Kroger

Digital Service Rehearsal Prototype
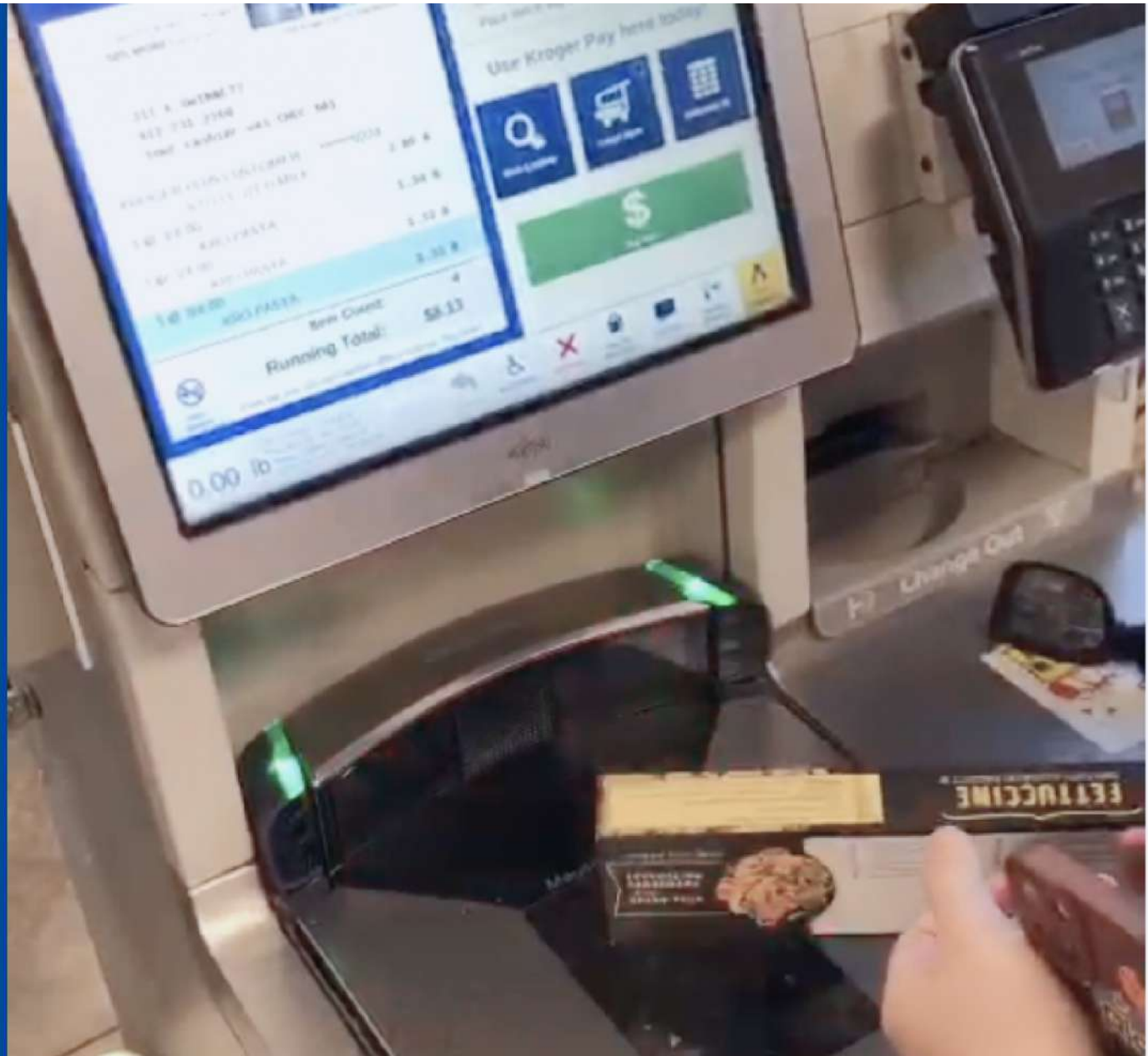
Self Check-out Kiosk Service

Chongyuan Yin, Siyun Lu, Priyanka Kakaria, Heidi Chang, Wendan Guo

Research & Preparation

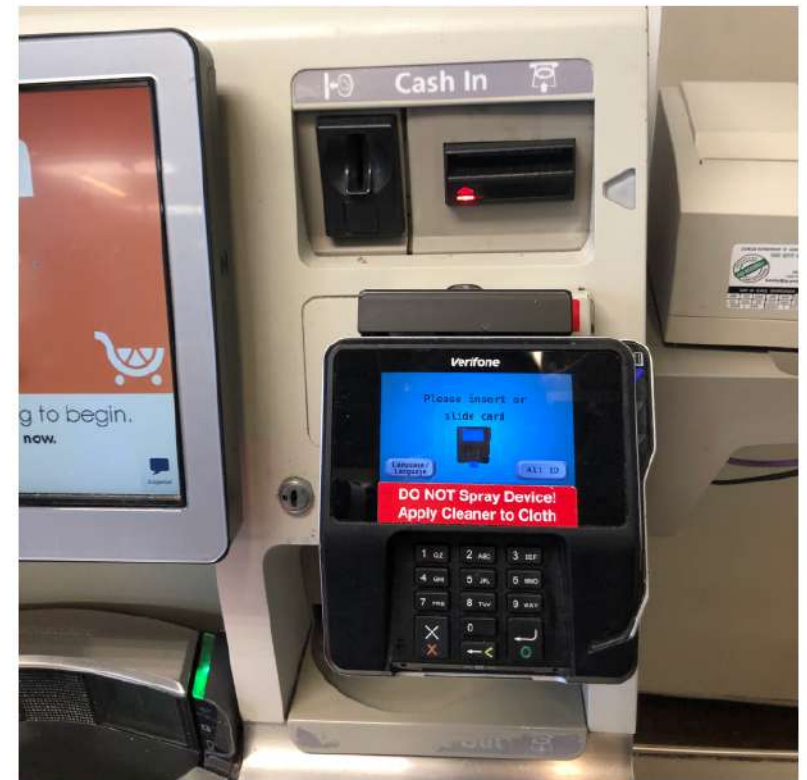We went to Kroger to observe the opportunities and record the kiosk and its interface.

On-site Investigation

SERV 732 Service Prototyping
Self Check-out Kiosk Service

User Journey Map

Phase of the journey	Arrive	Scan and Package	Payment	Leave

Actions
What does the user do?

Arrive	Scan and Package	Payment	Leave
Push groceries at the side of the kiosk; Take out phone; Open the Kroger App; Scan QR code of Korger ID	Call helps to continue scanning; Take out the items, find barcode; scan; Place item in the bagging area; Put bags to the cart	Select payment method; Waiting for system process; Wait for the machine to print the receipt; Get the receipt	Pick up the item and leave

Pain points
What problems does the user encounter?

	Scan and Package	Payment	
	Some vegetable and fruits don't have label for scanning, but the options on the screen make consumers confused.; Don't know how to scan. Don't know where the barcode should be aligned.; The machine will freeze if scanning too fast. In that case, consumers need clerks' help solve the problem; The machine may scan the item twice or more.; The packing area is too small; machine we need if substrate take of continugue perform the bagging area	If the previous customer did not take the receipt, it needs to be torn off and thrown away	

Touchpoints
What part of the product/service the user interacts with?

Arrive	Scan and Package	Payment	Leave
shopping cart; kiosk screen; Kroger pay service	Kiosk screen; Scan system service; Plastic bag	Kiosk screen; Print system service; Printer	Receipt feedback

Thoughts
What is the user thinking?

🔴 Gain   🟣 Pain

Arrive	Scan and Package	Payment	Leave
Which payment method do I use?	How do I scan ?; Do I need this item?; There are enough plastic bags for me to pack my stuff	Do I need a receipt?	
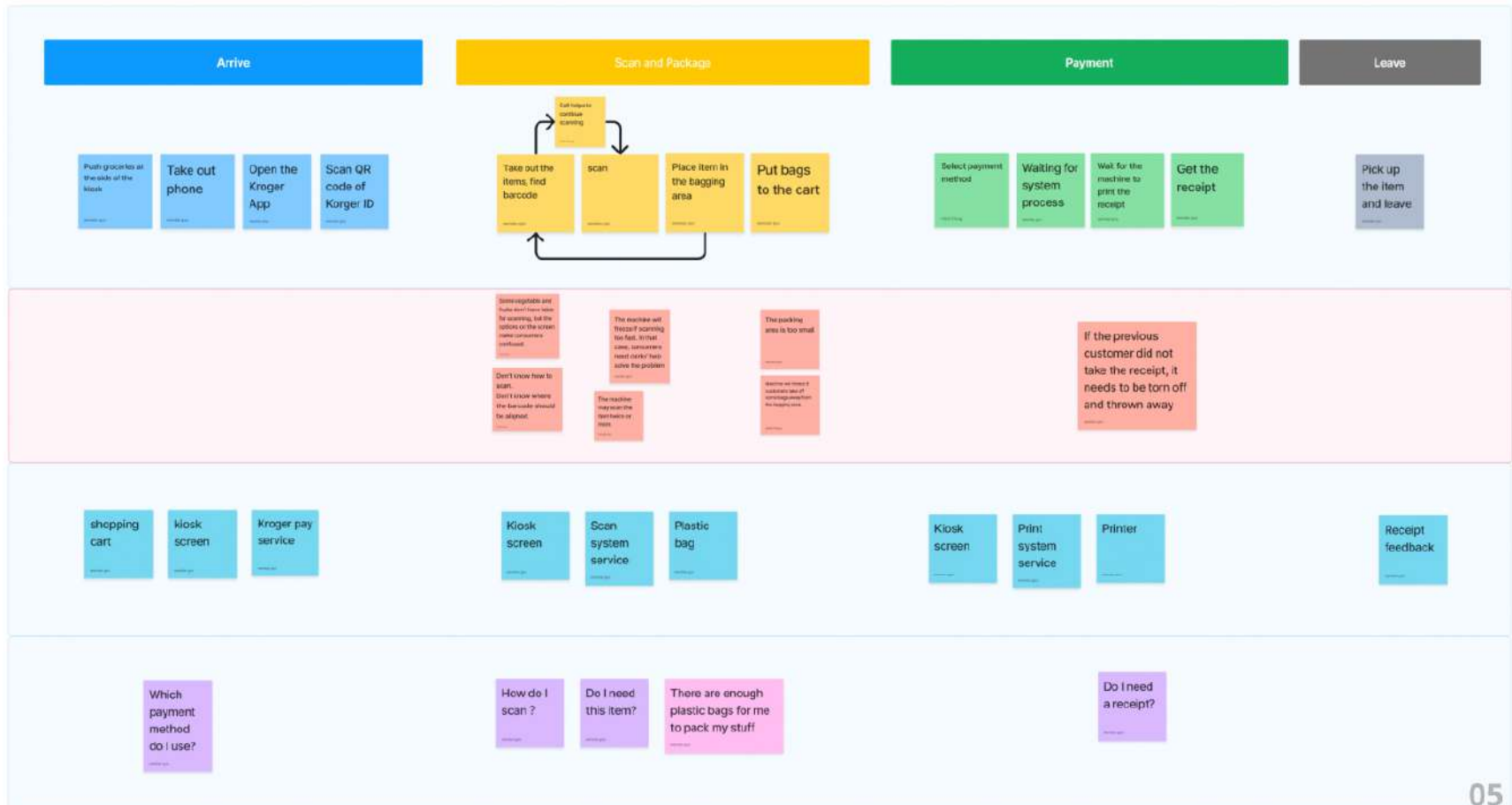
Rehearsal Prototype

This rehearsal video includes problems we observed and experienced while checking out at the kiosk.

HTTPS://WWW.YOUTUBE.COM/WATCH?V=GK53FOVSFFS

Step 1: Arrive

The consumer arrives at the checkout kiosk with items and scanned her customer membership card.

Step 2 : Scan

The consumer picks up an item and starts
scanning it in the scanning area with the
barcode.

Step 3: Call Help

The consumer does not know the name of an item, and as the item is a vegetable, there was no barcode on it, so she calls for assistance.

The attendant comes over and helps the consumer with searching for the item.

Step 5 : Call Help for Alcohol

The consumer buys a bottle of wine, while scanning, the kiosk called the attendant automatically to check the consumer's ID card.

Step 6: Payment Process

The consumer chooses to use a credit card to pay. The kiosk reminded her to insert or swipe the card on the side of the machine.

Step 7: Leave

The consumer takes the receipt and her purchasing items and leaves.

Physical Props

We created three parts of equipment: a scanning/weighting area, a touch screen, a pos machine, a receipt printer, and the sign of a number station.

Service Opportunity

During the prototyping and the research, we found some opportunities for improvement in the service.

Alcohol Purchasing

Current Situation

As long as the consumer scans alcohol products, the kiosk machine will go directly to call the attendant for help. The consumer is required to wait mandatory.

Pain Points

1. The consumer might have to wait for the attendant for a long time since, normally, only one attendant manages all kiosks.
2. The waiting time increases when too many consumers call for help.
3. Some consumers' ages apparently don't need to check their ID cards. But, because of the fear of fines, attendant still checks their ID cards.

Alcohol Purchasing

Opportunity

Eliminate the waiting time with ID scan and face recognition:
Equipting a camera on the kiosk can recognize the human face. The camera of scanning the barcode can identify the ID card.

Challenge

New technology and Avoid fines:
To update a new technology is hard work for a big company. If the technology is not progressive or designed comprehensively enough, it will be hard to avoid the offender.

Item Searching

Current Situation

Some products, especially vegetables and fruits, do not have barcodes. Consumers may not know the product's exact name or check out under wrong items, so they need to call attendance for help.

Pain Points

1. The consumer might wait for the attendant for a long time since, normally, only one attendant manages all kiosks.
2. International consumers may not remember the name of a particular item when searching by name
3. You have to go through a large catalogue of images while searching an item by image
4. If the consumer calls for help with many items, other consumers might wait for longer time.

Item Searching

Opportunity

Eliminate the waiting time with camera scanning:
The kiosk has a camera, so consumers can put the item in a certain area for camera to recognize it.

Challenge

New Technology:
1. The technology might recognize the item wrongly.
2. The old machine might not match with the new technology so it will be much expensive if it need to update the entire system.