



Thinking Aloud

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Introduction

"In a thinking aloud test, you ask test participants to use the system while continuously thinking out loud — that is, simply verbalizing their thoughts as they move through the user interface." (Nielsen Norman Group)

Examples of verbalised thoughts:

- "I'm trying to do ..."
- "I'm looking for ..."
- "I decided to do this, because ..."
- "This is confusing me ..."
- "I'm stuck ..."
- "This is frustrating ..."

Design Phases



Introduction – Why Thinking Aloud in Usability Testing?

- Understanding how test users view the computer system
- Facilitates identification of users' major misconceptions
- Shows what part of the dialogue causes the most problems
- Uncovers problems in our design
- Discovers opportunities to improve it
- Learn about users' behavior and preferences

Introduction – Variants of Thinking Aloud

- Concurrent Thinking Aloud
- Retrospective Thinking Aloud

Introduction – Concurrent Thinking Aloud

- Participants work through the predefined tasks
- The evaluator (moderator) takes notes on what has been said

Participants might need to be reminded to articulate themselves:

- “What are you thinking right now?”
- “What do you think does this notification mean?”
- “What do you think will happen?”
- “What reactions did you expect?”

Introduction – Concurrent Thinking Aloud

Dos:

- Show tasks/goals and let participants work & think aloud.
- Ask for permission to record it.
- Ensure that users understand that there is no right or wrong.
- Observe how participants interact with the system.
- Take notes & Remind users to think aloud.

Don'ts:

- Don't interrupt users while they are testing the system.
- Don't tell participants how to reach their goal.
- Don't test the users.
Test the system.
- Don't blame users for mistakes.

Introduction – Retrospective Thinking Aloud

Phase 1

- Participants complete the task in silence
- Activity is recorded with video and/or a screen-capture device

Phase 2

- Participants retrospectively comment on their process as they are watching a replay

Introduction – Comparison

Concurrent Thinking Aloud

- Unnatural situation
- Higher cognitive load
 - not compatible with performance measuring
- Inconsistent thoughts become apparent
 - less problems than in real life
- Biasing user behavior

Retrospective Thinking Aloud

- More extensive
 - more time required per participant
 - need to have the fitting video sequence available

Instructions

Step-by-Step



1. Define goals of the Thinking Aloud test
2. Plan tasks and scenarios
3. Organise location
4. Recruit participants (ca. 5)
5. Prepare and conduct the Thinking Aloud test



Strengths:

Relatively cheap in equipment and time-efficient. Process is simple and easy to learn.
Robust in data quality and flexible in processing.

Weaknesses:

Statement might get filtered.
Method can not be applied to everything.



Contact

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