

Coke Freestyle

Assignment #1: Ethnography

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CIM 622: UX Research Methods

2/1/16

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

Product Description

COKE FREESTYLE MACHINES



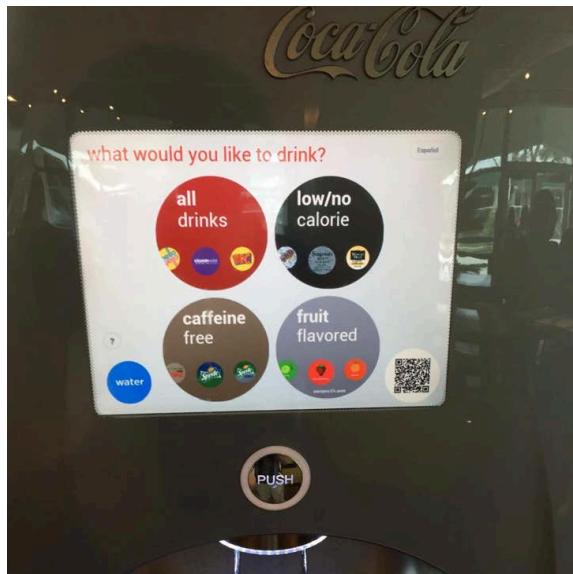
Product Type: Touch Screen Soda Fountain

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



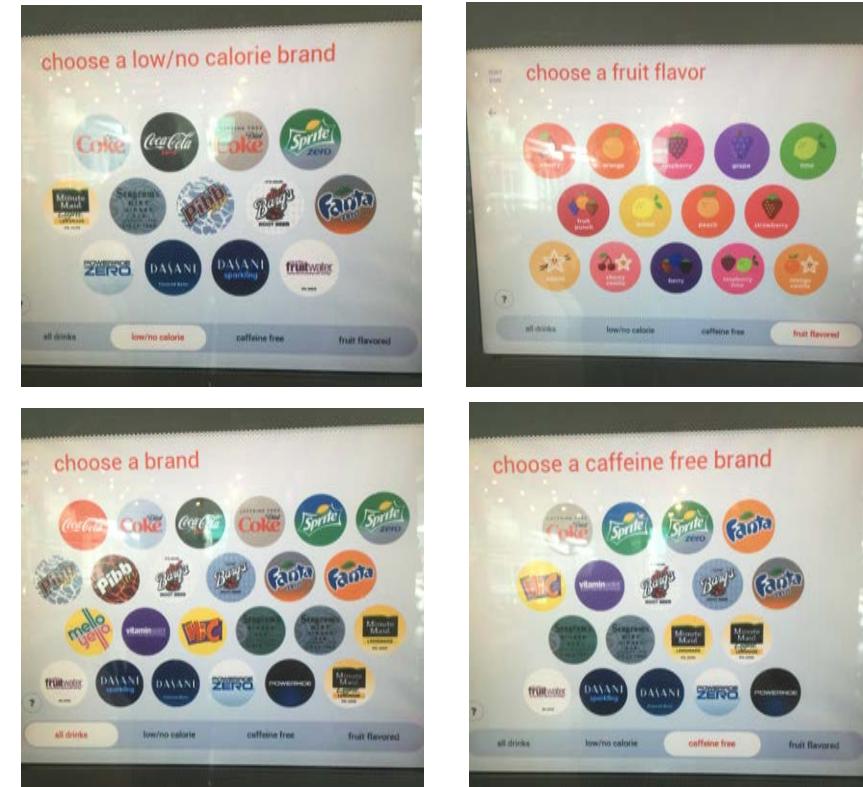
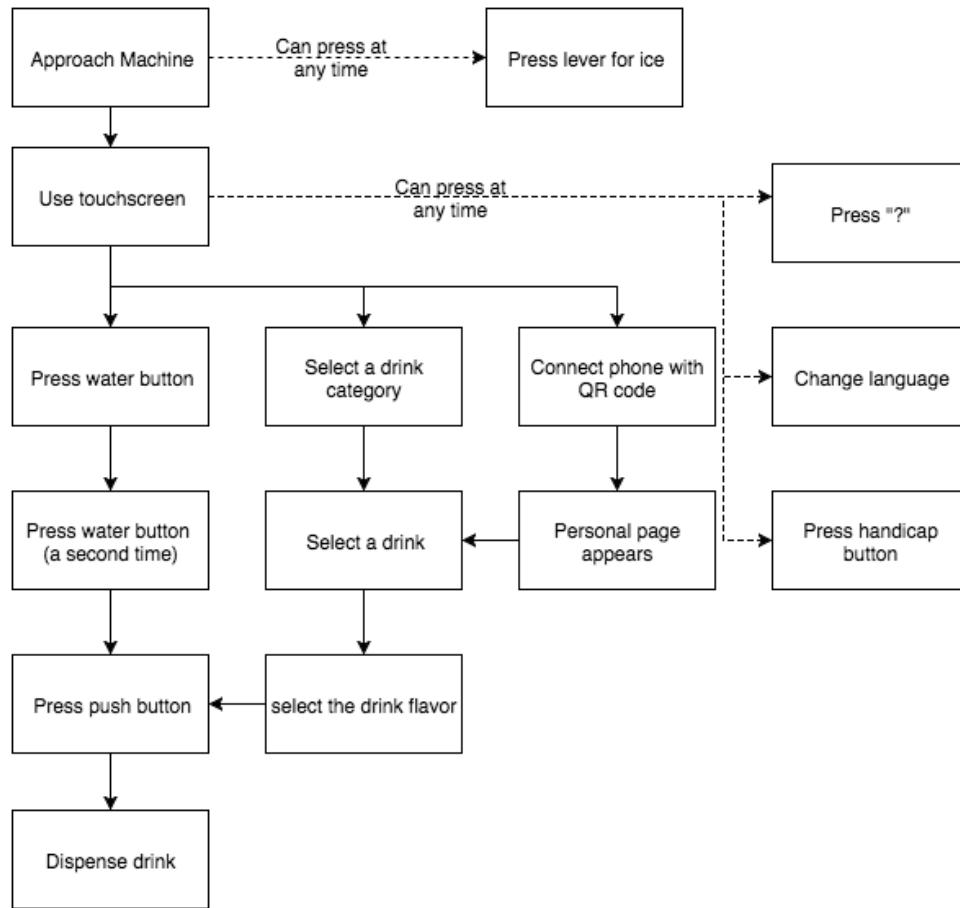
Handicap button – activated

Product Description

All Tasks:

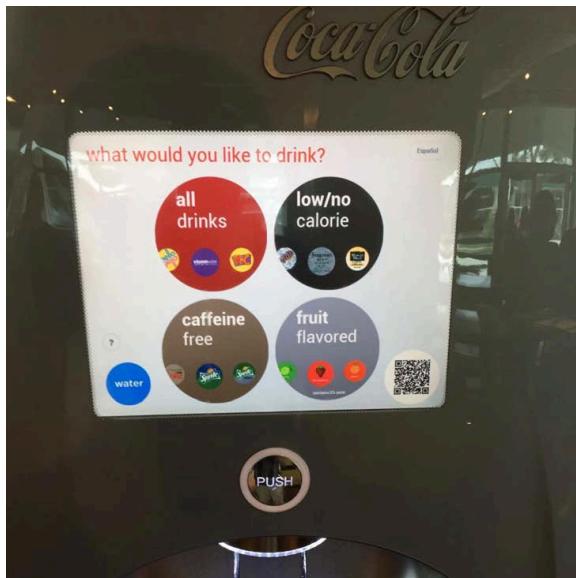
- Selecting a beverage
- Filling cup with beverage
- Filling cup with ice
- Connecting phone with QR code

Product Description – Task Flow

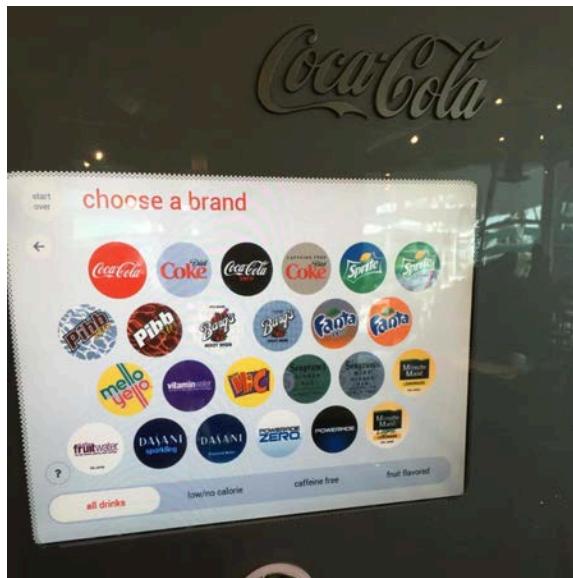


4 categories of drinks the user can select

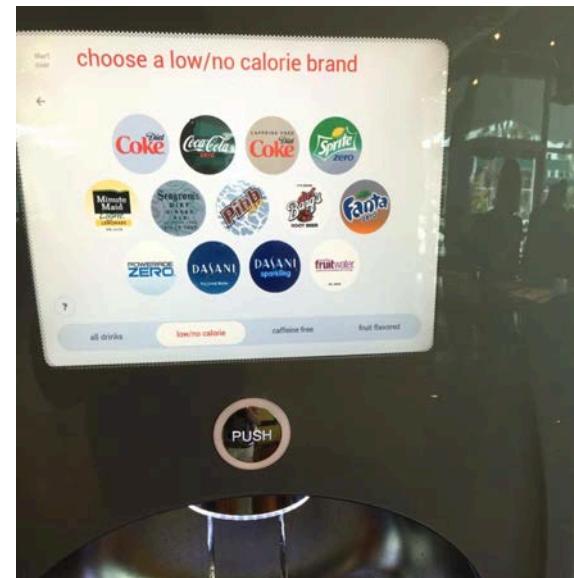
Product Description – Pictures



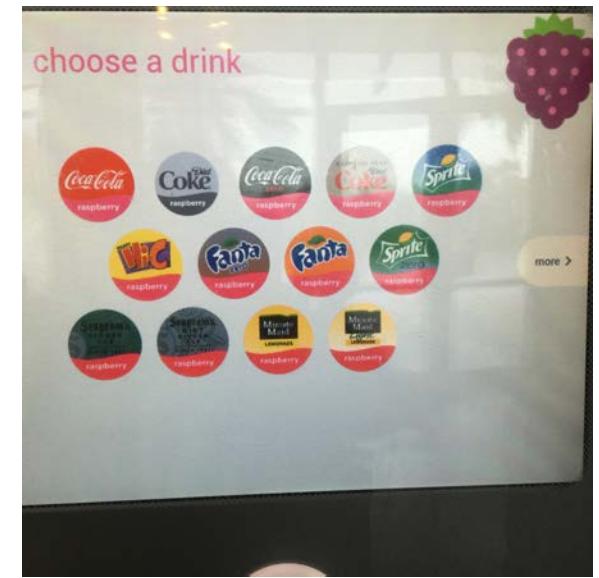
Main Screen



All Drinks



Low Calorie Drinks



Options by Fruit Flavor

Methods

Participants/Demographics:

- 14 Participants
- 4 females, 12 males
- Ages 18+
- Asked 8/14 participants 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 8/14 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 using an affinity diagram
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

Field Guide (n=14)

- 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?

Survey Questions (n=8)

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?

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 surveyed 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*

APP/
social
media

Couldn't
find
ice

Repeatedly
pressing
"push"
button

Asked where ice was un
loud

Pressed push then ice

Hesitation
over where
to go
next

4 menu items, people
don't know what items to
select

Pressed water, then back
button

Hesitated on every new
page

Went back and forth a
couple of times on the
screen

Went back to coke

PRESSING
ALL DRINKS
ON HOME

Water
Issues

Had to press water again
Pushed button, drank from
cup, filled cup up again

Had to press push button
I then pressed water
button again

Time
spent

Spent about 10 seconds

Spent about 10 seconds
Spent about ten seconds
About 40 seconds

Spent about 10 seconds

10 seconds

User had to press start
over in the top left corner

Pressed all drinks

Pressed all drinks

Pressed all drinks

Checked all drinks
Went to all drinks
Selected all drinks

Pressed all drinks

Pressed all drinks

Pressed all drinks

Lemon
Filled up water bottle
Pibb
Selected strawberry Fanta
Pibb with cherry
Diet coke
Ginger Ale

What would you change about CokeFreestyle?
Make the water button a one button process
What would you change about CokeFreestyle?
I would make the water button a separate button so you don't have to use the interface to
navigate to it.

What would you
make?

Came pouring out so they
tipped ice back
Less

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: Problems

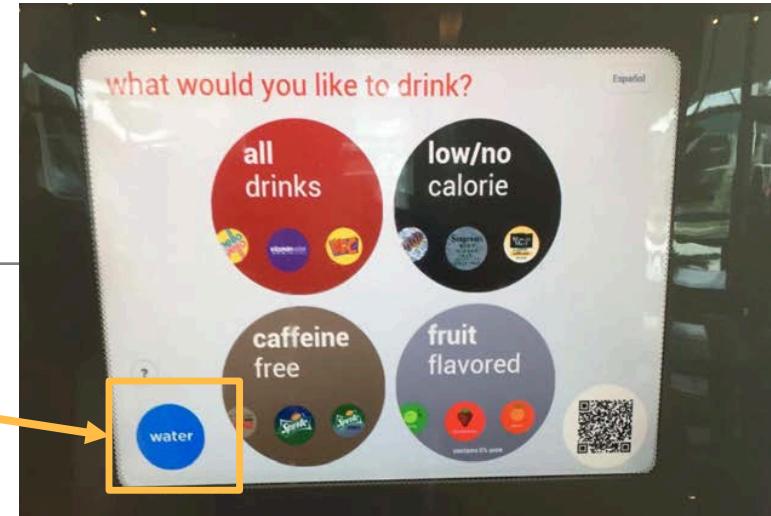
Problem: Water is difficult to locate

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

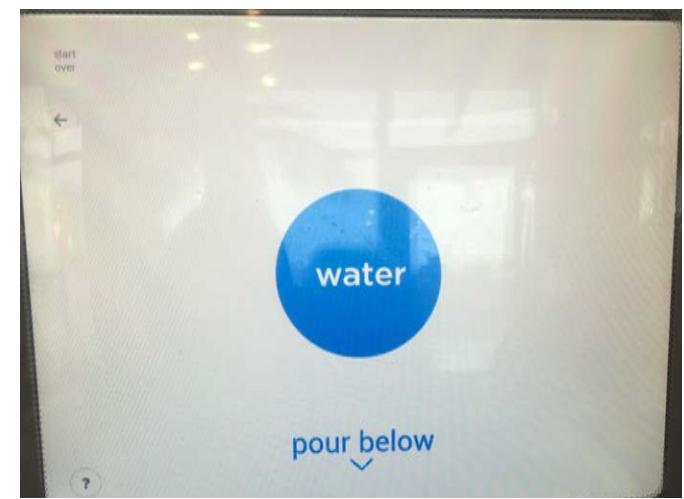
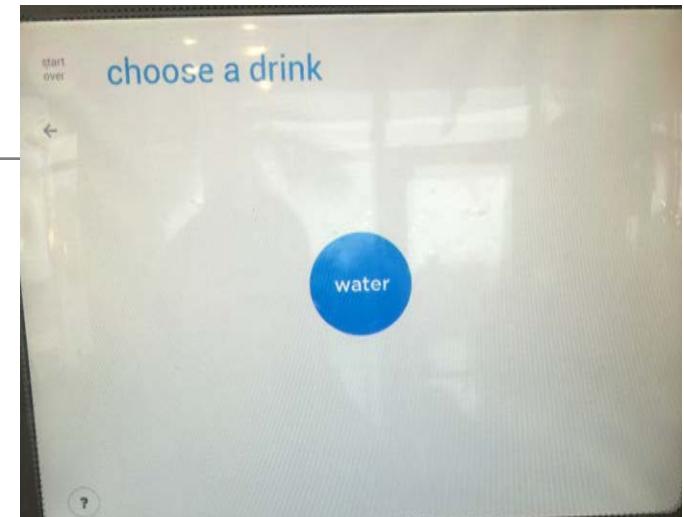
Problem: Water is a two step process

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

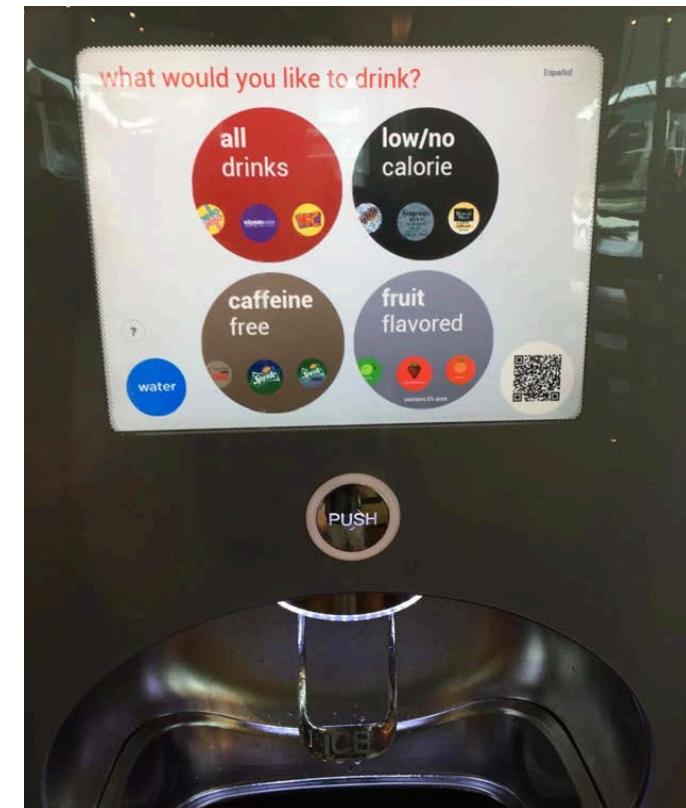
Problem: Ice dispensing too fast

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

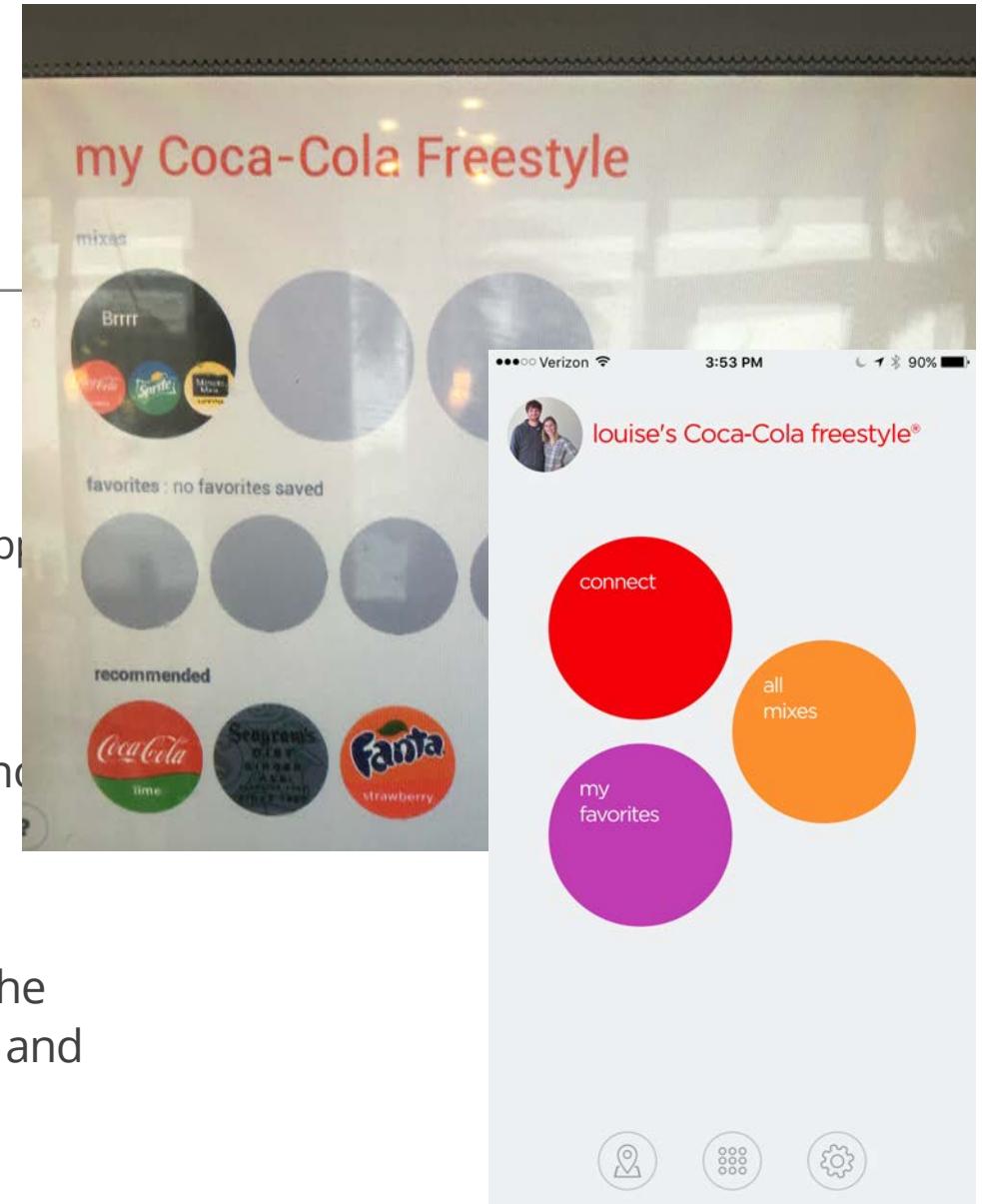
Observations/Voices:

- 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.

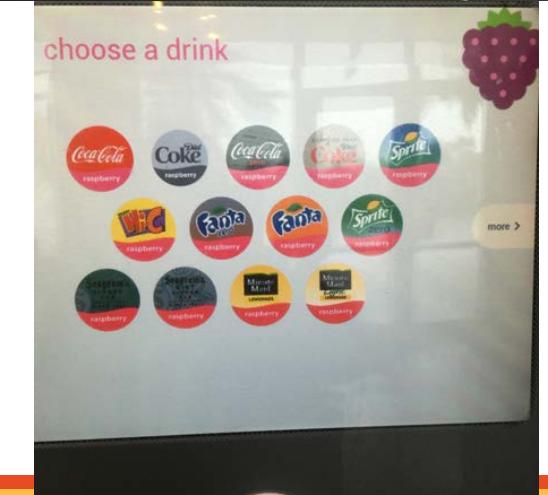
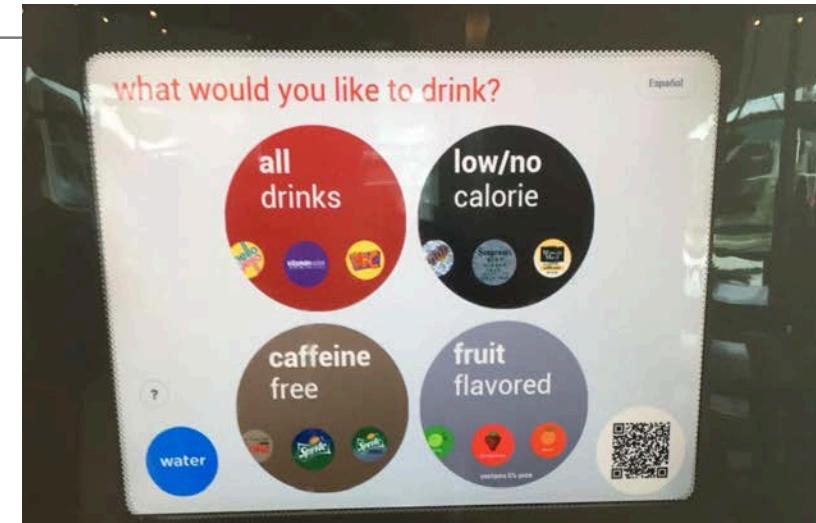
Observations/Voices:

- 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:

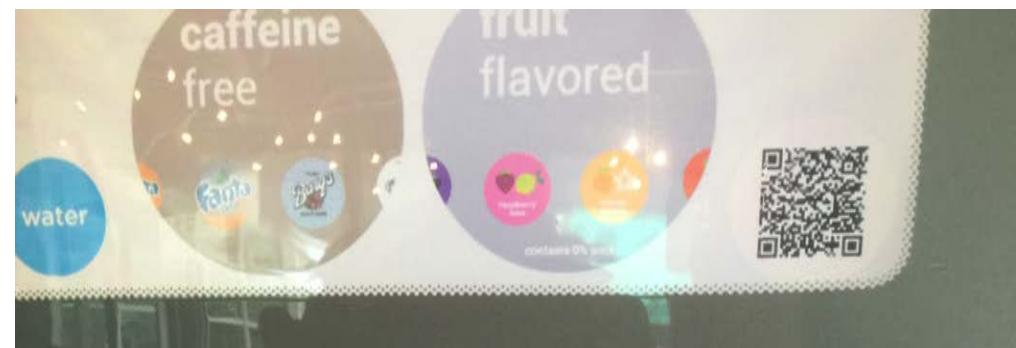
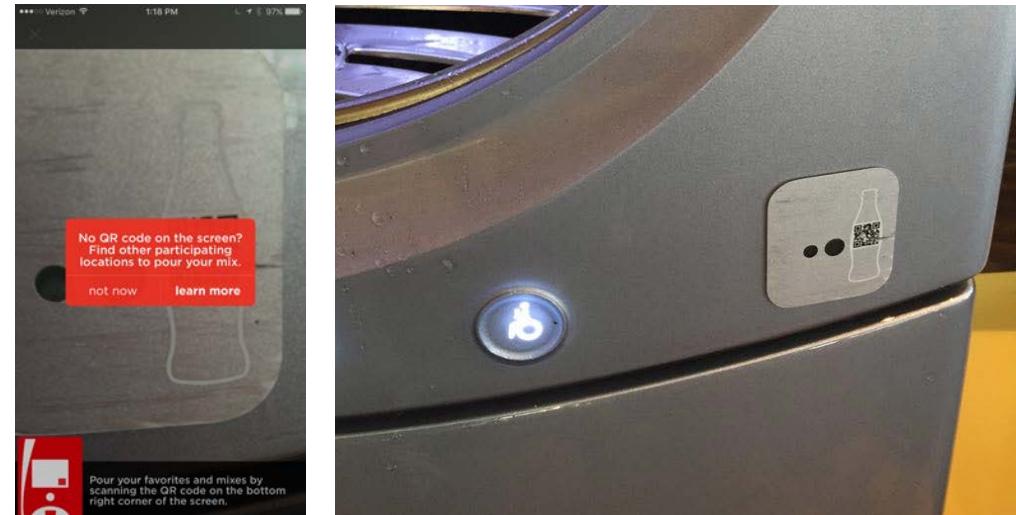
- 4 participants spent more than 30 seconds standing at the machine
- We observed 7 participants hesitate at different times in the process
 - One user went through 2 different drink choices before settling on one option
 - 4 users pressed the back button at least once
- The pages are slow to load on 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 *

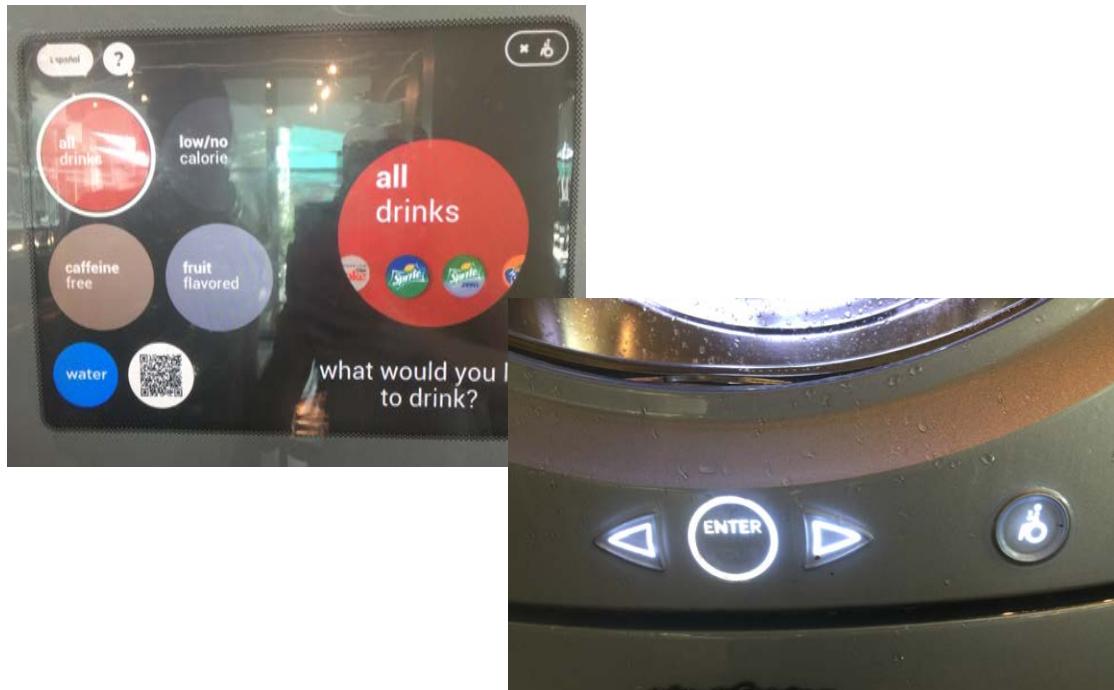
1. There are two QR codes on the machine that do different things
 - The one below the ice dispenser is for the phone to scan so the user can download the app.
 - The one on the screen is so the user can connect their app with favorite drink choices to the machine.



*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.

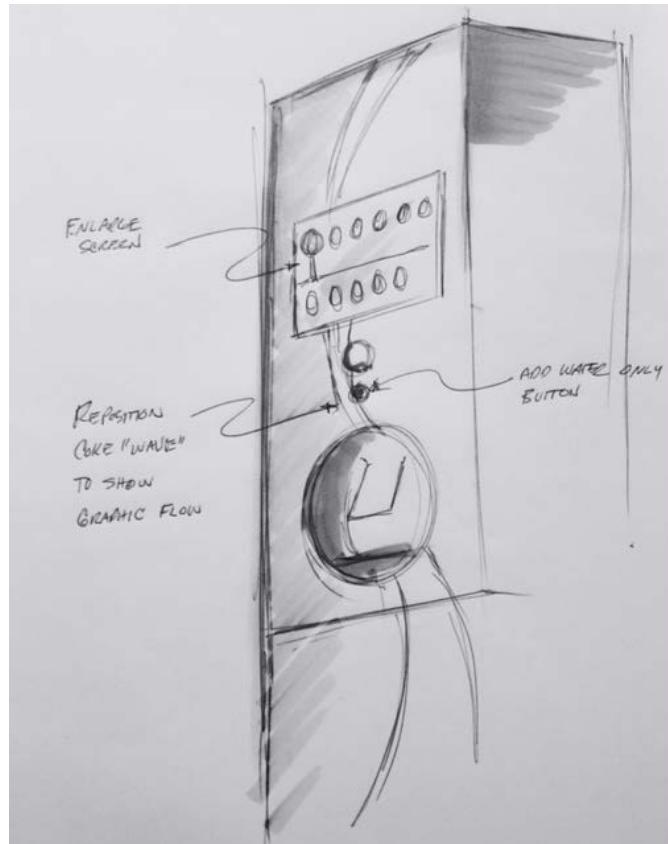


3. The help button provides instructions that are slow and difficult to follow

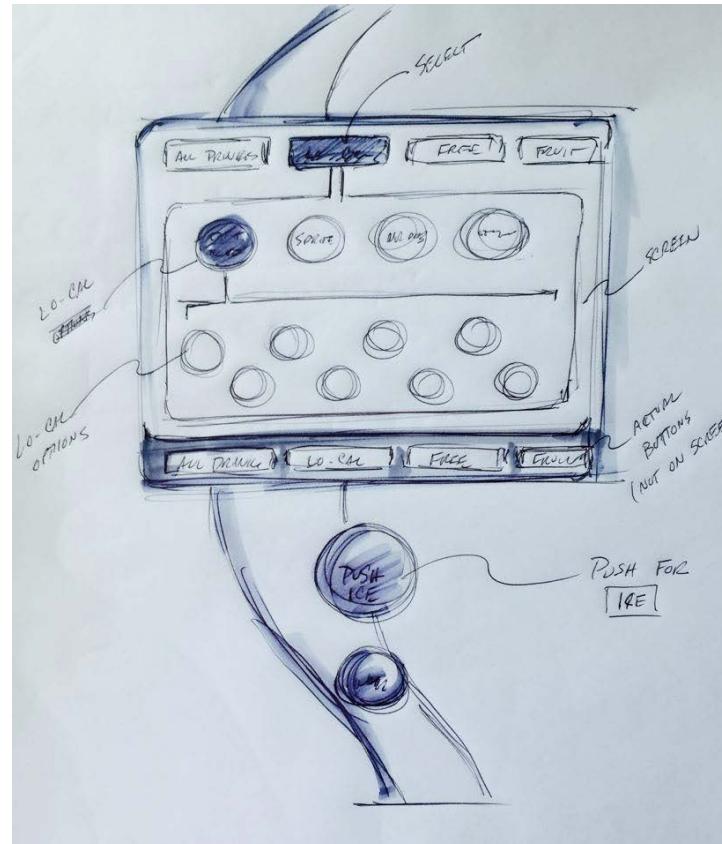


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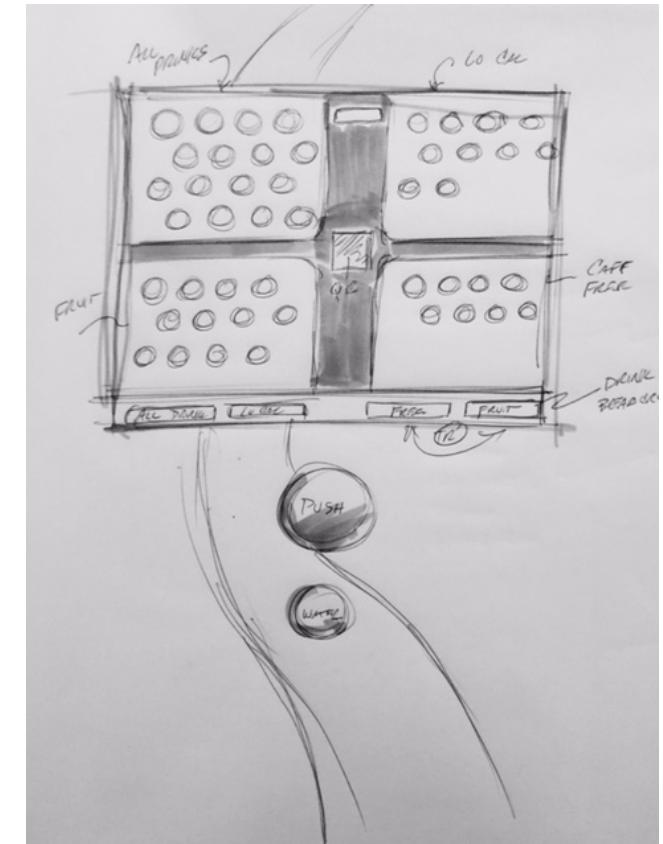
Recommended Redesign



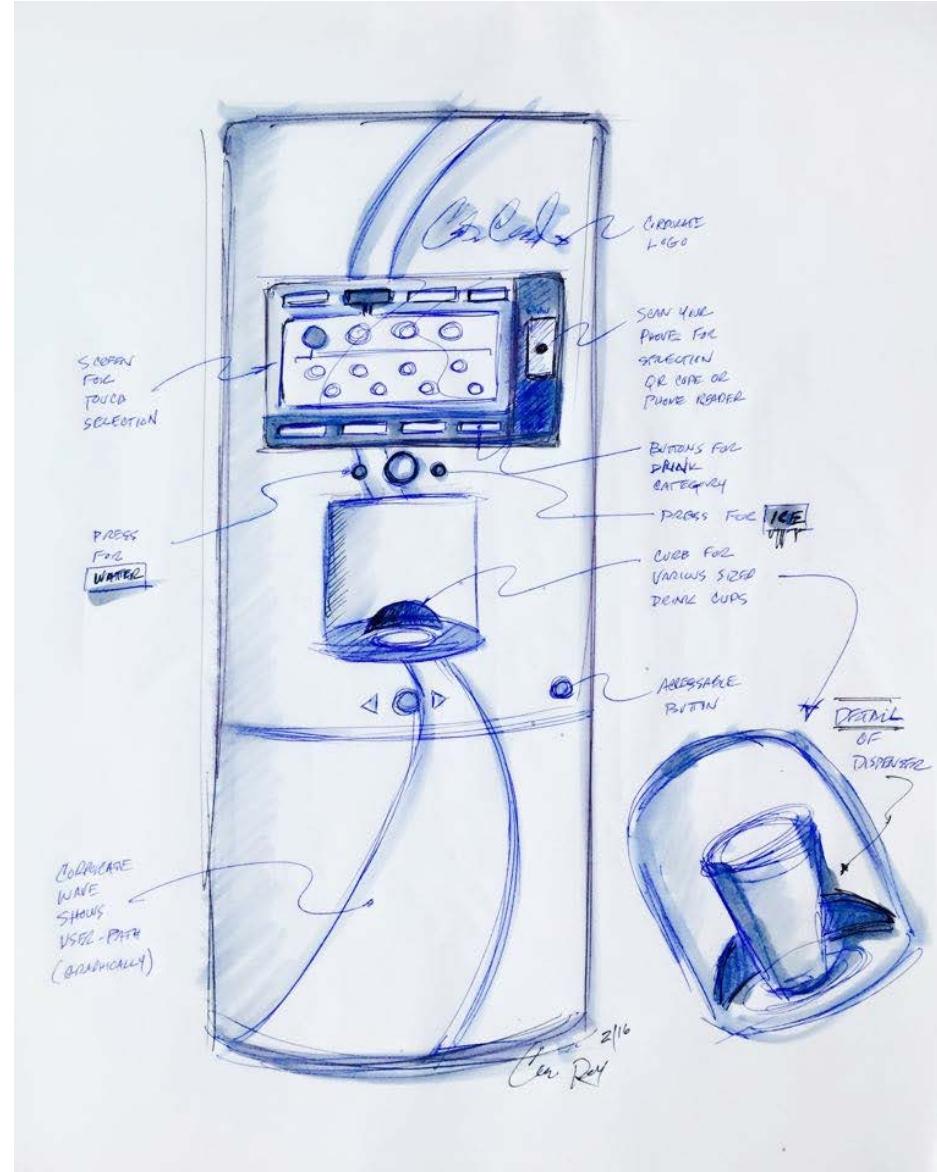
Version 1 of machine Redesign



Interface Option #1



Interface Option #2



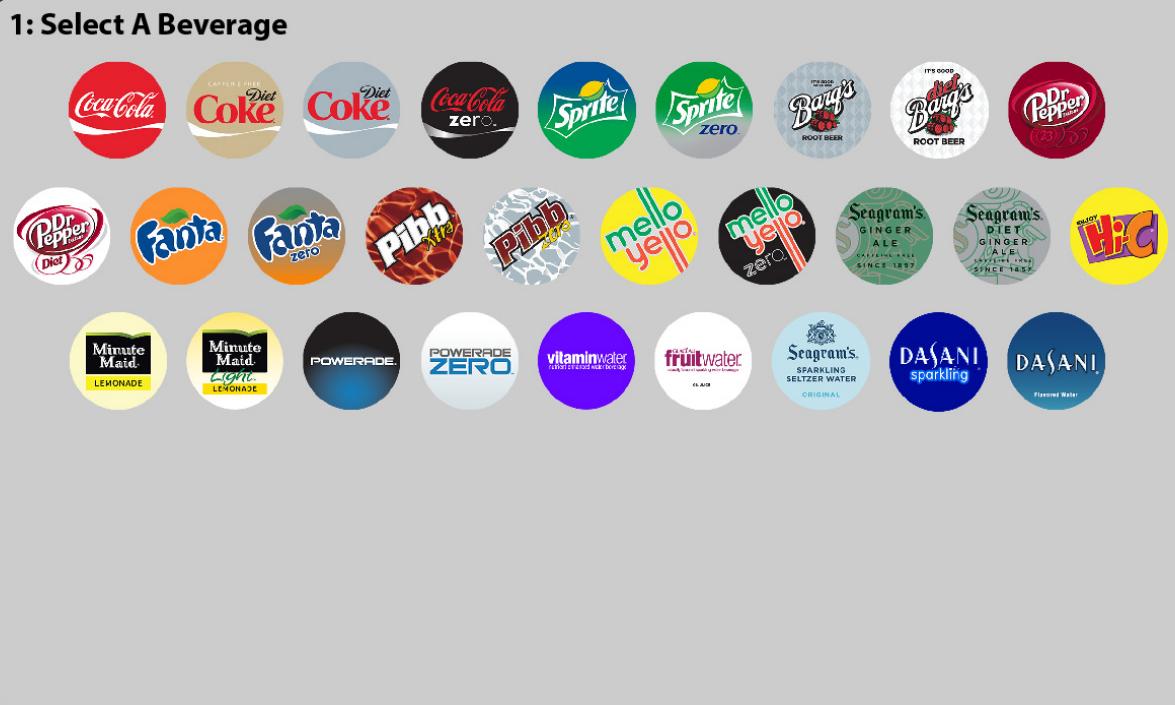
Recommended Redesign

The machine should have a separate button for water that is not on the screen in order to make the process of getting water faster. There should be an ice button next to the water button as users were not expecting to press on an ice lever.

There should be a barrier where the cup goes so the user can place the cup in the correct place and not spill liquid or ice over their hands.

There should be a QR code scanner rather than a QR code on the machine. The scanner should be next to the screen accompanied by a quick line about connecting your phone to the machine, so users are more aware it exists.

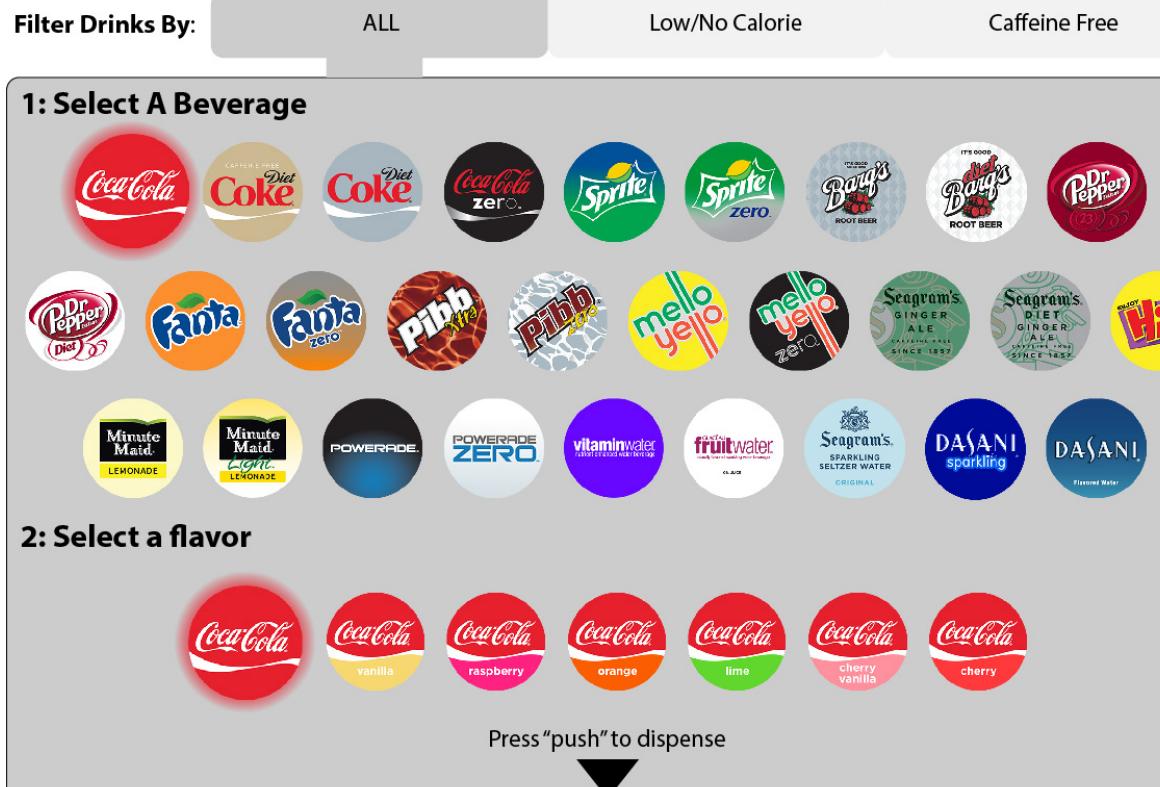
Recommended Redesign

1. Filter Drinks By: ALL Low/No Calorie Caffeine Free
2. **1: Select A Beverage**
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: Select A Beverage



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