

# Usability Study Plan

Group #8: Sam O'Brien, Kaitlyn He, Courtney McKee, Christian Bekele

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## Purpose

IKEA is a company that sells ready-to-use and easy-to-assemble household items. These items include furniture for living rooms and bedrooms, kitchen appliances, and accessories for all around the house. IKEA offers the options of assembly service, picking up items in an IKEA store, and having items delivered to the customers (to be assembled by the customer). The company also has a rewards program called "IKEA family members". This service targets customers that are loyal to IKEA and are interested in good deals and IKEA coupons.

Companies like IKEA are always looking for loyal customers, often times targeting younger users to keep the business running in the future. In order to accomplish these goals, IKEA should be appealing to college students, because students are about to be entering new jobs with presumably a higher income. Students are also more susceptible to brand loyalty, and appealing to the new working generation would be ensuring a customer base for the future. This usability study will be used to improve the experience of college users who have recently moved into an unfurnished home. In conducting this research, we aim to test the effectiveness, the user flow, and the aspects of the website that lead to customer satisfaction. This study also aims to identify if the IKEA website is an inclusive experience for users. Conducting this study will help IKEA improve the online customer experience, especially for users who are in college that are limited by possibly budget and transportation. Thus, appealing to a younger college generation will help IKEA establish a loyal customer base for future company development.

## Research Questions

1. Are users able to navigate through the website? If not, where are they getting stuck? (What are some of the confusing points of navigation?)
2. How easily can users find and purchase a product?
3. What issues do users have when attempting to make a purchase, and how often do they occur? Take particular notice toward repeated errors.
4. What is the most likely approach a user takes when purchasing a product on the website?
5. How discoverable are the coupons on the IKEA website, and where do users have trouble applying coupons to a purchase?
6. Does the IKEA website appeal to individual college students?

## Participant Characteristics

The participants in this study will be college students who have moved into a new home within the last six months. These participants will be aged from 18 - 24 years old. There will be eight participants, half of which having at least one experience involving browsing the IKEA website, purchasing an item, and having the item delivered (or picked up) to their house. This study will not be dependent on gender, therefore the demographic of participant's gender will vary, and each participant will have the option to identify as male, female, or other.

## Method

These will be the steps we will take during the usability test and the estimated time it will take is 45 mins to an hour. The first 15 minutes will include welcoming the participant and conducting the pre-test. During the next 15 minutes we will ask the participant to complete the tasks, and for the last 15 minutes will have a discussion about the tasks with the participant, followed by a post-test interview. There will be eight participants and one person for a pilot test.

1. Welcome the participant.
  - a. Make the participant feel comfortable.
  - b. The participant will be instructed on the procedure
    - i. Let participant know we are not testing them, but rather the product.
    - ii. Instruct them to read the tasks out loud and have them think aloud when completing tasks.
    - iii. Explain to participants how to “think aloud”.
2. Pretest background Questionnaire.
3. Tasks, think aloud protocol.
4. Post-test interview with a survey.
5. Thank them and give chocolate/goodies.

## Task List

1. Starting on the Home Page, find a large, black, circular table to purchase and proceed to checkout (up to the point of putting in payment information and address). Now remove the item from the cart.
  - *Success*: Users navigate through the IKEA website without asking for any guidance/assistance. Users successfully add a large, black, circular product to their shopping cart and choose the proper store to ship to. Users also successfully remove the product from their cart before proceeding to the next task.
  - *Fail*: Users need to ask for assistance when navigating through the website. Will also fail if users cannot add the product to the cart, or if they cannot successfully edit their cart. Not being able to choose the proper delivery location or failing to remove an item from the cart would also fail the task.

2. Starting on the Home Page, find a sofa, coffee table, and one decoration of their choice to purchase that is under \$500. Select a suitable, inexpensive sofa, coffee table, and decoration of choice and checkout (up to the point of putting in payment information and address).
  - *Success*: User is able to successfully discover how to sort products by price from lowest to highest. Once the products are sorted, the user should be able to comfortably navigate through the sorted list to find the items that match the search criteria, adding the product to the cart and proceeding to checkout.
  - *Fail*: User has to ask for assistance throughout the process. Also if they cannot find out how to sort a list of products by price from lowest to highest. If a user cannot navigate through a sorted list of products, or cannot find the items that are under \$500, then the task would also fail.
3. Starting on the Home Page, sign up for IKEA Family membership and apply a coupon available to members[or use the given coupon] to a purchase of a kitchen appliance on the website.
  - *Success*: A user is able to become an IKEA family member and find a relevant product coupon on the website. Once they have found the coupon page [or use the given coupon], effortlessly applies the coupon to a purchase of a product (up until entering personal information and address).
  - *Fail*: User did not become IKEA family member, cannot find the coupon page, or cannot discover how to apply the coupon to a product (or cannot discover what the coupons apply to).

Study Design - All of the participants in our study will be completing all three tasks on the IKEA website. One team member will be a moderator and will be sitting alongside the participant, offering guidance when needed. Another team member will be taking small notes about the interactions and experiences the user is having. A recording of the participant's face, voice, and screen will be taken for future analysis.

#### Background Questions (pre-test)

1. Have they ever had experience with an online furniture/house appliance shopping website?
  - If so, what was their experience like?
2. Have they moved in their life?
  - If so,
    - How many times?
    - What is the experience like?
    - How recently did they move?
3. Have they ever used the IKEA website?
  - If so,

- When was the last time?
  - What was the experience like?
4. Did they have to buy furniture for their new home? If so, where? How was the experience?
  5. Favorite sites to shop on and why?

#### Post Test Interview Questions

1. Were they able to find and purchase a product from the IKEA website?
2. What did they enjoy about the experience, what did they like least? If there was one thing they would change, what would it be?
3. How likely are they to come back to the site and purchase items again?
4. Would they want to recommend the site to their peers?
5. Do they feel that the IKEA website appeals to a younger / low budget audience?
6. What task was the most difficult and why?
7. Are there parts of the website that you found to be difficult and what would you change to improve it?

#### **Test Environment**

For our study, our group will conduct usability testing in a Sieg meeting room. We will be conducting our tests in a controlled and consistent environment that closely emulates a user browsing the IKEA website from home. We will be using three Apple Macbook computers and one Dell laptop to conduct usability testing and will be using the software “UserZoom” to manage and record our study. Materials required other than the laptops are a notepad with a pen and pencil, some water for the participant if they might get thirsty during the study, and a 5 dollar gift card to offer as a reward for completing our usability study.

#### **Facilitation Approach**

##### *Pre Background Test*

Preliminary questions about their experience in online shopping ( IKEA.com). In addition to these questions, our moderators will probe into specific behaviors or comments the participant makes that are interesting to glean out useful information from the research session.

##### *Moderated Usability Testing*

- The participant will meet with two of the team members in a quiet Sieg hall study room.
- The moderator will prompt the participant to think aloud when they walkthrough their task completion process.
- Let the participant attempt to complete the task without further instruction or support. If a participant gets stuck or confused, observer and ask what they could do to resolve. This helps us learn about how a user would deal with issues if they were to complete a task on their own.

- Another team member will observe the body language of the participant and take notes on the overall study session.

### *Post-Usability Testing Interview*

Ask the participants about their experience.

## **Data Collection**

This is the data that will be collected during the usability test and will be used to evaluate our findings. The research questions will be answered with this data. The data will consist of quantitative and qualitative elements.

### *Quantitative:*

- The number of tasks completed with and without assistance.
- The number of pages incorrectly navigated to.
- The number of times clicking the back button.
- The number of times they ask for help for each task.
- The time it takes to complete the task.

### *Qualitative:*

- Ease of use of each task
  - Ask ease of use question after each task and have participants rate ease of use. Then probe into why they rated that way.
- Participants Behavior (example: happy, annoyed).
- Comments from the participant.
- The participants' satisfaction.
- Think aloud notes taken by the observer.

## **Data Evaluation**

The following list is the information that will be reported to IKEA:

- Data from preliminary and post usability testing survey about the likelihood to complete a purchase in real life.
- The average time it took to complete a task.
- The average success / fail rates of tasks.
- The most salient participant comments from think out loud notes.
- A description of the participant's behavior.
- The average number of times the user needed help with completing a task.

## **Reporting**

The research study's results will be shared through presentations and a final report. Some of the ways that the information will be shared are:

- The overall findings of this usability test will be suggested to the Ikea Web Design and Development team for improving user experience on the website and helping to keep the users' loyalty at a quick glance with visual data analysis.
- The design recommendations are for the Ikea team to further investigate to improve their website experience.
- The presentation of the results will be used to demonstrate to higher management (and an audience outside of the UX field) about the business value of improving user experience through a process of usability testing.
- The final report will include all the documentation, videos, interviews, and other collected data with detailed steps and analysis, and will also help with conducting future usability testing under similar conditions.