

8 ways to make your survey useless

if you are making any of these mistakes with your surveys, you might as well throw away the data and start all over

by Stacey Barr

introduction

Surveys are one of the most popular methods for collecting data about people's attitudes and beliefs, such as customer perception of value, corporate image and employee satisfaction. And probably because of this popularity, many surveys lack the validity they require to provide useful and usable information. A survey is not a questionnaire plus an envelope plus a stamp.



As a qualified survey statistician, when I made the move from research to business I was flabbergasted by how many surveys people in business were conducting, how appallingly useless the data was that they collected, and how oblivious these people were to this problem.

Surveys must be designed with the same kind of rigour that scientists design experiments – but don't freak out! Surveys can be far less complex and intricate and dire than scientific experiments. It's just that if you want to draw conclusions from your survey data, that data must be objective, and objectivity is the product of rigour. A survey will produce objective data if it is designed with all of the attributes of data integrity in mind:

- the data is relevant to the questions you are collecting it to answer
- the data gives you a representative picture of the way things are
- the data is reliable enough to be in your “ball park” of precision
- the data is readable, and therefore able to be analysed and turned into the answers to your questions
- the data is a realistic investment – the cost of collecting it is sufficiently less than the value you create from using it

The steps you take in designing a survey are paramount to the degree of integrity of the data you end up with. So do what you can to avoid making the 8 mistakes discussed here (unless you actually do want to invest in a useless survey).

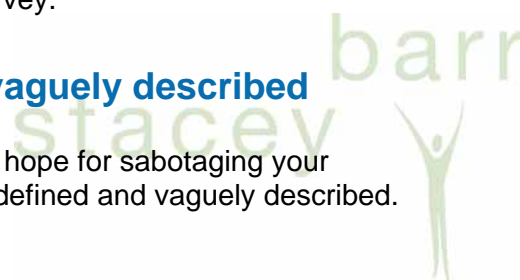
mistake 1: don't bother defining your purpose and objectives

The first way to make sure you waste the time and money you invest in your survey is to avoid at all costs defining or stating the purpose or reason for conducting the survey. If someone asks you why you want the survey, change the subject to how many multiple choice questions you'd like to see on the questionnaire. If you were to make your purpose clear, you would run the risk of having to drop some of those interesting questions you want to ask, and limit the survey just to those questions that would provide useful data.

Don't bother listing and defining the specific objectives of your survey – because if you do, you'd have to check if the questions you want on the questionnaire are actually going to collect the right data to meet those objectives. To ensure your survey turns out to be as irrelevant and uninformative as possible, use brainstorming to generate your list of questions, or copy the questions from another survey.

mistake 2: leave your target population vaguely described

If it isn't possible for you to make mistake 1, there's still hope for sabotaging your survey. Leave who or what your target population is undefined and vaguely described.



Avoid listing the criteria or specific characteristics that define that target population. If you are as specific as the following example is, then you might have to put effort into working out which people to survey and which to not survey.

Isn't it easier just to survey everyone in whatever list you already conveniently have? Or just those that are the most obvious? Or those that you "choose" to survey? It sure is. And if you don't articulate your target population, who's really going to know anyway?

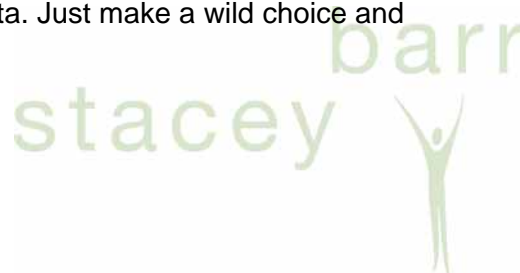
mistake 3: mailing the questionnaire saves you heaps

It couldn't be any easier or cheaper to render your survey data useless than to exploit the biasing influence that mail out surveys offer. Mail out surveys are usually posted or emailed to respondents, and they are thus very inexpensive. Because of the low response rates typical of volunteer surveys (particularly when no incentive is offered), mail out surveys result in large bias in the data, if those that respond are in some way different to those that don't respond.

The methods that allow you to control for and reduce bias are more expensive anyway. Well, at least it looks that way when you measure cost by dollars per respondent. If you measure cost by the more complex ratio of the value of the data relative to the total cost of collecting it, you'd run the risk of having to adopt one of the following methods instead:

- respondents are invited to a workshop, where they are facilitated through filling out the questionnaire, response rates are improved even when confidentiality is sometimes compromised
- respondents are interviewed by telephone, which is more costly per respondent but improved response rates can mean smaller samples are sufficient and in many cases data integrity is improved because of the interviewer controlling the data collection process
- respondents are interviewed face to face, which has the highest cost per respondent, and can offer higher data integrity, but it's not recommended for sensitive topics where face to face interaction can make the respondents feel uncomfortable

If you find yourself in the position of not being able to do the mail out option, you can still stuff up your survey quite successfully by choosing one of the above methods without considering the type of respondents in your target audience, the type of questions you will ask, the number of questions you will ask, your budget and the level of confidence and precision you want in your survey data. Just make a wild choice and hope for the worst.



mistake 4: get your admin staff to design the questionnaire

If you were a survey goody-goody, then you'd no doubt translate your survey objectives into a suite of questions for respondents that will most likely get the data you really needed to meet those objectives. But if you're a survey rebel, you'd instead ask any question that was in some way interesting or potentially useful, and you'd be obliging to anyone else who wanted to tack their interesting questions onto the questionnaire too.

In the quest to produce the worst survey with the least effort, you'd completely ignore the impact that any of the following factors have on how logical, intelligible or possible it is for respondents to answer those questions:

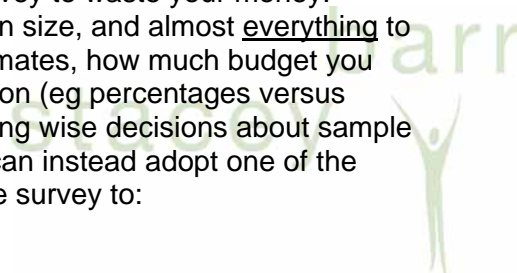
- the literacy or knowledge levels of potential respondents – regional or rural staff may be accustomed to a different language of managing customer relationships and find questions phrased in 'city speak' ambiguous or confusing
- respondent fatigue – customer relationship managers want to spend their time relating to customers, not filling out long surveys
- ensuring confidentiality of respondents – mail and group surveys would make it harder to customer relationship staff to talk about specific problems with customers without disclosing embarrassing or sensitive information

Design your questionnaire with the aim to fit as much information on each page as possible, if your intention is to render the data next to useless. For example, you can more easily destroy the readability of the collected data by not allowing enough space for respondents to provide answers to the questions (this is how many questionnaires magically fit onto a single page). Also, try sequencing your questions illogically, making everyone answer all the questions, even those that are irrelevant. And if you use multiple-choice, make sure that you frustrate respondents with options that you came up with off the top of your head. Don't explain the meaning of acronyms or special terminology you use. A really good trick is to ask a question like "Do you prefer A or B?" with instructions to tick "yes" or "no".

mistake 5: send the questionnaire to whoever is convenient

Whenever a survey is based on a sample, the data collected cannot tell you the exact answer - only an estimate. The confidence you can put in that estimate increases as you increase the sample size. Most people are conscious of this. But if you are like most people, your beliefs about how big the sample size needs to be will be wrong.

That offers up another strategy for engineering your survey to waste your money. Sample sizes have virtually nothing to do with population size, and almost everything to do with how much reliability you want in the survey estimates, how much budget you have, and what kind of data those estimates are based on (eg percentages versus continuous data like income or revenue). To avoid making wise decisions about sample size (it's going to take a little bit of effort, after all), you can instead adopt one of the following dubious approaches to decide who to send the survey to:



- quota sampling: where you keep selecting potential respondents until you have reached a target number of people willing to participate in the survey
- volunteer survey: where you invite everyone from your target population to participate, if they want to and if they can
- targeted selection: where a so called "expert" claims to have the ability to personally select appropriate individuals to participate in the survey

The most useful data comes from samples that have been randomly selected. Random selection means that every potential respondent in your target population has the same chance of being selected into your sample. This means you won't get bias in your sample design. So avoid random selection and sensible sample size design if a ridicule-worthy survey is your goal.

mistake 6: assume it's obvious how to implement the survey

The way a survey is conducted has a significant impact on the integrity of data you end up with. To flush this integrity down the toilet, you can fail to specify how the following activities are to be performed and just let it happen "naturally":

- making resources to conduct the survey available – providing questionnaires, telephones, respondent contact details, survey instructions, etc... to survey staff
- the ideal timing of the survey events – timing the survey so as not to introduce bias or reduce reliability as a result of simultaneous events decreasing the chance of selected respondents' participation
- contacting respondents – making it clear how to select and make contact with selected respondents to maximize the likelihood of making contact with them
- convincing them to participate in the survey – offering a clear and compelling reason for respondents to give up their time to answer the questions
- facilitating the answering of the questions without introducing any bias – helping respondents understand the intent and meaning of the questions that they aren't sure how to answer
- maintaining confidentiality – protecting the personal and private information about respondents and shared by respondents in the course of taking part in the survey
- safety, security and comfort of interviewers and other survey staff – taking care of the physical and psychological needs of all people participating in the survey process so they are unharmed and not negatively impacted
- collating completed survey questionnaires – ensuring all data is collated and made available for data entry

mistake 7: set a deadline that leaves no time for testing

If you want to save time and don't care about the usefulness of your survey data, then don't bother testing your survey questionnaire with a small number of your target population to fill it out "as if for real". You see, if you were to pilot test your survey, you might have to go back and change things if it didn't run as you wanted or deliver the kind of data you needed.

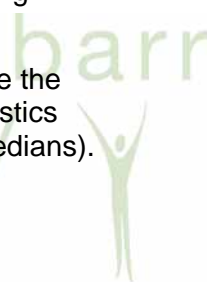
- target population definition – it becomes clearer to you exactly who should fill out the survey
- segmentation – you realise that you need to discern different sub-groups in your target population
- survey method – it turns out that your chosen method (e.g. telephone interview or focus group) isn't working as you expected
- survey questionnaire – the questions you asked or the way you asked them are clearly not meaning the same thing to respondents
- sample size – the variability in the answers people give is larger than you expected and you need a larger sample size to achieve the reliability you need
- survey procedures – confusion or errors in how the survey is administered and managed suggests different or clearer procedures are needed

mistake 8: treat the data as though it were perfect

There's more you can do to warrant your survey data useless. Yes, you can pretend it is perfect when you analyse it, and take its analysis as gospel. Firstly, don't do any of the following things to make it analysis-ready:

- coding qualitative (text based) data into categories or themes so you can measure and compare their relative occurrences
- handling non-response (e.g. assigning a unique code to items where no response was given - 9, 99 or 999 are typically used for rating scales and multiple choice type data) to ensure the data can be omitted from analysis and thus not underestimate averages and percentages
- handling responses that make no logical sense (e.g. *gender* is Male and *has had hysterectomy* is Yes) by fixing up the obvious ones and leaving the rest out of the analyses
- handling other anomalies in the data such as fixing up formatting problems (e.g. making date formats consistent)

Secondly, to get the least information as possible from your survey data, analyse the survey data using just averages or percentages and don't bother with other statistics that give you more context (such as ranges, standard deviations, modes and medians).



closing comments

It really isn't too hard at all to produce a survey that produces nothing of value. In part it is because most people have really no idea that survey design and implementation is a science, and there are scientists that specialize in how to do them well. It isn't rocket science; it's the field of statistics. Doing surveys well means adopting a few simple principles:

- have a clear and concise purpose and objectives
- design the survey questions to produce the data that will answer your objectives
- design your sample size based on your reliability requirements (not by taking 10% of the population)
- select your sample randomly
- define the steps in the survey implementation process
- pilot test the survey and questionnaire

If you have any doubt about how to put these principles into practice, seek some help from a statistician, or read more about simple sample surveys. You'll be glad you did because your resulting survey results will be defensible, cost effective, and actually answer your objectives.



about the author

Stacey Barr is a specialist in performance measurement, helping people to move their business or organisation's performance from where it is, to where they want it to be.

Sign up for Stacey's free email newsletter at www.staceybarr.com to receive your **complimentary copy of her e-book** "202 Tips for Performance Measurement".

