



Knowledge Networks Methodology

Introduction

Knowledge Networks has recruited the first online research panel that is representative of the entire U.S. population. Panel members are randomly recruited by telephone and households are provided with access to the Internet and hardware if needed. Unlike other Internet research which covers only individuals with Internet access who volunteer for research, Knowledge Networks surveys are based on a sampling frame which includes both listed and unlisted numbers, and is not limited to current Web users or computer owners.

Knowledge Networks selects households using random digit dialing (RDD). Once a person is recruited to the panel, they can be contacted by e-mail (instead of by phone or mail). This permits surveys to be fielded very quickly and economically. In addition, this approach reduces the burden placed on respondents, since e-mail notification is less obtrusive than telephone calls, and most respondents find answering Web questionnaires to be more interesting and engaging than being questioned by a telephone interviewer.

Panel Recruitment Methodology

Beginning recruitment in 1999, Knowledge Networks (KN) has established the first online research panel based on probability sampling that covers both the online and offline populations in the U.S. The panel members are randomly recruited by telephone and households are provided with access to the Internet and hardware if needed. Unlike other Internet research that covers only individuals with Internet access who volunteer for research, Knowledge Networks surveys are based on a sampling frame that includes both listed and unlisted phone numbers, and is not limited to current Web users or computer owners. Panelists are selected by chance to join the panel; unselected volunteers are not able to join the KN panel.

Knowledge Networks initially selects households using random digit dialing (RDD) sampling methodology. Once a household is contacted by phone and household members recruited to the panel by obtaining their e-mail address or setting up e-mail addresses, panel members are sent surveys over the Internet using e-mail (instead of by phone or mail). This permits surveys to be fielded quickly and economically, and also facilitates longitudinal research. In addition, this approach reduces the burden placed on respondents, since e-mail notification is less obtrusive than telephone calls, and allows research subjects to participate in research when it is convenient for them.

Knowledge Networks' panel recruitment methodology uses the quality standards established by selected RDD surveys conducted for the Federal Government (such as the CDC-sponsored National Immunization Survey).

Knowledge Networks utilizes list-assisted RDD sampling techniques on the sample frame consisting of the entire United States residential telephone population. Knowledge Networks excludes only those banks of telephone numbers (consisting of 100 telephone numbers) that have zero directory-listed phone numbers. Two strata are defined using 2000 Census Decennial Census data that has been appended to all telephone exchanges. The first strata has a higher concentration of Black and Hispanic households and the second strata has a lower concentration relative to the national estimates. Knowledge Networks' telephone numbers are selected from the 1+ banks with equal probability of selection for each number within each of the 2 strata, with the Black and Hispanic strata being sampled at a higher rate than the other strata. Note that the sampling is done without replacement to ensure that numbers already fielded by Knowledge Networks do not get fielded again.

Telephone numbers for which Knowledge Networks is able to recover a valid postal address is about 70%. The telephone numbers for which an address is recovered are selected with certainty; between one-half and one-third of the remainder are subsampled randomly depending on the recruitment period. The resulting cost efficiency more than offsets the decrease in precision caused by the need for sample weights. The address-matched telephone numbers are sent an advance mailing informing them that they have been selected to participate in the Knowledge Networks panel.

Following the mailing, the telephone recruitment process begins for all sampled phone numbers. Cases sent to telephone interviewers are dialed up to 90 days, with at least 10 dial attempts on cases where no one answers the phone, and on phone numbers known to be associated with households. Extensive refusal conversion is also performed. Experienced interviewers conduct all recruitment interviews. The recruitment interview, which typically requires about 10 minutes, begins with the interviewer informing the household member that they have been selected to join the Knowledge Networks Panel. If the household does not have a PC and access to the Internet, they are told that in return for completing a short survey weekly, the household will be given a WebTV set-top box and free monthly Internet access. All members in the household are then enumerated, and some initial demographic variables and background information of prior computer and Internet usage are collected.

As of August 2002, those RDD households that inform interviewers that they have a home computer and Internet access have been recruited to the panel and asked to take their surveys using their own equipment and Internet connections. Points, which can be redeemed for cash at regular intervals, are given to respondents for completing their surveys and take the place of a free WebTV and monthly Internet access provided to other panel households. Additional incentive points may be added to specific surveys to improve response rates or to compensate for longer surveys.

Prior to shipment, each WebTV unit is custom configured with individual email accounts, so that it is ready for immediate use by the household. Most households are able to install the hardware without additional assistance, though Knowledge Networks maintains a telephone technical support line and will, when needed, provide on-site installation. The Knowledge Networks Call Center also contacts household members who do not respond to e-mail and attempts to restore contact and cooperation. PC panel members provide KN with their email account and their weekly surveys are sent to that email account.

All new WebTV panel members are sent an initial survey to confirm equipment installation and familiarize them with the WebTV unit. For all new panel members, demographics such as gender, age, race, income, and education are collected in a follow-up survey for each panel member to create a member profile. This information can be used to determine eligibility for specific studies and need not be gathered with each survey. Once this survey is completed, the panel member is regarded as active and ready to be sampled for other surveys. Parental or legal guardian consent is also collected for conducting surveys with teenagers age 13-17 as part of the first survey.