

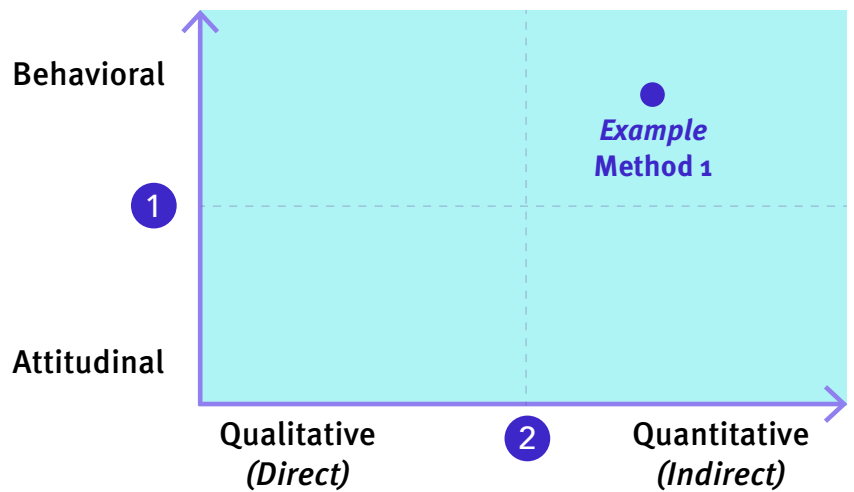
A Guide To Using **User-Experience Research Methods**

Summary: Modern day UX research methods answer a wide range of questions. To help you know when to use which user-research method, each of 20 methods is mapped across 3 dimensions and over time within a typical product-development process.

A Landscape of Methods

The field of user experience has a wide range of research methods available. To better understand when to use which method, it is helpful to view them along a 3-dimensional framework:

1. Attitudinal vs. Behavioral
2. Qualitative vs. Quantitative
3. Context of Product Use



Popular User-Experience Methods



● Natural use of product

■ Scripted (often lab-based) use of product

▲ Decontextualized / not using product

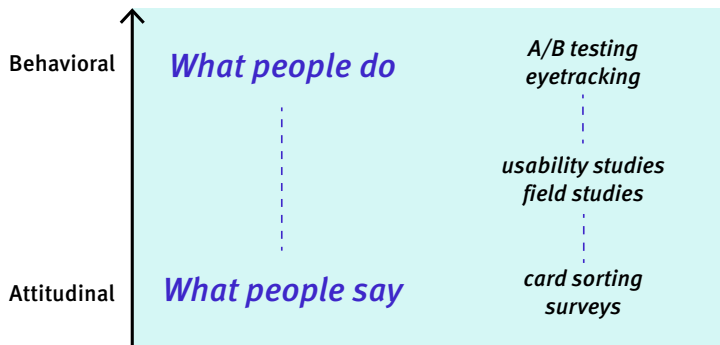
◆ Limited use of product

The Dimensions Explained

1 Attitudinal vs. Behavioral

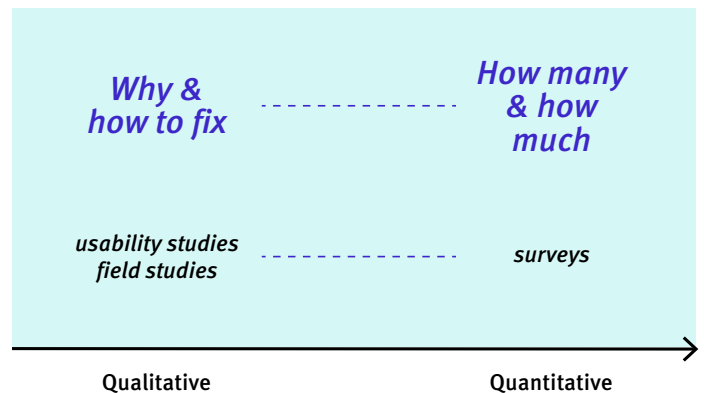
This distinction can be summed up by **contrasting “what people say” versus “what people do”** (very often the two are quite different).

Between these two extremes lie the two most popular methods we use: usability studies and field studies. They utilize a mixture of self-reported and behavioral data.

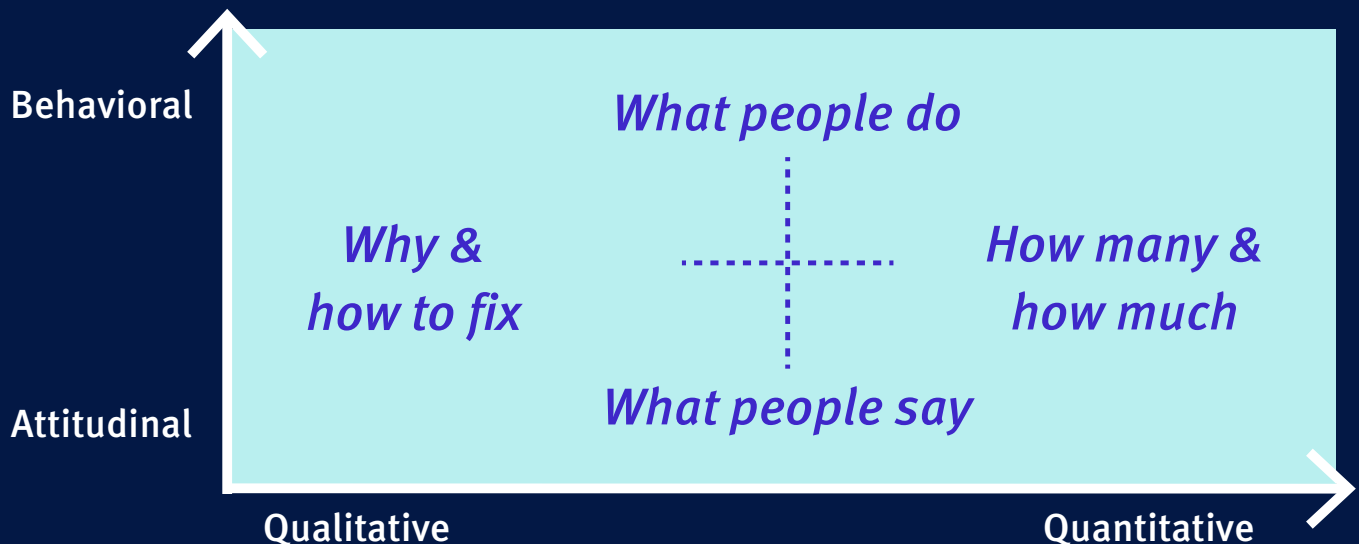


2 Qualitative vs. Quantitative

Studies that are qualitative in nature generate data about behaviors or attitudes based on observing them directly. These methods are better suited for answering questions about **why or how to fix a problem**. In quantitative studies, the data about the behavior or attitudes are gathered indirectly, through a measurement and answer **how many and how much** types of questions.



Questions Answered by Research Methods



Key

- Natural use of product
- Scripted (often lab-based) use of product
- ▲ Decontextualized / not using product
- ◆ Limited use of product

■ Usability Testing

Participants are brought into a lab, one-on-one with a researcher, and given a set of scenarios that lead to tasks and usage of specific interest within a product or service.

● Field Studies

Researchers study participants in their own environment (work or home), where they would most likely encounter the product or service being used in the most realistic or natural environment.

● Contextual Inquiry

Researchers and participants collaborate together in the participants own environment to inquire about and observe the nature of the tasks and work at hand.

◆ Participatory Design

Participants are given design elements or creative materials in order to construct their ideal experience in a concrete way that expresses what matters to them most and why.

▲ Focus Groups

Groups of 3–12 participants are led through a discussion about a set of topics, giving verbal and written feedback through discussion and exercises.

▲ Interviews

A researcher meets with participants one-on-one to discuss in depth what the participant thinks about the topic in question.

◆ Concept Testing

A researcher shares an approximation of a product or service that captures the key essence (the value proposition) of a new concept or product in order to determine if it meets the needs of the target audience. It can be done one-on-one or with larger numbers of participants, and either in person or online.

● Diary Studies

Participants are given a mechanism (diary or camera) to record and describe aspects of their lives that are relevant to a product or service or simply core to the target audience. Diary studies are typically longitudinal and can be done only for data that is easily recorded by participants.

● Customer Feedback

Open-ended and/or close-ended information provided by a self-selected sample of users, often through a feedback link, button, form, or email.

◆ Desirability Studies

Participants are offered different visual-design alternatives and are expected to associate each alternative with a set of attributes selected from a closed list. These studies can be both qualitative and quantitative.

▲ Card Sorting

A quantitative or qualitative method that asks users to organize items into groups and assign categories to each group. This method helps create or refine the information architecture of a site by exposing users' mental models.

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● ■ Eyetracking

An eyetracking device is configured to precisely measure where participants look as they perform tasks or interact naturally with websites, applications, physical products, or environments.

■ Usability Benchmarking

Tightly scripted usability studies are performed with several participants, using precise and predetermined measures of performance.

■ Remote Moderated Testing

Usability studies conducted remotely, with the use of tools such as video conferencing, screen-sharing software and remote-control capabilities.

■ Unmoderated Testing

An automated method that can be used in both quantitative and qualitative studies and that uses a specialized research tool to capture participant behaviors and attitudes, usually by giving participants goals or scenarios to accomplish with a site, app, or prototype.

▲ Tree Testing

A quantitative method of testing an information architecture to determine how easy it is to find items in the hierarchy. This method can be conducted on an existing information architecture to benchmark it and then again after the information architecture is improved with card sorting to demonstrate improvement.

▲ Analytics

Analyzing data collected from user behavior like clicks, form filling, and other recorded interactions. It requires the site or application to be instrumented properly in advance.

● Clickstream Analytics

A particular type of analytics that involves analyzing the sequence of pages that users visit as they use a site or software application.

● A/B Testing

A method of scientifically testing different designs on a site by randomly assigning groups of users to interact with each of the different designs and measuring the effect of these assignments on user behavior.

▲ Surveys

A quantitative measure of attitudes through a series of questions, typically more closed-ended than open-ended.