



503108

UI/UX DESIGN

CHAPTER 9: DESIGN TESTING

**LESSON 10 – DESIGN TESTING**

# OUTLINE

1. Introduction
2. Exploring Visual Design Mock-Ups
3. Choosing a Design Testing Approach
4. Usability Testing

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# 1. Introduction

- In the field of UX design, concept is also used to refer to design elements that are meant to represent one or more abstract ideas to the project team or a potential user.
- Concept can also mean the exploration of wireframes, visual design mock-ups, or rough prototypes that are meant to express the general messaging on the site.
- Concept exploration typically happens early in the design process.

# 1. Introduction

- Potential Pitfalls of Concept Exploration
  - “If I asked my customers what they wanted, they would have asked for a faster horse.” - Henry Ford.
  - Avoid asking participants to make direct choices
  - <http://www.aiga.org/content.cfm/design-meets-research>

# 1. Introduction



**Figure 14.1** *An example of a collage created by a participant during concept testing*

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## 2. Exploring Visual Design Mock-Ups

- It's best to have two or more variations available for them to compare and contrast
- Give the participants each design separately (either on a monitor or as a paper printout) and ask a set of questions



## 2. Exploring Visual Design Mock-Ups

- Some of the information you might gather includes
  - Common brand associations made by your participants
  - Design and lifestyle fit
  - Effectiveness of a particular mock-up in explaining a new concept
  - Ways that participants define some of the key terms you're using
  - Questions or concerns about how a particular set of tools would be used or the impact of introducing them
- Overall, there are no hard-and-fast rules for the activities included in concept tests or the types of elements you can test

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# 3. Choosing a Design Testing Approach

- The testing approach you take will affect the kinds of skills you need, the type of access to users that is necessary, and the space and software required to conduct your research
- Qualitative Research vs. Quantitative Research
- In-Person Research vs. Remote Research
- Moderated Techniques vs. Automated Techniques
- Remote Research Tools

# 3. Choosing a Design Testing Approach

- **Qualitative Research vs. Quantitative Research**

- Research approaches are often described as being either quantitative or qualitative
- Quantitative research is focused on numerical data and is meant to provide high-confidence, repeatable results among your target user groups
- Qualitative research, on the other hand, is not as focused on confidence levels and repeatability, but rather on gaining context and insight regarding user behavior

# 3. Choosing a Design Testing Approach

- **In-Person Research vs. Remote Research**

- The research methods can all be conducted in person, but some can also be conducted successfully from the comfort of your own home or office.
- Some of the factors to weigh when deciding whether to perform research in person or whether to perform it remotely

# 3. Choosing a Design Testing Approach

- **In-Person Research vs. Remote Research**

- *Context of environment.* By conducting research remotely you will lose some of the overall context of their environment
- *Context of need.* There's a benefit to using remote research regarding context here.
- *Access.* Here's an area where remote research often proves the best approach.
- *Cost.* Remote research is often thought of as being less expensive than in-person research

# 3. Choosing a Design Testing Approach

- **Remote Research Considerations**

- *Choose your tools carefully.*
- *Consider what hardware and software your users are likely to have.*
- *Test your setup before sessions begin.*
- *Have IT troubleshooting expertise at the ready.*

# 3. Choosing a Design Testing Approach

- **Moderated Techniques vs. Automated Techniques**
  - Most of the techniques covered are moderated, in which a facilitator (also called a moderator) talks directly to users and guides them through the research
  - Moderated approaches can be time-consuming and limited in scope
  - The number of effective automated tools for gathering research has exploded over recent years, providing a way for participants to complete research tasks online and have their responses and behaviors captured by the tool for later analysis



# 3. Choosing a Design Testing Approach

- **Moderated Techniques vs. Automated Techniques**

- What are you essentially trying to discover?
- What forms of data do you need captured?
- How would you like to recruit users?
- How will participants get to your test?
- Who's doing the analysis?

# 3. Choosing a Design Testing Approach

- **Moderated Techniques vs. Automated Techniques**
  - Setting up automated research can take more effort than moderated research in the planning stages
  - Automated tests generally work best for simple, linear tasks where you can ask specific questions and easily understand whether a user has succeeded or failed at a task

# 3. Choosing a Design Testing Approach

- **Remote Research Tools**

- <http://www.the10most.com/entrepreneurs/online-usability-testing-10-greattools-to-make-your-web-site-easier-to-use.html>
- <http://www.usefulusability.com/24-usability-testing-tools/>
- ClickTale (<http://www.clicktale.com>)
- Crazy Egg (<http://www.crazyegg.com>)
- UserFly (<http://userfly.com>)
- Chalkmark (<http://www.optimalworkshop.com/chalkmark.htm>)
- Loop11 (<http://www.loop11.com>)

# 3. Choosing a Design Testing Approach

- **Remote Research Tools**

- UserZoom (<http://www.userzoom.com>)
- UserTesting.com (<http://usertesting.com>)
- Usabilla (<http://usabilla.com>)
- OptimalSort (<http://www.optimalworkshop.com/optimalsort.htm>)
- Treejack (<http://www.optimalworkshop.com/treejack.htm>)
- SurveyMonkey (<http://www.surveymonkey.com>)
- Wufoo (<http://wufoo.com>)

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## 4. Usability Testing

- Usability testing is one of the most frequently used UX design testing methods.
- The concept itself is elegantly simple: create a prioritized set of tasks for your site, ask some users to perform them, and note where they have issues and successes.

# 4. Usability Testing

- **Usability Testing vs. User Acceptance Testing**

- People may have the misconception that usability testing only happens near the end of development or beginning of deployment
- This impression may also be related to the common practice of conducting user acceptance testing (UAT) at this later point
- UAT is one of the later stages of testing, and is rarely conducted on actual users.
- Usability testing is designed to provide more true-to-life performance information earlier in the process.

# 4. Usability Testing

- **Common steps involved in usability testing:**
  - Planning the research
  - Recruiting and logistics
  - Writing discussion guides
  - Facilitating
  - Analyzing and presenting results
  - Creating recommendations



# 4. Usability Testing

- **Planning the Research**

- Why Are You Testing?
- Who Are You Testing?
- What Are You Testing?
- What Information Are You Gathering?

# 4. Usability Testing

- **Planning the Research**

**TABLE 14.1** User Satisfaction Questions

QUESTION	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
The task took longer to finish than I expected	1	2	3	4	5
The task was easy to complete	1	2	3	4	5
I felt frustrated when trying to complete this task	1	2	3	4	5

# 4. Usability Testing

- **Recruiting and Logistics**

- Generating a List

- Registered users of a related company site
    - Customer contact information
    - Sites or groups relevant to your topic of research
    - E-mails to acquaintances with a connection to the subject of the test
    - Requests in the form of short surveys that prequalify participants
    - Postings or prequalification questionnaires in public places where potential participants may be found.
    - Third-party recruiting firms

# 4. Usability Testing

- **Recruiting and Logistics**

- Choosing the Compensation

- How general or specific is the audience?
    - How much interest is the topic likely to generate?
    - Will people participate mainly because they want to contribute something to the cause?
    - How inconvenient will participation be?

# 4. Usability Testing

- **Recruiting and Logistics**

- Screening

- Ensure the respondent is either a current user of the features you're testing or a likely future user
    - Determine his fit into one or more of your user group(s)
    - Help you get a good mix of participants within that user group
    - Exclude particular respondents who may have experience that could skew your results
    - Gather key details you need to know about before a participant arrives (optional)

# 4. Usability Testing

- **Recruiting and Logistics**
  - Planning for Space and Equipment
    - Where you're testing
    - What staff you'll need besides the facilitator
    - How you'll be recording the test

# 4. Usability Testing

- **Writing Discussion Guides**

- Begin with an introductory script that the facilitator can read to the participant.
- Instructions should include all the specific information that the participant needs to successfully complete the task or tasks you're testing

# 4. Usability Testing

- **Facilitating**
  - Be sure to ask users to think out loud during the test
  - Be careful not to give the participant the “right” answer too quickly!



# 4. Usability Testing

- **Analyzing and Presenting Results**
  - The amount of time you have for analysis
  - How your results will be used
  - Prioritizing Issues
  - Generating Insights

# 4. Usability Testing

- **Creating Recommendations**

- Resolve more than one issue, if possible
- Be actionable and simple—avoiding prematurely detailed designs
- Use verbiage that is straightforward but doesn't condescend