Large-Scale, Online Usability Testing: Usability Tools and Techniques

Card Sorting
What:
- Users place ‘cards’ into ‘buckets’
- Two basic approaches:
  - Open card sorts
  - Closed card sorts

Useful for:
- Identifying organization approaches
- Validating or refining existing information architectures (IA)
- Learning user’s expectations and understanding

Challenges:
- Selecting cards representing content’s depth and breadth
- Testing/understanding outliers

Tree Hierarchy Testing
What:
- Validating multi-level IAs:
  - Users locate content in a tree (folder) structure
  - Two basic approaches:
    - Static
    - Interactive
  - aka: Reverse Card Sorting

Useful for:
- Evaluating multi-level IA in a single sort
- Refining content strategy
- Identifying cross-linking and related content strategy

Challenges:
- Finding content that tests the IA’s depth and breadth
- IA gaps and logical alternative content locations

First-Click Testing
What:
- Testing user’s first instincts for performing specific tasks:
  - May also track click paths, task completion, and success rates
  - Evaluating areas that receive too much or too little attention

Useful for:
- Benchmarking traffic patterns
- Evaluating design/label change
- When no time for formal moderated usability testing

Challenges:
- Careful scenario identification
- Begin with homepage then moving through the IA

Testing Mobile Usability
What:
- Tools/techniques that:
  - Capture user interactions while using mobile devices
  - Allow users to share screens and/or facial expressions

Useful for:
- Understanding how different users/devices interact with sites
- Determining if a responsive or mobile site is wanted/needed
- Evaluating and improving responsive and mobile sites

Challenges:
- Testing best performed in person; remote testing poses software, hardware, and technical challenges

Social Media Recruiting
What:
- Recruiting through:
  - Blogs/Microblogs
  - Social networks
  - Content and collaboration communities (e.g., YouTube)
  - Zero- or low-cost alternative to recruiting services

Useful for:
- Leveraging existing social media presence/community
- When there is limited time or budget for formal recruiting

Challenges:
- Difficult to screen participants
- Recruiting strategy and limitations:
  - Screeners, data collection, PI, and OM seek clearance

Other (Related) Tools & Techniques
Crowd-Sourcing Design Feedback:
- Useful to involve users in the design process and get their buy-in
- Challenging to orchestrate and focus feedback to avoid overload and chaos

Online focus groups, interviews, moderated chats:
- Useful to pinpoint site strengths/weaknesses, and identify user wants/needs
- Challenging to ensure representation of target “actual” audiences

Formal, moderated usability testing:
- Useful to perform specific navigation/functionality testing including direct user communication and observation
- Challenging: requires formal recruiting, software, hardware, time consuming analysis and reporting

Surveys & Polls:
- Useful to collect targeted and general feedback
- Challenging: surveys/polls, strategy/methodology: responsiveness/follow-up

Conclusions
(Taking Usability to the Users)
Large-scale, online usability testing creates opportunities to:
- Test users in the field and online using different devices
- Include large, diverse, and distributed user population
- Recruit participants in a rapid, cost-effective way

Other Tools & Techniques
- Google Trends
- App Insights
- Mixpanel
- Hotjar
- UsabilityHub

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Emerging Usability Evaluation Tools and Techniques in Web-Based Health Communication