Issue: Hunger

Behavior: Households wasting food that is consumable

INITIAL SKETCHES
IDEA ONE: Donation Station

Persuasive Affordance: *Reduce barriers (time, effort, cost)*- Make it easy for people to do what you want them to do (Fogg 140).

At the donation station, there will be stickers and containers. After "finishing" our meal (in this country, eating half our plate of food), instead of going to the trash can, we can go to the donation station and put our still-good-to-eat food in a container and place a sticker on it that will indicate it's good to eat. These prepackaged meals will then be ready for delivery or pickup. **Here, we're making it easy for people to stop throwing away perfectly good food by replacing trash cans with Donation Stations.** By setting up these stations in each household in lieu of a trashcan, it's just as easy for households to donate as it is for them to throw away food.

IDEA TWO: SmartTrashcan

Persuasive Affordance: *Establish Social Norms*- Help people calibrate what behavior is reasonable or desirable by establishing a social standard (Fogg 140).

This is a "smart" household trashcan that will detect the amount of food thrown inside of it (measured by weight). It will then display the amount of trash a household throws out weekly compared to everyone in their township or city. It will display statistics on the average, max, and mean of food wasted. The trash can will show these statistics on its lid, which will have a touch screen interface. You can choose to view statistics for your street, town, city, etc. You can even view your history on it as a graph or chart.

IDEA THREE: Smart Plate

Persuasive Affordance: *Provide information for better decision-making*- Give people information that will lead them to make the decision you feel is better for them (Fogg 140).

The Smart Plate is a plate that will display a number representing the amount of starving people you could sustain for a day with the weight of the food on your plate. A significant portion of the food cooked/made by households goes to waste; people commonly fill up their plates then only eat a small portion of it. They end up throwing out more than what a starving person would eat on any given day. This design will persuade households to **buy less and put out less, causing less waste over time**.

Moreover, this will encourage people to finish the food on their plate. **After seeing that their dinner could've fed three starving kids, they'll stop and think before they head straight to the trash can. The Smart Plate has the potential to persuade people to finish their meals and make/buy less food in general (instead of wasting the food they couldn't finish).**

FINAL DESIGN: **SmartTrashcan**

With this design, I hope to change the behavior of households throwing away food. Food should not be wasted or thrown away with the amount of starving people in this world. 1 in 6 people in this nation alone face hunger ("11 Facts About Hunger in the US"). Hunger is a local as well as global issue. By creating a social norm around *not* wasting food, I expect that households will save their leftovers for later use or donate them to food pantries. This design will persuade people to stop wasting food (the initial behavior) and donate or save it instead (the result).

The Smart Trash Can is a device that is shaped like a trash can, but it will have a touchscreen display on the lid. This screen will display how much food is thrown inside of it (by pounds and ounces) in comparison to how much food people in other households of the same person count in your neighborhood are wasting. On the screen, the user can choose to view this data in graph form, as a pie chart (what percent of waste in the neighborhood is theirs), or another graphical display. The user can change the settings to view the waste data for the day, week, month, or year. They can also view the neighborhood history in the form of a graph. They can also view more than just

the data for households of the same size in the same neighborhood: the user can choose to view data by street, neighborhood, county, state, or country. Additionally, users will be able to view data for their social circles; this will be accomplished by a "friending" feature. You can add anyone you may know (friends, family, colleagues, acquaintances) to your social trash network. You can then place each added member into different categories or circles, and choose to view the food wasting habits of your college friends, work colleagues, basketball team, etc.

Moreover, if a household is doing relatively "well" (wasting less than most other households) in one of their networks or areas, the display will switch to show the household in comparison to a network/area they are *not* doing well in. This feature will solve an initial issue that came up with this design: if a person is living in a high-waste neighborhood, they may be wasting less than their neighbors and think they are doing great. This may persuade them to stop being so cautious of their waste and maybe even waste more food. However, this added feature stops people from becoming complacent with their wasteful habits.

Lastly, this design will keep track of your personal waste history, so you can look back and see your improvements or slumps.

This design uses the "establish social norms" persuasive affordance (Fogg 140). By making people's waste habits public, we are making it a norm to be conscious of what you're throwing away and how much food exactly you're wasting. People will view the habits of others and become persuaded to waste less. For example, if a household sees they are wasting more food than anyone else in their neighborhood, they'll realize their waste habits are abnormal and make an effort to donate their excess food or save it for later. If a person sees that someone on their basketball team wastes an exorbitant amount each week, they can get the rest of the social circle to pressure or judge the excessive waster to change his/her habits. **We're making it normal to be conscious of your food waste and to aim to waste less than others.** Right now, because no one sees how much you waste, no one really cares how much food you throw out. But, if anyone from your boss to your third cousin in Georgia can see how many slices of pizza or canned olives (in pounds) you threw out last week, you'll make an effort to waste less. We're establishing a social standard and letting people know that it's frowned upon to waste food; if you waste too much food, everyone from your mom to your tennis partner will be seeing, judging, and frowning.

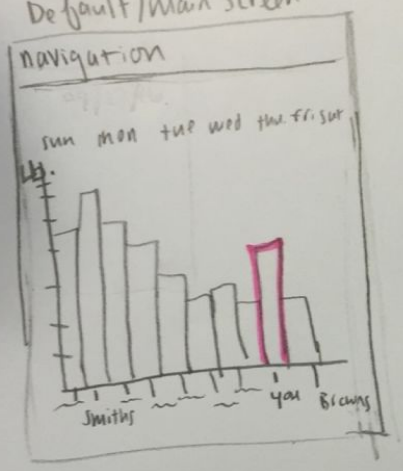
The key to developing a successful persuasive design is to create one that addresses a specific, measurable behavior relating to a bigger issue. By designing a trashcan that is specific to households, we're addressing the very explicit behavior of households throwing away and wasting otherwise consumable food. The bigger issue at hand is hunger. This design instantiates the persuasive affordance of establishing social norms by helping

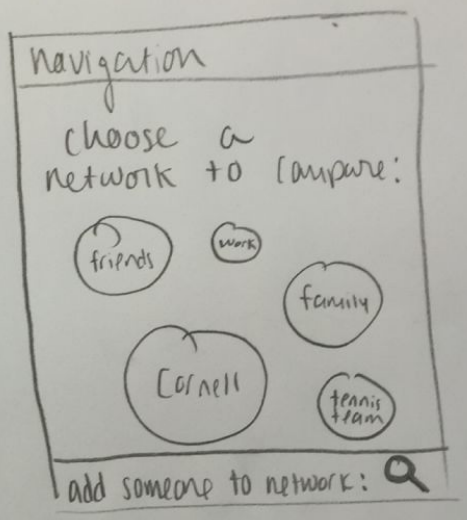
people realize how much domestic food waste is reasonable or desirable (Fogg 140). If someone is wasting more than a certain network of theirs, it is visible to themselves and everyone else in this network- pressuring them to waste less and to change their habits. Another issue that comes up with this design is that people may not purchase the device or that even if people have it, they “cheat” and use other trashcans for their food wastes. This is an issue that can be solved with legislation/government policy mandating that individuals must have a SmartTrashcan in their household, and they *must* place all their food wastes here.

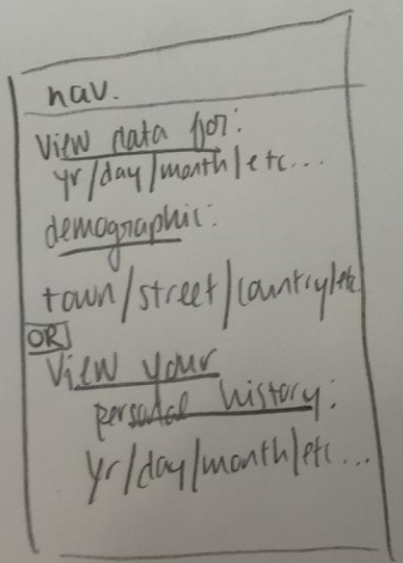
Sketch (3) on next page:

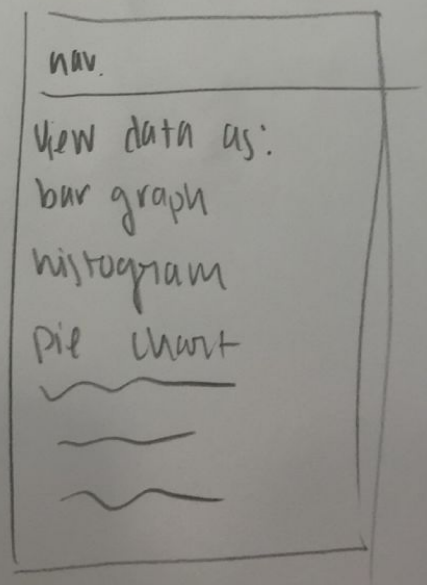
← shaped like common household trash can

Default/main screen









Works Cited

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