

Usability Testing Framework

moderated in-person/remote testing

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About Usability Testing

Usability is defined by 5 quality components:

- **Learnability:** How easy is it for users to accomplish basic tasks the first time they encounter the design?
- **Efficiency:** Once users have learned the design, how quickly can they perform tasks?
- **Memorability:** When users return to the design after a period of not using it, how easily can they reestablish proficiency?
- **Errors:** How many errors do users make, how severe are these errors, and how easily can they recover from the errors?
- **Satisfaction:** How pleasant is it to use the design?

The goals of usability testing vary by study, but in general, they usually include:

- Identifying problems in the design of the product or service
- Uncovering opportunities to improve
- Learning about the target user's behavior and preferences

The core elements in most usability tests are

- Facilitator (Researcher)
- Task
- Participant (End-user)

Conduct usability testing

1. Preparation before testing

Planning research helps to clarify the goals of the testing, set up the criteria to recruit

targeted users, contemplate the tasks and success criteria, and track the progress of recruitment and testing.

- a. Define the goals for the study
Talk with the stakeholders to determine what the team wants to learn.
- b. Example of research plan
 - i. Goals of testing
 - ii. Criteria of targeted users
 - iii. Task writing and success criteria
 - iv. User recruitment scheduling (ideally 5 users / user segment)
 - v. Moderator guide
- c. Progress tracking sheet
- d. Creation of the testing environment
E.g. is the object we're going to test on a live app, prototype, information architecture, etc.
- e. **Pilot testing** (very very important) internally or even externally
To debug the scenarios and the process

2. During testing sessions

- a. Responsibilities of a facilitator and an observer (Extra observers need to be hidden from the participant (user))
A facilitator is the one who is in charge of the flow of the testing session.
Activities of a facilitator include prompt users with tasks, ask follow up questions, etc. while an observer takes care of recording, maneuvers prototypes, and notes down user's behaviors.
- b. Before testing, ask user's consent to record the session (Recording Consent Form)
- c. During testing, encourage participants to think out loud (encourage users to articulate what they are thinking while doing tasks)
- d. User testing facilitation techniques
- e. After testing, ask follow up questions and give participants time to express concerns (related and unrelated topics)
- f. Debrief and prep between each session
Review and edit tasks, e.g. 2 users asked similar questions of a task and showed they didn't fully understand it. Rewrite the task.

3. Testing result decoding

Usability is measured relative to users' performance on a given set of test tasks.

- a. The basic measures are,
 - i. Success rate
 - ii. Time taken to complete a task
 - iii. Error rate
 - iv. Users' subjective satisfaction. (e.g. attitudinal rating)
- b. Identify patterns
What users' behaviors and comments repetitively appeared in the testing sessions
- c. Documentation

4. Team debrief (In any form of presentation, email, slack message, etc)

- a. Review of testing plan
 - i. Goals
 - ii. Methods
 - iii. Participants
- b. Outcome of testing
 - i. Answers to the questions/goals of the initial testing plan
 - ii. Identified patterns
- c. Invite stakeholders to observe the testing sessions (if recorded) and stakeholders are encouraged to take notes while observing.
- d. Communicate the next steps, which could include more research, prototype revising, information architecture adjustments, etc.

References:

<https://www.nngroup.com/articles/usability-testing-101/>
[A usability testing recording \(Youtube\)](#)
[Usability testing checklist](#)
[Stay neutral as a facilitator \(Tips on being a facilitator\)](#)
[Instructions for observers in usability testing](#)