UI & UX Design
SWE 4833

User Experience Research

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User Experience Research

UX research focuses on understanding user behaviors, needs, and motivation through observation and feedback. The goal of user experience research is to prioritize the user. Also business needs are to be met.

UX research can help bridge the gap between what a business thinks the user needs and what the user actually needs before an expensive and time-consuming product is made.

How does UX research fit into the development of a product?

You may remember that the Product Development Life Cycle (PDLC) from the previous lecture. It is the process used to take a product from an idea to reality.

➔ User research is a continuous part of the PDLC and takes place before, during, and after phase 3, which is **"Design"**.

UX Research Based on Time it is conducted

- ❖ **Foundational** research
  - ➢ **Before** anything is designed
  - ➢ Also called Strategic or Generative research.
- ❖ **Design** research
  - ➢ **During** the design phase
  - ➢ Also called Tactical research
- ❖ **Post-launch** research
  - ➢ At the **end** of the product development life cycle

UX Research Based on Time it is conducted

Foundational research
This research includes talking with users and identifying their pain points when using a product.

Answers the question:
- What should we build?
- What are the user problems?
- How can we solve them?

Goal:
The goal of foundational research is to help define the problem you would like to design a solution for.
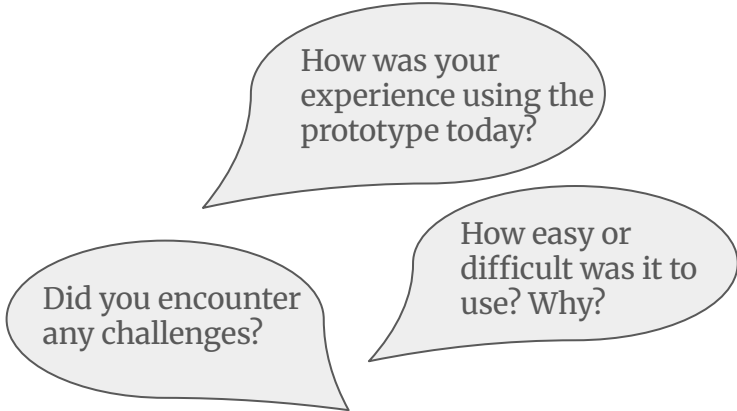
UX Research Based on Time it is conducted

Design research

Design research gives designers a chance to reduce the problems that occur as users interact with the prototype. This research can be conducted very early in the design process when you have paper sketches, or you can wait until you have a prototype to test with users.

Answers the question:
- How should we build it?

Goal:

The goal of design research is to inform how the product should be built.

UX Research Based on Time it is conducted

Post-launch research

Post–launch research can be used to evaluate how well a launch feature is meeting the needs of users.

Answers the question:

- Did we succeed?

Goal:

The goal of post–launch research is to understand how users experienced the product and whether it was a good or poor user experience.

UX Research Method

There are two ways we categorize research methods.
- Who conducts the research.
- The type of data collected.

UX Research Method based on Who conducts the research

1. **Primary** research

    a. It is the research you conduct yourself.

2. **Secondary** research

    a. It is research that uses information someone else has put together. Secondary research can be information from books, articles, or journals.

    b. Most of the time, secondary research is done at the very beginning of the product development lifecycle before any ideation happens.

UX Research Method based on the ==Type of Data Collected==

1. **==Quantitative==** research
   a. It focuses on data that can be ==gathered by counting== or measuring.
   b. It is often based on ==surveys== of ==large groups== of people using ==numerical== answers.
   c. This type of research often answers questions like, ==how many?== And, ==how much?==

2. **==Qualitative==** research
   a. It focuses on ==observations==. It is often based on ==interviews==, where we focus on a ==smaller number of users== and understand their needs in ==greater detail.==
   b. This type of research answers questions like, ==why or how did this happen?==

Common Research Methods

1. **Interviews**
   a. Interviews are a research method used to collect in-depth information on people's opinions, thoughts, experiences, and feelings.
   b. Interviews are usually conducted in person and include a series of open-ended questions where the researcher asks the user about their experience.
   c. Interviews are better when the questions require a detailed response.
2. **Surveys**
   a. Surveys are an activity where many people are asked the same questions in order to understand what most people think about a product.
   b. Surveys include a mix of quantitative and qualitative questions.

Common Research Methods

3. **Usability Studies**
    a. Usability studies are a technique that help us evaluate a product by testing it on users.
    b. The goal of a usability study is to identify pain points that the user experiences with different prototypes so the issues can be fixed before the final product launches.

Bias in UX Research

❖ **Confirmation bias:** This bias occurs when you start looking for evidence to prove a hypothesis you have.
  ➢ The most effective methods for overcoming confirmation bias during research is to ask open-ended questions when conducting interviews.
❖ **False consensus bias:** It is the assumption that others will think the same way as you do.
  ➢ False consensus bias can be avoided by identifying and articulating your assumptions.
❖ **Recency bias:** You mostly remember the last thing you heard in an interview, conversation, or similar setting because it's the most recent.
  ➢ Taking detailed notes or recordings is a way of overcoming this bias.

Bias in UX Research

❖ **Primacy bias**: Where you remember the first participant most strongly.
  ➢ Taking detailed notes or recordings is a way of overcoming this bias just like recency bias.
❖ **Implicit bias**: It is also known as unconscious bias. One of the most common forms of implicit bias in UX is when we only interview people within a limited set of identity profiles, such as race, age, gender, socioeconomic status, and ability.
  ➢ To overcome this bias, we can reflect on our behaviors and we can ask others to point out our implicit biases.
❖ **Sunk cost fallacy**: This is the idea that the deeper we get into a project we've invested in, the harder it is to change course without feeling like we've failed or wasted time.
  ➢ To avoid the sunk cost fallacy, break down your project into smaller phases and then outline designated points where you can decide whether to continue or stop.