

# Chapters 7&8 UX Design

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## Chapter 7: User Research

### Basic Steps of User Research

- Define your primary user groups
- Plan your research
- conduct the research
- form and shar your findings
- validate your usr group definitions
- Generate yser-focused product ideas

### Define Your User Groups

- Create a list of attributes
- Discuss and expand on the attributes
- prioritize the attributes that have the most impact
- segment the user groups

### Create a List of Attributes

- Documetns that stratigec considerations
- Data-based segmentations of current customers and other demographic data
- Previously conducted user research
- Surveys
- customerservice reports

### User attributes

- Promary user goals
- Roles
- Demographics
- Experience
- Work attributes

### Prioritize and Define

- Current frequency of trading
- number of product types traded
- level of subject-matter expertise
- level of techical savvy

### Plan Your Research

- How do nonprofessionals learn how to trade stock in the first place?

- What digital products do they use? Do they use a computer, a mobile device, or some combo to research and trade?
  - When do they tend to trade stock?
  - What kind of research do they do on a stock before they purchase?
  - What kind of research do they do on a stock before they purchase? What are their impressions of trading options? Are they worried that trading options would be too risky?
  - How many nonprofessional stock traders also trade options, currently?
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- Understand the common trading tools and habits of nonprofessional stock traders
  - uncover the obstacles that may stop a stock trader from learning how to trade options
  - determine the percentage of nonprofessional stock traders who have also traded options

#### Qualitative Research vs. Quantitative Research

- Quantitative research is focused on numerical data and is meant to provide *high-confidence, repeatable results* among your target user groups
- Qualitative research focuses on gaining *context* and *insight* regarding user behavior.

#### Product Analytics

- if you have a product out there you can use analytics to determine how people use your product

#### Event Tracking and Funnels

- this is tracking actions a user takes on your product like liking a post and selecting an article

#### For improving a search feature

- Which search filters get used the most often?
  - How frequently do users use the Advanced search?
  - How often does a visitor select one of their results after searching? Does this number vary between those using the basic search versus the Advanced search?
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- Of all visitors who performed a search in the past 30 days, how many opened the Advanced search at some point (whether or not they used it)?
  - Of all visitors who performed a search in the past seven days, how many actually used the Advanced search?

#### Choose Your Research Method(s)

- User interviews
- Field studies
- Focus Groups
- Card sorting
- Surveys

- Product Analytics
- Usability Testing
- A/B Testing (for live sites)

### **How Many Research Activities Can I Include**

- you must figure out your timeline so you can know what and how many Activities you can do?
- Budget and timeline
- where your highest areas of risk are, if you were to act without user insights
- Why you're conducting the research: what you want to learn from it
- Who you're including: the primary user groups you outlined above
- How you'll get participantsL recruiting people to participate and screening them
- How you'll compensate participants
- What space, equipment, and software you'll need, based on whether you'll be in person or you will conduct research remotely
- What you're covering" the primary topics
- How you're capturing information: the number of people involved and the tools they're using

## **Conduct the Research**

### **User Interviews**

- Structured conversations with current or potential users of your site

## **The Basic Process**

### **Interview topics**

- relevant experience with the project
- the company's brand
- Attitudes toward
- common goals or needs
- pain points in the overall process
- other people who are involved in the experience
- any other information that will help you validate assumptions you've made

### **Interviewing Tips**

- never ask leading questions don't guide the person to the answer
- record the interview to look back on

### **Contextual Inquiry**

combines field observation with interview techniques

- the real-life problems users are facing
- the kind of equipment they're working with
- the space they're working within
- their preference in interacting by mouse, keyboard, or touch
- How they're working with others

### The Basic Process

- 10 min introduction
- start with high level questions
- active observation is where the participant will walk you through this product while you take the role of the trainee to see what they see
- passive observation is where the participant will interact with the application as if you are not even there. this will show closer to how someone would use your product if they are alone.

### Focus Groups

involve bringing together a variety of people within a target audience and facilitating a discussion with them.

- Hearing a variety of user stories
- Understand relevant differences in experiences.
- Generating ideas
- understanding multiple points of a collaborative process

### The Basic Process

- explain your role as moderator
- why the attendees were chosen
- how the information will be used
- let them know they are okay to share whatever
- there are many topics to cover so they may have to move on even if a discussion isn't complete
- get everyone to talk on the first question that way everyone feels involved
- if you need to call on someone make sure to repeat the question so they don't need to ask
- control the flow by asking questions and leading the discussion in a natural way
- Indicate when there is a new topic so people don't get confused

### Card Sorting

participants are given items printed on cards and are asked to put them into groups that make sense to them. either into pre-made groups or groups that they decide on

## The Basic Process

- collect different ideas you would like to categorize
- choose items that are easy to understand without too much jargon

Give the following instructions

- Arrange these cards in whatever groups make sense to you
- try to have at least two cards in a group. If a card seems to belong to no group, you can place it to the side.
- At any time as you're sorting, you can name a group. By the end of the activity please name as many groups as you can.

## Variations on the Card Sort

- Closed sorts the high-level categories are provided and participants add to them
- group sorts this is where a collective group will come up with groupings for items

## Surveys

involve a set collection of well-defined questions distributed to a large audience

- can help see somewhat qualitative information in a more quantitative way

## The Basic Process

- create a survey based on the information that you want to figure out
- yes/no, strongly agree - strongly disagree, multiple choice

## Survey Tips

- who are you targeting
- What method for distributing the survey will give you the best results
- How much time will participants be willing to spend filling out the survey
- How will you know when to start analyzing the data
- What tool will you use to collect and analyze the data

## Usability Testing

involves asking participants to perform specific tests on a site or application to find usability issues and gather ideas to address them

## A/B Testing

is a method of comparing two designs to see which performs better against a particular measure

## Formal Share Findings

- there maybe a lot of information to churn though so it is important to figure out how to compile and share the findings

### A Quick Guide to Affinity Diagramming

- Code your participants with anumber and color, giving each a unique sticky note color.
- Break ot hte research notes for each participant onto separate stickies using their colors.
- Doa round of cleanup to make sure you have one data point per sticky note
- Gather the team, make it collaborative
- Ask people to cluster together statements together
- once clusters tart to form the tea should start labeling the clusters to provide further structure.

- Goals
- Mental models
- ideas and feature requests
- frustrations
- workarounds
- value statements

### Sharing Your Findings

- Make sure to make it nice an consice with the option to explore more that way more people are likely to read the information and the money the stakeholders used is not wasted/

Ask questions like

- what you set out to learn
- what you dd learn
- the key insights
- your recommendation after the research

### After the Research

- the next steps are to look back at your originall assumptions and reassess to get a better idea of who will use the product and how.

## Chapter 8: Personas

### What Are Personas?

artifacts that describe specific user types for a product, application or service.

- *marketing-targeted* personas that model purchase motivations
- *interactive personas* that are modeled toward usage behaviors

### Why Create Personas?

Personas can offer a lens into a user's perspective and can help justify why you make your product one way or another.

## **Finding Information for Personas**

- first you have to research them and then create the persona

## **Creating Personas**

- a persona is a singular person characteristic of the people that would use or are targeted at using the product.
- create a persona that is relevant to the applications product or service and that is believable

## **(Fairly) Standard Content Considerations**

- Name and image
- Job/role
- Goals
- Pain points
- Scenarios or use cases
- Channels/mediums
- Interaction style
- Quotes or testimonials
- Priority level

## **Additional (Optional) Content**

- Demographics
  - Age
  - Location
- Biography
  - Education level
  - Salary range/annual income
  - Online activities
  - Offline activities
  - Key entry or trigger points
- Psychographics
- technology comfort level
- Social comfort level

## **Ad Hoc Personas: The Empathy Map**

This is where we groupings based on actions they take we categorize all of them into 7 different categories about one person

## **Final Thoughts on Personas**

Personas are just to help you understand the user better!!

# Essential Questions

- What are the six basic steps of user research?
  1. Define your primary user groups
  2. Plan your research
  3. conduct the research
  4. Form and share your findings
  5. Validate your user group definitions
  6. Generate user-focused product ideas
- What are the steps of defining user groups?
  1. Create a list of attributes that will help you define the different users of your site
  2. Discuss and expand on those attributes with people at your company who have contact with relevant types of users
  3. Prioritize the attributes that seem to have the largest impact on why and how a potential user would use your product.
  4. Segment the user groups that you will focus on in research and design.
- What do these terms mean in the context of user research?
  - Primary user goals Why are users coming to it and what are they trying to accomplish?
  - roles What is the user's primary goal?
  - demographics Age, family, income and sometimes location
  - experience level of education, level of familiarity with the subject matter, and experience with relevant technologies,
  - work attributes size of the company users work for, department, type of job, and tenure.
- What are a goal, an objective, and a hypothesis in the context of user research?

A goal is the purpose for the research A objective is something specific, distinct and measurable that you want to accomplish A Hypotheses is an idea you want to validate or invalidate.

- What is the difference between qualitative and quantitative research?

qualitative has to do with non-numerical observations and measurements quantitative has to do with numbers and exact measurements. There tends to be higher confidence and repeatable results from quantitative research lending it to be a more reliable option.

- Describe three user-research methods

User interviews : One-on-one conversations with participants who belong to one of the site's primary user groups Field Studies : On-site visits to places with potential users to observe and learn about how they behave in their normal, everyday environment contextual inquiry is a common method that blends interviews and field work. Focus Groups : A group discussion where a moderator leads participants through questions meant to uncover their feelings, attitudes, and ideas about a specific topic

- What is a persona in the context of design?



It is artifacts that describe specific user types for a product, application or service. It is a simplified symbol of a product, application or service's user base.

- Why are personas useful?

They help us understand the users of our product so that we can better design whatever it is.

- How do you create a persona?

you have to gather research about the people your product helps, then you have to bring together common attributes and compile them until they can be simplified to be just one person. Then you can paint a picture on who that person is and what their life looks like.

- PLEASE GOOGLE: What is an IRB and how does that relate to human research in the context of a university?

An IRB is an Institutional Review Board its purpose is to, review reseach proposals, ensuring informed consent, protecting participant's privacy and confidentiality, ongoing monitoring and ensuring risk minimization. it is important to have since there are so much research is going on and it is good to have everything fact checked and quality checked so the reputaiton of the institution is not infringed apon.

## Reflection Questions

- Does yser research as described in chapter 7 line up with how you have seen research/science done in the past? Why or why not?

A little but I think it has goals and objectives where as I feel as though most science is very much hypothesis hypothesis hypothesis. The goal is to demonstrate or invalidate the hypothesis. The objective coincides.

- What od you think is one potential pitfall when defining user groups and how could you avoid it?

Getting too concerned about race and other non-impactful groupings of people. Income and things like education level are much better and gives a better picture in to the lives of your users. This can avoid racist or otherwise useless user groups.

- What is a qualitative question you coyld ask about someone's user experience with this book?

Do you think the color scheme makes sense for this book, why or why not?

- What is a quantitative question you could ask about someone's user experience with this book?

How long did it take you to read chapter 7?

- How can you personally practice building empathy as a design skill?

Creating personas and putting yourself in to other people's shoes will help you understand other people and see what they are going through in life.