

Harnessing Internet-based Innovations in Market Research for Higher Education

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As a research-based consulting firm serving educational institutions and associations, Maguire Associates has applied innovations in market research, analysis, and predictive modeling throughout our 20 years of existence. In the area of market research there have been many advances, one of the most substantial over the past decade being the dramatic movement toward Internet-based data collection.

As with most paradigm shifts, adherents to the more traditional approaches of phone and mail surveys have been skeptical about the validity of data captured via the Web. Yet, despite its detractors, the advantages of on-line data collection methods (e.g., speed of data acquisition, 24-hour access, and cost efficiencies) and the narrowing technology gap among critical portions of the population have made the Internet an increasingly more desirable and popular medium for administering surveys.

A Five-Year Perspective

Approximately five years ago, after operating a calling center for many years, we were finding it increasingly difficult to get important target audiences (e.g., prospective college students) to answer their phones and complete lengthy surveys. Moreover, the cost per completed phone survey was rising substantially due to falling response and completion rates and a limited pool of qualified interviewing staff.

As a result of these challenges, we began using the Internet for data collection and enjoyed immediate success doing so. Since then, we have conducted many research projects using Internet-based data collection methods for many different types of institutions (i.e., secondary schools, private and public colleges and universities, and technical schools) and for a number of audiences (e.g., prospective and current undergraduate students, their parents, prospective and current graduate students, adult learners, and alumni).

Early in our transition to Web-based data collection, we wanted to understand the impact this new data collection method had on response rates, demographic compositions of samples, and the quality of data in comparison to traditional phone and paper-and-pencil methods. In 2000, a New England liberal arts college, for whom we were conducting prospective student image research, permitted us to divide the research sample into phone, mail, and Internet survey groups. Additionally, as we suspected that financial incentives would be required in the absence of an interpersonal recruitment process, we varied the monetary incentive offered in the mail and Internet groups (\$0, \$5 or \$10). The provocative findings prompted us to write a paper and present these results at the 12th Annual Symposium for the Marketing of Higher Education. The data from this study helped set the stage for our moving forward, and subsequent analysis of and experience with Internet data collection have led to some invaluable insights.

Sample Composition. We have typically found that the demographic compositions of final survey samples collected using on-line methodologies are comparable to those of their original populations. Similarly, in our 2000 research, comparable demographic compositions were obtained across the three data collection methods. However, one difference we did find was that, while female students participated at higher rates across methods, male students were more likely to participate on-line than by phone or mail. This tendency is of great benefit, as male students are often underrepresented when data is collected via traditional means.

Data Integrity. Over the last five years, we have found the quality of data collected on-line is not inferior to, and in some cases surpasses, that collected via other methods. While most variables in the 2000 study were unaffected by the method by which the data was collected, there are three notable exceptions.

First, **quality ratings** for the sponsoring college were lower when assessed by Internet or mail rather than phone. These results reinforce the existence of a demand characteristic at play in phone methodology (i.e., to be more positively predisposed) in comparison to less personal methods of contact. In our on-line research over the last five years, we have consistently found institutional evaluations to be lower in data collected via on-line surveys than in data collected via phone surveys. We believe the lower ratings are a truer reflection of the participants' impressions.

Second, we found the quality and breadth of **open-ended responses** were enhanced by the Internet and mail methods. Telephone interviewing tends to result in less rich data as Internet and mail survey respondents have more time to reflect when responding. Further, the ability to include "Comment" sections without character limits in on-line surveys also allows research subjects to express opinions at their own pace and in their own words. In short, we have found that open-ended questions are easier to administer and result in feedback that is superior when collected over the Internet.

Finally, although the three groups placed similar levels of importance on academic quality, finances, and an institution's location, Internet participants rated **social variables** as somewhat less important. As a result, the Internet may increase participation rates among persons who may be reticent about participating in phone surveys.

Response Rates. As we expected, incentives greatly elevate on-line response rates and are a necessary component to sufficiently recruit some constituencies. In our experimental design, when no monetary incentive was offered, the participation rate achieved via phone (11%) was twice that by mail or Internet (5% each). However, data collected by phone was approximately 70% more expensive per completed survey than that obtained by mail or Internet. Response rates tripled for both mail and Internet samples when a \$5 incentive was offered, and increasing the incentive to \$10 further elevated response (mail: 15% to 29%; on-line: 15% to 22%). Even with incentive payments included, the cost for each successfully completed participant was substantially lower in the mail and on-line conditions when compared with the phone group.

In our research, we tailor participation incentives to the population. Strategies we have employed include per survey payments (as in the 2000 study), sweepstakes' drawings, and non-monetary as well as monetary awards. The use of the on-line medium, paired with these incentives, has allowed us to collect large samples cost-efficiently – and larger sample sizes bring increased power to our analyses. However, Internet response rates are also affected by a number of other factors, including the timing and length of the survey, type of audience (e.g., internal versus external to an institution), type of institution, and subject matter.

The Future of On-Line Data Collection

While our analyses and experience point toward an optimistic outlook for the value and validity of Internet-based data collection, great care must be taken in maintaining the integrity of its application. The following are just some of the future challenges on-line research faces:

- As legislation curbs telemarketers through no-call lists and other regulatory measures – prompting even legitimate research efforts to struggle in the wake of this movement – so too looms the “anti-spam” movement. How, if at all, this new movement will affect the recruitment of survey participants is currently unknown.
- On-line methodologies continue to be inappropriate for some populations. For example, older audiences (e.g., adult learners and college alumni) are more likely to complete a paper than Internet survey.
- The growth of Internet-based research has spawned companies with a wide range of research expertise, and “do-it-yourself” software options allow even a relative novice to administer an on-line survey. However, the ability to devise and execute well-designed questionnaires, in most instances, requires a solid background in market research and methodology to yield optimal value.
- The increasing access to research populations via the Internet and the formation of on-line research “panels” runs the risk of inundating and saturating potential survey participants. The popularity of on-line data acquisition may be its undoing.

In sum, Internet-based surveying clearly offers considerable benefit in conducting market research with various constituencies, including higher education audiences. Improved speed and cost-efficiency of on-line methodologies suggest great opportunities for researchers without sacrificing quality. Conversely, the minimally intrusive, 24-hour access and self-pacing capability are advantageous to survey audiences. Internet-based surveying has proven to be an effective means for colleges and universities to obtain the information they need to advance their mission, strengthen their reputation, and enhance the vitality and health of their institutions.