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Designing the iPhone User Experience

Related Research Activities

User research can provide valuable insights, but it's not the only way to understand your users. In addition to user research, be sure to consider some of the other activities outlined in **TABLE 3.2**. Competitive research will be discussed further in Chapter 5, "Evaluating the Competition."

TABLE 3.2 Activities That May Help Define Your App

Activity	Description	App Stage
User research	Develop an understanding of your users' needs and how they are currently being met on the iPhone and other relevant platforms.	New or existing
Competitive research	Evaluate what your competitors are doing on the iPhone, as well as on other relevant platforms (Mac OS X, Android, Windows OS, BlackBerry, etc.).	New or existing
Market research	Evaluate your app's potential for a specific market.	New or existing
Literature review	Read existing research related to the app: market research, academic research, white papers, industry news, etc.	New or existing
Analytics	Evaluate how users are currently using your app. Many tools such as Flurry (www.flurry.com) can be used to show how users navigate through your app and what features are used most/least frequently.	Existing
App Store reviews	Read your app's reviews in the App Store; look for trends within the comments.	Existing
Customer support	Analyze what users are saying in your customer support forums.	Existing
Online forums	Analyze what your users are saying in relevant online forums, such as Twitter, Get Satisfaction, or Facebook groups.	Existing

Summary

Up-front user research can benefit both new and existing apps, shedding light on prospective users' context of use, perceptions, pain points, language, and customs. Using this foundation, you can make informed decisions throughout the product development process. Moreover, research can reveal new app opportunities and inspire innovative solutions.

The user research strategy depends on the type of app and its stage in the development cycle. In most cases, apps in the very early stages will benefit from observational methods, whereas apps in later stages will benefit from observational methods combined with app prototypes. As you develop and execute your research plan, keep in mind the following:

- *Some* user research is better than *no* user research. If you're seriously strapped for time, keep the study small and recruit through friends and family.
- Don't skip the user research plan! Sorting these details out in advance will save time and aggravation.
- Be empathetic and respectful toward your participants. Your sessions
 will be richer and the benefits greater if there is mutual respect and
 understanding.

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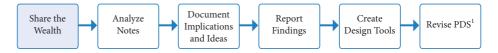
Analyzing User Research

AFTER COMPLETING THE USER RESEARCH for your app, you will undoubtedly be armed with reams of notes, dozens of photographs, and hours upon hours of audio or video footage to sift through. The sheer quantity of these artifacts can be overwhelming, but it's a priceless resource that you may refer to for months—potentially years—to come.

The challenge is how to translate these artifacts and observations into insights that can easily be used by designers, developers, and other members of your team. This chapter provides you with step-by-step advice on how to effectively analyze your user research, with an emphasis on collaborative affinity diagramming.

You'll also learn how your findings can be used to create valuable design tools such as personas, scenarios, and user journeys. These tools will help you prioritize features and ensure that your app designs meet your users' needs. To illustrate, we'll look at case studies demonstrating how other app designers and developers used similar methods in their design process.

Share the Wealth



One of the first things to do after a study is gather the artifacts and post them in a place where other team members can view them. Intranets and wikis are great, but so is an actual physical space within your company such as a conference room, an office, a cubicle, even the hallway if that's your only option. You can use invisible tape on the wall, whiteboard, or foam core.

Making the artifacts visible has several benefits:

- Surrounding everyone with this content will create a shared understanding within your organization.
- It simplifies analysis since the medium makes it easy to collaboratively analyze findings.
- The physical representation can be referred to in the later design stages, as it's continually updated and refreshed.

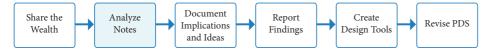
Initially, you'll want to organize these artifacts according to participant, as shown in **FIGURE 4.1**; later on you'll look for themes across participants. As discussed in the previous chapter, artifacts may include photos, notes, screen captures, video, audio, or all of the above.



FIGURE 4.1 Participant board for iPhone field interview analysis

^{1.} Product Definition Statement

Analyze Notes



Once you've gathered your notes, start extracting observations and grouping them into themes as you uncover them.² Sounds simple, right? If you are working independently and have observed nearly all of the sessions, the process can go rather quickly. However, if you are working with a group and not everyone has attended the sessions, the process may take a few days. People who didn't attend may be curious about some observations or debate whether a behavior even occurred. One rule that can help alleviate this problem is that team members must have attended at least two user interviews to participate in the analysis sessions. The depth and format of your interview notes (handwritten, transcripts, verbatim notes) will influence your approach.

HANDWRITTEN NOTES

As mentioned in the previous chapter, handwritten notes are a good option if approximate user quotes are acceptable. Study participants may also be more comfortable since a notebook is less intrusive than a laptop or video camera. Unfortunately, when notes are handwritten, the person who wrote them is typically the only one who can fully decipher them. Even the note taker may have a hard time interpreting incomplete sentences and shorthand. If there isn't time to create a transcript, consider having the note taker read the notes aloud while others in the group write observations on sticky notes. Additionally, holding debrief sessions immediately after each interview is a great way for teams to collaboratively analyze and expand upon notes.

TRANSCRIPTS

Transcripts can be created from the audio or video captured during your sessions. They are helpful if your team needs precise user quotes along with timestamps. Although transcripts are the most accurate option, they can take a long time to review since they include every single word that you, the participant, and the observers said during the interview.

Transcripts can be read to a team during an analysis session, but they require some filtering on the part of the reader. In this situation, it might help to divvy up the transcripts and have team members independently analyze each one.

NOTE

Creating transcripts is a time-consuming process. Companies sometimes outsource this step to a transcription service, which costs approximately \$60 for each hour of footage. Another option is to use software to help transcribe content such as InqScribe or Transcriva.

^{2.} The process is commonly referred to as *affinity diagramming* and was developed in the 1960s by Japanese anthropologist Jiro Kawakita.

VERBATIM NOTES

Typed verbatim notes (also known as "approximate" transcripts) typically require less filtering since they contain valuable details and quotes without the extra noise included in a transcript.

The following paragraphs are an excerpt of notes taken during an iPhone field interview with a college student. The notes totaled five pages for a 1.5-hour interview. The participant was asked to describe how he uses the iPhone at school.

I would have chemistry in the morning for 5 hours, Trig in afternoon, English at night. My chemistry teacher would lecture for 2 hours. I would have my periodic table open. I was in class one day and forgot my periodic table. I Googled it and found an iPhone periodic table app. I showed everyone in class and then they got it. It's free and they have a light version. A lot of people in class have an iPhone; half the class. Everybody is on the iPhone, especially on the train.

I'd also use my scientific calculator. If you turn the iPhone landscape, it expands. I removed the other one [he purchased a different one for class]. Don't like a ton of apps on my phone at once. Replaced my TI-89. The other app allowed more numbers than the built-in calculator app; could do longer equations with iPhone app. I looked in the App Store under scientific calculator. Looked for graphing one. I got this one. [shows me] There was a pop quiz one day so I asked: Can I use the phone? Professor said yes but some would say no.

To see how to analyze a user interview, examine the highlights indicating the notable observations:

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