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Conducting Online Research

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The Growth Of Online Research

Marketing researchers' use of the Internet is exploding. The newsletter Inside Research, which has been surveying firms to track the amount of money spent on online research efforts, estimates that less than \$3 million was spent in the United States in 1996. By the year 2001, Internet research was a global phenomenon with estimated spending of more than half a billion dollars.

Some types of online marketing research are pure products of the Internet era:

- measurement of Web site audiences and surfing activity;
- testing of the effectiveness of online advertising; and
- gauging reactions to Web sites themselves.

A growing majority of online marketing research efforts, however, represents a migration of more traditional research activities, such as:

- qualitative research;
- concept testing;
- customer satisfaction studies; and
- other types of quantitative surveying.

Companies Conducting Online Research

Inside Research estimates that in the United States, 79% of Internet research spending is devoted to better understanding of attitudes and activities of consumers, while 21% is spent on business-to-business efforts. Major companies that have talked about their Internet research efforts at industry conferences include firms devoted to the Internet, such as Expedia and Yahoo!, and such high-tech companies as Intel, Microsoft and Sun Microsystems.

Online research is not confined to these types of organizations, however. Consumer packaged good giants like Procter & Gamble, Kimberly-Clark and Kraft are also conducting Internet research. General Mills, in fact, was using online methods for 80% of its research by the end of 2001.

Types Of Online Research

Web Site Behavioral Research

Web site behavioral research is an entirely

new field that has developed in the Internet age. It derives in part from software usability testing. Many labs now offer the ability to do usability testing on Web sites before they are officially launched. In these labs, researchers can observe study participants as they navigate their way through pages. Some offer the ability to track participants' eye movements and offer quantitative findings on where they gazed.

Other Web site behavioral research concentrates on the click-stream behavior of Web surfers on active sites. Log-file analysis involves examining how people have moved through a company's Web site and the information they have entered on the Web pages. Independent companies exist that will audit these log files (and help analyze them) so that would-be advertisers can be sure that sites receive as many hits as their promoters claim.

Other organizations have created panels of people with Internet access who have agreed to let software on their computers record how they move through the Internet. Some Internet service providers are now also collecting this data from their customers, as are companies that have set up proxy servers that panelists use in return for faster access to Internet material collected on them.

Online Qualitative Research

Types of online qualitative research include online focus groups and bulletin boards. Online focus groups are timed, moderated chat sessions that can bring together geographically dispersed respondents. Online bulletin boards allow respondents to provide input on their own schedules over longer periods of time.

Compared to moderated, in-person discussions, online focus groups will tend to generate about 75% as much content in the same period of time. Of course, the quality of the input is largely dependent upon the typing speed and skills of the participants. There is evidence, however, that there is less of a problem with group dominators in online focus groups than

there can be with in-person sessions.

Technology also allows participants to examine multimedia stimuli online during focus groups. In addition, quantitative instruments can be used in conjunction with online focus groups, so that participants can provide survey input then immediately see how their opinions compared to others' in the group.

A clear advantage of online focus groups is that electronic transcripts are available immediately

when groups are complete. The Internet can also be a useful tool for disseminating the results of traditional focus groups. Several organizations offer the capability to provide secure, live broadcasts of in-person groups over the Web.

Online Survey Research

The move from traditional methods of surveying to online surveying has come largely because companies have found the Internet reduces the time and cost of completing studies. General Mills, for example, has concluded that using online methods has reduced the time it takes to complete a typical survey by two-thirds and has produced an average cost savings of 50%.

A study conducted by Thomas Miller and Abhilasha Gupta at the University of Wisconsin's A.C. Nielsen Center for Marketing Research tells a similar story. More than 300 research providers and users responded to their survey. These research experts said that — compared to traditional methods such as face-to-face, telephone, mail and mall surveys — online research:

- has a lower total cost;
- has a lower cost per respondent;
- is speedier;
- can reduce interviewer bias; and
- makes it easier to examine data as they are collected.

People also would prefer to take surveys over the Web. Burke Interactive has found that when given a choice between taking a telephone survey or an Internet survey, as many as 90% of people with Web access will say they would rather participate via the Internet.

In one parallel Burke study, the same survey was administered over both the phone and the Web, with people randomly assigned to take a particular version. The people taking the study online were significantly more likely to indicate that they definitely would participate in similar research in the future.

One reason might be because Web surveys generally take respondents less time. In the parallel study, a survey that took, on average, 19.4 minutes to complete over the phone took those responding online an average of just 12.5 minutes.

It is not always faster, however, to go through an online questionnaire: A survey that asks respondents to type in answers to a lot of open-ended questions can tend to take more time than the same survey administered via the phone.

Concerns About Online Research

Many researchers are concerned about potential security risks that can occur when new product concepts and designs are presented online to survey respondents. Techniques can be used to make it harder to copy online images, but no approach to securing survey materials is fool-proof for online or traditional research efforts.

Respondents in the recent University of Wisconsin study of research providers and users also gave online research relatively low marks for:

- The quality of open-ended responses and the relative inability to probe survey respondents for clarification. This is a matter of some debate, however. Many online studies have resulted in very rich verbatim comments.
- The difficulty verifying the identity of online respondents. Although imposters can also participate in research administered through more traditional means, some believe that the relative anonymity provided by the Internet makes it more likely that people will fill out online surveys untruthfully.
- The lack of representativeness of the individuals who will respond to online research.

Lack of Representativeness

Whether data collected online is representative of target populations has, in fact, been an area of intense study by practitioners.

There are certainly justified concerns about online polls using volunteers who respond to a banner advertisement or "Take a Poll" button at a Web site. Such surveys often suffer from intense self-selection bias.

One recent online poll, for example, collected more than 10,000 responses. When this many people respond to scientifically designed surveys, researchers generally have great confidence that the results they get are very close to what they would find if they polled everyone in the population they are seeking to represent. This poll, however, showed that 57% of respondents accessed the Internet via broadband connections at a time when scientifically designed research showed that only 12% of U.S. individuals with Internet access used such connections.

Even well-designed online research, however, can misrepresent a population. Although a majority of Americans now have access to the Internet, a sizable minority do not. There is no way to tell for sure how people without Internet access think about questions by surveying individuals with Internet access.

Surveys consistently show, for example, that, compared with the general U.S. population, people with online access tend to be:

- younger;
- better educated;
- wealthier; and
- more inclined to own technology products.

This issue of coverage error is even greater for international research, as Internet penetration in most countries lags behind the U.S. rate.

Even if the population that one wants research to represent is limited to individuals with online access, data obtained from online research can be misleading. People who are willing and able to complete a Web questionnaire are likely to be more sophisticated users of technology than are all people with access to the Internet.

Studies have shown that, compared to people with Internet access responding to surveys administered through traditional methods, those responding to parallel online surveys:

- tend to spend more time each week on the Internet; and
- participate in a wider variety of online activities.

Efforts to overcome coverage error can include weighting data. A multi-mode research approach would allow people without Internet access to be included in the sample source.

Many proponents of online research, however, argue that traditional research methods also suffer from serious problems as well, and that the shortcomings of online research are not much worse. They point out that:

- the percentage of people contacted who decline to respond to telephone and mail surveys continues to increase for the industry as a whole; and

- productivity continues to drop for marketing researchers based in shopping malls.

Many studies presented at industry conferences show that, even without weighting, responses to well-designed online surveys on a wide variety of topics will very closely match what can be obtained through offline methods. It is argued that, given the cost, timing, and other benefits of online research, there is no reason to avoid using the Internet for such projects.

Survey Design

There are two generally conflicting schools of thought when it comes to Web survey design:

- Survey designers should try to keep respondents engaged by taking full advantage of the capabilities of Internet.
- Every extra "cool feature" that can be inserted into a Web survey has the potential to make the survey slower to download and less likely to function for some potential respondents.

One area of agreement among online researchers is that shorter survey lengths reduce the percentage of respondents who drop out before completing the survey. Internet attention spans tend to be short, and long surveys might especially encourage people with slow connection speeds to drop out. If researchers decide to give respondents guidance about how long a survey will take, they should honestly report average speeds for people with dial-up connections.

New Capabilities

There are certain Internet capabilities that certainly are an advantage to researchers. Respondents to the recent University of Wisconsin study of research providers, for example, indicated a high level of satisfaction with the use of online methods for discrete choice studies.

Choice studies ask consumers to pick among a set of sometimes complex product configurations. To conduct such a study via the telephone, respondents typically had to be mailed a set of materials to look at ahead of time. Researchers also had to employ experimental design techniques to create a very limited set of choice tasks. Using the Internet allows for more complex exercises and truly randomized design.

The Internet also lets researchers present respondents with visual stimuli in a way that could not be done over the phone. Testing of video and multimedia presentations is even possible, especially among the growing percentage of Internet users with broadband access. Of course, limiting the population surveyed to those with high-speed connections can increase the problem of coverage error.

Multi-Mode Research

Simple Web survey design can be especially appropriate when online surveying is combined with traditional methods for a particular study. In these cases, using all the bells and whistles available through the Internet might induce respondents taking online surveys to respond differently from how they would through a mail questionnaire or telephone interview. The results obtained through different methods would thus be less comparable.

Combining study methods could be a viable option in the following situations:

- in international studies when Internet penetration in some countries is low;
- any other time when individuals without Internet access are a key part of the population to be studied; or
- when researchers want to do follow-up phone calls among people who did not respond to e-mail invitations. Such calling might reduce non-response error. (Non-response error occurs when the opinions of those initially responding to a questionnaire differ from the opinions of those who do not respond.)

When researching opinions of important customers or other key organizational stakeholders, companies might also want to provide them the option to respond by whichever method is most convenient for them. This could mean, for example, sending out mail surveys, but including on the questionnaire a Web site address, or URL, where respondents could also go to provide their feedback.

Scales and Question Issues

Burke research has shown that responses to questionnaires can differ based solely on the survey method. For example, when a response scale is used in which every option has a verbal description, telephone respondents are more likely to use the extreme responses than those filling out the survey online. This is not the case, however, when numerical scales are used.

Check-all-that-apply questions can also create response differences in telephone and online survey combinations. On the telephone, survey respondents generally respond to the options one at a time after they are read by an interviewer. On Web surveys, respondents are more likely to “satisfice” by clicking a few options, then proceeding on to the next screen.

The use of “don’t know” responses is another problematic area for multi-mode research. In telephone research, a “don’t know” option is generally not read to respondents, but can be accepted when it is volunteered. If a “don’t

know” option is shown on Web survey screens, the percentage of respondents choosing it tends to be much higher than for phone research, especially on sensitive issues.

Generating Samples For Internet Surveys

Web Site Intercepts

Although simply putting a “Take a Survey” button on a Web site can produce very misleading results, interstitial pop-up windows, which more actively intercept Web site visitors by putting a survey invitation in a daughter window, can improve survey response rates and reduce self-selection bias.

Pop-up windows can appear when people are arriving at certain Web pages or when they are leaving a particular server. If companies do not want to interview every site visitor, a selection process can be used so that only every Nth visitor is selected to receive the survey. A site can also place cookies on site visitors’ computers so that it is less likely that they will be bothered by repeated survey invitations.

This respondent recruitment method can be a good alternative whenever the population to be studied is visitors to a particular Web site.

Panels and E-mail Lists

Many companies have also assembled panels and lists of individuals who can be e-mailed invitations to participate in online surveys. Panels differ from lists in the following ways:

- They typically recruit potential survey participants from a wider variety of sources.
- They tend to contact potential survey respondents more frequently.
- They tend to have more information about potential respondents on file.
- They try to forge ongoing relationships with panelists, which may mean more restrictions on what surveys can ask, how surveys must appear and what sort of incentive must be offered.

Panels also tend to get higher response rates from survey invitations than e-mail lists. Response rates for lists, in fact, can fall well below 10%. Nevertheless, lists can provide a cost-effective way to reach populations that might be hard to find any other way. Lists compiled by health-oriented Web sites, for example, might be good ways to reach people who suffer from a certain disease.

It should be noted that there is considerable overlap in online panel membership. A December 2000 study conducted by McKinsey & Company found that, among people with

Internet access contacted by telephone, almost two-thirds (65%) did not belong to any online panels and 11% indicated that they belonged to just one. On the other hand, 8% belonged to two, 7% belonged to three and 9% said that they belonged to four or more.

Avoiding Spam

Companies using list providers or panelists should work to ensure that all individuals to whom they will be sending invitations have agreed to receive e-mails. The marketing research community has issued standards designed to prevent the use of unsolicited e-mails — also known as spam — to recruit respondents for surveys.

The Council of American Survey Research Organizations (CASRO), for example, requires that its member firms verify a substantive pre-existing relationship exists between the individuals contacted and the list owner (who must be identified).

Companies that do send spam might suffer from retributions from numerous organizations working to protect the privacy of Internet users. A non-profit organization called the Mail-Abuse Prevention System, for example, placed a prominent marketing research firm on its Realtime Blackhole List for allegedly sending survey invitations to people who did not want to receive them. In response, several Internet service providers temporarily blocked efforts by the firm to contact their subscribers.

Using Organizational Lists for Respondents

Organizations wishing to conduct online research can also compile their own e-mail lists of potential survey respondents. Companies engaged in several marketing research efforts a year involving the same population might, in fact, find it useful to create a proprietary panel or online customer advisory board. Such panels can be recruited in the following ways:

- using opt-in boxes on company Web site registration areas;
- intercepting Web site visitors;
- collecting e-mail addresses and permission during offline research efforts; or
- through advertising and public relations efforts.

Setting Up E-mail Invitations

Typically, a survey invitation e-mail will include a URL that can be clicked on or cut and pasted into a browser address box to take respondents to a survey welcome screen.

To control access to the survey, invitations can be set up so that each potential respondent is assigned a unique URL that can be used only once. Invitations can also be sent with unique

passwords that must be entered into a log-in screen. E-mail invitations should be as short as possible, with a subject line that conveys the general purpose of the research.

CASRO standards require that individuals be given a choice to be removed from future e-mails in each survey invitation and prohibit the use of false or misleading return e-mail addresses. It's a good idea to include real offline addresses and phone numbers that invited individuals can contact if they have questions or encounter concerns.

Invitations should never be sent out in ways that would allow potential respondents to see (or reply to) the names or e-mail addresses of others invited to take the survey.

In general, a majority of the responses received will arrive in the first 48 hours after sending out invitations. It is, however, advisable to keep surveys open for at least a week. Different types of people might respond to surveys at different times of the week. For example, weekends generally generate a lot of response from individuals using their home computers, but are typically bad times to try to get respondents using work computers.

Reminder e-mails can be useful for generating more survey completions and potentially reducing non-response error. Multiple reminders, however, also have the potential to annoy individuals invited to participate in the survey and some might regard them as spam. Every effort should be made to ensure that reminders are not sent to people who have already completed the survey.

Incentives

To generate the response rate typical of telephone surveys, people generally must be offered an incentive to complete an online survey. Possible incentives include:

- cash;
- online currency and incentive programs;
- drawings and prizes; and
- company offers.

Cash

Direct payments to survey respondents might be the most effective incentive to generate responses. To entice a consumer population to fill out a short (less than 10 minute) survey, payments of only a few dollars will generally prompt a response rate similar to that obtained through a telephone study.

For longer questionnaires and studies of more specialized populations, higher incentives might be required. For certain groups, such

as physician specialists, it might be necessary to offer incentives of several hundred dollars. (Such groups would typically be offered similar incentives to participate in traditional research efforts.)

One problem with cash incentives is that it can be an administrative hassle to collect addresses and mail out checks to respondents.

Online Currency and Incentive Programs
Many online companies offer the option of electronic fulfillment of incentive payments, which can reduce administrative costs. If an organization chooses this option, however, it is important to work with a vendor with a good record of service. If mistakes are made in, for example, the delivery of goods ordered using online currency, the respondent will likely assign some of the blame to the research organization.

Drawings and Prizes

Giving away one or a few major prizes can be less expensive than making cash or online payments to all respondents. Survey administrators should, however, be cautious about violating lottery laws. As a general rule, invited participants should be given instructions about how to qualify for the drawing without actually responding to the survey.

Company Offers

An organization really wishing to economize might try to combine marketing efforts with incentive payments and offer its own products, gift certificates, rebates or coupons as incentives. There is, of course, a risk that such efforts will bias the survey findings by making invited respondents who view the research sponsor more positively more likely to respond to the survey invitation.

Online Reporting

It should be noted that the Internet has transformed more than marketing research data collection. The Web is also changing how research results are disseminated. The electronic delivery of files over computer networks means that fewer binders full of paper need to be passed along.

An even greater paradigm shift is occurring as online analytical processing begins to be more frequently applied to survey research results. (These results need not be from studies using the Web for data collection, either. Findings from research using any data collection method can be delivered via the Web.) Information users are now accessing study data from their desktops and slicing and dicing it over the Internet in ways that most suit their particular needs.

Such online data processing can now be done in real-time, so that information presented on the computer screen might reflect input a survey respondent provided only moments before. For example, continuous tracking of visitor satisfaction with Web sites is now possible, with site strategists able to check on up-to-the-minute survey results 24 hours a day, seven days a week.

The Future Of Online Research

The relatively short history of online research has already produced many changes in what activities researchers can and do undertake. For example, as the novelty of taking surveys has worn off, response rates are dropping, perhaps necessitating increasing incentive payments in order to attract study participation.

Such changes likely will only accelerate. As Fortune magazine has predicted, "The real upheavals of the Network Age are ahead of us."

A few predictions for the coming years:

- The global nature of the Web will become even more important to the research community as Internet connections allow more access to research services and innovation from around the world.
- As software for customer relationship management continues to develop, survey and research reporting applications increasingly will become "baked" into them. A shrinking percentage of marketing research will involve discrete studies managed outside a company's normal course of business.
- The growing use of high-speed Internet connections will increase online survey respondents' capabilities.
- The use of wireless Internet devices will also continue to increase, becoming especially prevalent in countries where penetration of personal computers is low. Specialized survey programs have already been developed for use with wireless devices and will transform the operation of face-to-face surveying.

As more appliances other than computers are used to access the Internet, the concept of online research as one specific branch of marketing research will likely become outmoded. Digital networks will become such a part of intermediated human communication that the idea of conducting marketing research without them will simply become archaic.