

UX Case Study: Tomorrow's Shopping Cart



Project Summary

Tomorrow's Shopping Cart is an electronic shopping device that allows customers to find any product in the store. It can also help people find the ingredients of a recipe. It helps them speeding through checkout with the function to scan items. It helps them speeding through checkout with the function to scan items. My role was to research, design and test the device. This was a project assignment for David Travis ultimate guide to UX.

Length of project: 2 weeks

Client: [Dr David Travis - Udemy](#)

Role: User Experience Researcher

Tasks: Carry out user research to discover if there is a user need for a product like this. Identify the key user groups, identify the key tasks, set usability goals, develop a prototype and run a usability test before iterating on the design.

Design Tools / UX Methods: Used Competitive Analysis, Affinity sorting, Persona, Storyboarding, Adobe XD, InVision Studio.

The Problem

So many products in the supermarket. Hard to select properly, don't you think? Am I eating healthy? And where did they put this item again? Shopping can get very confusing.

The Solution

Wouldn't it be wonderful to have a device on your shopping cart that allows you to find any products in the store, scan items and see what's inside a product? That's Tomorrow's Shopping Cart.

UX DESIGN PROCESS



Strategic objectives: The director of a chain of supermarkets wants to develop an electronic shopping device to encourage people to buy in his stores.



Requirements: He wants a physical product that attaches to the shopping trolley to remain in store.



Business Goals + User Goals: An electronic shopping device. allowing customers to find any product inside the supermarket. The user research will show the user needs and the changes the device will need to meet them.

DISCOVER



Competitive Analysis: I observed the following apps: Sainsbury's SmartShop, Sainsbury's Groceries, Tesco and Ocado.

I visited the App Store, checked the user reviews and identified the following goals users couldn't reach:

- No minimum of items required to purchase.
- Option to go back without having to return to homepage.

- Option to save the credit card information.
- Access to vouchers and coupons.
- Access to receipt.
- Add photos of products inside the recipe tab.

Everyone can download and use these apps anywhere. No one offers a special service or feature from inside the store exclusively.



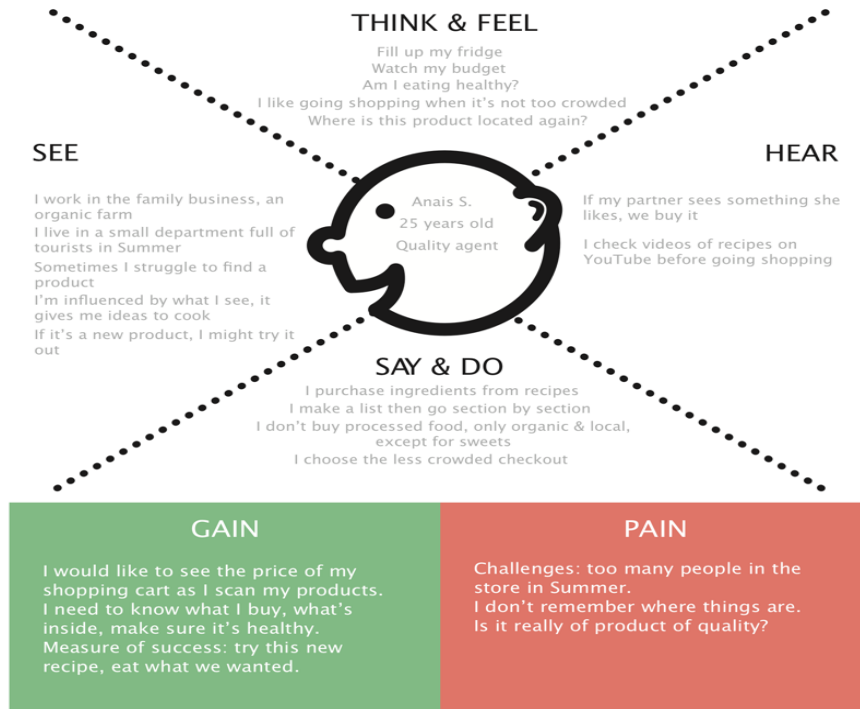
User Research: I interviewed 5 people age range 25–58 to evaluate the need for the system. I recorded the user interviews to focus on the body language and It showed the following:

- 60% of the users follow a list.
- 40% have a hard time locating the products. Even when they buy at the same store.
- 60% always walk the same route and know where everything is placed.
- 80% purchase to cook specific recipes and would love suggestions of new ones.
- For 80% of the users, knowing exactly what they eat is important.
- 60% are watching their budget.

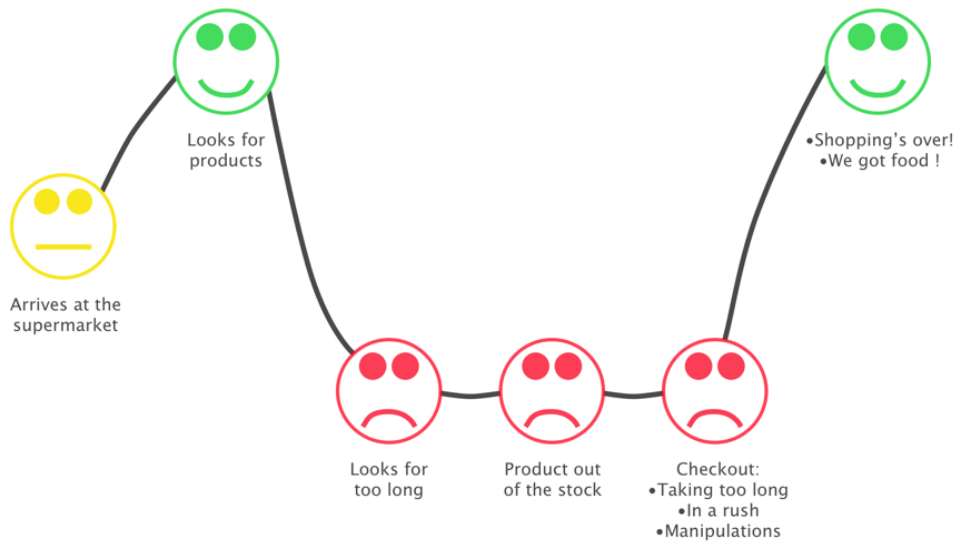
Affinity Sorting and Persona

I used affinity sorting to define my *primary persona* and the *red routes*.

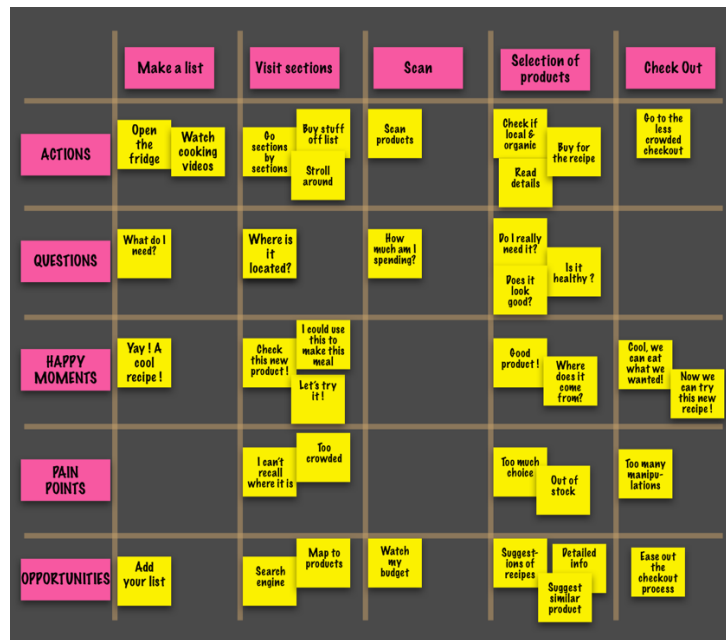
The sticky notes show the observations made by the users and the common themes and tasks. The stickers are ordered chronologically, from the preparation of the purchase (list) to the checkout. I used an *empathy map* and a *user journey map* to develop my *persona*. [see empathy map, improvement map and user journey map]



Empathy Map



Improvement Map



User Journey Map

Based on the *user research*, I discovered the need of the following features:

- Scan products to manage budget and facilitate the checkout process.
- Detailed information of the products (components, if healthy).
- Search products.
- Map to products.
- Add your shopping list.
- Show substitute products.
- Recipes according to the items in the shopping cart.

I created the red routes for the app and the scenario based on my primary persona and her user story.



Anais

"I need directions to find the products and to know if I eat healthy"

Anais is young and is watching her budget. She always bought organic and local food except for some treats from time to time. She's the one cooking at the house and she likes to buy ingredients to try out a new recipe she found. It's important for her to know what's inside each product and if it's healthy as she's on a diet. She has no sense of orientation and she would love having more directions in the store.

General

- Quality agent
- 25 years old
- Buys once a week
- She's the one cooking
- Makes a shopping list

Needs & Goals

- Needs orientation to find products
- Needs to watch her budget
- Wants to know if she eats healthy
- Needs help to select good products

Shopping behaviour

- Likes shopping when it's not too crowded
- Likes to stroll around
- Only buy local & organic

OUTCOME

Learnings?

Working with the empathy map and user journey map. It really helped me put myself in the shoes of the users and not designing ideas that could have helped my own shopping experience.

Surprising insights from user research?

So many users taking care of what they eat, making sure the products are healthy, local and mainly organic. So many of them insisted on knowing the components of the products and their origins. I was impressed by the level of awareness.

Challenges?

Make this project fun. Of course the project sounded a bit futuristic with the notion of Tomorrow's shopping cart. But how could I make buying groceries a bit more entertaining? I did my best to make the device as playful and efficient as possible. Because no one has time to learn how to use something complicated. Even less when buying groceries can be a nightmare for some people.

Introducing Tomorrow's Shopping Cart

