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Miniproject 2 10/6/2019

Social Issue

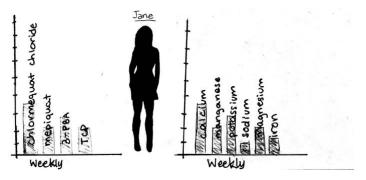
The social issue in focus is ethical eating, which involves the active thinking on the effect of food choices on the environment, labor practices, animal cruelty, and consequences of food policy.

Behavior

The behavior associated with the social issue of ethical eating, is buying local produce. More specifically, the user should buy local vegetables, at least once a week if making any purchases of produce during the week. This would attempt to slightly combat the negative impact mass production has on the environment and our bodies.

Brainstorm

I. Promote understanding of cause-effect relationships: A graphic in an easily visible location in homes that reflects the positive and negative change on the user with each purchase/meal and effectively represent the non-immediate consequences of the user's actions. A smart system would track purchases in grocery stores, meals made at home, restaurants, etc. and have a graphic that would be reflected in your home that shows the effect of each choice on your body and the environment over time. Would also show the changes in various time projections; life expectancy, weekly, monthly, annual change.



II. Establish Social Norms: A smart system that would be integrated into grocery stores, nurseries, and farmer's markets that would generate a report on locals who are consuming the most local produce and who is living the greenest lifestyle. This report would be available in local newspapers, online, and publicized around towns and cities and essentially establish a social standard to help locals/participants calibrate what behavior is reasonable or desirable.



III. Reduce Barriers: A small-scale modified greenhouse that would grow vegetables, protect them from the elements allowing for maximum production year-round. This implementation would vary from city apartments to suburban houses and vary for purpose. For example, in an apartment the top floor would be a shared vegetable garden, while individuals could maintain smaller specific greenhouses in their apartments with limited space. This would make it easier for users to achieve the behavior change identified above by eliminating the inconvenience of paying more for organic groceries in comparison to non-organic, and would be overall more convenient as users wouldn't have to go to the supermarket to purchase fresh produce.

Below: The device on the roof of an apartment for the entire building, and the device on a kitchen counter.



Final Design

This design aims to change the behavior of people not eating locally grown produce, namely vegetables, by making it inconvenient to eat non-locally grown produce. For those who buy produce once frequently, the first purchase of produce during a week, on a Sunday-Saturday calendar, should be of locally grown produce. Those who do not eat produce on a weekly basis will not be penalized for this as the design aims to change the behavior of those who already consume a vegetables, not change general eating habits.

This relates to the problem of over and ethical consumerism as it aims to make people eat local produce to reduce the negative impact the industry is having on the environment and on our bodies. The design promotes buying and consuming local produce, not supporting the mass production of produce, and redirecting energy into green eating. This behavior is measurable as an individual will not buy produce for the week, or they will buy produce for the week, of which the first purchase must be local. This same behavior is observable as the system will not rely on user input, its own internal system records the consumption habits of each user.

This design is a specialty greenhouse, that comes in varying sizes from able to fit on a kitchen counter to occupying the top floor of a building. This design serves to reduce the barriers of

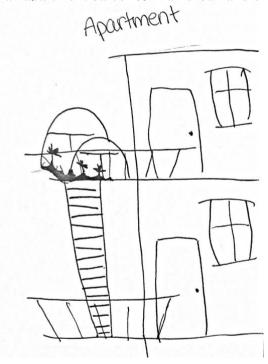
navigating a grocery store to find the right locally grown produce, only to then pay more for vegetables that go bad at a faster rate. Removing the hassle of going to the grocery store and paying for more expensive goods should encourage individuals to change their behavior and start eating produce grown on a smaller scale. It is much more convenient to walk upstairs or outside and pick your own fresh produce, and this design aims to make it less convenient to not have a personal vegetable garden on your property. It is expected that making local produce this accessible and easy would promote some change in the behavior of eating mass produced vegetables. Additionally, there is some novelty and enjoyment to growing your own food, and though this design would not rely on enjoyment to change behavior, it is an additional benefit.

To give this design the best chance at changing behavior, the graphic from the first design above could be incorporated as an additional feature, to promote understanding of cause-effect relationships. These greenhouses, already equipped with advanced technology, could have a method of tracking food purchases and consumption, similar to methods used in self-checkout devices in stores. This data would then be structured to present visualizations on how these choices are helping individual health, and environmental wellbeing. This data would be personalized and available through a program that syncs to the individual's produce intake.

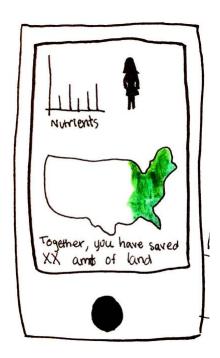
Below is the device outside, in the backyard of a house in a suburban area.



The device on an apartment balcony, in an urban and smaller setting.



The incorporation of graphics to promote the understanding of cause-effect relationships.



This device, for the reasons mentioned above, has a good chance to be effective at inducing a behavior change in those who do not support local produce. Using vegetables grown at home or in the local greenhouse is cheaper and easier than shopping for produce at the grocery store. By making the healthy alternative so easy, this design has a good chance at inducing change. Further, it could result in a change to social norms as well. As the easy and moral alternative increases in popularity those without the mechanism would be seen as particularly uncaring and unmotivated for avoiding an intuitive and natural cause of action.

The design has some pitfalls as it does require some motivation to invest in a personal greenhouse and may be seen as a privilege affordable only by the affluent. Individuals who already do not consume produce will not be affected by this design at all, as they have no interest in consuming vegetables, regardless of where they were grown or on what scale their production is. A social stigma could arise around this design and purchasing a greenhouse could be seen as a freedom available only to those who have extra time to care about smaller environmental issues.

Despite these shortcomings, once initially purchased, the internal regulation and programming would ensure that each plant inside is grown to its full potential. The temperature, watering, and sunlight will all be provided year round, as necessary for each vegetable. The benefits quickly out-value the cost of the initial purchase, and is the responsible and fun choice for individuals who have any need for fresh produce in their households.