Seeing the Forest *and* the Trees:

Towards a Comprehensive Usability Testing Method



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Some background





Many ways of evaluating speech applications

Tuning

Task Completion Rate

Containment

Automation Rate

Focus Groups

Usability Testing

Misroutes

QA

Recognition Performance

Customer Satisfaction

Regression Testing

Usability testing is a method for...

- observing end-users individually,
- as they interact with an application,
- completing predefined tasks, and
- soliciting their opinions about the interaction you observed

Many Flavors of Usability Tests

- Application: prototype or production
- Users: actual end users or surrogates
- Data: real, dynamic data or created, fixed
- Venue: In-person or remote

Comparing Methods

Large-Scale Remote

- Participants interact with the system in their natural environment
- Participants complete a survey describing their experience
- Ability to test large numbers of participants in a relatively short time

In Person, Lab-Based

- Participant interacts in a lab setting
- One-on-one discussions with facilitator to describe experience
- Ability to explore participant's reactions and opinions to specific parts of the interaction

Unique benefits to each

Large-Scale Remote

- Catches infrequent, but important, interactions
- Shows what's happening in the interaction and with what frequency

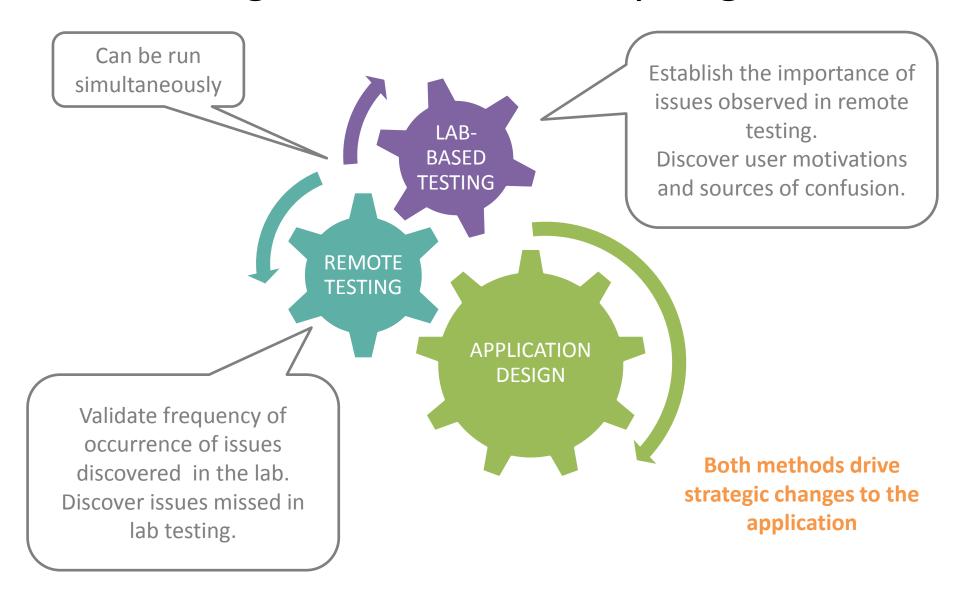
In Person, Lab-Based

- Ability to ask "what were you thinking when...?" about choices participants make
- Shows how strongly participants feel about issues they encounter

Reliability: the issue occurs regularly

Validity: the issue is relevant to the interaction

Combining methods creates synergies



Client Example

- Large IVR (1 million calls/month)
- Lab-based test with 15 participants, remote test with 500 participants
- Run simultaneously
- Issue: customers' opinion of the voice of the system

Converging data

In the lab 2/18 participants reported that they disliked the voice.

Remote testing validated that 12% of participants disliked the voice AND that younger participants were more likely to dislike the voice.

Change the voice!

Lab-testing revealed that participants disliked the voice because it sounded condescending or scolding.

Client was targeting a younger demographic.

Higher quality data

- What's happening and what it means
- Provides both a broad view of customer behavior and in-depth understanding of their motivations, needs, and preferences
- Allows organizations to make strategic changes to self-service applications with less risk

Thank You!

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