KNOWLEDGEPANEL®
A Methodological Overview

Rigor:

KnowledgePanel is the largest online panel that is representative of the adult US population. Our recruitment process employs an addressed-based sampling methodology from the latest Delivery Sequence File of the USPS – a database with full coverage of all delivery points in the US. As such, samples from KnowledgePanel cover all households regardless of their phone status, providing fully representative online samples to the research community. This methodological rigor is backed by our experts in survey research methods and applications who work closely with our clients throughout the project execution and delivery. Relying on proper statistical methodologies, survey results from KnowledgePanel samples are often used for government and academic research purposes and publications in scientific journals.

Expertise:

By all measures – clients, services, professionals, and industry recognition – Ipsos is a leading research organization. Relying on an impressive cadre of seasoned statisticians and survey research scientists, our tried and proven methodologies are supported by an organizationally mandated quest for remaining at the cutting edge of research and relevant technologies. Our experts have successfully transitioned a myriad of survey and market research projects from phone and mail modalities to an online data collection alternative via KnowledgePanel. These include the design and administration of longitudinal and tracking surveys with complex reporting needs.

Recruitment:

The recruitment process for KnowledgePanel was originally based exclusively on a Random Digit Dialing (RDD) sampling methodology. In order to improve the representativeness of the panel, however, in 2009 we migrated to an Address-Based Sampling (ABS) methodology for recruitment purposes. This probability-based sampling methodology improves population coverage and targeting, particularly for hard-to-reach individuals such as young adults and minority subgroups. As in the past, we continue to provide a web-enabled device such as a tablet computer and free internet service for adults recruited from households without internet access.

Address-Based Sampling (ABS):

We rely on the most current version of the Delivery Sequence File (DSF) from the USPS for ABS purposes. The DSF-based sampling frame we use for address selection is enhanced with a series of refinements – such as the appendage of various ancillary data to each address from various commercial and government data sources – to facilitate complex stratification plans.[1] Taking advantage of such refinements, quarterly samples are selected using a stratified sampling methodology that aims to retain the representativeness of our panel.

Adults from sampled households are invited to join KnowledgePanel through a series of mailings, including an initial invitation letter, a reminder postcard, and a subsequent follow-up letter. Given that a subset of physical addresses can be matched to corresponding landline telephone numbers, about 5 weeks after the initial mailing, telephone refusal-conversion calls are made to nonresponding households for which a telephone number is matched. Invited households can join the panel by:

➢ Completing and mailing back a paper form in a postage-paid envelope;

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[1] Fahimi, M. and D. Kulp (2009). "Address-Based Sampling – Alternatives for Surveys That Require Contacts with Representative Samples of Households." Quirk's Marketing Research Review, May 2009.
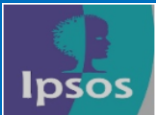
➢ Calling a toll-free hotline phone number maintained by Ipsos; or

➢ Going to a secure Ipsos website to complete the recruitment form online.

While KnowledgePanel is primarily a sampling frame for the US adult population, during the initial recruitment survey, attempts are made to recruit every household member who is at least 13 years of age to become an active member. For teenage household members, consent is secured from a parent or legal guardian, and no direct communication with teenagers is attempted prior to obtaining consent. While surveys can be conducted with teens directly, in most instances teen surveys are conducted by first selecting a sample of active members who are parents. This parent route alternative, while slightly more expensive, makes it possible to reach a more representative sample of teens.

KnowledgePanel Latino:

In 2008, KnowledgePanel Latino was created to provide researchers with the capability to conduct representative online surveys with Hispanics, including those who speak only Spanish. Our members are recruited using a dual-frame RDD sampling methodology targeting telephone exchanges associated with areas with a higher concentration of Hispanics. Households are screened in Spanish to allow recruitment of Hispanics with varying levels of acculturation. These members supplement Hispanics recruited through our general ABS methodology who take surveys in English or Spanish.

Sampling from KnowledgePanel:

Once panel members are recruited, they become eligible for client surveys only after they complete our Core Profile survey which covers individual demographics and household composition. For general population surveys, a representative sample is drawn from the entire panel using our patented weighted selection methodology (see section on sampling design). Customized stratified samples can also be selected to accommodate study requirements by taking advantage of hundreds of data items available for each member through our Core and other profile surveys. The general sampling rule is to assign no more than one survey per week to individual members, but to allow for occasional weeks when certain panel members receive more invitations.

Survey Administration:

Once assigned to a survey, members receive a notification email letting them know there is a new survey available for them to take. This email notification contains a custom link that sends members to the survey questionnaire without requiring any further login or password verifications. Each active member has a personalized homepage that lists all the surveys that have been assigned to that member and have yet to be completed. The field period for surveys depends on the client's needs and can range from a few hours to several weeks. In order to secure high rates of response, however, email and telephone calls are used to encourage nonresponding panel members to partake in surveys they are assigned to. Typically, email reminders are sent after three days and phone calls are initiated about four days later. Ipsos provides a modest incentive to encourage participation and foster member loyalty. Members can enter special raffles or be entered into special sweepstakes with both cash rewards and other prizes. Most surveys take about 10 to 15 minutes, however, for longer surveys an additional incentive is typically provided.

KnowledgePanel Profile Data:

KnowledgePanel provides an efficient tool for probability-based sample surveys of rare subgroups by taking advantage of the rich set of profile data available for all recruited panel members. In addition to the Core Profile survey that gathers detailed geodemographic information about each member and his/her household, several Topical Profile surveys are also administered to active members on a rolling basis over the course of the calendar year. These surveys cover a wide range of topics including shopping habits, media usage, health conditions, sports interests, political ideology, usage of technology, etc.

Our unique repository of profile data items not only provide cost-effective options for selecting

representative samples from low-incidence populations, but also, they can be appended to surveys to eliminate the need for their inclusion in client surveys. Moreover, such data can also be used to calculate incidence rates and weighting benchmarks for subpopulations that are not covered by government surveys, such as the Current Population Survey (CPS) or American Community Survey (ACS).

Sampling Design Weights:

Significant resources and infrastructure are devoted to the recruitment process for KnowledgePanel so that it can properly represent the adult population of the US. This representativeness is not only achieved with respect to a broad set of geodemographic characteristics, but also hard-to-reach adults – such as those without landline telephone or Spanish language dominant individuals. Consequently, the natural distribution of KnowledgePanel mirrors that of the US adults fairly closely, barring occasional disparities that emerge for certain subgroups due to differential attrition rates among recruited panel members. For selection of general population samples, however, a patented methodology has been developed that ensures the resulting samples behave as EPSEM (equal probability selection method). This methodology relies on a PPS (probability proportional to size) procedure to select study-specific samples that are fully representative and self-weighting.

Study-Specific Analysis Weights:

Virtually all survey data are weighted before they can be used to produce reliable estimates of population parameters. While reflecting the selection probabilities of sampled units, weighting also compensates for practical limitations of sample surveys, such as differential nonresponse and undercoverage. As such, our weighting process starts by computing base weights to address any departure from an EPSEM design and then further adjusting the resulting design weights to study benchmark distributions using an iterative proportional fitting (raking) procedure. In the last step, calculated weights are examined to identify and, if necessary, trim outliers at the extreme upper and lower tails of the weight distribution. The final weights are then scaled to sum to the total sample size of all eligible respondents.

KnowledgePanel Calibration:

Studies that need a large number of respondents, or those that focus on rare subpopulations, can require sample sizes that KnowledgePanel may not be able to provide. In such instances, a blended sample from both KnowledgePanel and various opt-in online panels can provide an effective alternative. For such applications, our cutting-edge Calibration process is used to correct for biases that result due to systematic undercoverage associated with nonprobability samples from opt-in panels. These coverage problems include omission of non-internet households, overrepresentation of hyper internet users, as well as various attitudinal and behavioral measures.

Based on many parallel surveys we have conducted using probability and nonprobability samples, we have identified specific measures with respect to which significant differences exist among the corresponding two pools of respondents. Cognizant of such differences, our calibration methodology aims to realign respondents from nonprobability samples with respect to a multidimensional set of measures to improve their representation. As compared to surveys that exclusively rely on non-probability samples without any calibration, our calibrated weights enable the resulting blended samples to represent the target population more effectively and offer more robust inferential possibilities. This improved representation is not only with respect to geodemographic distributions, but also with respect to an important set of attitudinal and behavioral measures.[2]

[2] Fahimi, M., F. Barlas, R. Thomas, and N. Buttermore (2015). Scientific Surveys Based on Incomplete Sampling Frames and High Rates of Nonresponse. *Survey Practice*, Vol. 8, no 5, 2015, December Issue.