



Personal Shopping Assistant

"Your smart shopping cart across the web"

P3-Usability Study Plan

Microsoft AI - Personal Shopping Assistant

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Purpose

Personal Shopping Assistant is a smart shopping mobile cart available in web (browser extension) and as a mobile app. The overall goal of this usability test is to find the usability issues of the its mobile app. Both the versions are currently in beta version so the overall goals of this usability test are:

1. Identify potential usability issues in the mobile app.
2. Are the users being able to understand the overall function and purpose of the app?
3. Understand whether the participants find this app useful enough to continue using it.

Research Questions

Based on the overall objectives of the usability study we came up with the following research questions:

Overall Research Questions:

- What do the users expect to accomplish from the PSA mobile app?
- Does the PSA app efficiently enhance one's shopping experience?

Onboarding Experience:

- How is the user's onboarding experience with the app?
- Do the users understand the purpose of accessibility and feel comfortable enabling it?
- Does the tutorial successfully help the users walk through the app?

Functions:

- Can the user add products from any retail web and mobile apps to the PSA app?
- Do the users understand how to add items to the different boards within PSA?
- Can the user successfully share a saved product with others?
- Can the user understand if the price of any saved product has dropped?

Perception:

- What are the overall reactions of the users when they use the app? Do they find the app engaged enough to continue using it after the study?

Participant Characteristics

Based on the discussion with our client , we have identified the following characteristics of the participants :

- 18 - 35
- Android user
- Shops frequently online from their smartphones (at least once a month) from browser and any retail app.
- English speaking
- Frequently looks out for discounts and compares prices in different apps/platforms
- Preferably creates boards in apps like Pinterest etc.
- Preferably creates wish lists in the retail apps

We will also try to recruit more female participants (3:2 ratio) for the study. Currently, there are no restrictions on the income of the participants. But we will recruit both students and working professionals.

Number of Participants:

Participants for the pilot study: 2

Participants for the final study : 7

Incentives: TBD

Methodology

Through this study we are will gather both qualitative and quantitative data. We will also create a script for the moderator and a task list document for users to do each of the tasks.

Team roles: Below roles will be done in rotations.

1 moderator, 1 observer , 1 recorder and 1 wizard of oz

Flow: Total: 60 mins

1. Introduction (10 mins)
 - a. Sign consent form

- b. Introduction to PSA mobile app
 - c. Explanation the purpose of this study
 - d. How frequently do you shop online?
 - e. What devices do you usually use when shop online? Computer/mobile?
 - f. Do you frequently shop from an app or browser. Which mobile apps?
 - g. Follow up question from survey (TBD)
2. Study sessions (40 mins)
- One round of task-oriented study session will be conducted. Participants will explore the PSA Mobile and provide think-aloud feedbacks with guidelines of 3-4 scenarios. We will collect both quantitative and qualitative data through observation, screen recording, and time recording.

Task lists

Task 1 Installation: Install PSA

Task 2 Login: Log into the PSA app

Task 3 Add from Amazon: Find a product from a Amazon (browser and/or mobile app) and add it to PSA

Task 3a: Save it PSA

Task 3b: Add it to board

Task 4 Add from Apps: Find a product from any other shopping app add it to PSA

Task 5 Add to boards: Add a product to a new board from PSA

Task 6 Share: Share a product from PSA with others

Task 7 Notification: Check whether the price has dropped for any saved products

3. Post Study questionnaire (10 mins)
- a. Ask overall impressions
 - b. Experience Rating
 - c. Anything they were afraid that would break? What do they like? Would you recommend it to their friends?
 - d. Would they like to uninstall or would they use it in the future?

Test Environment(s), Equipment, and Related logistics

Environment:

The test will be conducted in a meeting room at UW

Equipments:

Android phone (if the user is not comfortable using his phone) , video camera, voice recorder, laptop, screen record(Android Lollipop),tripod for video camera, battery chargers for all equipments, pre-set form for note taking (digital and printed),moderator script and debriefing notes (including Likert scale satisfaction question),printed scenarios for user reference.

Participants Incentive: TBD)

We are conducting this study on investigating usability issue of the app, any failures or confusing when using the apps are welcomed. Interviewees should feel comfortable and honest with their feeling. We will try our best to create a reliable and comfortable environment for the interviewees.

Data Collection

Below are the questions and issues we will be examining during the usability study. Accordingly, we will collect and analyze both quantitative and qualitative data.

Questions	Tasks	Data collected	Data collection method
<p>How is the user's onboarding experience with the app?</p> <p>Do the users understand the purpose of accessibility and feel comfortable enabling it?</p>	<p>Install PSA</p> <p>Log In</p>	<p>Successful completion of Task</p> <p>Number of clicks</p> <p>Time required to complete the task</p> <p>Whether prompting or assistance is required</p>	<p>Observation</p> <p>Think aloud</p> <p>Screen Recording</p> <p>Probing Questions</p>

<p>Does the tutorial successfully help the users walk through the app ?</p>		<p>Major problems associated with the task</p> <p>Any feedback provided by user</p>	
<p>Can the user add products from any retail web and mobile apps to the PSA app?</p>	<p>Find a product from a Amazon (browser and/or mobile app) and add it to PSA</p> <p>Find a product from any other shopping app add it to PSA</p> <ul style="list-style-type: none"> - Save it PSA - Add it to board 	<p>Successful completion of Task</p> <p>No of clicks</p> <p>Whether prompting or assistance is required</p> <p>Major problems associated with the task</p> <p>Any feedback provided by user</p>	<p>Observation</p> <p>Think aloud</p> <p>Screen Recording</p> <p>Probing Questions</p>
<p>Do the users understand how to add items to the different boards within PSA ?</p>	<p>Add a product to a new board from PSA</p>	<p>Successful completion of Task</p> <p>Whether prompting or assistance is required</p> <p>Major problems associated with the task</p> <p>Any feedback provided by user</p>	<p>Observation</p> <p>Think aloud</p> <p>Screen Recording</p> <p>Probing Questions</p>
<p>Can the user successfully share a saved product with others?</p>	<p>Share a product from PSA with others</p>	<p>Successful completion of Task</p> <p>Whether prompting or assistance is required</p> <p>Major problems associated with the task</p> <p>Any feedback provided by user</p>	<p>Observation</p> <p>Think aloud</p> <p>Screen Recording</p> <p>Probing Questions</p>
<p>Can the user understand if the price of any saved product has dropped?</p>	<p>Check whether the price has dropped for any saved products</p>	<p>Successful completion of Task</p> <p>Whether prompting or assistance is required</p> <p>Major problems associated with the task</p> <p>Any feedback provided by user</p>	<p>Observation</p> <p>Think aloud</p> <p>Screen Recording</p> <p>Probing Questions</p>

Quantitative

- Task Success/Completion Rate
- Task Failure Rate
- Task Error Rate
- Number of assistance
- Number of Clicks
- Time
- Satisfaction Rating
- Net promoter score (TBD)

Qualitative

- Click Pattern Analysis
- Verbal Cue Analysis
- Nonverbal Behavior Analysis
- General feedback on the features
- Suggestions provided by the participant

Reporting

Upon completion of the usability testing and data analysis, the following deliverables will be provided to the key stakeholders at Microsoft.

- Oral presentation (in classroom environment)
 - Includes highlights from the usability test sessions
- Summary report of findings
- Detailed methods and findings report - PDF, includes:
 - Review of overall objectives
 - List of research questions
 - Participant profiles for recruited sample
 - Methodologies utilized
 - Data points collected throughout the study
 - Analysis of data
 - Recommendations based on findings , including areas that may need additional research
 - Recommendations for continued research (if any)

- Appendix including:
 - Screener survey
 - Consent and non-disclosure agreement forms.