

Usability Study Plan

Team Human Centered Pizza

Purpose

Domino's is a fast food restaurant, known for its pizza. Customers can order pizza, pasta, and more from their menu online and can choose whether they would like the food to be delivered to their doorsteps or to carry the food out of the restaurant. As a fast food restaurant, Domino's goal is to make online ordering fast, intuitive, and enjoyable to speed up the ordering process, eliminate employee error from the ordering process, and free up more time for employees to spend on other tasks. The purpose of this study is to evaluate Domino's online ordering process and figure out what can be done to improve the experience for users. Specifically, we are aiming to improve the ease of use of the online ordering system and the effectiveness of the chatbot to reduce frustration for users as well as the cost of hiring employees to take phone orders. By making these improvements, Domino's can create a great online ordering experience where customers will want to come back to their website to order more food when they are hungry.

Research Questions

The research questions that this study will try to answer are as follows:

- Will users understand how to sign in to their pizza profile?
- Can users quickly and successfully place an order manually? Can users quickly and successfully place an order via the chatbot?
- What is the most intuitive path that users take to edit an existing order?
- Can users successfully apply a coupon or promotion code to their order?
- Will users prefer to place an order manually or via the chatbot? Is one of these options easier than the other? Why?
- Which features, if any, of the online ordering process are frustrating to the users?

Participant Characteristics

Our target user group consists of college students, ages 19-25, from the Washington area. These users will be looking for a fast, convenient meal at an affordable price. We would like for our participants to have ordered a pizza online, over the phone, or in person from any pizza restaurant in the past three months and are hoping to recruit a total of eight participants for our study as well as one participant to pilot our study. Of the eight participants, four participants will have ordered pizza online before and four

will have not. It important to have participants with different experience levels, because we are testing how intuitive Domino's online ordering process is and having different experience levels will help us learn if previous experiences with online ordering affect how users navigate the website. The gender ratio will be equally split, with two males and two females who have ordered pizza online as well as two males and two females who have not.

Method Overview

Usability test sessions will be approximately 45 minutes long. The procedure for this study is as follows:

1. Welcome (5 min)
 - a. Introductions and icebreakers
 - b. Explain the purpose of the test and answer any questions the participant has
 - c. Ask the participant to sign a release form to consent to recording their face and screen during the study and using the recording in our reports
 - d. Provide instruction for the study
 - i. Explain thinking aloud and ask for honest feedback
 - ii. Participants are testing the product, not being tested
 - iii. Answer any further questions the participant has
2. Background survey (5 min)
 - a. Have you ever ordered pizza online?
 - b. Tell me about the last time you ordered a pizza.
 - c. Have you ever ordered pizza from Domino's?
 - d. Do you prefer ordering food online, over the phone, or in person? Why?
 - e. What is your favorite platform for ordering food online? What do you like about the experience?
3. Tasks (30 min)
4. Post-study interview (5 min)
 - a. Overall, how satisfied are you with Domino's online ordering experience? What did you like or dislike? Why?
 - b. Do you feel like the standards and terminology used on Domino's website were clear?
 - c. Based on what you used today, do you have a favorite feature on Domino's website? Which one?
 - d. If you could change one thing about the experience, what would it be?
 - e. After using Domino's website, would you use it to order a pizza again?

Task List

Users will be asked to go through two workflows: placing an order manually and ordering a pizza via chatbot. To meet the successful completion conditions for all of the tasks in both workflows, users must be able to perform the tasks and achieve the correct results without moderator assistance.

Part One - Place an order manually

Users will go through an end-to-end flow of building a pizza with the pizza builder, adding to and editing items in their order, applying a coupon to their order, and placing their order. The tasks are as follows:

1. **Task:**

Create and log in to a Domino's profile.

Start State:

Dominos.com home page.

Goals:

- To understand the navigational buttons and paths a user chooses to create and log in to their pizza profile.
- To discover any barriers (e.g., too much information required) to creating a pizza profile.
- To understand if the feedback mechanisms (e.g., "Hi, Profile Name") communicate a successful login state to a user.

Prompts:

If the user does not talk about what they are seeing, ask them: What information do you think is required to create a Domino's profile? Why do you think it is required?

Success Criteria:

The user creates and logs in to their Domino's profile and reaches the Domino's home page.

2. **Task:**

Start a delivery order.

Start State:

Dominos.com home page (logged in).

Goals:

- To understand the navigational buttons and paths a user chooses to start a delivery order.

Prompts:

After the user successfully starts a delivery order, ask them: In what ways can you order pizza from the Domino's website?

Success Criteria:

The user fills in their location information and reaches the menu page.

3. Task:

Add a large pizza with a hand tossed, no garlic-seasoned crust; cheese (extra); robust inspired tomato sauce (normal); pepperoni (extra); and black olives (extra) to your order.

Start State:

Menu page with location information.

Goals:

- To understand the navigational buttons and paths a user chooses to build a pizza and add it to their order.
- To evaluate the efficiency of the secondary navigation in the menu. Can a user find the "Build Your Own Pizza" section of the menu?
- To evaluate a user's understanding and the ease of use of the pizza builder.

Success Criteria:

The user builds the pizza as specified and adds it to the checkout cart.

4. Task:

Add a 8-piece parmesan bread twists with garlic dipping sauce to your order.

Start State:

Menu page with pizza in checkout cart.

Goals:

- To understand the navigational buttons and paths a user chooses to add bread twists with dipping sauce to their order.
- To evaluate the efficiency of the secondary navigation in the menu. Can a user find the "Breads & Sides" section of the menu?

- To evaluate a user's understanding and the ease of use of the breadstick modal.
- To understand a user's feelings on the dipping sauce being auto-selected for them. Will they like or dislike it? Specifically, will they be frustrated that an item is auto-selected for them?

Prompts:

If a user does not talk about their feelings on auto-selected items, ask them:
How do you feel about the process of choosing a sauce?

Success Criteria:

The user adds a 8-piece parmesan bread twists with garlic dipping sauce to the checkout cart.

5. **Task:**

Add two 2L bottles of Barq's root beer to your order.

Start State:

Menu page with pizza and bread twists with dipping sauce in checkout cart.

Goals:

- To understand the navigational buttons and paths a user chooses to add Barq's root beer to their order.
- To evaluate the efficiency of the secondary navigation in the menu. Can a user find the "Drinks" section of the menu?

Success Criteria:

The user adds two 2L bottles of Barq's root beer to the checkout cart.

6. **Task:**

Apply the "Large 2 Topping and 8-Piece Stuffed Cheesy Bread" coupon to your order.

Start State:

Menu page with pizza, bread twists with dipping sauce, and two bottles of Barq's root beer in checkout cart.

Goals:

- To understand the navigational buttons and paths a user chooses to apply coupons to their order.
- To evaluate a user's understanding and the ease of use of the coupons modal.

- To understand if the feedback mechanisms communicate that the coupons have been successfully applied to a user.

Success Criteria:

The user applies the “Large 2 Topping and 8-Piece Stuffed Cheesy Bread” coupon and reaches the menu page OR the review order page.

7. **Task:**

Remove one 2L bottle of Barq’s root beer from your order.

Start State:

Menu page with pizza, bread twists with dipping sauce, two Barq’s root beer, and coupon in checkout cart OR the review order page.

Goals:

- To understand the navigational buttons and paths a user chooses to edit or remove an order. Specifically, will a user choose the dropdown, the “remove” text, or a different option to remove one of multiple items?
- To evaluate if a user understands how to edit or remove one of multiple orders.

Success Criteria:

The user removes one 2L bottle of Barq’s root beer from the checkout cart.

8. **Task:**

Checkout your order.

Start State:

Menu page with pizza, bread twists with dipping sauce, Barq’s root beer, and coupon in checkout cart OR the review order page.

Goals:

- To evaluate if a user understands how to check out their order.

Success Criteria:

This part of the usability test is complete when the user reaches the “Order Summary” page and their order includes a large pizza with no garlic seasoning, extra cheese, extra pepperoni, and extra black olives; a 8-piece parmesan bread twists with garlic dipping sauce; and a 2L bottle of Barq’s root beer. With the coupon applied, their total should be \$36.81.

Part Two - Order a pizza via chatbot

Given a generic phone number and address, users will customize and order a pizza through the chatbot, "Dom." The task are as follows:

1. Task:

Starting on the Dominos.com home page, start a new delivery order via the chatbot, using the phone number "425-877-3393" and the apartment address "4730 University Way NE #613, Seattle, WA 98105."

Start State:

Dominos.com home page.

Goals:

- To evaluate the discoverability of the chatbot feature from the home page.
- To evaluate the ease of use of the chatbot ordering process.

Success Criteria:

The user correctly enters the given phone number and address and receives the following chatbot prompt: "Got it. What would you like to order today?"

2. Task:

Order a medium ultimate pepperoni pizza with a hand tossed crust.

Start State:

Chatbot prompt: "Got it. What would you like to order today?"

Goals:

- To evaluate the ease of use and efficiency of adding a pizza to an order via chatbot.

Success Criteria:

The user adds one "medium ultimate pepperoni pizza with a hand tossed crust" to the checkout cart.

3. Task:

Checkout your order.

Start State:

Chatbot prompt: "Medium (12") Hand Tossed Ultimate Pepperoni was added to your order. What would you like next?"

Goals:

- To evaluate the ease of use of navigating to the checkout screen via chatbot.

Success Criteria:

This part of the usability test is complete when the user reaches the “Order Summary” chatbox and their order includes a “medium pizza with a hand tossed crust.” Their total should be \$22.55.

Test Environment, Equipment, and Related Logistics

Usability test sessions will be conducted in a study room on the third floor of Odegaard Undergraduate Library.

Participants will use one of our laptops and Chrome 70.0 with high-speed Internet access. The laptop will have a webcam as well as UserZoom and Zoom installed on it to record the participant’s face and their screen. We will also bring an additional notebook, tablet, or laptop to take detailed notes and collect data.

The facilitator will sit next to the participant while conducting the session and will introduce the study, conduct a background survey, introduce the tasks, and conduct the post-study interview. They may ask follow-up questions to dig deeper into the participant’s behavior and actions. The observer will sit in the back of the room and will take detailed notes and collect data on their notebook, tablet, or laptop during the session.

Facilitation Approach

Usability test sessions will be conducted in a study room on the third floor of Odegaard Undergraduate Library. Participants will think aloud as they complete the tasks, and both the participant’s face and their screen will be recorded. One facilitator and one observer will sit in the room with the participant. The facilitator will begin the session with an introduction to the study and a background survey. They will then introduce the tasks for the participant to perform and will end the session with a post-study interview. Although there are questions prepared for both the background survey and post-study interview, facilitators are free to ask follow-up questions to better understand participants’ behavior and actions.

Data Collected

The data that will be collected for this study are as follows:

- Recordings of the usability test session, including the participant’s face and their screen, for think aloud data collection

- Qualitative data from background survey responses
- Number of tasks correctly completed without moderator assistance, time a task takes, and participant quotes
- Number of tasks failed (either a user requires moderator assistance or moves on to the next task without meeting the success criteria)
- Qualitative data from post-test interview responses

Data Evaluation

The data that will be evaluated from session recordings and observer notes will be analyzed to answer this study's research questions and are as follows:

- Compare the average number of completions for each task without moderator assistance across all participants
- Compare the average number of assists for each task across all participants to identify features that users may find frustrating
- Evaluate if users can quickly and successfully place an order both manually and via the chatbot and if they can successfully apply a coupon or promotion code to their order
- Use notes from the background survey, tasks, post-study interview, and quotes to identify major themes in the user's behavior and actions as well as pain points that may affect how they feel about the online ordering experience before and after using the product

Reporting

The results of this study will be reported in three ways as follows:

- Preliminary analysis small report. This report will inform our immediate product team about this study's preliminary findings and will be submitted on 11/20/18. It is intended to give our product team a description of the product's most critical issues so that they are aware of what issues are preventing users from ordering their food and need to be resolved.
- Final presentation. This presentation will inform our client about this study's findings and our recommendations and will be held on 12/06/18. It is intended to give our client a description of this product's issues and our recommendations to resolve those issues so that they can improve their online ordering experience and bring more value to their product.
- Final report. Like the presentation, this report will inform our client about this study's findings and our recommendations and will be submitted on 12/11/18. It is intended to be an archive of this study and will include enough detail so that the study can be replicated in the future if necessary.