

1 Background + User Research

Background

Nourish Technology builds standalone robotic systems that prepare and cook hot breakfast sandwiches and brew fresh coffee. Nourish Technology strives to disrupt the fast food industry by producing healthy and delicious “fast food.” Breakfast Box (“BBox”) is their pilot product – a freestanding retail kiosk that lives inside of office buildings, hospitals, airports, schools, and other locations with high foot traffic.

BBox challenged us to identify pain points in their current customer process and reinvent a more delightful morning experience.

Research

We conducted research through a few different methods:

- **Secondary Research** – research the restaurant industry and its developments with automation.
- **Survey** – morning routines and how it relates to eating habits
- **Contextual Observations & Guerilla Interviews** – visited EATSA SF and interviewed morning commuters on BART.
- **Interviews** – gathered thoughts on automation in the food industry, ideal breakfast experiences, and initial usability testing for current BBox webapp



SF Eatsa



Affinity mapping observations from user research

Research Insights

From our research, we sorted through observations and notes to synthesize some main insights:

- We found that consumers valued **health, quality and taste**.
- **Lack of time was the biggest factor that caused our survey participants to skip breakfast**; although almost everyone desired to incorporate a quick morning meal into their daily routine.
- The majority of interviewees expressed an **aversion to seeing robots or machines cook their “fresh” food**, citing a “seemingly dystopian” vibe.
- Regarding the current BBox webapp, most interviewees thought that the process was relatively simple, but most **wanted more visuals** in the ordering process.

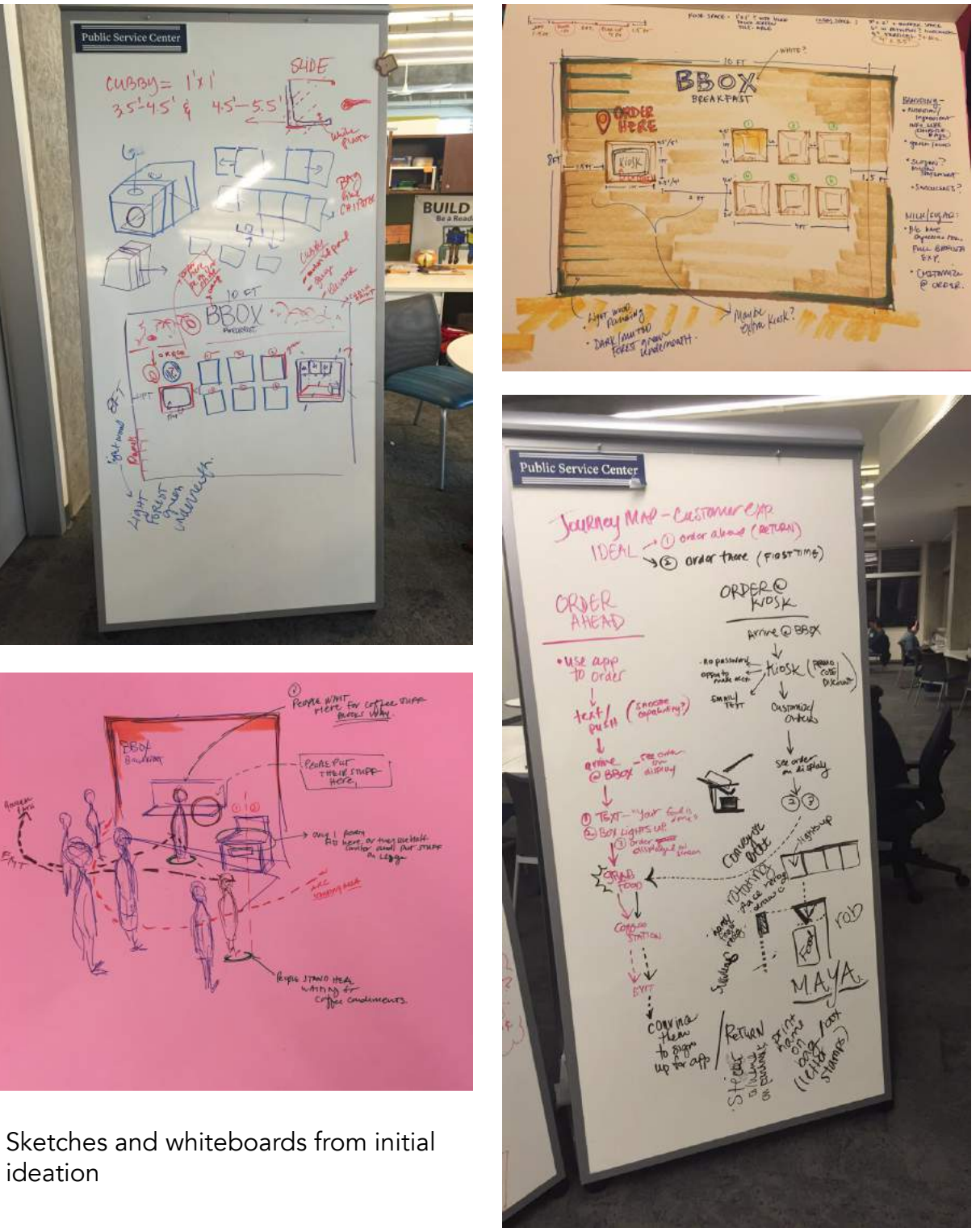
2 Ideation

Initial Ideation

Focusing on the insights that we gathered from research, we began ideation on the overall wall interface and the mobile app for ordering.

Wall

For the wall, we ideated for different elements for the wall: pick-up cubbies, an ordering kiosk, a potential LCD screen, packaging, and the general visual aesthetic.



Sketches and whiteboards from initial ideation

Mobile App

For BBox's mobile app, we focused on creating a streamlined onboarding, ordering, and sign-up process.



Initial sketches and lo-fi wireframes for the BBox mobile app

3 Prototyping + Iterating

Wall | 3D Modeling

We created various 3D models of different versions of the wall, modeling the layout of the pick-up cubbies and an ordering kiosk. We started working on Prototype 2 after our initial cardboard build of Prototype 1, as shown below in “Wall | Physical Prototypes.”

When building the prototypes to the physical wall and the mobile app, we made sure to **prioritize convenience** and **communicate health, nutrition, and value**.



Prototype 1

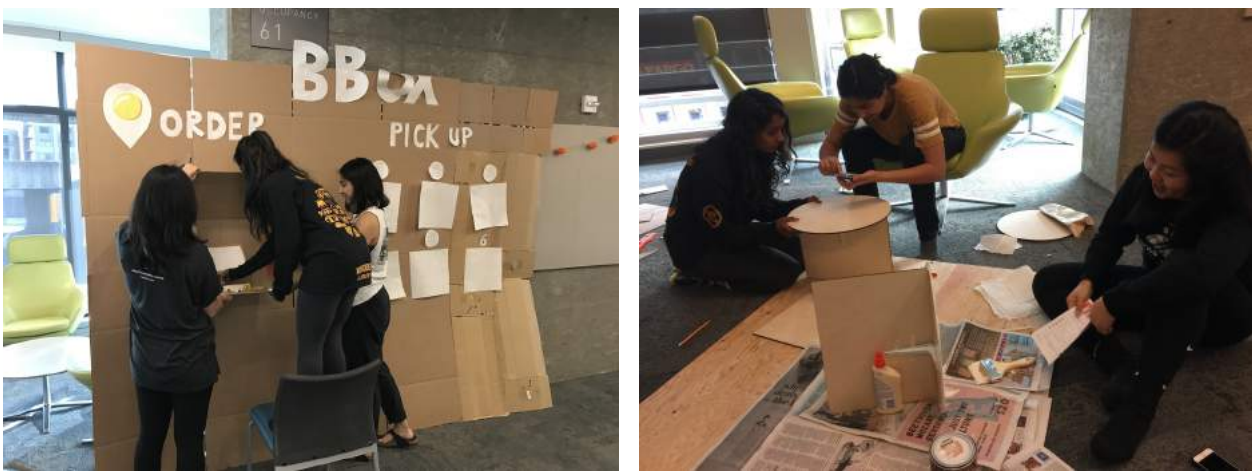


Prototype 2

Wall | Physical Prototypes

We built the first prototype out of cardboard in order to gain a general understanding of the scale and layout of the restaurant wall.

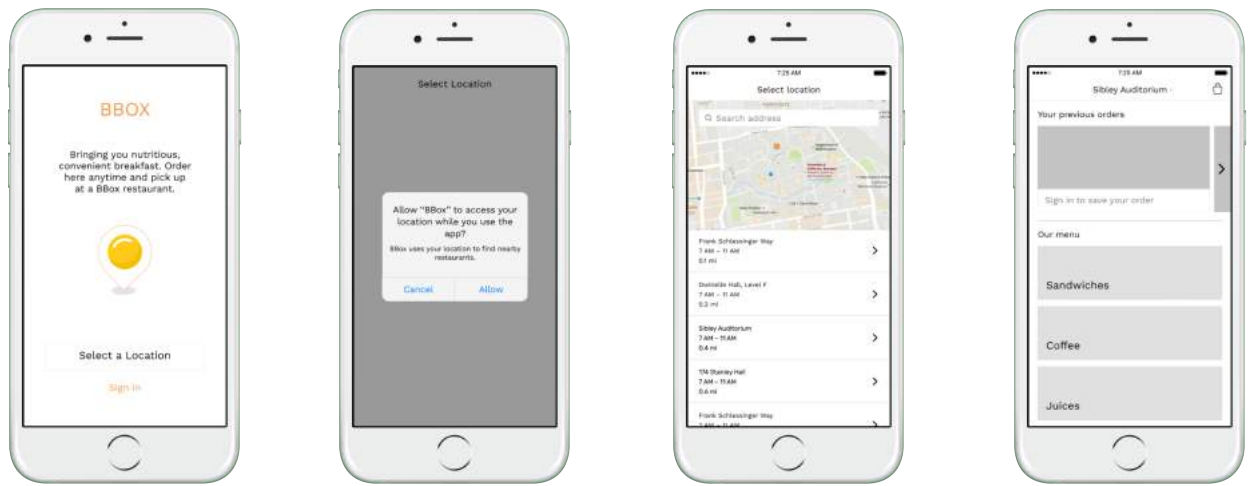
For our second prototype, we focused on building a single pick-up cubby out of plywood and acrylic, in order to closer model the experience a customer would have when picking up an order from BBox.



Left: Building cardboard Prototype 1, at scale; Right: Building Prototype 2, focusing on a single shelf

Mobile App

Alongside prototyping the physical wall, we also built a working prototype of the mobile app.



We built a working prototype of the app using Marvel, in order to do initial tests on user onboarding, ordering, and signing up for an account.

4 Refinement

Wall

After moving toward the design of Prototype 2, we built a refined prototype of the pick-up cubbies out of plywood and acrylic to further explore how users would interact with the cubby.



Clockwise from the top: Shelf, food to test cubby, turntables for the cubby

Mobile App

We created a high-fidelity mockup and working prototype of the mobile app to communicate the journey of a new user placing an order, adding a payment, and signing up for an account with BBox.

