



MASS WORKSHOP

Key Takeaways from Multiple Phases of UX Testing

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WHY ITERATION IN TESTING MATTERS

Nielsen's motivation for using an iterative approach to UX design



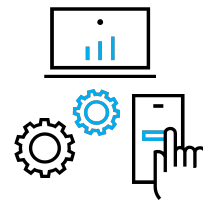
ITERATION

Usability testing best practices suggest using an iterative approach when evaluating respondent materials.*



TESTING

Exploratory testing allows researchers flexibility to incorporate feedback throughout the design process.



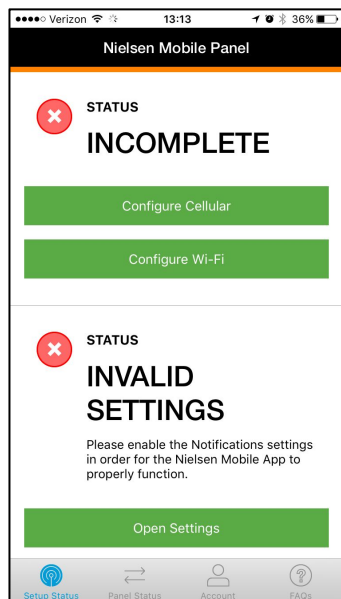
RESULTS

Produces a finished product that most closely suits the needs of the panelists.

*(Geisen and Romano Bergstrom, 2016)

HOW DID WE GET FROM...

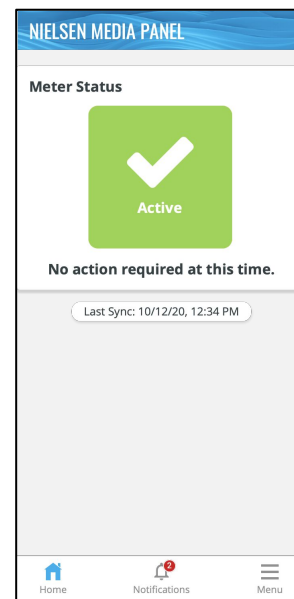
2018 & EARLIER



2019 - 2020



2021 - PRESENT



TESTING TIMELINE

Mobile App UX 1.0 Study

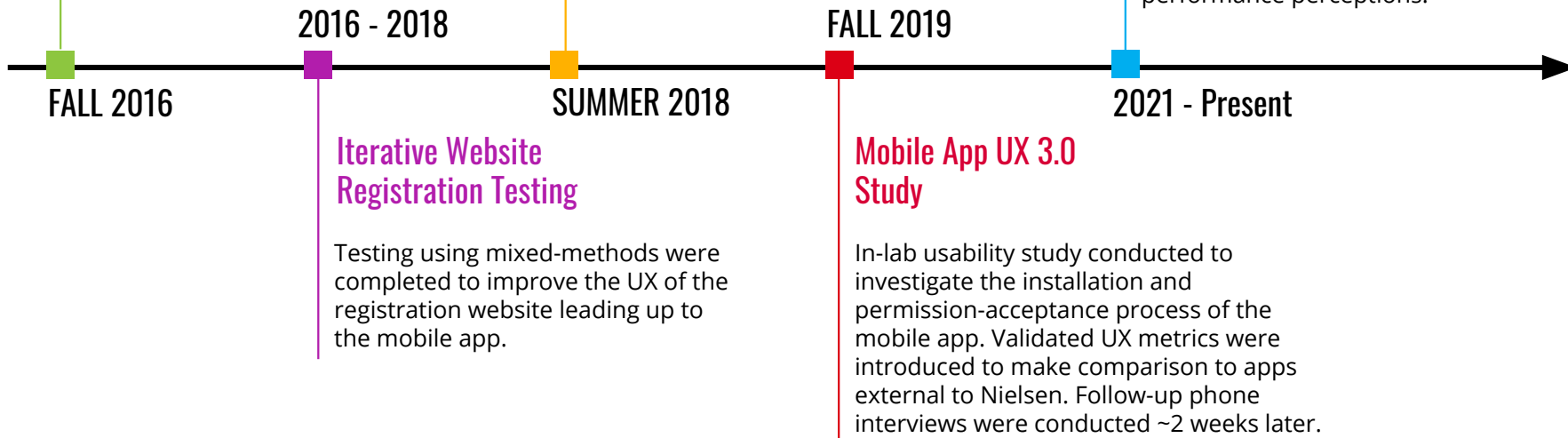
In-lab usability study conducted to investigate the web registration and installation process for the mobile app with users on a mobile device. Follow-up phone interviews were conducted ~3 weeks after the in-lab study.

Mobile App UX 2.0 Study

In-lab usability study conducted with both English and Spanish participants was conducted to understand the registration and installation process as well as users attitudes towards the apps purpose and their privacy. Follow-up phone Interviews were conducted ~3 weeks after.

Mobile App UX Ethnography

Lite UX-based ethnography using video diary-based participant responses to investigate user interactions with the iOS version of the mobile app over a ~2.5 week period. iOS Battery Usage Statistics were also collected to provide more insight into participants performance perceptions.



METHODS



Study Locations

- New York, New York
- Tampa, Florida
- Nationwide (U.S.) using remote platforms



Recruitment:

- General Population
- Tech Literacy
- Screener
- Incentives

Demographics:

- Mix of gender, ethnicities, and ages
- Mix of mobile device operating systems



Study Designs:

- In-lab Usability Studies
- Phone Interviews
- Eye-tracking
- Remote UX Studies
- Lite Ethnography with Video Diary Entries



METHODS

How did we collect data?



EYE TRACKING

For two of the five studies we used eye tracking. We used heat maps, gaze plots, and AOIs to analyze the usability of our recruitment website and our mobile application.



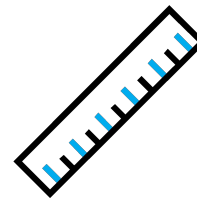
PARTICIPANT INSIGHTS

Throughout each of the five studies, we recorded participant feedback. By recording unprompted participant judgments and eliciting reflections, we ensured a more robust and thorough picture of the participant experience.



NEUROLOGICAL MEASURES

In three of the five studies, we used neurological measurement as a way of capturing subconscious message resonance.



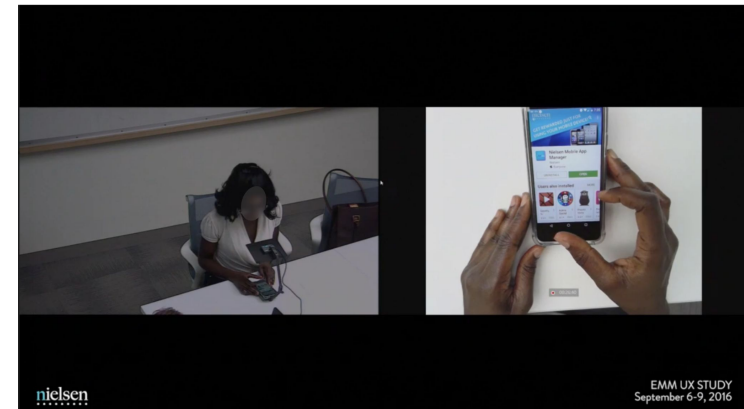
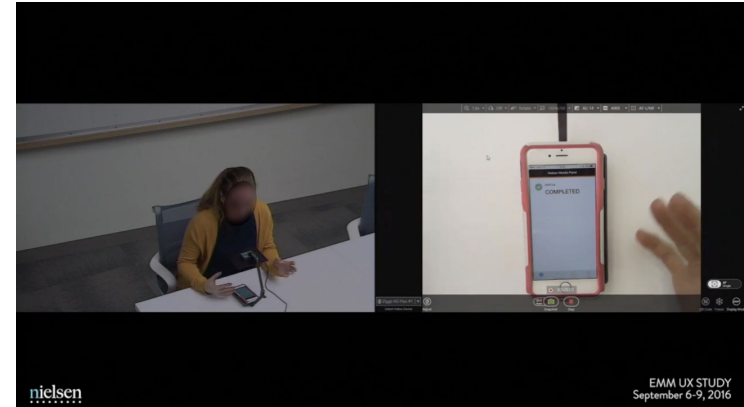
VALIDATED UX METRICS

In two of the five studies, we used validate UX metrics as a way to capture measurement across iterations of the study as well as make comparison with external UX studies.

FALL 2016: MOBILE APP USABILITY STUDY

Key Takeaways

- ❑ **UX Deliverables Matter :**
 - ❑ Creation of a highlight reel of users/participants making mistakes showcased that problems do exist and create stakeholder buy-in.
 - ❑ Stakeholders see value in UX testing and become interested in including iterative testing in the future.
- ❑ **Prioritization of UX Problems:**
 - ❑ Finding a large amount of problems can become overwhelming when addressing from a product management perspective.
 - ❑ Creation of a prioritization matrix (high, medium, & low) for identified problems helps speed improvement timelines
 - ❑ Problems are prioritized by impacts to the end-user, impacts to the product, level of effort to address, and more...

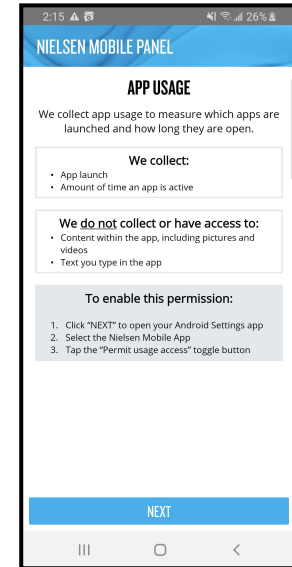
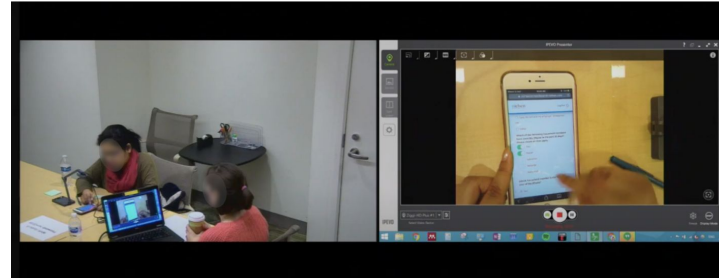


FALL 2018: MOBILE APP UX 2.0 STUDY

Key Takeaways

- ❑ **Insights from Spanish Participants:**
 - ❑ Spanish users have more difficulty with the app compared to English users.
 - ❑ Important to include Spanish Language SME in the app development cycle

- ❑ **Permissions are Difficult:**
 - ❑ Permissions are very difficult for users to correctly set up, regardless of language.
 - ❑ Permissions need to be siloed (“one t a time”), provide users with instructions, and provide users with value propositions.



FALL 2019: MOBILE APP UX 3.0 STUDY

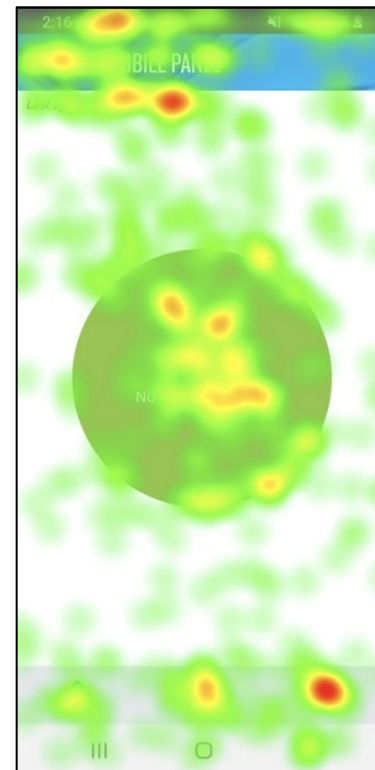
Key Takeaways

❑ Eye-tracking Insights:

- ❑ Most individuals DO NOT read permissions screens while completing an onboarding process. They go on auto-pilot.

❑ In-Lab Study * Real World Use:

- ❑ Follow-up phone interviews spotlighted performance issues perceived by the app.
 - ❑ Also spotlighted that some phone functionality was prohibited once the app was installed (i.e.; Chromecast, Screen Mirroring)
- ❑ Collecting UX Metrics showcased that the app is in a fairly good state (regarding its usability)

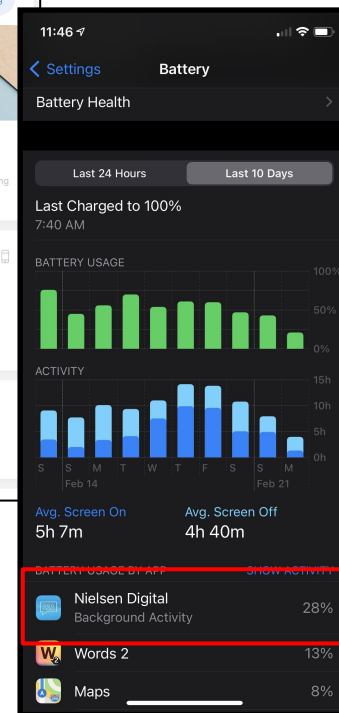
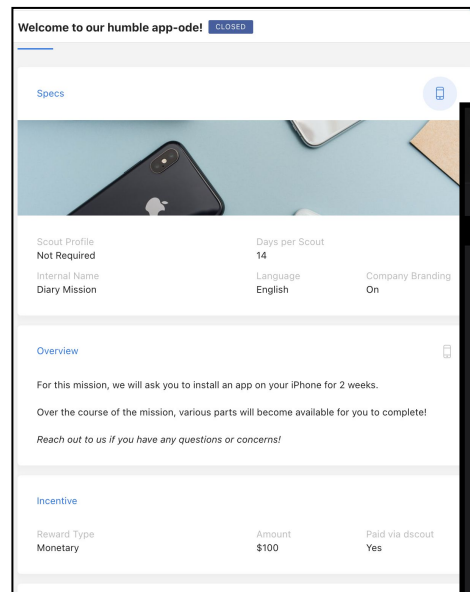


2021: MOBILE APP UX ETHNOGRAPHY STUDY

Key Takeaways

- ❑ **COVID-19 Pandemic > New Methodology:**
 - ❑ Remote-unmoderated > Nationwide (U.S.) sample
 - ❑ Reduced researcher bias, hands off approach

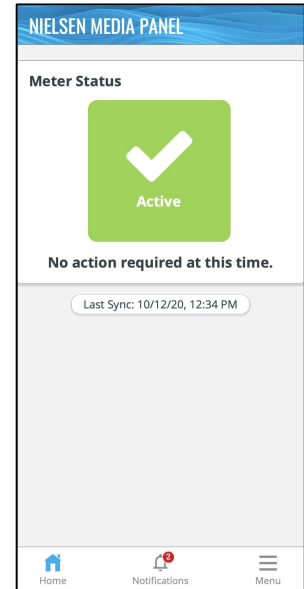
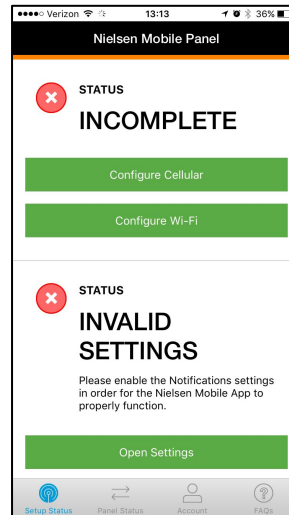
- ❑ **UX can be Impacted by non-UI Components:**
 - ❑ Severe performance issues (battery use)
 - ❑ Battery usage perceived by end-users doesn't correlate with what tech teams report is used
 - ❑ Asking for various permissions causes privacy concerns, however, proper UI can mitigate concerns to an extent.
 - ❑ Users more willing to allow permissions (and not voice concerns) compared to previous testing



CONCLUSION

Why is iterative testing important?

1. There's **ALWAYS** room for improvement.
2. You only get **ONE** first impression.
3. **LISTEN** to your participants





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