QUICK GUIDE

How To Create A Survey

You may be quite familiar with survey research, or this might be the first time you've ever needed to create one.

There may be several reasons you want to create a survey. You want to find out how many people attended an event, or you want to know why people are, or are not, satisfied with your engagement process. Surveys are one tool that researchers, planners, and others use to gather information in a systematic way. The optimal goal is to use the results of the questions on the survey to inform decisions, policies, budgets or other aspects of public life. They can identify patterns or themes which can then be used by researchers and planners to develop qualitative questions for interviews or focus groups to gather more in-depth information on the issue or problem being addressed.

This guide will look at the following steps to get you started:

1. Who is your target?
2. How will you determine who receives your survey?
3. What questions do you have and how will you ask them?
4. Analysis, and;
5. Disseminating results

A FEW EXAMPLES OF SURVEYS

- Parks and Recreation want to know what programs to offer and when, and what age groups would best be served by these programs
- Mayor and Council want to know how many people attended at least one engagement session on active transportation for the Official Community Plan (OCP) being developed
- The Human Resources Manager wants to understand how *equity* is communicated to all staff in the Municipality or Regional District

Who is your target? What is the best way to reach them?

One of the first tasks when carrying out a survey is to identify which group you want to obtain information from. What is the target group you want to reach that will help you answer your question(s)? Once you have determined the target group, the next task will be to decide the best way(s) to reach them: online web-based surveys, by telephone, and/or a mail-out through a postal service.

Mixed modes, or using different types of communication to send out your survey, are often used to increase your response rate. For example, using a mail-out survey with a follow-up email linked to a web-based survey will reach people who may not respond to a mail-out survey, but will respond to a web-based survey. Using multiple methods of communication and response modes usually improves the survey response rate.

Sampling your target population

Will you survey everyone in your population or just a sample? Usually, there are too many people to survey in your target population. To help keep costs down, surveyors take a "representative sample" of people to survey. That is, they select a group of people that they can use the results to form a conclusion about that target population. There are different types of samples, and these require different sampling methods to select the group you want to survey.

How will you select your sample? There are two predominant categories for sampling methods: probability sampling and non-probability sampling. Simply put, probability sampling methods are defined as everyone in the total population has an equal chance of being selected for being included in the sample population. Probability samples use three types of methods for selecting the sample: random, stratified, and cluster. Non-probability sampling aims to learn about a specific population or ensures that specific groups are included. Thus non-probability techniques are often known as "purposeful" sampling. Some sampling techniques used for non-probability sampling methods are quota, purposive, systematic and snowball. This is not an exhaustive list, but these methods of sampling are considered the more predominant.

What questions do you have?

Designing questions for the survey is a multi-step process that requires attention to detail. The first step is to determine what information you need to answer your research question. The next step is to develop a set of questions that measure opinions, experiences and/or behaviours. For example, you may want to know how "satisfied" people are with a service or program, or how "likely" they are to use a resource. An important component of determining a set of questions is determining the set of responses. Writing survey questions is often a learning process. It may take several attempts to create questions and responses that are organized in a way that increases the response rate as well as the accuracy of the responses.

Close-ended questions, that is questions that are pre-populated with a single response, are frequently used in surveys because they are easily quantified during the analysis stage. Open-ended questions are often used for respondents to further elaborate or expand on a close-ended question. For example, if you asked the close-ended question as to whether or not they were satisfied with a service or a resource, you could then ask respondents an open-ended question to elaborate or explain why or why they were not satisfied, what worked well, and what improvements could be made.

A Likert scale is a type of rating scale. Likert scales are one of the most common rating scales that researchers use for response statements. There are various types of Likert scales that include responses that measure levels of agreement, satisfaction or attitudes and can be written to involve a variety of levels, with the most common being a five-point scale or a seven-point scale. Likert scales can be unipolar with the scale moving from one extreme to another or they can be bipolar which measures two opposite opinions or attitudes with a neutral option in the middle.

Unipolar:

- → Completely satisfied
- → Mostly satisfied
- → Satisfied
- → Somewhat Satisfied
- → Not at all satisfied

Bipolar:

- → Very satisfied
- → Satisfied
- → Neither satisfied nor dissatisfied
- → Dissatisfied
- → Very dissatisfied

Testing your survey

An important step that should not be overlooked: testing your survey before you send it out to your target population. It's always a good idea to send your survey out to a small group of testers for feedback and to take the time to test/pretest both the content of the survey as well as the technology if you are using a web-based survey. You want to make sure the questions and responses are clear and respondents know what you are asking and the responses are appropriate or suitable. How are the questions ordered? Do they follow a logical sequence? Are similar questions or topics grouped together? If you are using close-ended, pre-populated responses, do the response options provided allow respondents appropriate choices? Is the language in the survey clear and suitable for your target group?

If you're using a web-based survey platform, such as Survey Monkey or Google Forms, be sure to test all the responses to make sure they collect the data you are seeking. For example, some survey platforms offer "radio buttons" which are useful for a forced single-only response, while "check boxes" could allow respondents to check more than one box for a question. In this case, it might be good to add "check all that apply" to your question so that respondents know they can check more than one box.

Analysis of results

Most web-based survey platforms such as Survey Monkey, Google Forms or Microsoft Forms offer simple analysis of the results, particularly results from close-ended questions. Close-ended questions are easily quantifiable and allow researchers to code or categorize responses into groups more readily. Open-ended, qualitative questions offer rich descriptions or responses in a respondent's own words, but may not be as easily quantified or counted. In a small sample (i.e., < 50) with only a few open-ended questions, it may be realistic to simply review the responses and look for themes and patterns that emerge from the answers that can be categorized by the researchers themselves. Larger samples (i.e., > 50), however, will likely require a more systematic, organized, approach that uses computer software to assist with coding and categorizing to determine what is significant.

Not everything that has meaning can be counted, and not everything that can be counted has meaning[1]. One of the key objectives for researchers when designing a survey is to know what question they want to answer and what data or information will help them answer that question. In this sense, it's important for researchers to define the boundaries of the data that they want to collect: don't collect data for the sake of collecting data. Ensure that the data the survey is collecting is meaningful or significant and helps to answer the overarching question of the research.

Next steps: dissemination of results

Different audiences often have different needs for information and therefore require different modes of communicating the results. How you disseminate the results or findings from the survey will depend on who needs to know what, and how that information is best communicated to that particular group or specific audience. Do you need to prove or convince or is it more important to share knowledge? Who is benefitting from this information? Are you providing the information in a transparent way? Infographics are a useful way to share results or findings using a mixture of text, images and data. Short one-page briefs are another way to share findings and are particularly useful for policymakers or decision-makers that don't have a lot of time to read a multi-page report. However you choose to disseminate your survey results, the key takeaway here is that your data is telling a story and how you want to tell that story and what tools you want to use to tell that story will depend on your audience.

Additional Resources

Dillman, D.A., Smyth, J.D.,& Christian, L.M. (2014). Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method (4th ed.). John Wiley and Sons Inc.

Fundamentals of Data Visualization: https://clauswilke.com/dataviz

Using icons in your infographic: thenounproject.com

1 The precise quote is: "Not everything that can be counted counts, and not everything that counts can be counted." Cameron, William Bruce. Informal Sociology: A Casual Introduction to Sociological Thinking, New York, Random House, 1963: p. 13