

# Project M Check-In 2

Team 10

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**Abstract:** This project focuses on the task of a user going to a store to shop for items. Online shopping notwithstanding, the current user experience can be less than ideal for shoppers going into a new physical store to shop for items and this project aims to improve that experience for both novice and veteran shoppers alike.

## Introduction

This project expands on the work performed by Dajiba Patel in the Assignment M series. An original interface was designed for traditional in-store shoppers to find goods in stores more easily.

## Needfinding Planning

### User Types

We have identified 3 types of users for this tool:

1. Store customers (regular people who visit stores to purchase goods for themselves)
2. Professional shoppers (Instacart shoppers)
3. Store owners

Store customers and professional shoppers are customers who would use the interface created in the first design iteration for this task.

Store owners are a different type of user with different needs. Buy-in from store owners will be needed for this application to succeed. Store owners will play a

part in ensuring that the interface can remain updated with consistent information about store products.

## **Needfinding Plan 1 - Surveys for Store Customers**

Store customers were the target audience for needfinding in the first interface design iteration. We will use these surveys to ask more targeted questions that will drive the design of the interface.

The goal of this survey will be to better understand shoppers' current practices when shopping in stores. The questions asked will reveal how frequently they carry their smartphones (key to being able to use an app-based interface), how often they look for new items, how much time they spend looking for those items, how frequently they ask for help, and how helpful they find the help. We will also ask shoppers what they think will help improve their shopping experience.

### **Data Inventory Items**

In the first iteration of this interface design, we identified who the users are (shoppers), where they are (in stores), the context of their task (busy focusing on finding their items and navigating the store), their goals (buying the items on their shopping list),

### **Biases**

With surveys, we may encounter a number of potential biases: confirmation bias, observation bias, voluntary response bias, and recall bias all present potential issues.

Confirmation bias poses a risk at the survey review phase. I can limit the impact of confirmation bias by collecting as much empirical data as possible from the respondents and leaving questions open-ended, inviting them to provide information that's not aligned with my questions. Once in the data-review phase, we will specifically seek out information that contradicts our pre-existing notions.

Observation bias poses a risk at the survey design phase. We may design a survey that aligns too closely with my specific beliefs about shopping. We will limit this impact by scripting the survey as neutrally as possible.

Voluntary response bias poses a risk to our survey, as users more excited about shopping (in either direction) are more likely to respond. We will limit this impact by avoiding showing questions to users until they've begun the survey.

Recall bias poses a risk to my survey at the response phase. Respondents may not have shopped recently (or may not have shopped for new items recently). We can limit this impact by inviting respondents to consider their recent previous experience shopping.

**We created the following survey questions (with the summary below):**

The following questions pertain to your shopping experience at grocery stores (Kroger, Publix), wholesale clubs (Costco, Sam's), department stores (Walmart, Target), and hardware stores (Home Depot, Lowes). Please describe your experiences at these stores.

1. How often do you plan to buy new items that you haven't purchased before?
    - a. Always
    - b. Often
    - c. Sometimes
    - d. Rarely
    - e. Never
  2. On average how much time do you spend searching for specific items you're unable to locate? (in minutes)
  3. Describe your agreement with the following statement: In general, I am consistently satisfied with my current shopping experience.
    - a. Strongly Agree
    - b. Agree
    - c. Neither
    - d. Disagree
    - e. Strongly Disagree
  4. Is your preferred in-store shopping method browsing all of the aisles or going straight to the items you need?
    - . Browsing all of the aisles
    - a. Going straight to the necessary items
    - b. A mixture of both
  5. What things would enhance your shopping experience?
    - a. Shopping List
    - b. In-Store Navigation/Mapping
    - c. Electronic Product Locator
    - d. Other
  6. If you selected Other on the previous question, please describe it here
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7. On a scale from 1 to 5, how often do you have your personal smartphone with you while shopping?

- a. Always
- b. Often
- c. Sometimes
- d. Rarely
- e. Never

8. Do you ever utilize existing shopping cart programs such as Kroger's clicklist?

- . Yes
- a. No

9. Do you use shopping services like instacart or store's shopping services

- . Yes
- a. No

10. If you answered Yes to previous question, what is the main reason you use these services

- . Busy schedule
- a. Shopping difficulties
- b. Other

11. If you answered "Other" to the previous question, please explain:

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12. How often do you use shopping lists?

- a. Always
- b. Often
- c. Sometimes
- d. Rarely
- e. Never

13. If you use a shopping list, approximately what proportion of the time are you the person creating the shopping list for your shopping episode (vs someone else)? (in %)

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14. Describe your agreement with the following statement: It is helpful to plan the path you will take to collect each item on your shopping list.

- . Strongly Agree
- a. Agree
- b. Neither
- c. Disagree
- d. Strongly Disagree

15. How frequently do you seek help to decide on a product when presented with number of options?

- . Always
- a. Often
- b. Sometimes
- c. Rarely
- d. Never

16. Describe your agreement with the following statement: When I ask for help locating an item that is on my shopping list, I am very satisfied with the help I receive.

- . Strongly Agree
- a. Agree
- b. Neither
- c. Disagree
- d. Strongly Disagree

### **Needfinding Plan 2 - Interviews with Professional Shoppers**

Professional shoppers are a new target audience that we speculate could find good use from an interface like the one designed in the previous iteration. We'll conduct interviews with professional shoppers to learn more about the tools available to them, their inputs, and their needs.

### **Needfinding Plan 3 - Interviews with Store Owners**

Store owners are an important user whose needs were not evaluated in the first iteration of the design of this interface.