cueinsights

Market Research in App Development

In 2010, Apple trademarked the popular phrase, "There's an app for that" due to the climbing popularity of mobile apps. The mobile app industry continues to see tremendous growth, and now instead of there being *an app* for "that," there are likely *many apps* for "that." The average U.S. consumer spends around 5 hours a day on mobile devices, and over 90% of that time is spent in apps[1]. Companies are spending more time, money and resources on mobile apps than ever before.

As new apps strive for share of those 5 hours, first impressions are critical to continued utilization. Market research provides valuable insights and recommendations during various stages of the app development process to support a strong and successful app release.

Mobile App Development Process

1 BACKGROUND AND OBJECTIVES
2 WIRE FRAMES
3 TECHNICAL EVALUATION
4 PROTOTYPE
5 VISUAL DESIGN
6 CODING
7 FINAL TESTING
8 RELEASE

Cue Insights provides critical feedback throughout several stages of the mobile app development process, including:

STAGE 2: **WIREFRAMES**	Wireframes are a blueprint for an app. They are created for the purpose of arranging elements to best accomplish a particular purpose[2]. They vary on levels of complexity. They can simply be an illustration with image and text placeholders for planning purposes, or they can be much more detailed with actual headlines and with some clickable links within a program.
STAGE 4: **PROTOTYPE**	In this stage, an app is typically a functional version that is ready for testing, but not yet finalized for launch. Several iterations of testing are typically done during this stage as it provides a more tangible product for respondents to test and provide feedback, compared to the initial wireframes which can be more conceptual.

STAGE 5:
VISUAL DESIGN

This stage goes beyond the features and functionality to test the visual nature of the app. Colors, icons, graphs, font and more are evaluated at this stage in order to produce a look that supports and enhances the mobile app.

STAGE 7:
FINAL TESTING

Once an app has gone through several iterations in preparation for release, a final testing is conducted in order to understand usage, perceptions and expectations. In this stage, the objective is to confirm that the app is ready for launch and to only make minor edits as necessary.

Based on Cue's extensive experience, we have developed helpful tips to support successful testing of mobile apps.

1. **Plan for iterative rounds of research and development**. Iterative research during any stage of the process incorporates mini-rounds of user feedback in a short period of time. App developers benefit greatly from this continuous improvement process.
   - One of the most critical pieces to iterative research is keeping all parties well informed. Developers need to be on track with the research timetable so they can plan their schedules to make the necessary updates to the stimuli prior to the next round of research.
   - If repeat respondents are being used, provide an overview of the entire process during the introduction of the study as better engagement leads to more thought between rounds and higher repeat show rates.
   - When testing multiple iterations of a digital prototype using repeat respondents, ensure respondents have access to previous iterations for comparison, as they don't always remember what they saw in previous rounds of research.

2. **Account for how technical requirements and willingness to download apps impact incidence and sample planning**.
   - *Consider the technical aspect.* In typical market research, your incidence is based on finding the respondents who meet your general criteria. When testing mobile apps, the technical aspect is added to the list of requirements and takes on another level that needs to be accounted for in sample planning. Each mobile app will have its own technical requirements, such as necessary software versions, device compatibility and storage size needed. Some testing programs have requirements of their own such as specific phone models or operating systems. Be sure to clearly state these requirements in the screener. Even if respondents think they meet the technical requirements, they may have technical issues and not be able to download the app.
   - *Recognize that not all respondents are open to downloading apps to their mobile devices.* While some respondents are willing yet unable, others are simply unwilling to download apps onto their phone. In one study that Cue Insights conducted, 10% of qualified respondents who met the technical requirements terminated from the screener because they didn't want to download an app.

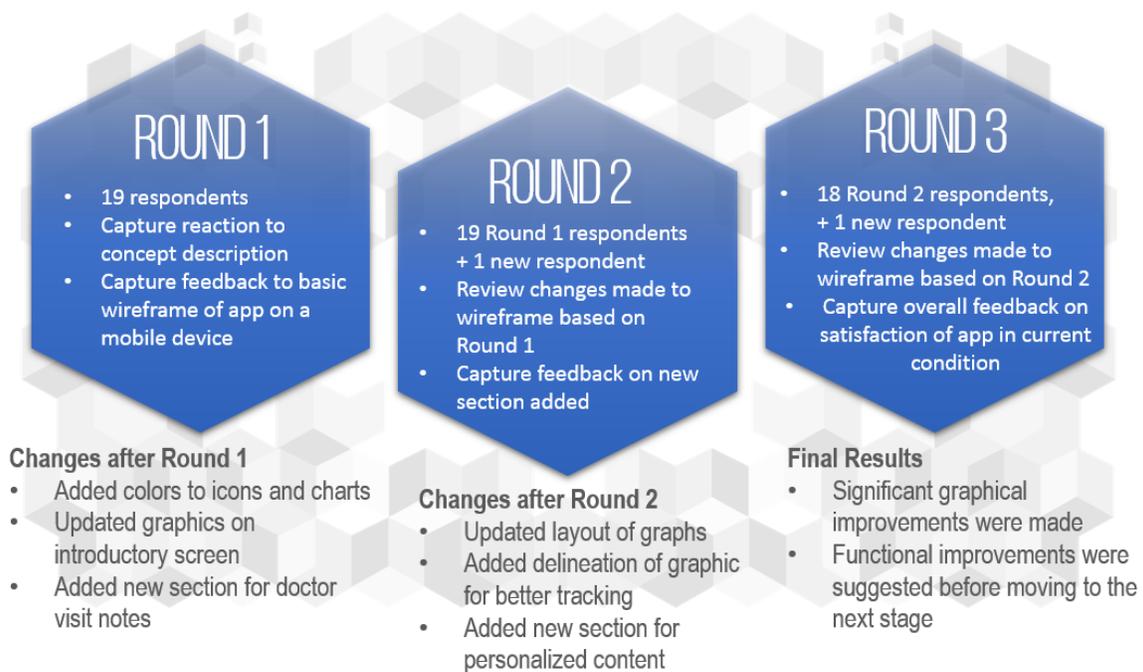3. **Equip respondents with relevant and clear instructions**.
   - *Provide clear technical guidance.* Once a respondent has passed the screener, provide them with detailed technical information for downloading the app and be prepared to help with any technical issues in order to aid project success. When possible,
     - Include links to download the app for a quick, easy and fool-proof download.
     - Include the app image that respondents should see when downloading the app in case they opt to download the app manually.
     - Consider if there are any similarly named apps worth mentioning. With the high number of apps available, there may be several apps with a name similar to the one being tested so it is sometimes helpful to include information on what NOT to download.
   - *Communicate assumptions and limitations of the app* in each stage and clearly state the objectives of the current stage of testing. For example, if respondents are evaluating an advanced wireframe, be sure to explain areas that will be updated in the future and what is a placeholder so that respondents do not get caught up in functionality or visual design at this stage.

Mobile app development and testing is a time-consuming process, but when done correctly, it aids in producing an amazing product that supports and grows your business. Instead of just being *AN* app, be *THE* app that your consumers want and need.

Case Study: **New healthcare app testing**

Cue Insights conducted qualitative interviews for a healthcare app that was in the wireframe stage of testing elements that affect the impact and understanding of the user interface. Three "sprints" (i.e., rounds) of interviews were conducted with 2 weeks in between each round. Each interview lasted 45 minutes. Due to the iterative methodology, significant improvements were made from round to round. Respondents were excited to see the improvements with each subsequent round and remained engaged throughout the entire process. By the end of the research, the app received much graphical improvement, but research suggested that more time needed to be spent on functionality improvements as these were frequently suggested. The client took the additional time necessary to refine the functionality of the app before moving forward with further development testing.

Healthcare App Testing Rounds

ROUND 1
- 19 respondents
- Capture reaction to concept description
- Capture feedback to basic wireframe of app on a mobile device

ROUND 2
- 19 Round 1 respondents + 1 new respondent
- Review changes made to wireframe based on Round 1
- Capture feedback on new section added

ROUND 3
- 18 Round 2 respondents, + 1 new respondent
- Review changes made to wireframe based on Round 2
- Capture overall feedback on satisfaction of app in current condition

Changes after Round 1
- Added colors to icons and charts
- Updated graphics on introductory screen
- Added new section for doctor visit notes

Changes after Round 2
- Updated layout of graphs
- Added delineation of graphic for better tracking
- Added new section for personalized content

Final Results
- Significant graphical improvements were made
- Functional improvements were suggested before moving to the next stage

Is mobile app development or refinement in your future?
Visit www.cueinsights.com to schedule a consultation.

[1]https://www.flurry.com/post/157921590345/us-consumers-time-spent-on-mobile-crosses-5

[2]https://en.wikipedia.org/wiki/Website_wireframe