



「CROP」

CROP'S WEB PANEL CALIBRATION MODEL

550, RUE SHERBROOKE OUEST
MONTRÉAL (QUÉBEC) H3A 1B9
BUREAU 900 - TOUR EST
T 514 849-8086, POSTE 3064
WWW.CROP.CA

The CROP protocol for calibrating online panel surveys

This paper presents our solution for calibrating web panels. We use this method for our syndicated study (FOTO) as well as any web survey that studies a population for which we can obtain comparable data. Whenever possible, every study based on web panels is verified, weighted and calibrated using our unique method.

Reflections on Methodology

CROP's monthly syndicated omnibus study has been running for many years, and from inception we ensured that this telephone survey of 1,000 completed interviews (18+ years) complied with the highest standards of statistical inference and probabilistic representation (with maximum margins of error of 3%, etc.).

In 2010, we altered the data collection method of this omnibus study to include online interviews conducted via panel samples from highly reliable firms with whom we regularly do business. The decision to switch methods was reached after some serious reflection, but more importantly, it was the result of a lengthy series of tests whose aim was to develop a rigorous methodology that guarantees a high quality of results.

With the passing of years, it had become increasingly difficult to realize the required quota of completed interviews within the timelines set for this type of telephone surveys. Also contributing to the decision to resort to online polling via web panels for our monthly omnibus studies were the added costs generated by the necessity to fulfill quotas.

The online solution not only allows more flexibility, but also makes it possible to display certain visuals on screen, while it maximizes participant responses (when interviews are self-administered online, we tend to minimize socially desirable answers often found in interviewer-administered telephone interviews).

The controversy surrounding web panels

Although Canada is today one of the markets in the world where online panels are most frequently used for research and opinion polling purposes (proportionally to the volume of research activity in the country), the use of such panels still generates negative press in the Canadian marketplace, a fact that has spurred us to come up with a procedure that would minimize – as much as possible – any problems inherent to the use of online panels.

The negative press associated with web panel sampling is due to the fact that, statistically speaking, these samples cannot be formally considered as being representative of the populations under study as the mode of participant selection and recruiting does not conform to probabilistic

rules. Therefore, such samples cannot be accurately described as “representing” the populations that are being surveyed (with margins of error, etc.)¹.

However, a study of market research and opinion polling practices around the world reveals that the use of online panels has sharply increased in most countries and furthermore, shows all signs of being here to stay. In this country, the bad reputation that web panels have acquired – despite being used more and more often – is due to the fact that telephone surveys in Canada (and especially in Quebec) still generate response rates that are deemed by some as potentially acceptable². Random selection sampling from the initial contact lists tends to reinforce this argument even if collaboration rates are much lower today than they were years ago.

However, if Canada is one of the last countries in the world still holding strong against the tide, the increasing difficulty in reaching people over the phone will undoubtedly encourage a more frequent use of web panels. The question will not be whether or not we should use online research supports, but rather how to use them in a way that confers an acceptable degree of “representativity” to the sample (even if this term cannot be formally applied to online panels).

It is a fact that the first correction envisaged in optimizing the quality of a panel sample is to proceed to the weighting of the samples’ socio-demographic and socioeconomic characteristics. This is done based on census data or any other reliable databank detailing the actual characteristics of the population under study (age, sex, language, income, etc.).

Unfortunately, we also know that this socio-demographic calibration falls short from its intended purpose and makes it imperative to add other weighting variables in order to strengthen the quality of the panels. With this goal in mind, ESOMAR, the world organization of market and social research, has for example published in 2008 a guidebook that contains a checklist of questions to be considered when one needs to ascertain the quality of a web panel. Therefore, in developing the methodology for FOTO, our revisited version of CROP’s monthly omnibus survey, we sought inspiration from worldwide industry consensus.

¹ From a technical and statistical viewpoint, a sample is said to be “representative” when right from its initial conception, all the individuals comprised in the population are given the same chance or “probability” to be selected to answer the survey (the term “probabilistic” has the same origin). By using lists that compile the entire population, each and every individual is therefore given an equal chance to be part of the final sample. In addition, the higher the collaboration rate, the more reliable the survey’s results are as each individual’s chances of participating are higher (and in order to optimize participation, there is the added option to “gently insist” on respondent collaboration).

For its part, the web panel relies on the voluntary participation of respondents whereby invitations are sent to people who indicated their availability, asking them to take part in the proposed studies. This “goodwill” and the absence of an initial exhaustive list undermine the “representative” nature of such samples.

² Given the multiplication of caller ID display, the reduced number of landlines, etc.

The CROP solution for web panels

We know that from the respondent's viewpoint, taking part in a panel is often associated with specific values and motivations. People who agree to participate in an online panel study are often driven by a need to "belong" to this select community of individuals who are regularly consulted about important issues that affect the market and society with, in more than a few cases, perceptions of status and a sense of pride of belonging. Yet others are driven by financial considerations, as they get to be paid each time they complete an online questionnaire.

Often enough, the bias of web panel samples is caused by the knowledge that participants are people characterized by this particular mix of motivations and who, consequently, cannot be considered as being representative of the population as a whole.

CROP's solution to improve web panel samples consists – in part – in calibrating the various socio-cultural motivations that are usually found in the population, both in Canada and the province of Quebec, then applying the same parameters to the panel samples that we use.

This method borrows some of ESOMAR's principles on what is referred to as "soft variables", that is, socio-cultural data which introduce some additional information that "forces" online panels to take into account the diversity of motivations observed in the general population (a correction that cannot be solely based on socio-demographic and socioeconomic variables).

To this end, we devised a multidimensional weighting method that relies on three types of information, ensuring thereby that our samples will reflect, as closely as possible, the actual population that is being surveyed:

1. Census data (the short version!) on the main socio-demographic and socioeconomic variables;
2. Probabilistic telephone surveys conducted multiple times a year with the express purpose of measuring certain "soft variables" and using them in calibrating our panels;
3. Socio-cultural variables from CROP's Panorama (3SC) Program.

Phone surveys used for calibration purposes

As part of our omnibus program, we conduct perfectly representative telephone surveys many times a year. These are based on methods of respondent selection that use digitized phonebooks as well as databanks of valid telephone numbers and enable us to collect the information we need to calibrate our online panels.

The types of information collected vary from one data collection to another as they are determined by the needs of our clients and by the kind of information required to calibrate our web panels.

In addition, we sometime revert to telephone surveys to collect information that we suspect is highly sensitive to the sampling methods (ex. vote intentions, etc.)

Socio-cultural weighting

Another method used to correct the potential bias attached to the panel users' values and motivations is to employ a certain number of socio-cultural indicators and a segmentation model – developed with the use of our Panorama (3SC) program tools – in order to replicate the diversity of values and motivations that are typically observed in society and the marketplace. Thus, the need to belong, the feelings of pride and any financial considerations are corrected in a way that reproduces their actual proportions in the population as a whole.

This particular protocol was subjected to several tests and research experiments with results that allow us to put forward a weighting solution of web panels in which we are fully confident.

An optimal solution

Like any market research company in the world, we cannot possibly claim that a web panel sample can conform to all of the formal rules of statistical inference and be perfectly representative of the population surveyed. However, by using all of the various weighting and calibration methods described in this article, we believe that it is possible to optimize the potential representative quality of our online samples. The CROP solution may not achieve the representativity of samples obtained in the past years but it can certainly optimize the quality of a process that our industry will have to live with for years to come.

