
Tips and Tricks for Better Usability Test Recommendations

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Abstract

In this SIG experienced usability professionals will share tips and tricks for useful and usable recommendations resulting from usability tests. The discussion will be based on carefully analyzed, real-world examples.

Keywords

Usability recommendation, usability comment, usability testing, evaluation, usability test problems.

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

While there is substantial literature on how to conduct usability evaluations, little attention has been paid to the way that usability evaluations lead to recommendations for changes. This is a critical step in making sure that the results of evaluations have an appropriate impact on product development. If the translation from problem to solution is flawed, or if the recommendations are not taken seriously by the product team, a usability evaluation is a costly step that may have little impact on the product. How good are the recommendations that seasoned usability professionals

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provide in their reports? How well do evaluators communicate to developers the changes needed?

The basis for this SIG is the CUE-5 study, where a corpus of 13 experienced evaluation teams assessed the same web application, five of them doing a usability study, and the rest an expert review. We analyzed the problems reported by the largest number of teams for the presence of recommendations and for the usefulness and usability of what was recommended.

This SIG will be a forum for exchanging practical tips and tricks about usability test recommendations using actual usability problems and recommendations from the CUE-5 study as examples.

The intention is not to present a single right way of doing things, but to encourage an open and thoughtful discussion about various approaches to meeting some of the common challenges. In fact, we will welcome controversy.

Some of the topics that we envisage for the discussion are:

- What is a useful recommendation?
- What is a usable recommendation?
- Why are some recommendations less useful and less usable than you might expect?
- When should recommendations be provided?

Comparative Usability Evaluation 5 (CUE-5)

The specific recommendations used in this SIG are taken from the Comparative Usability Evaluation 5 (CUE-5) in which 13 professional usability teams independently and simultaneously evaluated the

usability of the IKEA PAX wardrobe planning tool on www.ikea-usa.com. Five teams used usability testing for the evaluation, seven teams used expert review, and one team used a combination of usability testing and expert review.

After the teams had submitted their anonymous test reports, the reports were analyzed and issues reported by two or more teams were identified. The overlap between reported findings was limited, which is roughly similar to what has been previously reported from the CUE-2 study [1].

In CUE-5 we also compared the recommendations for identical issues and found that they differed considerably with respect to content but also with respect to usefulness and usability.

A preliminary analysis revealed that some of the recommendations were not useful in the sense that implementing the suggestions would probably not solve the usability problem; indeed, it might introduce a new, more serious usability problem.

It also turned out that some of the recommendations were not usable in the sense that they were

- Incomplete, for example because important parts of the solution were not described,
- Incomprehensible, for example because they used usability jargon.

In this SIG we want to present our analysis to our colleagues. We want to discuss if our findings are correct, what the causes are and what can be done to solve any methodological problems, if they indeed exist.



Figure 1. Sample screenshot from the IKEA PAX Planner illustrating a serious usability problem: When users had constructed a frame and wanted to add interior components such as shelves and drawers, they were often annoyed by the message *Check the dimensions of this frame*. The message appeared because the width and depth of the frame did not match the width or the depth of the selected component. We will discuss the diversity, usefulness and usability of the recommendations to fix this usability problem in the SIG.

Examples of Usability Recommendations

"Check the dimensions of this frame"

The usability problem is illustrated by figure 1. Sample recommendations from 10 of the 13 teams who reported this issue:

- Team A: Only offer items that can actually be added to the frame (items that fit the dimensions of the frame). Change the error message to something more descriptive like, "Item doesn't fit due to your frame's dimensions."
- Team E: Don't show what can't be used
- Team N: The system should explain that the operation is not completed due to dimension incompatibility.

Accidental delete frustration

Several teams reported problems which led to accidental deletion of components which had been carefully selected and built up.

- Team B: Undo – provide an undo so the user can roll back a step. This will also remove the need for the pop up message.
- Team B: Also, all irretrievable actions should be accompanied by an "are you sure..." prompt.
- Team B: Keep the previous selection for the doors if the user toggles back to "yes" (after selecting "no")
- Team C: The reviewer suggests being able to drag items out of the layout to delete them.
- Team E: Confirm on deletion (of frames).

Inconsistency

When selecting interiors its not clear if the selected shelf is being added to the solution. The behavior seems different to the doors.

- Team A – Doors are added differently from interior items. All exterior and interior items should be consistent in how users add them to their wardrobe.
- Team E - Mental model for adding shelves is different than adding units. Common model for all – click and drag – this enables moving of shelves and units as well as installing – the same model could be used for deleting
- Team J - Unintuitive tools - User had to try a couple of times before properly using the tools.

Difficulty adding a corner unit

Sample recommendations from 3 of the 6 teams who reported this issue.

- Team A: All error messages need to provide clear information on what the user is doing wrong and directions for how to do it correctly.
- Team E: User tried adding the big one (100 centimeters?) – didn't seem to work
- Team H: Make error message have more detail. Perhaps even have a suggestion based on the units selected. It seems that the unit can be created with a 39 3/8" unit.

Citations

[1] Molich, R., Ede, M., Kaasgaard, K., & Karyukin, B. Comparative usability evaluation. *Behaviour & Information Technology* 23, 1 (2004), 65-74.

[2] CUE home page
<http://www.dialogdesign.dk/cue.html>