

Study Plan: Self-checkout machines in stores

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1 Study Objectives

- Detect common user pain points
- Analyse real self-checkout systems
- Design a clearer and more user-friendly self-checkout systems

2 Research Questions

- What confuses people the most using the self-checkout systems?
- What visual problems users revolts the most?
- Are age and type of problems related?
- What changes do users think would improve self-checkout the most?

3 Participants

- At least 15-20 participants representing diverse demographics

4 Study Method

- Usability testing
- Questionnaires about the existing solutions and our proposed solution

5 Tasks

- Users will be tasked with completing a questionnaire about their experience with self-checkout machines, try our proposed improved solution and complete a second questionnaire about their thoughts about it.

6 Data Collected

- Quantitative data (age, how often the user uses the self-checkout machines,...)
- Qualitative data (users' experience with the self-checkout machines)
- Data collected with two questionnaires, one about the existing self-checkout machines and the other about the users' experience with our proposed improved prototype

7 Procedure

- Task execution (prior experience using self-checkout machines, testing our solution)
- Demographic questions
- Questionnaire about the user's experience with the system

8 Data Analysis Plan

- Compare the answers from both questionnaires and determine whether we have improved what users found the most problematic. Analyze what the users think the biggest problems with our solutions are and if we introduced any new problems that the existing solutions didn't have.

9 Ethical Considerations

- All the data collected from our questionnaires will be anonymous