to enter the code that was supplied with the form letter. The codes were used for verification purposes.

3. Creating the web form

In order to survey online, a web site is required. To create a web site to conduct a survey you the need the following: A host, a web server that allows database connectivity, a tool to create web sites, and database management software.

There are a number of ways to create a web site. Many Internet Service Provides (ISP's) provide space on their servers for their subscribers to put up web sites. Very few supply the tools that enable the subscriber to link a form to a database. One way of solving this problem is to use an ISP that provides a static Internet Protocol (IP) address. IP addresses can be static or dynamic. If the address is dynamic, every time you link to the Internet your machine will have a different IP address. If it is static, the IP address will always be the same. You can access your site by typing in the IP address (http://xxx.xxx.xxx.xxx) in the address bar of your browser. Or you can register the address and a name with a company like REGISTER.COM. To access the site, one needs to type http://www.yourname.com in the address bar of the browser.

Once you have a static IP address, you are ready to create the site. For someone to access your web site, you must be running a web server. Microsoft includes a personal web server with all their operating servers. If you are running Windows 98, ME or XP, go to help and look for the personal web server (PWS). Install the PWS and install the Front Page Extensions. This will allow you to link the form with a database.

To build the web site you need a development tool. One such tool is Microsoft Front Page. It comes packaged with Microsoft Office Professional Version, or it can be purchased separately. Sun Micro Systems provides free web development tools for faculty and students.

Front Page is similar to Microsoft PowerPoint. With Front Page you can create tables and forms. To create a form, go to insert on the menu bar, scroll down to form and over to one line text. Depending on the type of responses to the survey that you want, you can choose: one-line test boxes, scrolling text boxes, check boxes, radio buttons, and drop down menus. Each one of theses choices can be linked to a field in a database. Use the form property to link the form to a table in the database, and the object property to link to a field in the table. Create a Microsoft Access database. Use the form property to link the form to a table in the database, and the object property to link to a field in the table.

Afterwards the information collected can be imported into a Microsoft Excel spreadsheet or SPSS that a statistical analysis could be performed.

4. Our Experience

Three surveys have been conducted that allow responses by mail, fax or online. Unfortunately our online response rate has been dismal. For the Health Care Strategic Alliances survey we sent out nine hundred and forty surveys. Ninety-seven responded via mail/fax and eight responded via the web site. For the Chemical Industry we sent out two hundred and thirty seven surveys. Nineteen responded via Mail/Fax and no one responded using the web site. For the Financial Industry we sent out four hundred and twenty four surveys. Twenty-one responded via Mail/Fax and there were no responses using the web site.

Industry	Surveyed	Mail/Fax Responses	Online Responses
Health Care	940	97	8
Chemical	237	19	0
Financial	424	21	0

Most of the responders were Chief Executive Officers and Chief Operating Officers. They may have found it easier and more efficient to fill out the survey by hand rather than going to a web site, navigating the site and responding online. Another possibility is that answering mail and using the Internet are disjoint functions. People receiving the survey in the mail are not going to stop what they are doing to go to a web site to fill out a form. The request is never met. If the request to fill the survey was emailed to the executive, a better response could be expected. Or the reason could be that assistants use the Web, not the executives.

5. Conclusion

The authors are preparing another study this summer. We are trying to create an incentive or motivation so that the survey is completed online, thereby shortening the data input process.

Notes