

# Coke Freestyle

## Assignment #1: Ethnography

---

Louise Whitaker and Chris Roy

CIM 622: UX Research Methods

2/1/16

# Product Description

---

## COKE FREESTYLE MACHINES



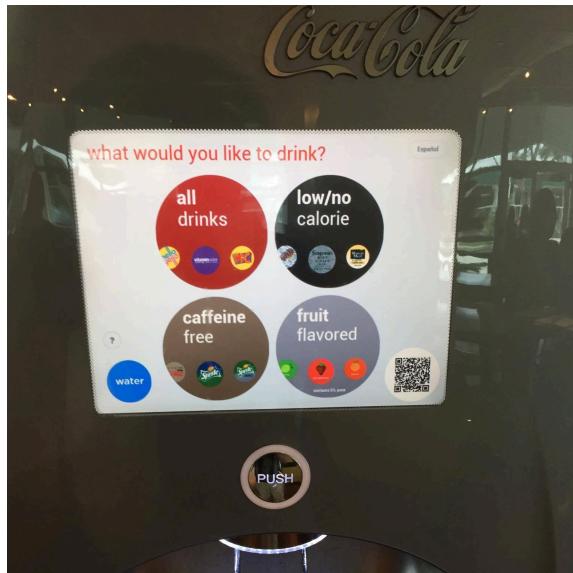
**Product Type:** Touch Screen Soda Fountain

**Why Selected:** We selected the Coke Freestyle machine because we had used this machine before, but never spent much time thinking about all of the problems with the machine. We also wanted to be able to ask users about their experiences using the product. We did some research and found that the machine was developed in 2009 to help revitalize the soft drink industry. We wanted to see if our users were more likely to get a drink if this machine was there and if they were using the application.

# Product Description - Controls

- 1. Digital display – touch screen**
- 2. “Push” button for beverage – physical control**

1.



Touch Screen- Main Menu

2.



Main state of Push Button

# Product Description - Controls

**3. Lever for Ice** – physical control, user presses cup against lever to dispense

**4. Accessibility buttons underneath beverage dispenser**

- Handicap button – physical control, button
- Arrows and select button – touch button

3.



Ice Lever

4.



Handicap button – not activated



Handicap button – activated

# Product Description

## All Interactions:

1. Pressing lever for ice
2. Pushing the button to dispense beverage, has a white light border around it, when a drink is ready to be dispensed it flashes
3. Selecting categories and drink icons on the machines to dispense the beverage, icons on screen expand when a selection is made
4. Pressing the handicap button, when handicap button is pressed the other three accessibility buttons light up



"Push" button Flashing



Handicap button – not activated



Handicap button – activated

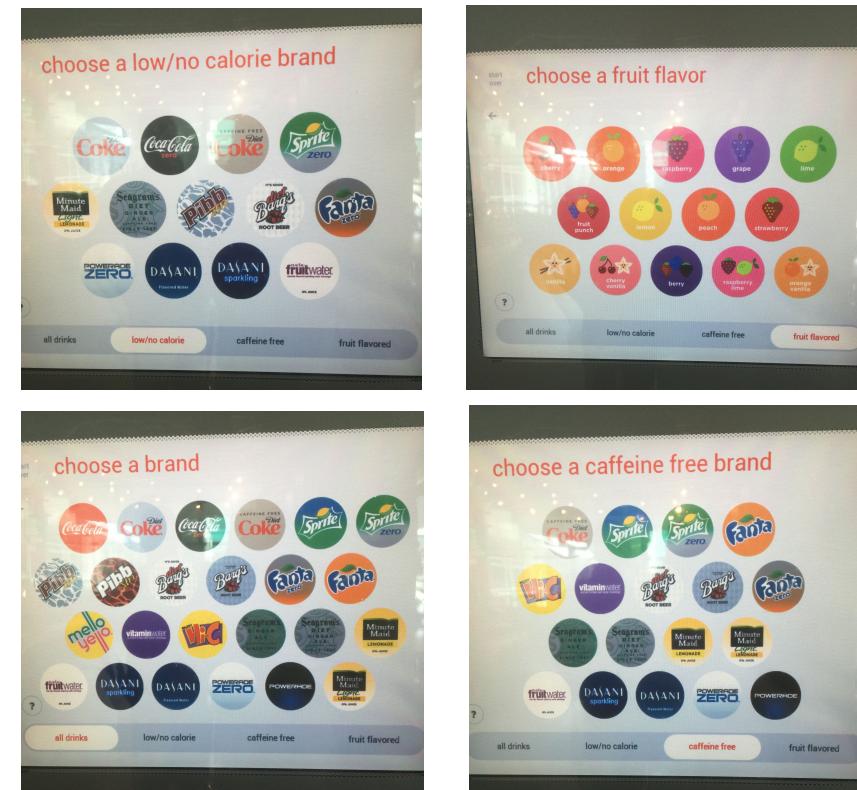
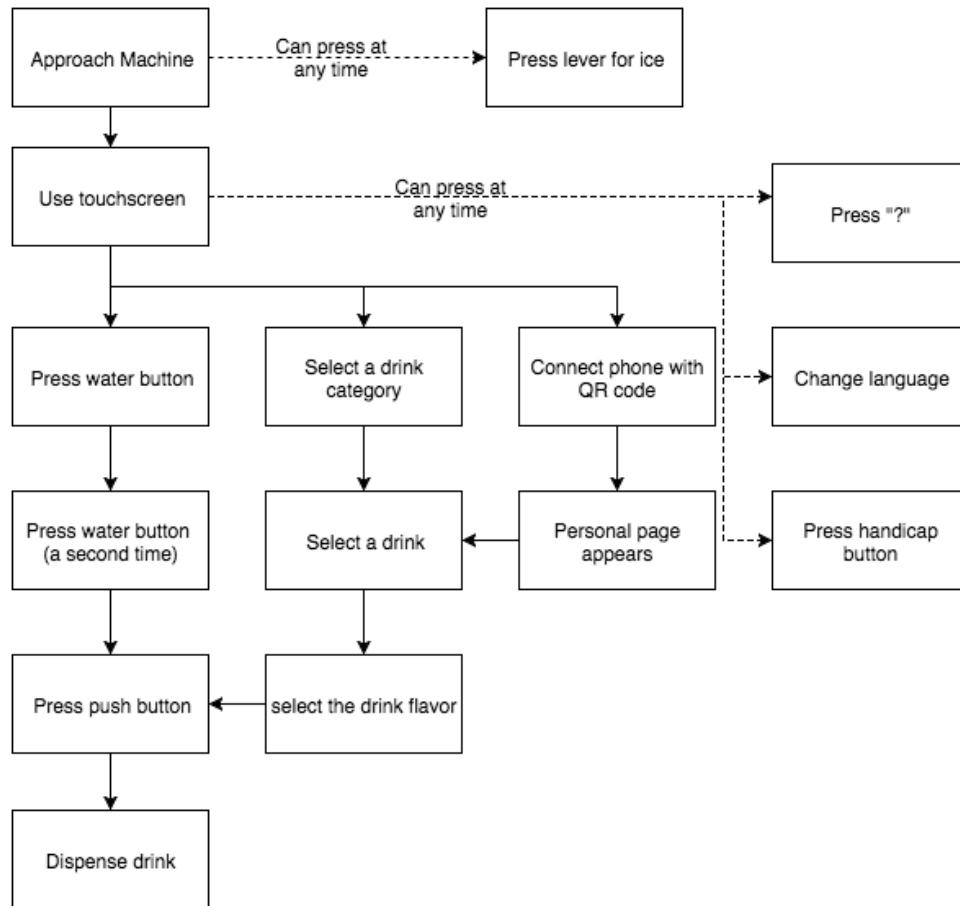
# Product Description

---

## All Tasks:

- Selecting a beverage
- Filling cup with beverage
- Filling cup with ice
- Connecting phone with QR code

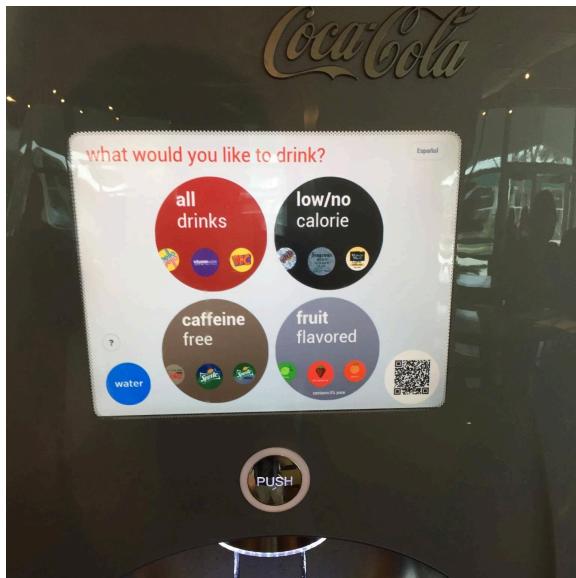
# Product Description – Task Flow



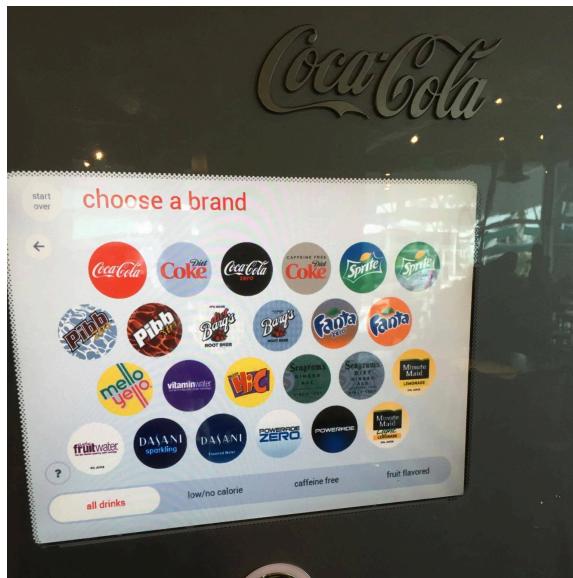
4 categories of drinks the user can select

# Product Description – Pictures

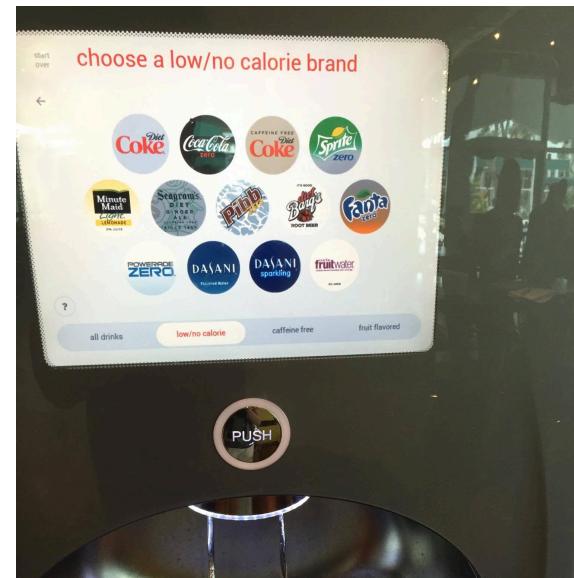
---



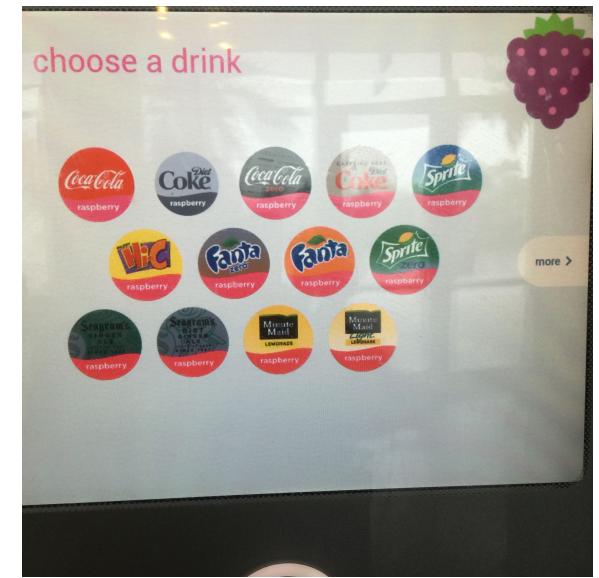
Main Screen



All Drinks



Low Calorie Drinks



Options by Fruit Flavor

# Product Research

---

- Developed in 2009 to boost falling Coke sales
- Target audience: Millennials
- Has over 100 drink combinations
- Uses small cartridges with flavors instead of large boxes of syrup
- Design was collaboration with in-house Industrial Design Team with other companies such as Pininfarina Extra, who have done design work for Ferrari

*"We've proven prelaunch and in-market that when a restaurant has Coca-Cola Freestyle, their traffic, incidence and beverage servings grow anywhere from single to double digits,"* says Jennifer Mann, VP and general manager, Coca-Cola Freestyle.

*"They expect unlimited choice, personalized and delivered through multiple channels at maximum speed,"* says Joe Tripodi, Chief Marketing and Commercial Officer of The Coca-Cola Company

# Methods

---

## **Participants/Demographics:**

- 14 Participants
- 4 females, 12 males
- Ages 18+
- Asked 8 of them to answer survey questions (6 males, 2 females)

## **Equipment:**

- Pens – to take notes, for participant surveys
- Paper - to write notes on
- Printed copies of interviews to fill out
- Printer – to print out notes to make affinity diagram
- Post-it Notes – affinity diagram
- Phone – to take photos of machine
- Computer – type out notes, create survey

# Methods

---

## Schedule:

- Tues 1/26 – Conducted secondary product research on the Coke Freestyle machine. Explored functionality of the Coke Freestyle machine on campus.
- Wed 1/27 – From 11am - 11:30am we talked about what we wanted to get out of our study and talked to the Lime employees. From 11:30am -12: 30am we conducted primary research and observed users interact with the machine.
- Thursday 1/28 – Analyzed the data and came up with product problems
- Friday 1/29 - Sunday 1/31 – Redesign and Report

## Roles:

- Note taking during observations (both)
- Analyzing Data (both)
- Redesign (both)

# Methods

---

## **Procedure:**

1. Conducted secondary research on the Coke Freestyle product
2. Went to machine to explore the functionality of the machine
3. Created an observation field guide and list 5 survey questions to ask our participants
4. Met at lime to conduct primary research
  - Found a good location to observe users, spoke to employees and got background information on the machine
  - Sat in Lime on campus for an hour and observed users' interactions with the machine and took notes
5. Approached 8 of the users as they waited for their food and asked them our survey questions
6. Combined all of the answers and observations to find common themes
7. Picked out specific problems with the machine and made recommendations to change those specific problems
8. Came up with illustrations and wireframes for the redesign

# Methods

---

## **Survey Questions:**

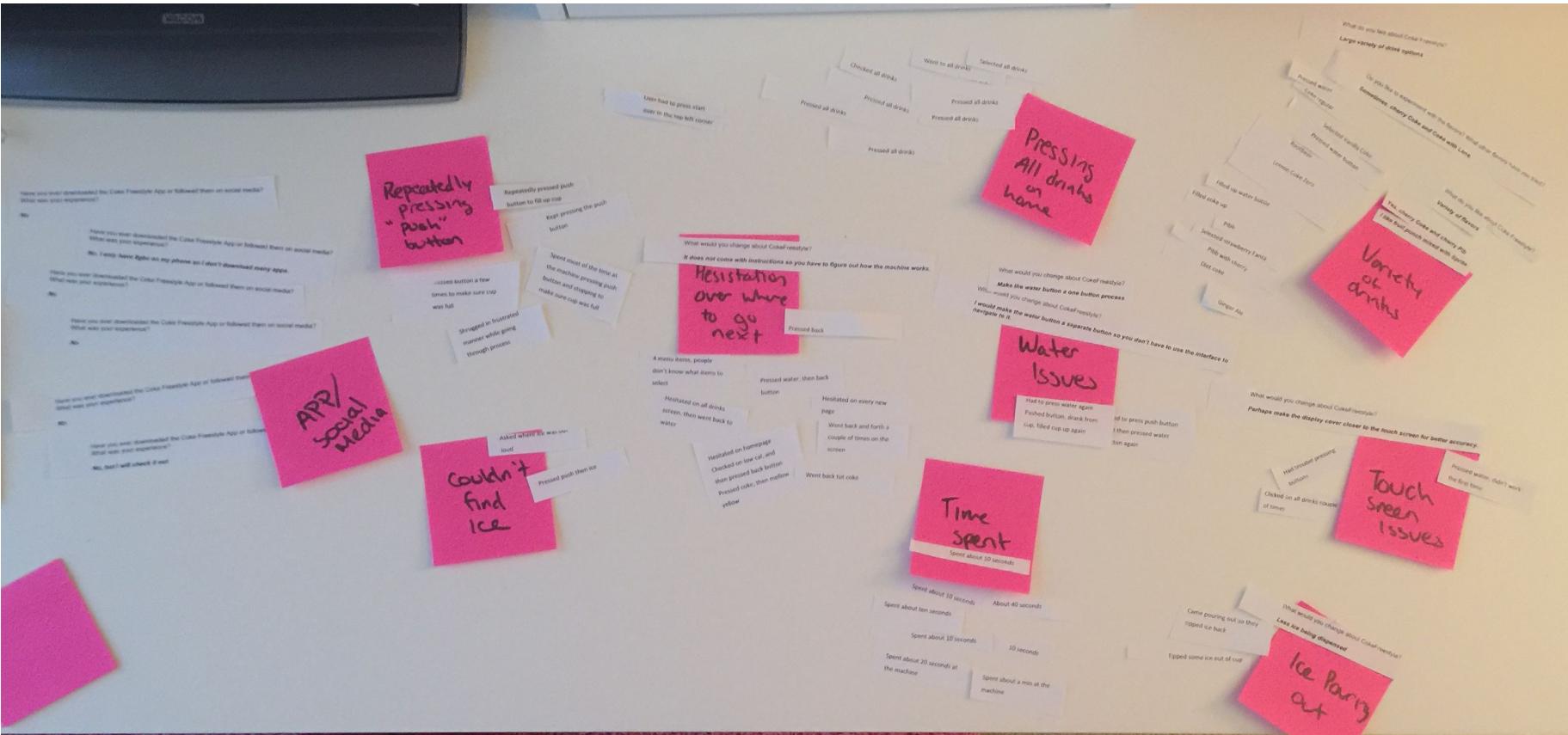
1. What do you like about Coke Freestyle?
2. What would you change about Coke Freestyle?
3. Do you like to experiment with the flavors?  
What other flavors have you tried?
4. Does this machine make you more/less likely to order a soda at a restaurant? Why?
5. Have you ever downloaded the Coke Freestyle App or followed them on social media?  
What was your experience?

## **Field Guide:**

- How long do people take?
- What drinks do people get?
- Is there a variety in drinks/is there a common drink?
- What problems do people have?
- Is the interface easy to navigate?
- Do people take a while to chose a drink?
- Can people find the ice?
- Are people using the Coke Freestyle App?

# Findings

## Affinity Diagram:



# Findings - Themes

---

## Inefficiencies

- Not a multi-serve system
- Takes time for user to make choices
- Users not understanding how to use the system

## Lack of Intuitive Design

- Buttons are not clear, too small
- Navigation issues
- Help button doesn't make machine easier to use

## Variety

- Users selected different drinks
- Users followed different pattern for selecting drinks

## Waste

- Ice poured out fast enough that users threw it away
- Soda came out to fast
- Time spent selecting drink
- Time spent waiting for pages to load on screen
- Opportunity to promote application

# Findings: Observations

---

People selected a variety of different drinks:

- 4 people selected water
- 7 people selected a beverage with no flavoring
- 4 Selected a beverage with flavoring

People spent a variety of different times at the machine

- 8 people spent about 10 seconds
- 4 people spent between 10 and 20 seconds
- 4 people spent more than about 30 seconds

Of the 4 people that selected water, 3 of them had trouble locating and dispensing the water

8 people got ice, 3 people poured ice out of the cup after dispensing it

5 people repeatedly pressed the 'Push' button to dispense the beverage to fill it up all the way

4 people couldn't find the ice, one person even turning around to her friend and asking where it was

6 people hesitated on pages or went back pages while looking for a drink choice

4 people struggled with the touch screen, pressing items multiple times trying to make the screen work

# Findings: Voices

---

All 8 people had never used the app or seen the Coke Freestyle social media

5 people did not like to try different flavors, 3 did

2 people said it did make them more likely to order soda, 6 said it didn't

## Things people like:

- *I think it's a fun way to order drinks.*
- *Easy to use. Offers a choice.*
- *More choices than a regular soda machine.*
- *Large variety of drink options*
- *Variety of flavors*
- *It is interesting to use the digital display*
- *Keeps water cold*

## Things people would change:

- *It does not come with instructions so you have to figure out how the machine works.*
- *Nothing*
- *One one dispenser leads to backed up lines everywhere*
- *I would make the water button a separate button so you don't have to use the interface to navigate to it.*
- *Less ice being dispensed*
- *Perhaps make the display cover closer to the touch screen for better accuracy.*
- *Make the water button a one button process*

# Findings: Problems

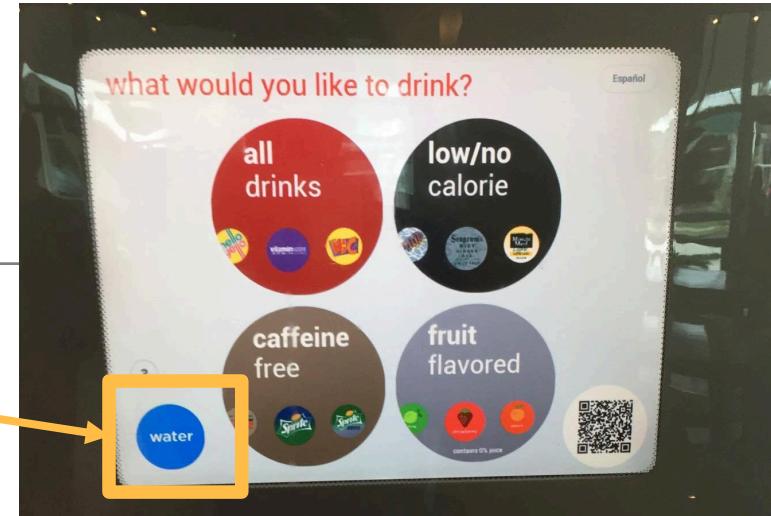
**Problem:** Water is difficult to locate

## Observations/Voices:

- 4 out of 16 people selected water
- Of the 4 people that selected water, 2 of them couldn't find the water
- One person clicked all drinks and went back and forth on a few pages to look for it
- *"I would make the water button a separate button so you don't have to use the interface to navigate to it."*

## Recommendation:

Take water out of the touch screen and create a physical button next to the 'push' button, so users don't waste time searching for it on the screen.



# Findings: Problems

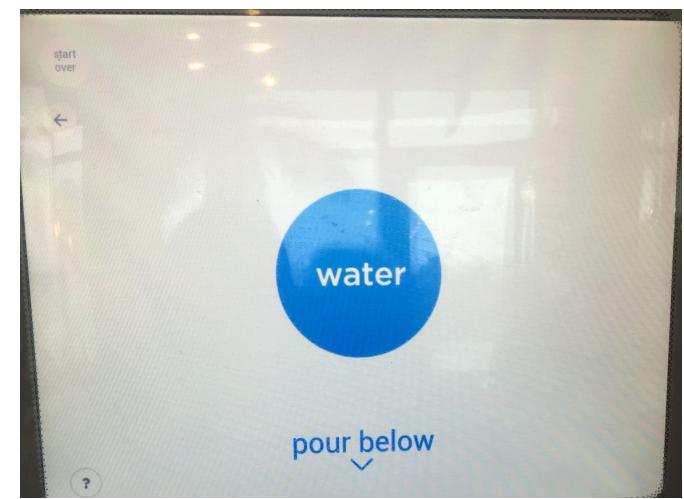
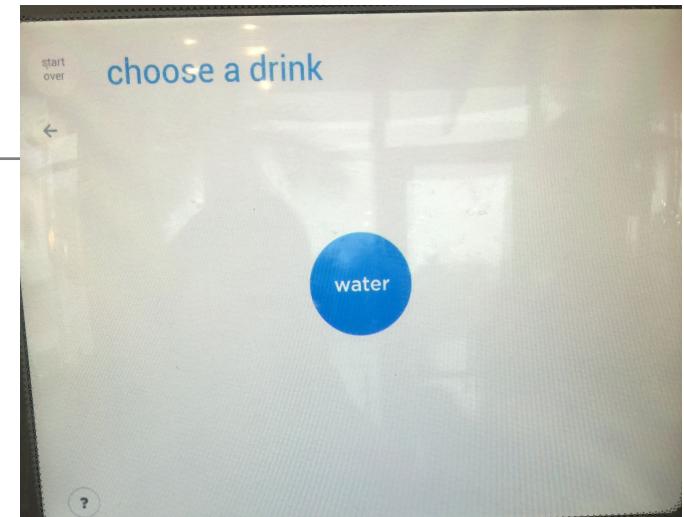
**Problem:** Water is a two step process

## Observations/Voices:

- 4 out of 16 people selected water
- One user selected the water button, tried to press the “push” button and pressed water again
- *Another user said: “Make the water button a one button process”*

## Recommendation:

Take water out of the touch screen and create a physical button next to the ‘push’ button. Water is a complementary beverage so it should be quick and easy for the user to get it, so they don’t spend more time than they need to at the machine.



# Findings: Problems

---

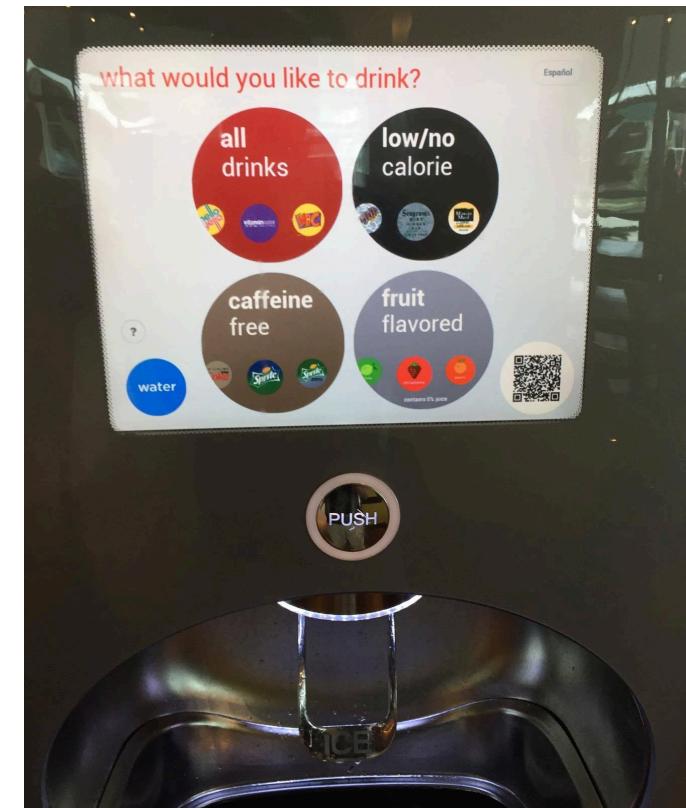
**Problem:** Ice dispensing too fast

**Observations/Voices:**

- 3 people poured ice out of the cup after dispensing it
- One user answered what would you change with: “*Less ice being dispensed*”

**Recommendation:**

The ice should be dispensed more slowly



# Findings: Problems

**Problem:** People struggled to locate the ice dispenser

## **Observations/Voices:**

- Most people that wanted ice went for it first
- 4 people visibly struggled to find it, some clicking through different screens
- One user even turned to their friend and asked where the ice was

## **Recommendation:**

Change the design of the physical machine so the user can more easily see the flow of the machine – if the coke wave is moved to the middle of the machine the user's eye will follow it down. The screen could then be made larger.

Remove ice lever and create a physical button next to the 'push' button



# Findings: Problems

**Problem:** No participants knew about the app

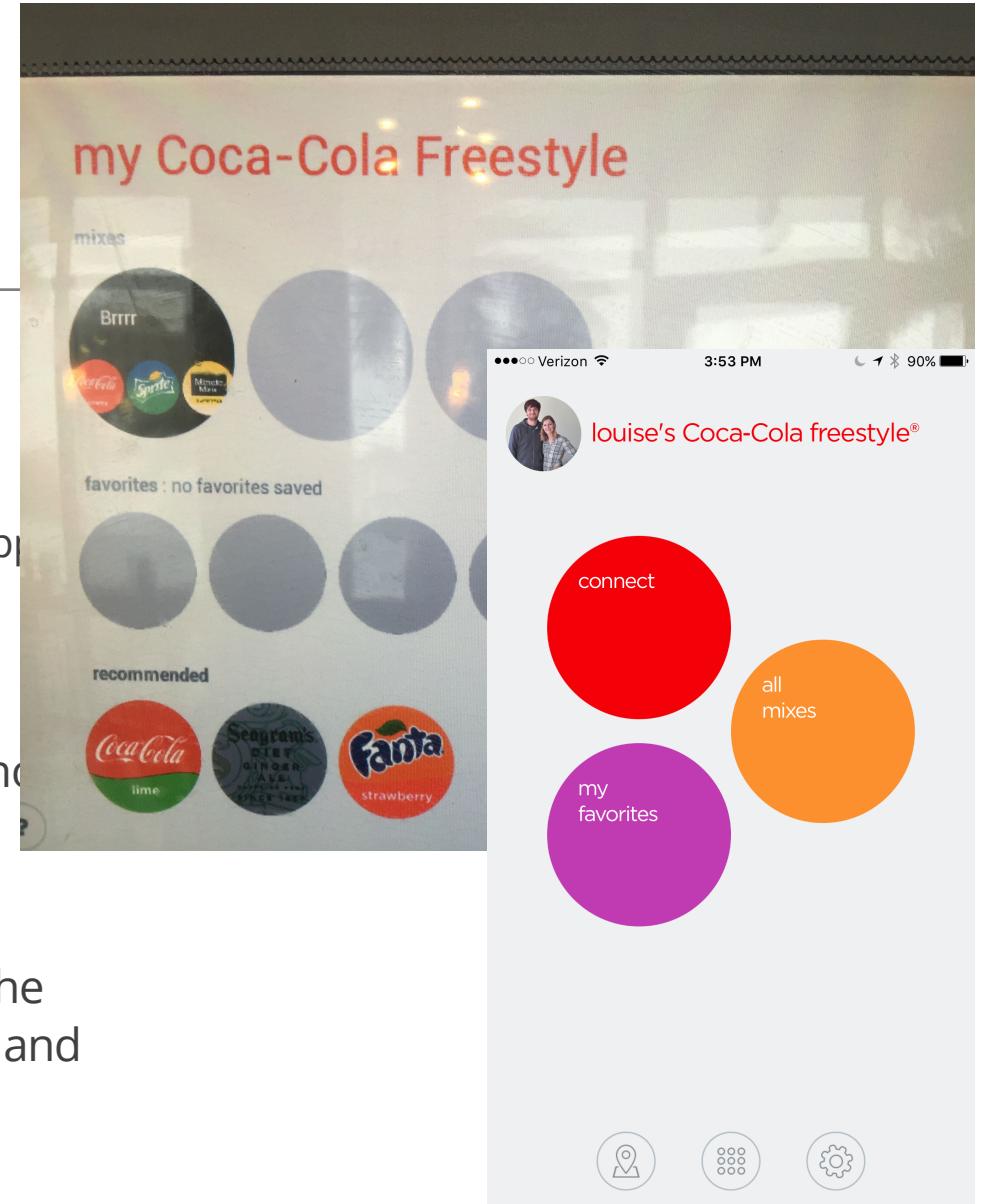
## Observations/Voices:

- No one used the QR code on the home screen
- Of all the participants we spoke to, none had downloaded the app even heard of it

## Recommendation:

Make it more clear what the QR code does and is for since none of our users new what it was for.

A QR code has the affordance of something that should be scanned to give the phone information, not a way to send the coke machine information. The App should have a barcode and the user should hold their phone up to the screen.



# Findings: Problems

---

**Problem:** Touch screen sensitivity

**Observations/Voices:**

- One user suggested: *"Perhaps make the display cover closer to the touch screen for better accuracy."*
- 4 people struggled with the touch screen, pressing items multiple times trying to make the screen work
  - One user became so frustrated that the machine was not responding to her touch that she threw her hands in the air
  - If it didn't work the first time users would rapidly press on the touch screen

**Recommendation:**

Having an more responsive touch screen would solve the problem

Having less pages that a user needs to click through would alleviate some of the problems if the technology is not available to make a more accurate touch screen.

# Findings: Problems

**Problem:** Lack of intuitive navigational design.

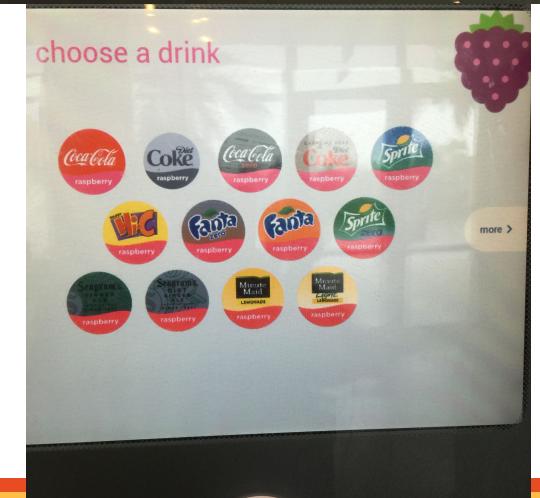
## Observations/Voices:

- A lime employee told us: "with the 4 menu items on the home screen people don't know what items to select"
- Another user said: "It does not come with instructions so you have to figure out how the machine works."
- One user pressed "all drinks", then pressed back to find water
- One user hesitated on the home page, pressed "low cal" then pressed the back button, then went to all drinks, then clicked on a drink, hovered over the screen for a while, found the back button before selecting coke

## Recommendation:

There are too many different pages a user must click through, so it is easy to get lost in the interface. The user needs more feedback about what page they are on, and less pages to click through so they can locate what they are looking for.

Fruit flavored should be removed because it doesn't fit in with the other three selections. All drinks shows all the brands of drinks and low/no calorie and caffeine free take the user to a subset all of the drinks. Fruit flavors lists all of the syrups a user can add to the drink.



# Findings: Problems

---

**Problem:** One machine leads to longer wait times because there is a choice and people spend longer at this machine than they would at a traditional soda fountain

## Observations/Voices:

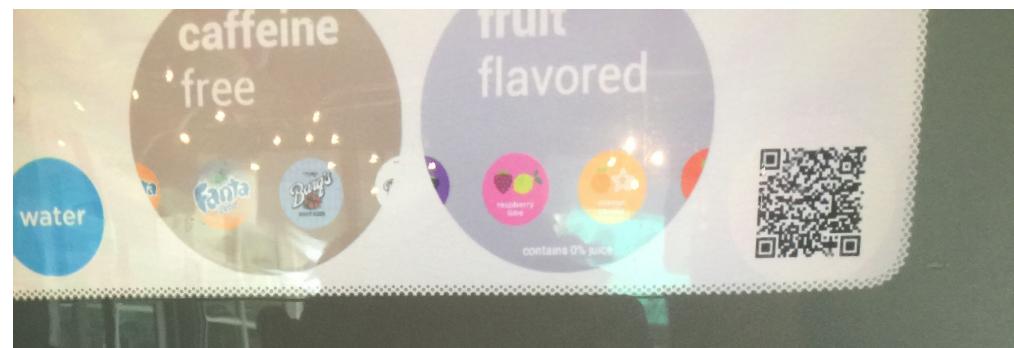
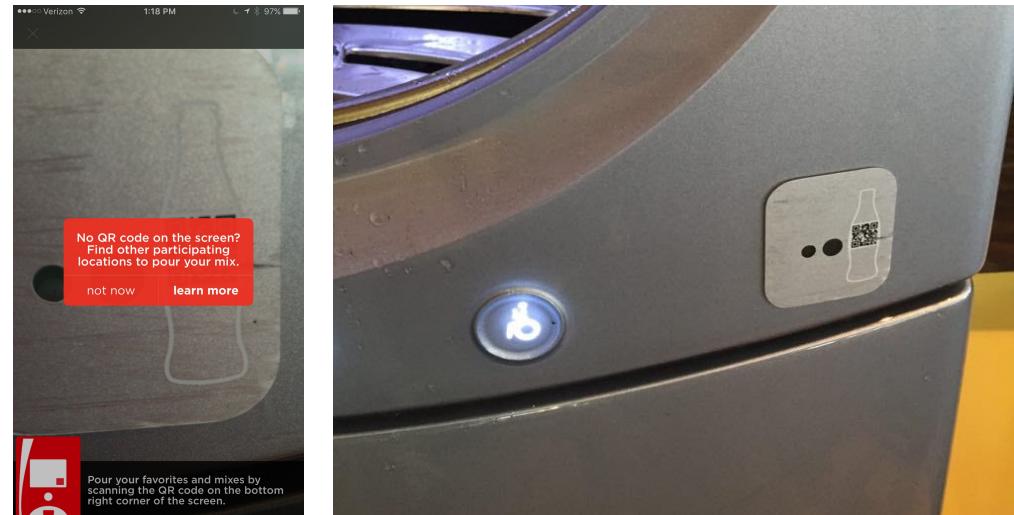
- 4 participants spent more than 30 seconds standing at the machine
- We observed 7 participants hesitate at different times in the process
  - One user went through 2 different drink choices before settling on one option
  - 4 users pressed the back button at least once
- The pages are slow to load on the machine
- One user said the downside to the machine was: "*One one dispenser leads to backed up lines everywhere*"
- If a user walks away from the machine the next user has to press the start over button to go back to the home page

## Recommendation:

Make the pages on the machine load pages more quickly, have a view so the user can simply walk up to the machine and see all of the choices on the home screen

# Findings: Other Problems \*

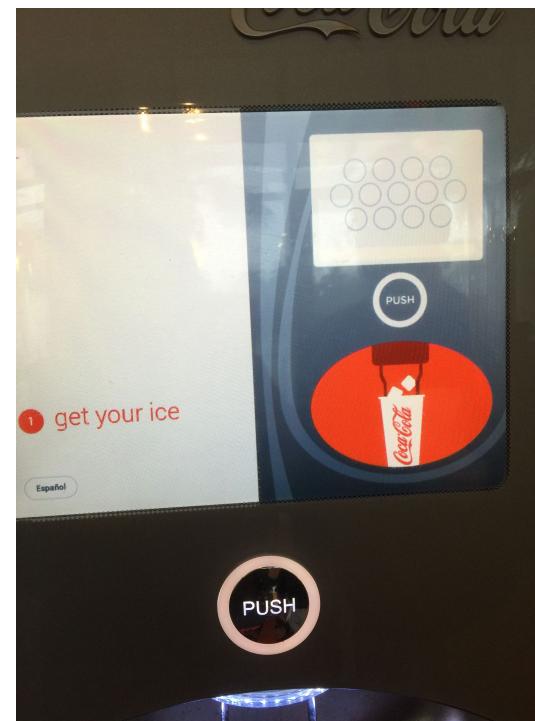
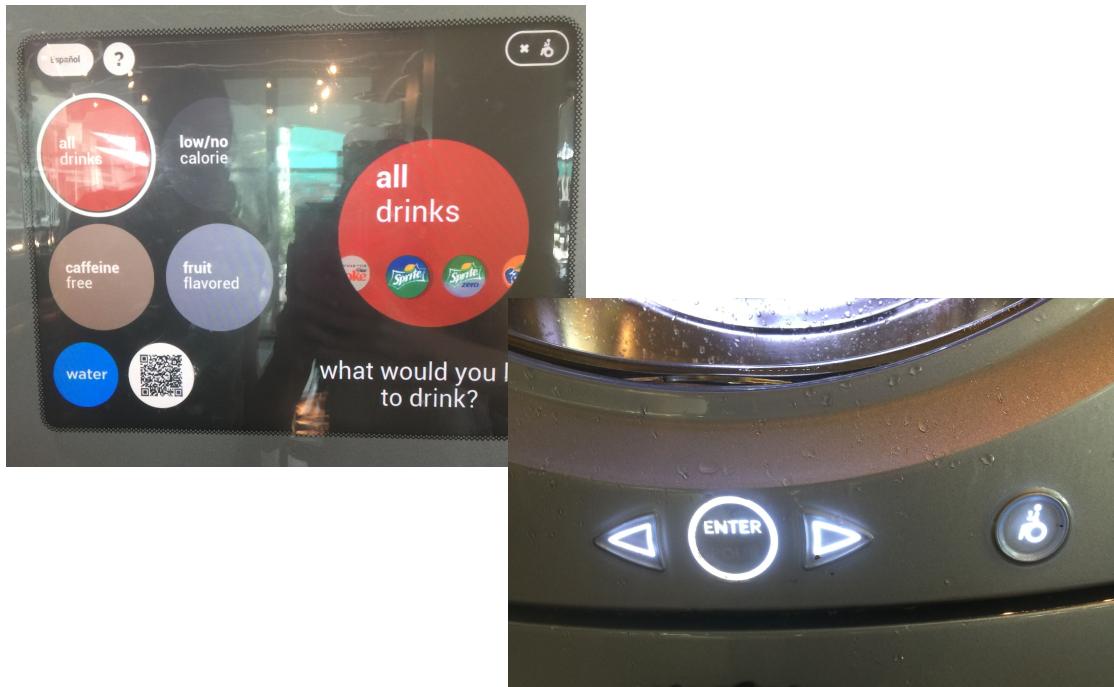
1. There are two QR codes on the machine that do different things
  - The one below the ice dispenser is for the phone to scan so the user can download the app.
  - The one on the screen is so the user can connect their app with favorite drink choices to the machine.



\*Problems we noticed but did not observe

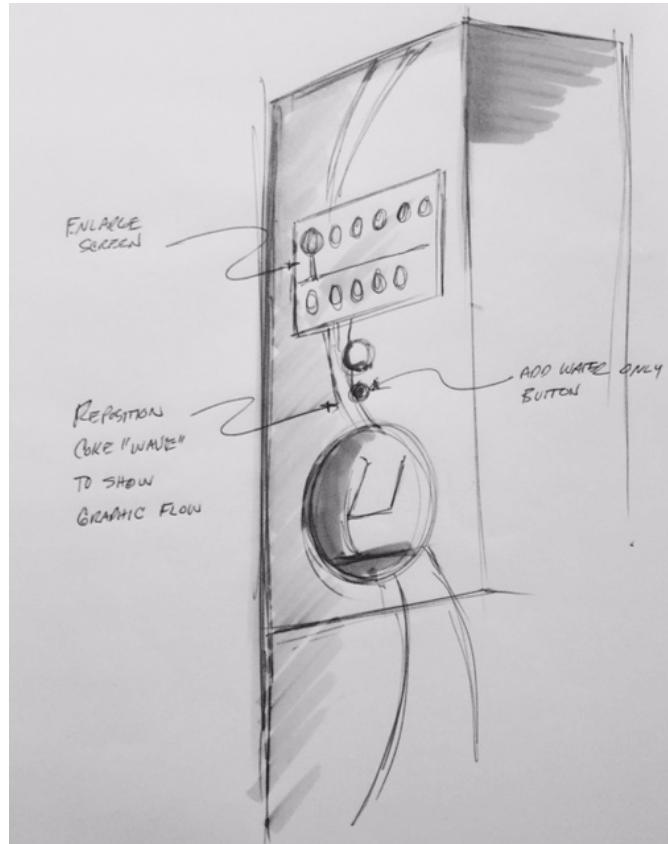
# Findings: Other Problems \*

2. Handicap buttons are not very responsive and don't allow for simple navigation of the screen.
3. The help button provides instructions that are slow and difficult to follow

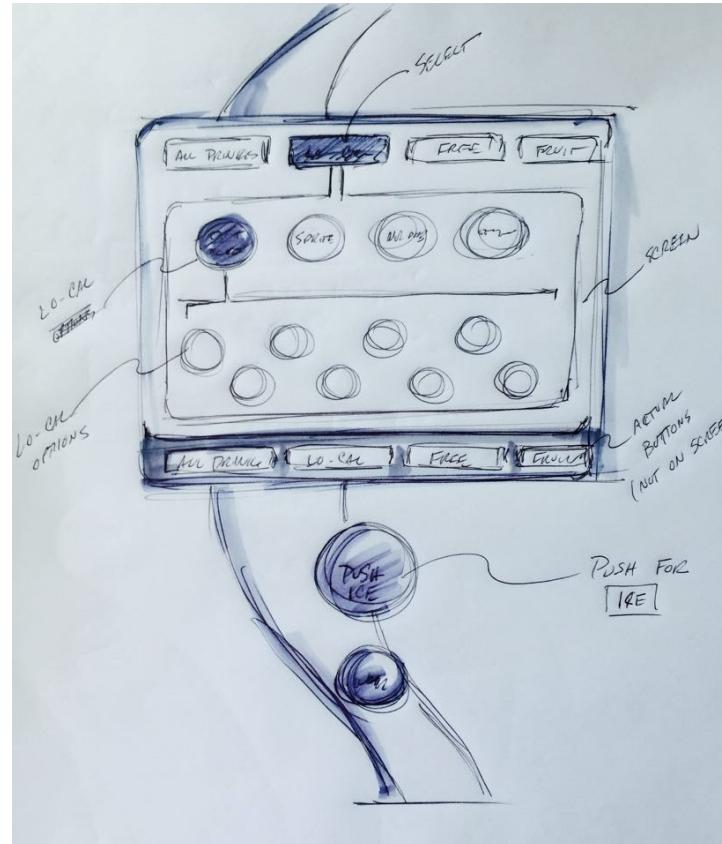


\*Problems we noticed but did not observe

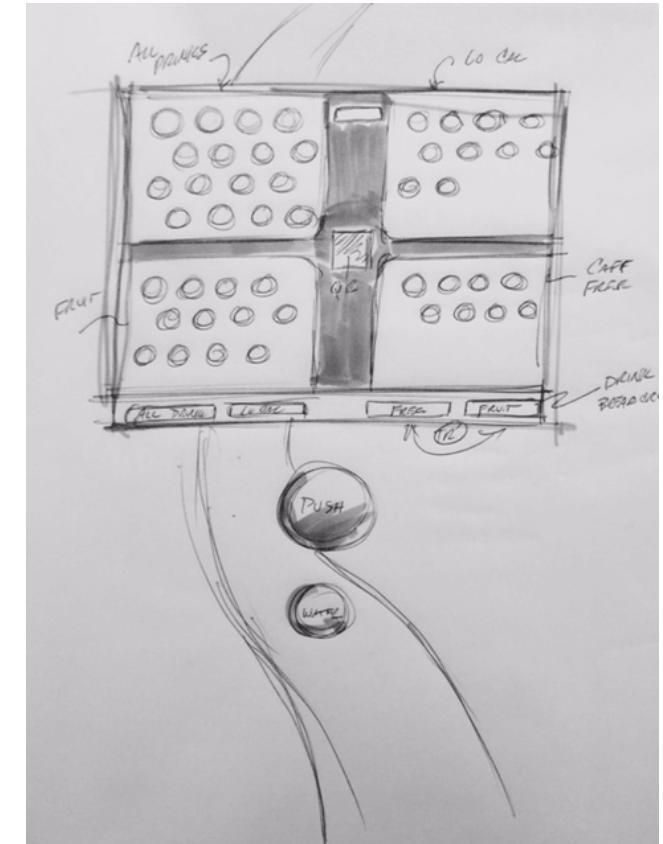
# Recommended Redesign



Version 1 of machine Redesign



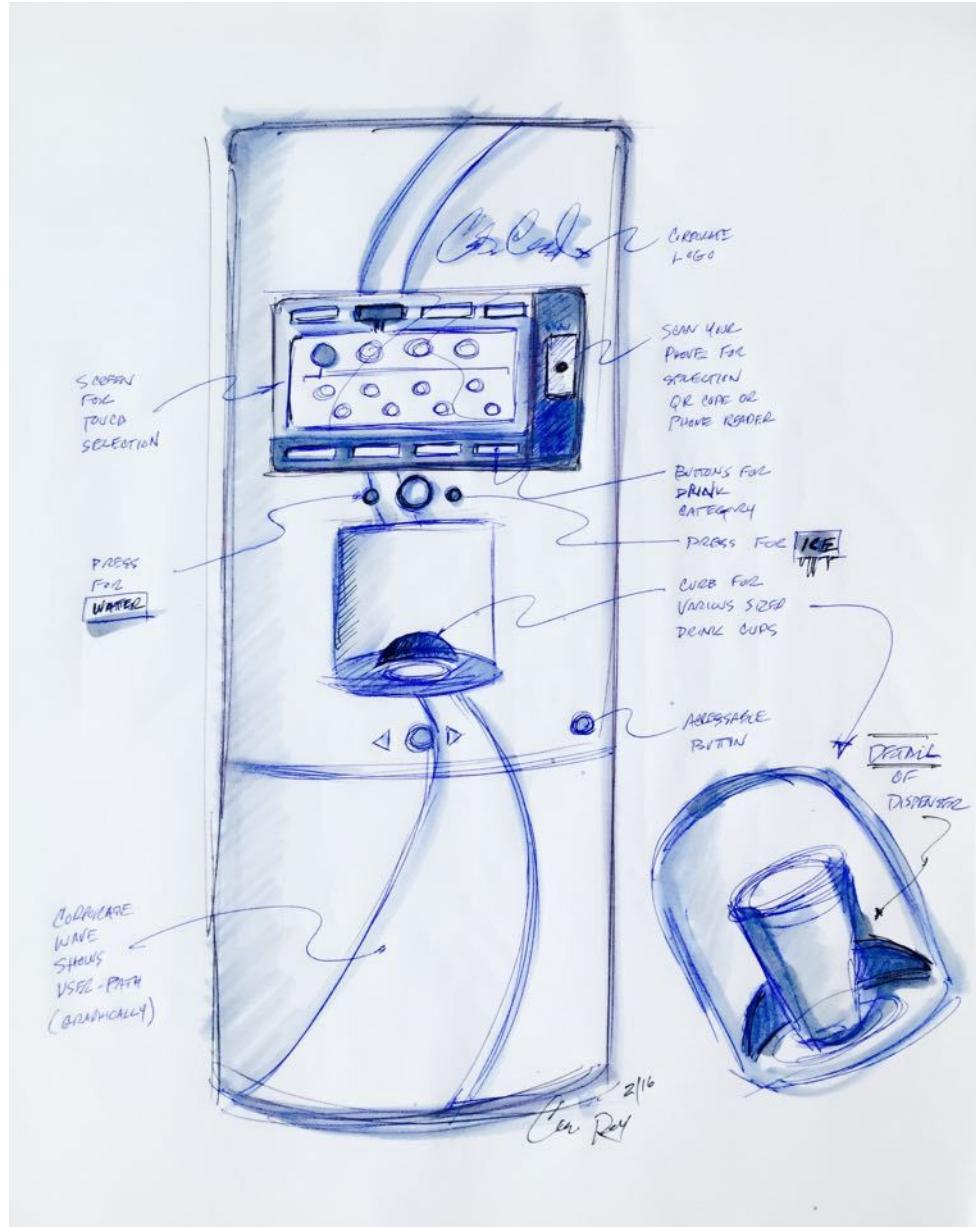
Interface Option #1



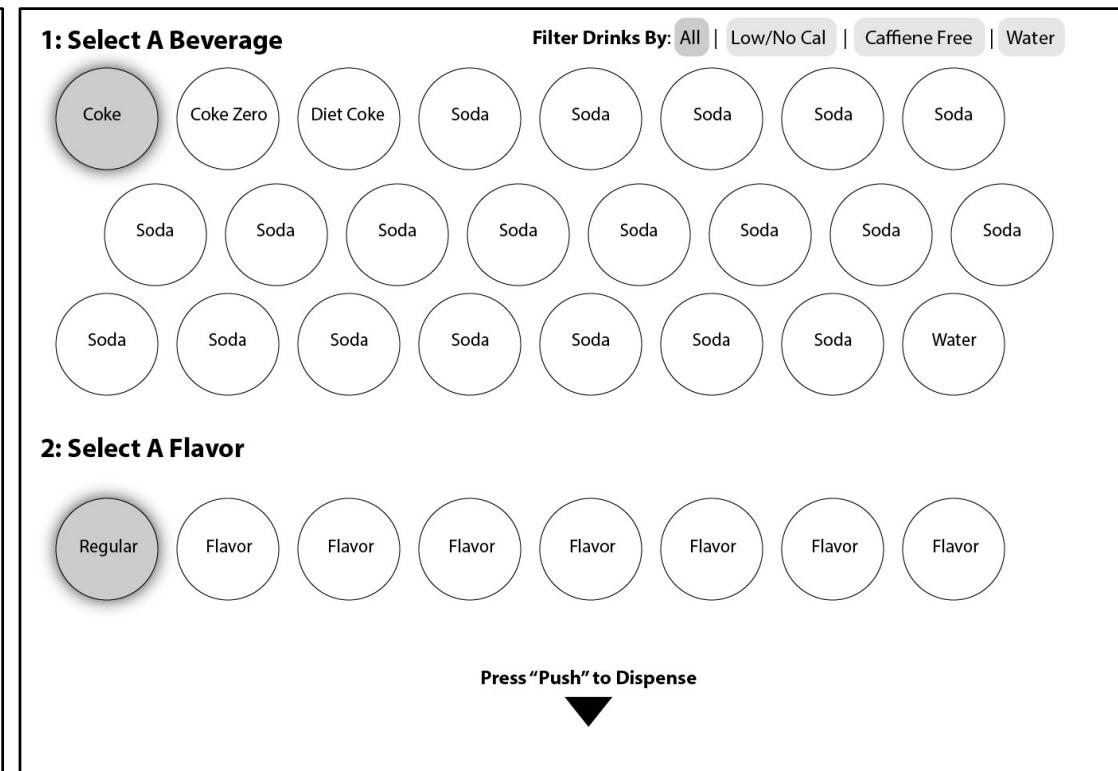
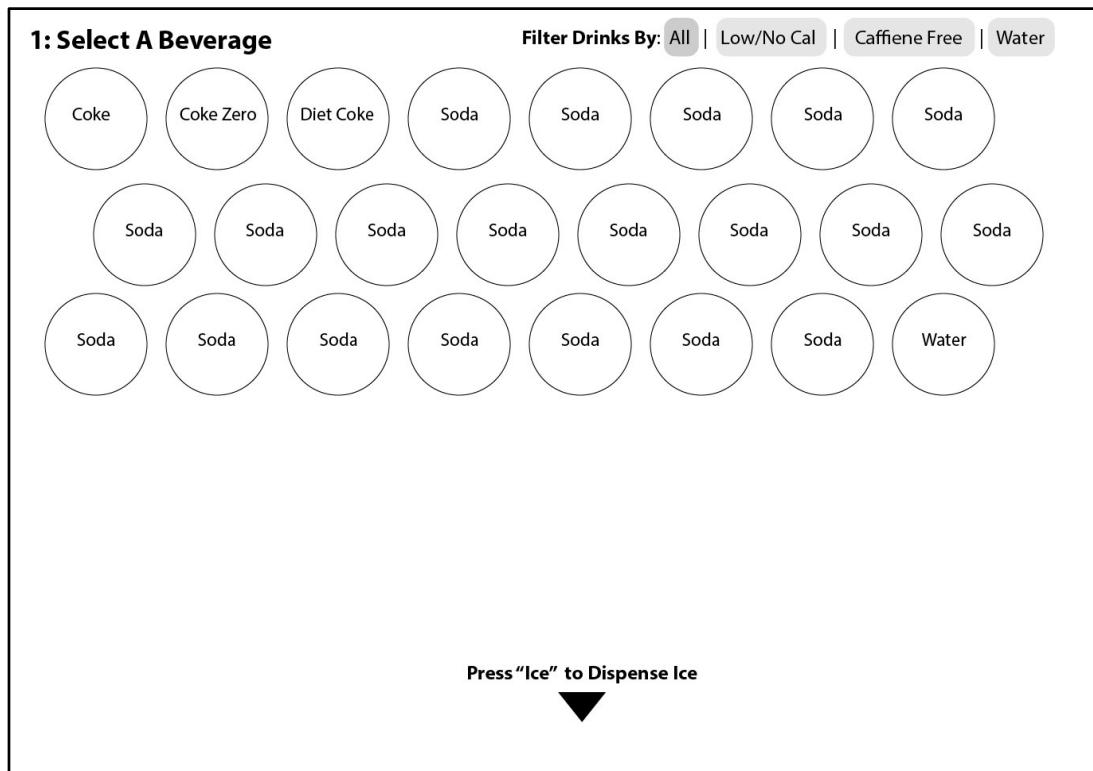
Interface Option #2

# Recommended Redesign

Version 2 of the machine redesign

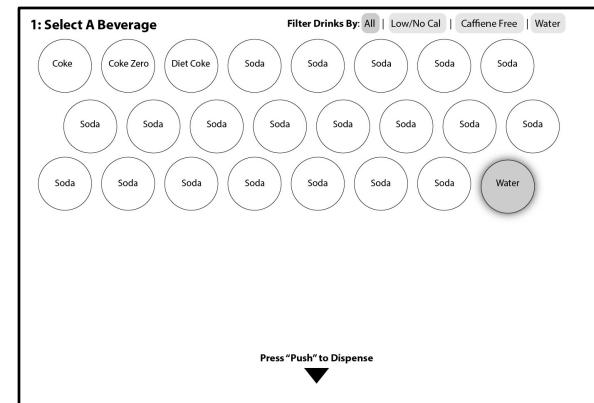
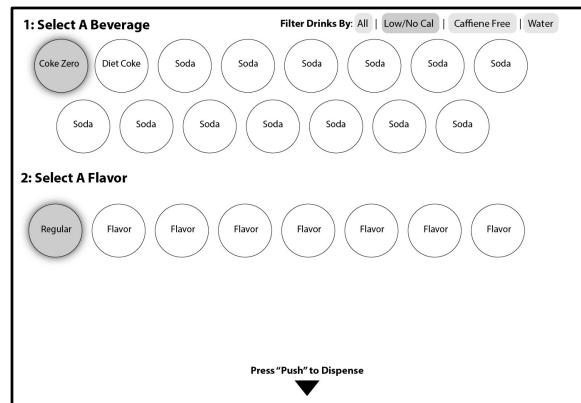
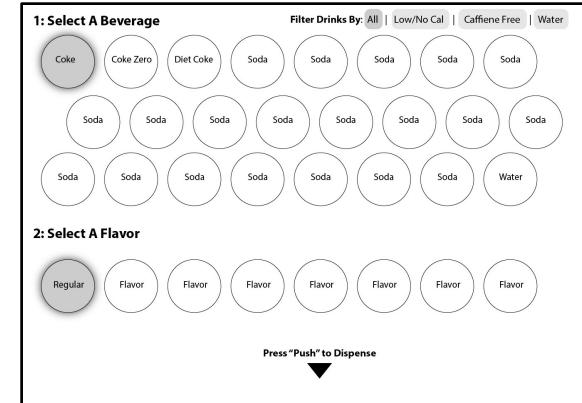
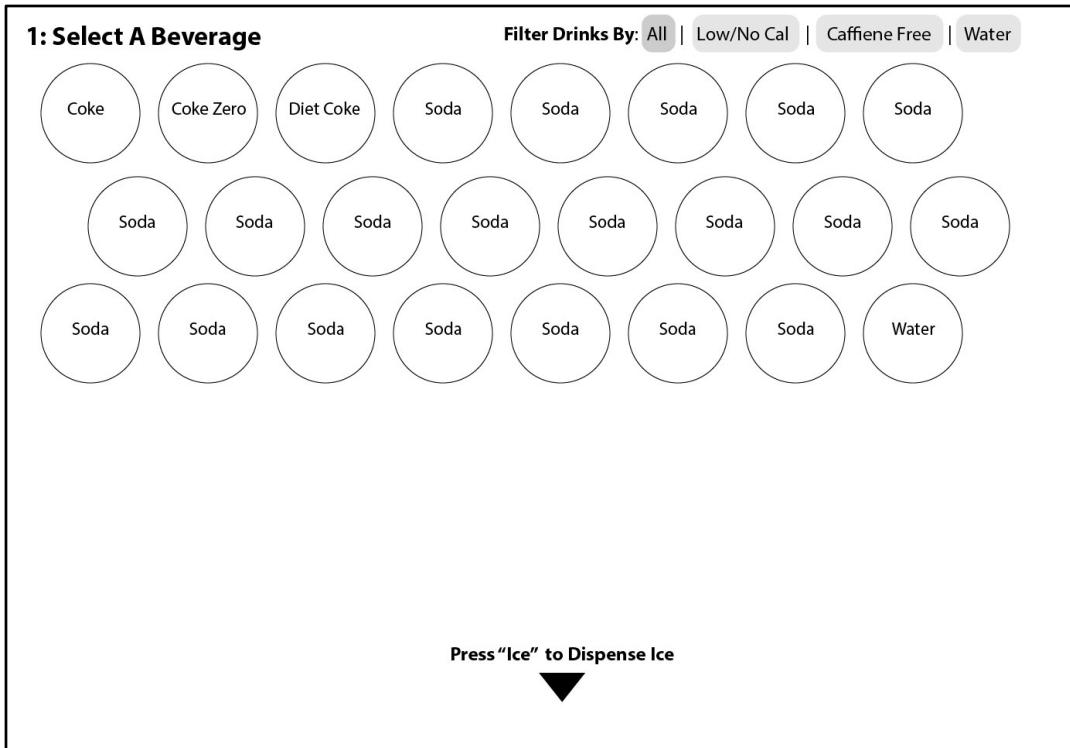


# Recommended Redesign: Interface



# Recommended Redesign

## Initial Interface redesign:



# Recommended Redesign

1. Filter Drinks By: ALL Low/No Calorie Caffeine Free
2. 

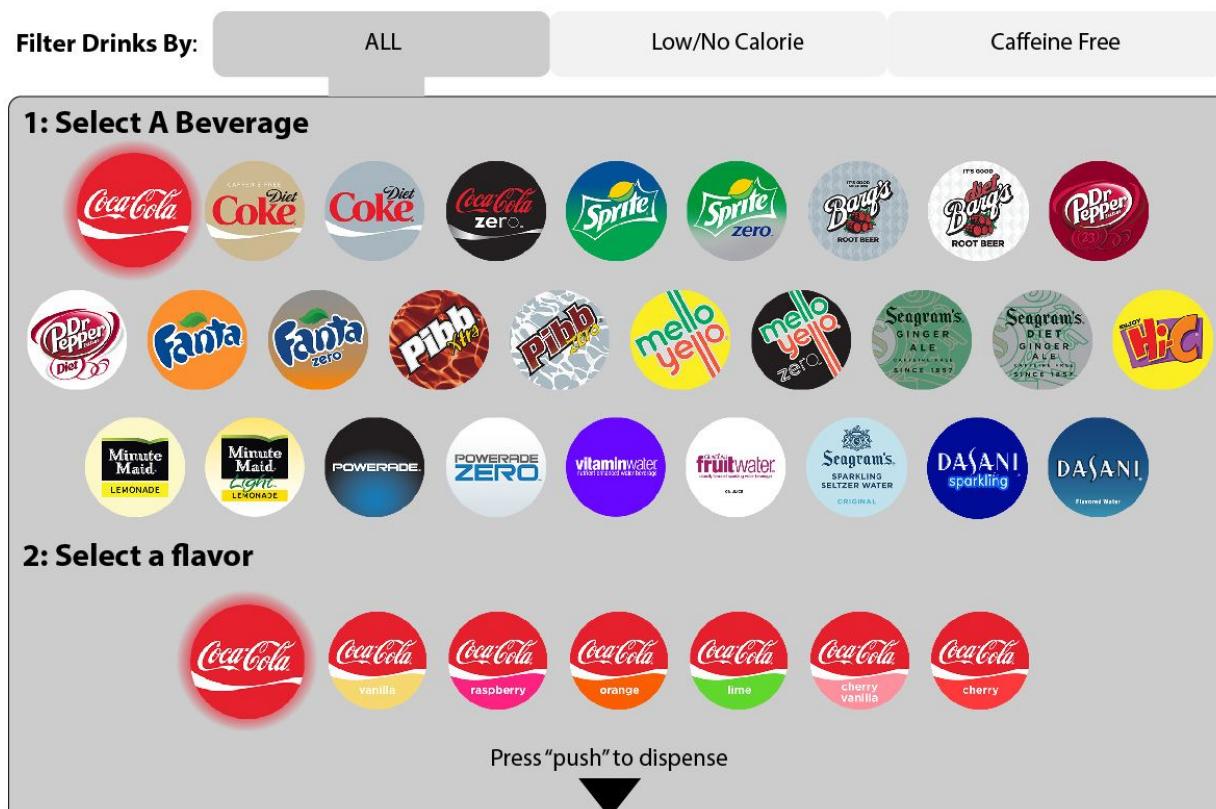
1: Select A Beverage

The grid contains logos for various brands: Coca-Cola, Diet Coke, Coke, Coca-Cola zero, Sprite, Sprite zero, Dr. Pepper, Dr. Pepper zero, Fanta, Fanta zero, Pibb, Pibb zero, Mello Yello, Mello Yello zero, Seagram's Ginger Ale, Seagram's Diet Ginger Ale, Hi-C, Minute Maid Lemonade, Minute Maid Light Lemonade, Powerade Zero, Vitamin Water, Fruit Water, Dasani sparkling, and Dasani.
3. Language: English Español

## Initial Screen

1. User can use the filter to select a subset of drinks, currently the "ALL" is active
2. The user can see all of the drinks in the category
3. Language toggle

# Recommended Redesign



Language: English Español

When the user selects a beverage

1. When the user selects a beverage the button will expand and 2 becomes visible
2. Once the user chooses a beverage the flavors will appear. The regular version with no flavor is selected by default so the user doesn't have to select the drink a second time if they just want the plain beverage

# Recommended Redesign

Filter Drinks By:

ALL

Low/No Calorie

Caffeine Free

1.



When the user changes the filter

1. When the user selects another option in the filter at the top of the screen, they will see that subset of drinks

Language: English Español