

Craigslist Usability Test Plan

Project Summary

Craigslist is a free advertisement website used to buy and sell products. A formative usability test analyzed the usability of creating a posting on the site.

Research Goals

Research Question #1:

What is the average number of errors a user makes when creating a posting?

Hypothesis #1:

H_0 : Craigslist users will make no more or fewer errors during task completion than the average error rate across all sites

H_a : Craigslist users will make more errors during task completion than the average error rate across all sites

Research Question	Study	Type of Data	Outcome Variable
1	Formative	Quantitative	Number of Errors

Participants

Screener

Screener Criteria

Research will be conducted with participants that understand the purpose of online advertising sites and are comfortable with navigating websites to complete a task.

1. Do you understand the purpose of online advertising sites?
 - a. *(If yes, move on to #2)*
 - b. *(If no, end interview)*
2. Do you know how to use a computer comfortably?
 - a. *(If yes, move on to task instructions)*
 - b. *(If no, end interview)*

Sampling

Sample size calculations determined that fourteen users should be recruited for the study, to achieve 80% power. The sample consisted of seventeen participants, due to initial error in sample size calculations. Due to limitations of budget, participants will be recruited using convenience sampling. Ideally, a sufficient budget would enable recruitment of a random sample of Craigslist users, through a third-party service.

Sample Size Calculations

Formula:

$$n = \frac{(z_a + z_b)^2 * s^2}{d^2}$$

One-tailed z-score values:

$$z_a = .95 = 1.64$$

$$z_b = .80 = .84$$

Standard Deviation from Pilot Study:

1.41

Pilot Study Data

Participant Name	Number of Errors
N	7
A	5

Sample Size Calculation

$$d = 1$$

$$n = \frac{(1.64 + .84)^2 * (1.41)^2}{(1)^2} = 12.23$$

Iterations:

$$t(11) = \frac{(1.80 + .84)^2 * (1.41)^2}{(1)^2} = 13.86 \sim 14$$

$$t(13) = \frac{(1.77 + .84)^2 * (1.41)^2}{(1)^2} = 13.64 \sim 14$$

Estimated Sample Size = 14

Design and Procedures

Task	Type of Data	Variables
A	Quantitative	Number of Errors

Variable Operationalization:

Errors - Any slip the user makes will be counted as an error. Slips are defined as any unintended action a user makes while trying to do something on an interface, even though the goal is correct.

("The Design of Everyday Things", Norman 1988)

Task Descriptions

Task A: Participants who pass the screening will be shown an interactive prototype of Craigslist's homepage. Participants will be asked to create a posting for a hypothetical product: a microwave in used condition to be sold for \$50, pickup only, in the West Los Angeles area.

General Procedures

Introduction

Hi, my name is Veeksha and I am researching the free marketplace website, Craigslist. Would you be interested in taking about 15 minutes of your time to answer some questions in exchange for a Starbucks gift card?

NDA

It is imperative that users stay uninformed about the logistics of this research. As a result, please be sure to not discuss any details of the study with any other individuals, until you receive notice that the study has been completed.

Consent to Record

Do I have your permission to record your interactions?

Pre-task questions

1. Do you see the purpose of online advertising sites?
 - a. *(If yes, move on to #2)*
 - b. *(If no, end interview)*
2. Are you computer literate (i.e. do you comfortably know how to use a computer)?
 - c. *(If yes, move on to task instructions)*
 - d. *(If no, end interview)*

Setting up the task

Task

- 1) Researcher will provide the Craigslist interactive prototype to users
- 2) Researchers will provide a sheet of paper to each user, with the words "Microwave- used condition. Selling for \$50 in the West Los Angeles area."
- 3) Researcher will state "Please create a posting using the information from the paper that you were provided."
- 4) Participants use prototype to complete the task
- 5) Researcher will debrief participants

Debrief

Thank you for completing this study. We appreciate your time and hope this experience was engaging.

Analysis

H1: Hypothesis 1

A one-sample one-tailed T test will be used to analyze user error rate.

The study will compare the present group's average user error rate during task completion to the average user error rate during task completion across all sites.

Jeff Sauro ("The Practical Guide to Usability Testing", Sauro 2010) found that the average number of errors per task across many consumer and business websites is 0.7 errors.

Deliverables

You will have the following deliverables for class:

- Interactive Prototype
- Detailed Findings Report
- Summary Presentation & Slide Deck

Timeline

Milestone	Status	Due Date	Notes
Research Design	Completed ▾	10/28/2022	
Data Collection	Completed ▾	11/18/2022	
Analysis	Completed ▾	12/02/2022	
Report	Completed ▾	12/02/2022	
Mockup Generation	Completed ▾	12/09/2022	
Summary Presentation Deck	Completed ▾	12/09/2022	