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A guide to top UX Research methods

A complete guide of all time favourite UX research techniques, from primary and secondary research to quantitative and qualitative research.



Top UX research techniques of all times

This article starts revealing why UX research is necessary and the function it has on the design process. I'll walk you through between the differences of UX Design and UX Research and where they both meet to minimize the risk of failure. We will continue learning about the misconceptions of research design, and finally, the article will end with the top research methods of all time.



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Empathy is where design starts (and research prepares you!)

“Empathy is seeing with the eyes of another, listening with the ears of another and feeling with the heart of another.” — Alfred Adler

I'd like to tell you a little story to help you understand why empathy is where Design starts.

“Maria graduated with a M.S. in Human Centered Design & Engineering from the University of Washington. She loves sports, travelling and karate and on the other hand she doesn't enjoy cooking or reading novels. During the first years of her career she worked in three different companies, three different products all far from each other, an online book club, a platform to sell second-hand clothes and a software company selling a parental control tool.

Maria had little knowledge about all these products, but she was curious about them all. The empathy she got from research helped her understand and shape the user personas. With the insights gained from research, she learned what the users were looking for, helping her succeed in designing a product appealing to these needs.”

Designers are not experts in everything, and usually they work building products they would never buy for themselves, so to succeed you have to put your feet in somebody else's boots and create a meaningful product for the user.

Maria knew that without the help of the data gathered on the UX research phase she would be incapable of designing an app to help parents prevent their children being bullied online, but with the help of all the data she gathered, she was able to understand the parents needs and create a great product.

“The design does not begin with some preconceived idea. Rather, the idea is the result of a careful study and observation, and the design a product of that



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According to [wikipedia](#) **User experience design** (UXD, UED, or XD) is the process of supporting user behaviour through usability, usefulness, and desirability provided in the interaction with a product. User experience design encompasses traditional human-computer interaction (HCI) design and extends it by addressing all aspects of a product or service as perceived by users.

On my own words, User Experience Design is the process to shape the journey a user will follow in order to get to its final destination. Our task is to make this journey pleasant, short and highly engaging, it's about enhancing the entire experience people have while interacting with the product and making sure they do it with delight, joy and find what they are looking for. **If a holiday trip represents that goal, using various UX research methods are the path designers use to prepare for this trip.**

What is UX Research?

Again, according to [wikipedia](#), **User research** focuses on understanding user behaviours, needs, and motivations through observation techniques, task analysis, and other feedback methodologies. This field of research aims at improving the usability of products, services, or processes by incorporating experimental and observational research methods to guide the design, development, and refinement of a product.

In order to to make it clear we can say that research is a combination of three main players:

- **Observation:** you need to understand your user, and observation can help you. The most famous direct way to observe a user would be a User Interview, where you directly guide a conversation to understand your user through a questionnaire. On the other hand, ethnographic research would be a method where you can observe your user without interacting with them.
- **Task Analysis:** a technique where a user performs a series of tasks to meet the desired goal. By analysing user's tasks, using contextual inquiry, we can discover key issues in their existing flows and better design opportunities for a smoother experience.
- **Feedback methodologies:** Companies gather feedback from different channels,



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To sum up, research is the key to open the door of success, if we understand success as giving the user what they want. Steve Jobs pointed out research doesn't mean we will surely succeed, but we will have better odds for it.

“It's really hard to design products by focus groups. A lot of times, people don't know what they want until you show it to them.” Steve Jobs.

The UX Research ghosts

User Testing and User Research are usually two critical steps in the design process, but usually the most misunderstood steps on the flow because companies are scared of the three “Research Ghosts”:

- **Research costs tons of money:** Is a misconception that research costs tons of money, in fact what costs tons of money is investing in a product that nobody will use, better spend some money to understand if your million dollars idea has any space on the market. Prevention is better than cure.
- **Research needs lots of time:** false, you can conduct research as fast as you like, starting from a two-week sprint. Check one of my articles “[Rapid UX Research](#)”, where you can learn more about my two weeks framework for rapid research.
- **Research needs to recruit experts on the matter:** true, you need to talk with experts, but don't get overwhelmed with it. We have a famous and great platform named [linkedin.com](https://www.linkedin.com) where you can reach out several professionals that will help you. In my personal experience lots of people would spend 30 minutes with you if they are truly passionate and engaged with what they do.



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Research Methods

Primary and Secondary Research:

Secondary research is a type of research that has already been compiled, gathered, organised and published by others. A lot of secondary research is available right on the Web, simply by entering key words and phrases for the type of information you're looking for.

Primary research, on the other hand, is research you conduct yourself (or hire someone to do for you.) It involves going directly to a source — usually customers and prospective customers in your target market — to ask questions and gather information.

Examples:

Secondary Research

- Internet Research and observation (Quantitative & Qualitative Data)
- Competitive analysis. (Qualitative Data)

Primary Research

- Surveys (Quantitative & Qualitative Data)
- Moderate Interviews (Qualitative Data)

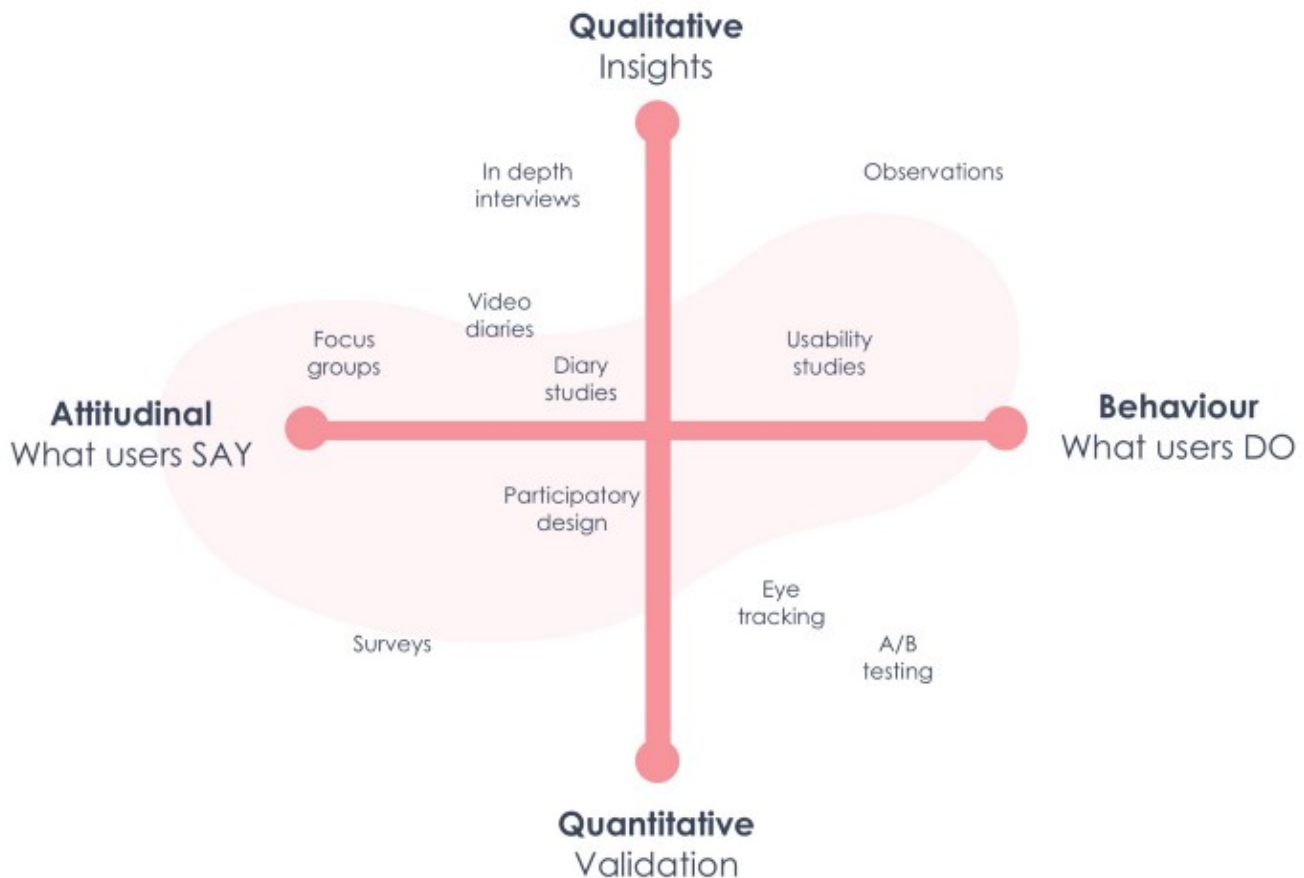
Quantitative and Qualitative Research:

We can differentiate between two main groups of research methods.

Quantitative research can be measured by numbers and formulas. Qualitative research is about insights that can be observed but not computed.

There are multiple techniques out there, but I will present the top five qualitative and quantitative methods I use as a product designer on a daily basis.



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UX Research matrix with various methods

Quantitative research is a methodology used to validate or invalidate hypotheses about people's behaviours. The results are numerical or of statistical evidence that help to draw generalised conclusions about users attitudes.

You can find lots of techniques out there to help you find a design solution to a problem. These methods can be used in a different time of the design process. Here you can find the most famous methods:

- **Surveys**: Ask multiple users anything you would like to know, questions can range from what they think of your product to how they interact with it. Remember this is about what they say they do, as opposite of what they actually do.
- **Card sorting**: Organize your website or app information architecture based on your users mental structure. Allow users group and sort the product's information on their own mental model.



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- **Analytics:** This technique is becoming the queen of them all, with tools such as Hotjar or Google Analytics you can create heat maps, count clicked links or cards swiped. This will help your team know if a given interaction is being used by your users or not.
- **Desirability Studies:** A good association technique to know what your users think about your product. This can be a powerful insight, imagine that 88% of your users think that your product is “family orientated”, is this association what you were looking for?

Qualitative research is based on observations and is exploratory and non-numerical . It's about understanding what people believe and practice in the real world. The sample size is typically small, usually around 5 participants per test.

- **Interviews:** Definitely the most famous technique of all times. Interviews can be structured, the interviewer has a script with multiple questions to ask to the interviewee or semi-structured, where the interviewer has more freedom to flow with the conversation. Another form is the ethnographic interview, where you conduct the interview in the user's environment to observe how they perform tasks.
- **Usability Testing:** Before realising an MVP or a new feature of a product it is important to test the new concept asking users to complete different tasks, from the results you'll be able to improve the concept. There are moderate and unmoderated tests, the first is guided by a researcher and is conducted in person or online, the second is completed remotely, for example recording yourself.
- **Heuristic Evaluation / Expert review:** One or more “experts” testing a product navigating through the UI looking for problems related to design, usability or accessibility of the product. You can use established guidelines in order to evaluate the product.
- **Focus Groups:** Usually a group of five to ten people participating in a moderated interview. Through this technique, you can learn about the user's attitudes, ideas, desires and beliefs.



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From a pool of techniques, selecting your research weapons will help you shape your product to perfection, making and serving your customer and business more effectively.

The integration of UX research in a company can boost the customer satisfaction by improving the usability of the product. Additionally, research can benefit the development of the product by reducing development time and reducing production costs.

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I'm Oriol, a product designer. I solve problems through research and design ✨. Feel free to reach me via [LinkedIn](#) or my portfolio [website](#).



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