

Using Surveys to Gather User Data

Discussion:

The goal of the Empathy stage of the design process is to get to know the user. In order to create a product that effectively solves a problem for a specific population, you have to develop a full understanding of who the users are, what they value, and what challenges they face.

In addition to conducting interviews and observations, you can learn more about users through surveys. Surveys are especially helpful because they enable designers to gather data about multiple users at once. Data collected from surveys can then be analyzed to identify trends and draw conclusions about what users find important and what challenges they are facing.

The key to collecting accurate data from a survey is to develop a strong survey. While this may seem like an easy task, it is actually quite difficult!

The first thing to consider when writing a survey is the survey's objective. The objective should define the purpose of the survey and specify what information you are trying to collect. Some example objectives include: *develop a better understanding of how people feel when they are waiting in line*, *gain insight into the extent to which students value recycling and composting at school*, and *gather data about the challenges soccer players face during practice*.

After writing your objective, you're ready for the hard part: actually writing the questions. There are multiple question types to consider when developing a survey.

The first question type is a **structured or closed question**. Closed questions have a set of answers that the respondent chooses from. Here are some examples of a structured question:

What is your favorite color? <input type="radio"/> red <input type="radio"/> orange <input type="radio"/> yellow <input type="radio"/> green <input type="radio"/> blue <input type="radio"/> purple <input type="radio"/> pink <input type="radio"/> other	Are you familiar with the programming language HTML? <input type="radio"/> yes <input type="radio"/> no
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When developing the response options, it is important to consider two factors: the list should provide an option for *all* possible choices, and the options should not overlap. While you do not want to add the "Other" or "None of the above" option to every question, these options can be beneficial because they enable the respondent to choose something if their desired choice is not an option.

It is also important to keep your options consistent and relevant. If some choices are in minutes and others are in hours or if you include off topic choices, respondents may get confused, which

can lead to inaccurate data.

Another type of closed question is a **rating question**. These types of questions are helpful if you want to gather users' opinions about a specific topic. A rating question asks the respondent to choose how they feel about a statement based on a provided scale. Here are some examples of a rating question:

How do you feel about the importance of using strong passwords? <input type="radio"/> very important <input type="radio"/> important <input type="radio"/> somewhat important <input type="radio"/> not very important <input type="radio"/> not important at all	To what extent do you agree with the following statement: <i>It is essential to gather input from users when developing a new product.</i> <input type="radio"/> extremely agree <input type="radio"/> agree <input type="radio"/> somewhat agree <input type="radio"/> somewhat disagree <input type="radio"/> disagree <input type="radio"/> extremely disagree
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The last type of survey question is a **non-structured question**, or an open ended question. While these types of questions are helpful when you are exploring new ideas, they are difficult to analyze because they do not provide concrete data. Therefore, non-structured questions should be used very sparingly when developing surveys.

Source: "Designing a Survey." *Science Buddies*, accessed 8 August 2020,
<https://www.sciencebuddies.org/science-fair-projects/references/how-to-design-a-survey>.

Exercise:

Now it's your turn to create a survey to gain insight into the challenges and values of your users. Start by identifying your target user population and writing the objective for your survey. Remember, the objective should define your survey's purpose and the information you want to collect.

Then, write your questions! Your survey must include 3-5 closed questions and 1 open question. Your closed questions can be multiple choice, multiple select, and/or ranking questions.

Target Population:

Objective:

3-5 Closed Questions:

1-2 Open Question: