

GIVE THE USERS WHAT THEY WANT:
ELEVATING THE USER EXPERIENCE OF THE BUY NOTHING PROJECT

by

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ABSTRACT

Natural resources are being depleted at an extremely unsustainable rate, and it has caused harm to the planet, animals, and to ourselves. Factors that are contributing to the earth's pollution are caused by overconsumption from our current linear economy. The *Buy Nothing Project* encourages a circular economy by having hyperlocal groups associated by neighborhoods that are hosted on Facebook, and have users give each other items at no cost, that would otherwise be discarded.

This thesis explores how Facebook is not the right medium to host the *Buy Nothing Project*, and how empathizing with users of the *Buy Nothing Project* by following the Human-Centered Design process, can help create a more meaningful experience for the user. By designing a mobile app that aligns closely to the user's goals, there is potential for increased usage by current participants, an opportunity to educate current users on the positive environmental impact they are making from participating in the project, and the possibility of attracting new environmentally conscious users.

To better understand the user, a digital survey was conducted that yielded over 40 responses, five interviews were organized in which to better understand pain points and goals, and a digital prototype was created and tested with six individuals ranging from current participants of the *Buy Nothing Project* to those that were unfamiliar with it. Results indicated potential success and an overall more positive experience than the current state of the *Buy Nothing Project*. Users felt like they were making a positive impact on the environment, that the app was reducing redundancies, and it granted

potential to reconnect them with their community.

I. CHAPTER 1 - INTRODUCTION

The amount of garbage humans throw away is rising fast and will not peak this century without transformational changes in how we use and reuse materials. According to the 2018 World Bank report (April 17, 2018), it is predicted “that global annual waste generation will increase from 2.01 billion tons in 2016 to 3.5 billion tons in 2050, as nations and cities develop economically, urbanize and increase their populations.” We have been depleting resources at an extremely unsustainable rate, that has caused harm to the planet, animals, and ourselves. Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs. In terms of Environmental Sustainability, ecological integrity is maintained, all of earth’s environmental systems are kept in balance while natural resources within them are consumed by humans at a rate where they can replenish themselves. In that case, Environmental Sustainability is one of the primary ways of avoiding the depletion of natural resources to maintain an ecological balance.

Thesis Objective

The purpose of this thesis research is to examine the financial, environmental, and sociological impact of visual communication and the user experience of the *Buy Nothing Project*. This thesis will discuss factors contributing to the earth’s pollution caused by overconsumption by our current linear economy and wasteful lifestyle and explore if the *Buy Nothing Project* is a feasible lifestyle change, and what design changes would benefit the project to help increase its awareness and use, and therefore create a substantial and

positive global impact.

Thesis Organization

This thesis is organized into five chapters. The first chapter introduces the *Buy Nothing Project* and its intended impact. Chapter 2 goes in depth into the preliminary research, like finding the right target market, and performing a competitive analysis. Chapter 3 states the problem and suggests an alternative to being hosted on Facebook. Chapter 4 shows the Human Centered Design process, creation of the prototype, feedback from usability testing, and ideation. Chapter 5 analyzes results from the final round of usability testing and concludes the thesis by comparing the potential of success of this app to the current presentation of the *Buy Nothing Project*.

What is the *Buy Nothing Project*?

The *Buy Nothing Project* is a worldwide social movement that focuses on hyperlocal, volunteer-run groups on Facebook (See Figure 1) where neighbors can offer free items and services to each other with no expectation to receive anything back in return.

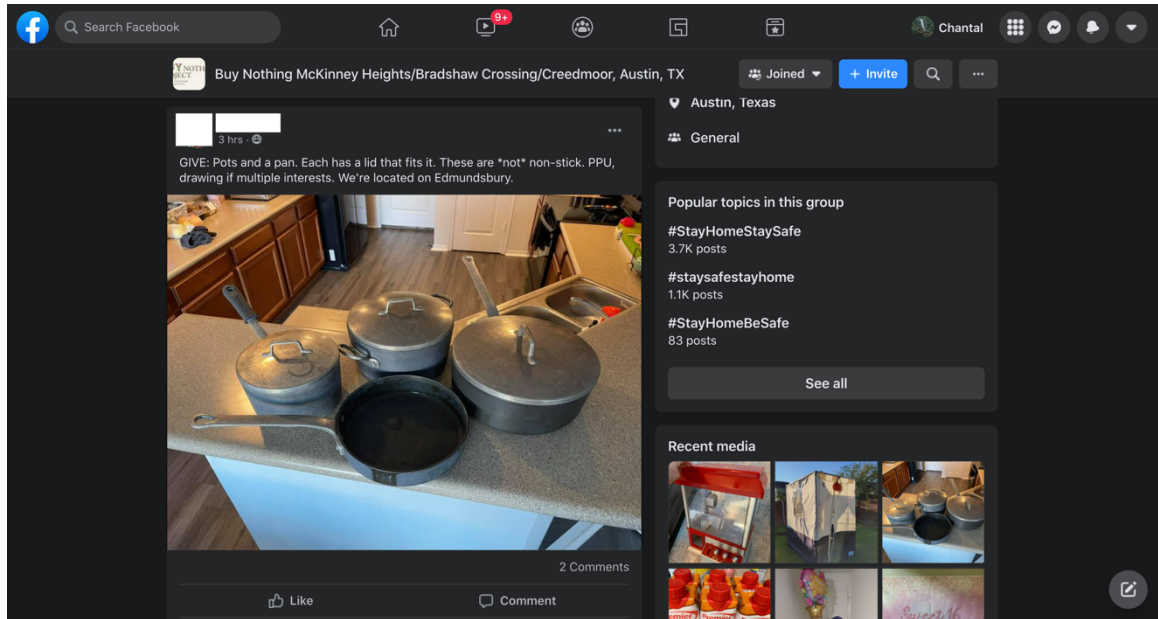


Figure 1. How the *Buy Nothing Project* currently operates on Facebook groups.

It encourages a circular economy, which is a model of production and consumption that involves sharing, reusing, repairing, refurbishing, and recycling existing materials and products. Which ensures that the life cycle of products is extended in the hopes of reducing waste to a minimum. This is opposed to our current linear economy where raw materials are used to make a product, and after their use are discarded, causing an overwhelming amount of waste. A circular economy is not a new model by any means and has been adopted by other countries such as: Denmark, Netherlands, Scotland, Sweden, Japan, Germany, and China. For example, Germany has had a model of sustainable development in place since 1994 and helped to shift product responsibility to producers which means minimizing waste happens at the source (Ogunmakinde, 2019). In 2005, Germany even placed a ban on landfill dumping, with the goal of completely phasing out landfills by 2020, which lead to about 50% of waste being recycled while zero municipal waste has been sent to landfill for disposal since 2009 (Ogunmakinde,

2019).

Currently The U.S. produces more than 30% of the planet's total waste, though it is home to only 4% of the world's population. Approximately 42% of all U.S. greenhouse gas emissions are created in the process of extracting resources, producing goods, disposing of waste, and transporting materials at every stage of that process which is the biggest contributor to global warming pollution. According to the United States Environmental Protection Agency (EPA, 2018), The total generation of municipal solid waste (MSW) in 2018 was 292.4 million tons or 4.9 pounds per person per day (See Figure 2).



Figure 2 – Infographic on landfill waste on the EPA homepage, 2018

Thanks primarily to word of mouth, the *Buy Nothing Project* has over 1.2 million participants in over 25 countries. It was started as an experiment in 2013 by Rebecca Rockefeller and Liesl Clark in Bainbridge Island, WA, after Liesl had returned from a relief mission in Nepal. During this relief mission, Liesl was impressed by the ways the community members shared each item equally, noticing that when warm clothes were brought to the village, the village members insisted that the clothes be divided equally among the households, so each family would have equal social capital to share with the community. This sparked the idea of starting a fair gift economy in Rockefeller and Clark's own hometowns (Clark, Rockefeller, 2020).

Getting involved with the group is simple, but typically only if you can hear about it from word of mouth. The *Buy Nothing Project* is neither a profit nor non-profit organization, but rather just an experiment. They do not have any sort of marketing and rely heavily on word of mouth. Currently, the *Buy Nothing Project* consists of a website (<https://buynothingproject.org/>) where users can read more about how the project started, its missions and principles, and other Frequently Asked Questions. The project itself operates on Facebook, and if users are not invited to your local group by a neighbor users will have to find the *Buy Nothing Project* website to locate their neighborhood and join their specific group. Otherwise, users are left in confusion on navigating Facebook groups, trying to find which one they specifically belong in. Users are only allowed to join one group, and to find the right one they must navigate through the website and search through your country, state, city, and finally-neighborhood. Once a user locates the group that corresponds to their neighborhood, they are redirected to Facebook where

they must request permission and answer three membership questions that need to be approved by a moderator. Each group allows up to 1,000 members for the purpose that the project wants to maintain a sense of a close-knit community (Clark, Rockefeller, 2020). Depending on the size of the group, there are several moderators assigned to assist in the operation of the group and ensure that group members are following the rules. The rules of the group are simple, the user posts anything they'd like to give away, lend, or share amongst neighbors. They are also allowed to ask for anything they need or would like to receive for free or to borrow. There is no buying, selling, trading, or bartering allowed. The project strictly relies on a gift economy and encourages its users to be creative in the way in which they share to help create a sense of community.

The *Buy Nothing Project* relies on two different post methods: Ask/Wish and Give. Asks/Wishes consists of a member asking for an object or service. Gives can be further broken down into categories:

Gift of Self - which is something that one member can do for another

Gift of Talent – Anything that one member can teach another

Gift of Time – Offering to spend time with a neighbor

Furthermore, there are different ways to give. Flash gifts are a “first come, first serve” basis, typically when a giver wants the item out of their home as soon as possible. However, the *Buy Nothing Project* prefers for givers to allow their posts to “simmer” and ask for a more creative method of gifting that allows members to get to know one another more to help with fostering a sense of community. Which chosen methods are up to the

original giver's discretion but can include raffles, requests on stories from neighbors about themselves, or what they'd do with the gift, etc.

The *Buy Nothing Project*'s Intended Impact

Financial

While not the original intent of the *Buy Nothing Project*, there are significant financial benefits to being a member: It decreases the spending of a household and can assist families to live within their means. Being frugal can also be positively sustainable, if habits are changed such as: driving less, buying second-hand goods, repairing broken goods, or borrowing items from acquaintances, and overall buying less products. Making use of what an individual has and buying less makes a bigger impact rather than buying green. Because buying green products does not require a vast change in consumption or in lifestyle, it is still considered a form of materialism and is not the purpose of the *Buy Nothing Project* (Helm, Serido, Ahn, Ligon, Shim, 2019).

Environmental

By participating in a local *Buy Nothing Project* group users are reducing the dependence on single-use and virgin materials by extending the life of existing items through gifting and sharing between other group members. Recycling wins over virgin production on many environmental measurements, since in most cases when it comes to carbon emissions, recycling a product requires less energy than making a product from virgin materials (United States Environmental Protection Agency 7). Estimates vary with the type of recycling process used, but recycling and re-manufacturing materials saves at

least 30% of the carbon emissions that original processing and manufacturing produces (Staley, 2021). Currently the overproduction of unnecessary goods means the overfilling of landfills, pollution of watersheds and seas. However, if Americans can rethink the way they consume, refuse to buy new and instead ask for an item from a neighbor, this may impact the amount of goods that are manufactured, and in turn will stall overproduction and waste.

Social

The social connections people form is not built around our homes and neighborhoods in the same way they used to be. We create social networks through work, schools, houses of worship, gyms, and other places away from home. Many of us lead daily lives in which we hardly recognize our next-door or across-the-hall neighbors. People want to maintain their privacy, or, perhaps, they might want this connection but do not feel safe or comfortable initiating contact in person (Clark, Rockefeller, 2020).

The *Buy Nothing Project* is a platform where users can go to communicate. Where users can tell stories about the things they are offering, as opposed to just offering more stuff without reason. A place where users can offer their time, services, and wisdom to share communally and collectively. The true wealth is in the strength of connections. Shifting the stigma around shame about not owning things and asking for help. Admitting we do not have everything is an act of vulnerability and allows us to learn to value each other and not things. Consumers do not only seek the functional/utilitarian and hedonic value of the product/service, but also pursue social value, such as interaction with others and self-fulfillment.

CHAPTER 2 – PRELIMINARY RESEARCH

The Human Centered Design Process

In the past, product development, the conceptualization, design, development, and marketing of newly created goods or services, emphasized on what the competition was doing and how companies could differentiate themselves, and designers were brought on to improve the aesthetics of products. However, now design goes beyond aesthetics, and designers are now asked to solve problems and design is seen as a critical process to simplify complex issues and to humanize technology. “The design process is commonly described as user centered, meaning that decisions are made to help people accomplish their goals and achieve their aspirations. Many large corporations have embraced design because it is a process that drives innovation and helps companies avoid the threat of commoditization.” (Kolko, 2021)

Human centered design is typically made up of a set of principles such as: empathizing with users, which is known as the ability to fully understand, and create a product that reflects a person’s expressions, needs, and motivations. Having empathy allows us to go beyond our user’s frustrations, and understand their hopes, limitations, and goals.

Creating wireframes, a visual guide that represents the skeletal framework of a website. of ideas, which is essentially a blueprint that is used as a visual guide for designers to communicate their ideas with others. And finally refining prototypes which is typically a step before the final product.

To build empathy with users, a design-centric organization empowers employees to observe behavior and draw conclusions about what people want and need. Those

conclusions are tremendously hard to express in quantitative language. Instead, organizations that value design use emotional language (words that concern desires, aspirations, engagement, and experience) to describe products and users. Team members discuss the emotional resonance of a value proposition as much as they discuss utility and product requirements. But those systems help shape a customer's impression of the company. Design thinking is an essential tool for simplifying and humanizing a product, specifically in technology.

Finding the target market

Understanding our target market can dictate how the design of the experience of the *Buy Nothing Project* will turn out in both aesthetics, and the usability of our product. It is easiest for the researcher to assume to tailor the experience to Millennials. However, it would be a great disservice to not consider the outlying generations, Generation X, and Generation Z because if the project is to become sustainable, it should be long-term targeted, comprehensive, and strategic.

Analyzing a group of people by their generation allows researchers to analyze changes in views over time and by life-stage. Therefore, being a part of a particular generation can help explain how formative experiences, such as technological, economic, and social shifts, shape people's views of the world and can influence behavioral and attitudinal characteristics. It is crucial for companies to understand their consumers' perceptions as these can be powerful indications for the development of certain products or services.

Generation X

Generation X's are the generation who were born between 1965 and 1979.

Generation X consumers are a group that is cost conscious, difficult to persuade, and confident in taking actions. They grew up with NASA's iconic 1972 Blue Marble photo, the first Earth Day in 1973, the seminal 1988 founding of the Intergovernmental Panel on Climate Change, and the 1992 Earth Summit (the United Nation's Conference on Environment and Development). The oldest Gen Xers are the last to remember a time before the Internet changed everything, and the youngest are our first digital natives.

Generation X often takes a comprehensive account of the product or service, evaluating aspects such as quality, price, opinions, and environmental issues. "Today, they are our CEOs, successful business owners, and parents of young college students. Gen Xers have emerged as a powerful group that can help ensure a livable planet for their grandchildren." (Baskin, p.44)

Generation Y - Millennials

Millennials are the generation born between 1980 and 1994 and are the generation that have begun to show more spending power in the current market. Millennials seem more influenced by word of mouth for purchase decisions (Sitel, 2012). Therefore, when marketing to Millennials, it is important to think of the influence of interpersonal sources.

Millennials are the generation that paved the way for environmental consciousness, they are known to be more concerned about world affairs and hold their family and friends in higher regard than corporations (Hira, 2007). For a generation that went through a world transformed by 9/11, the first black president, an economic

recession, rapid shifts in technology, and the invention of social media, all these changes lead to millennials becoming generational chameleons. For this group, happiness is not defined by possessions or career status. To this group, living a meaningful, happy life is achieved by creating, sharing, and capturing memories earned through experiences that span the spectrum of life's opportunities. The combination of this generation's interest in events, and their increasing ability to spend, is driving the growth of the experience economy.

The average millennial has experienced slower economic growth since entering the workforce than any other generation in U.S. history (Dam, 2020). Millennials are overwhelmed by dealing with lower earnings, lower wealth, and delayed milestones, such as homeownership. Spending their early years struggling to find work during a job recovery, only to be hit by the Great Recession and another recovery. While millennial employment recovered from the Great Recession within a decade, millennial earnings never did (Dam, 2020).

According to the 2019 Report of the Federal Reserve, about 12 percent of all workers couldn't cover a \$400 emergency expense — even with the help of family or credit cards. Because millennials grew up in a world where they witnessed their parents go through a financial meltdown and are now witnessing the new normal of seeing people in their 70s working at grocery stores when they should be retired, they have become the generation that is most weary with the status quo. What is interesting to mention for Millennials, in general, is an evident shift from ownership to access (Godelnik, 2017). Millennials nurture more symbolic and hedonic values implying that they aim to participate in the greater cause (e.g., sustainability and environmental issues), but also

strive towards indulgence (Činjurević, Merima & Kožo, Amra & Berberović, Denis, 2019). This generation prefers to experience all that life has to offer, and since acquiring things no longer dictates your class or status in life, millennials are more concerned with spending their money on experiences and enjoying access instead of ownership, trading mortgages for tiny houses, owning a car for Uber and Lyft. Which is why it is no surprise that millennials are the generation that is most open to the gift economy.

Generation Z

Generation Z is the demographic following Millennials that were born between 1996 and 2010. They are the generation who is currently entering the workforce and are starting to grow into their buying power. It would be great to focus on them while they are young and impressionable and have the *Buy Nothing Project* transform along with them. They are a generation that is most notable for being the generation that does not know life before the internet. While Millennials were the inventors of social media, Generation Z has completely revolutionized it and have made brands completely reevaluate how they market their products. Not only is there a greater emphasis on marketing on social media, but Generation Z birthed the social media influencer.

Furthermore, Generation Z prefer brands that are ethically transparent. Companies that put this concept into practice can gain a competitive advantage in the market by providing consumers with products which are more durable, innovative, and mainly environmentally friendly. (Malikova, 2021). Lastly, Generation Z is known to be even more concerned with environmental and social ethics than their predecessors. Therefore, this generation will be able to shape the consumer landscape, their connection to

technology will influence beyond socioeconomic brackets and demographics (Navas, 2021).

The Circular Economy

Capitalism in the United States currently thrives on a linear economy where natural resources are extracted and transformed into goods and services, sold, and used, and which after some time they are eventually discarded. If we are to continue to consume at the rate that we do, the United Nations estimates that we'd need the resources of two Earths to continue functioning, and three Earths by 2050 (Bonciu, 2014).

However, there has been a gradual increase of awareness on the limits of the linear economy. The negative effect on the environment has been noted from the increasing consumption of raw materials as well as the quantity of waste that is put into the environment. So much so, that in December 2012, the official position on the European Commission on the circular economy was presented under the name of a Manifesto for a Resource-Efficient Europe. This document emphasized "In a world with growing pressures on resources and the environment, the EU has no choice but to go for the transition to a resource-efficient and ultimately regenerative circular economy." In a circular economy, markets are given incentives to reuse products, rather than discarding them and having to extract new resources (See Figure 3).



Figure 3. ("Circular Economy | UNCTAD")

In this economy, all forms of waste, such as clothes, scrap metal and obsolete electronics, are returned to the economy or reused in a more efficient manner. This can provide a way to not only protect the environment, but use natural resources more wisely, develop new sectors, and create jobs. The circular economy implies the ending of a “throw away” society, “The circular economy model is internationally recognized as a virtuous model in that it complies with a set of key principles, the first being the reuse of resources according to a continuous circular process (involving design, production, remanufacturing, distribution, use, reuse, repair, collection, and recycling) as opposed to the traditional linear “extract-produce-use-dump” approach.” (Salvioni, Almici, 2020). In

the circular economy energy is still consumed and waste still exists, but both are at an increasingly lower rate and magnitude than before. It is impossible to fully eliminate the use of energy and resources, and waste, however diminishing it has a great positive impact on the environment and slows down overconsumption.

Competitive Analysis

To further explore the needs of the *Buy Nothing Project*, in design thinking it is imperative to make a competitive analysis amongst comparable programs to see what similar associations are doing successfully or where they also need improvements.

Craigslist Free

Craigslist is a classified advertisements websites with sections devoted to jobs, housing, for sale, items wanted, services, community service, gigs, résumés, and discussion forums. Craigslist has a designated “Free stuff” forum, where users post their items and add a general location, (See Figure 4)

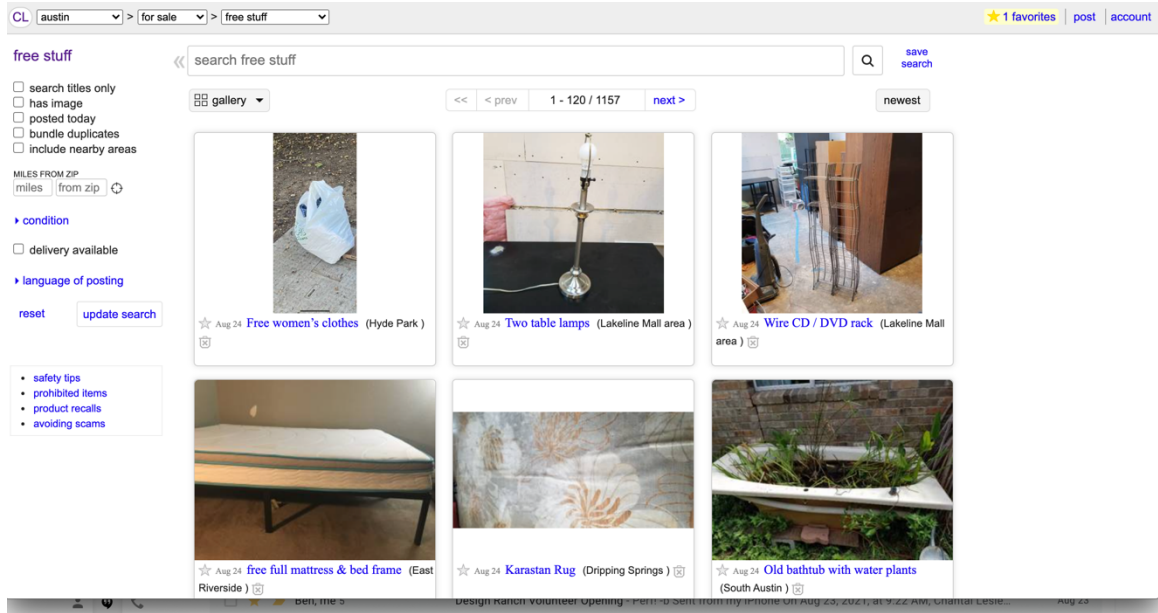


Figure 4 – The free section of Craigslist

on Craigslist specifically, for safety reasons an anonymous email is associated with the post for users to contact the poster, or the poster also has the option to add their phone number. While successful, there are issues of safety since posters and users are completely anonymous and meeting up is at the user's own discretion. Furthermore, it completely misses the community aspect and is not easy to identify when the item has been picked up. Their graphical User Interface, which is their look and feel, is outdated, but because of not improving the User Interface they are able to keep the platform free and without support from advertisers.

Freecycle

Freecycle operates like Craigslist, where they have their own freestanding website, (See Figure 5) that allows users to peruse the current listings and allow them to contact the original poster via email. Like the *Buy Nothing Project*, Freecycle is a

grassroots nonprofit movement of people who are giving and receiving goods for free in their own towns.

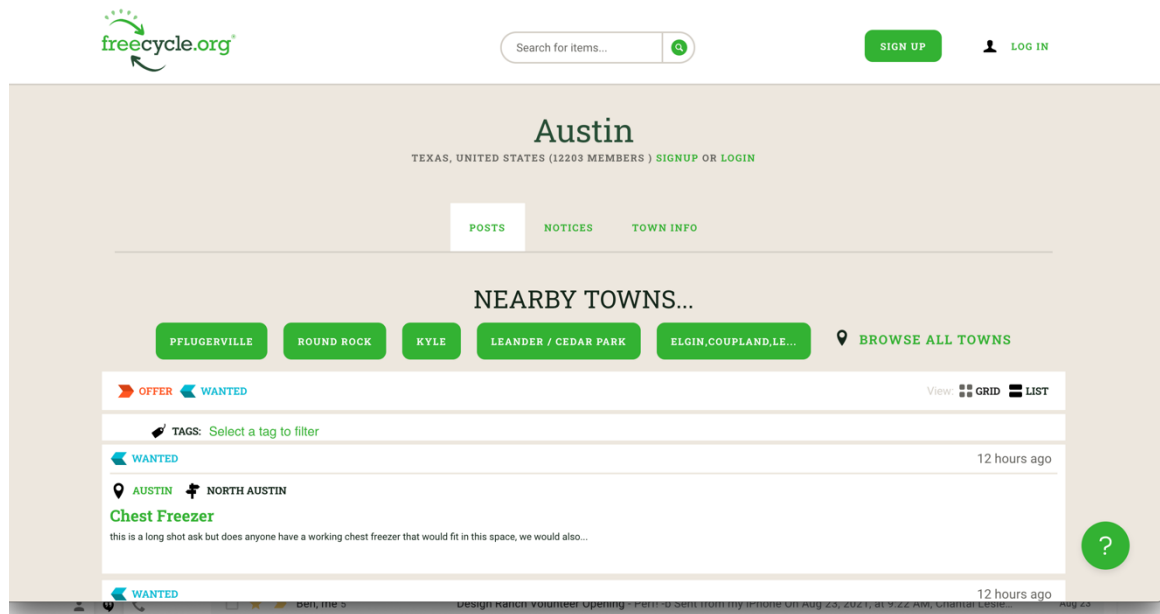


Figure 5 – The Freecycle homepage

Where Freecycle differs from Craigslist, is that it is meant specifically for free items, as opposed to the allowing for other forms of commerce. Another differentiating factor is that users can create a Freecycle account, and sign up for email notifications, where frequent emails are sent to your inbox with the latest posting of items. In comparison to the *Buy Nothing Project*, Freecycle has a well-organized website, and allows users to search for specific items instead of being shown a never-ending feed. Freecycle also does not restrict users to a specific neighborhood, which the *Buy Nothing Project* has received criticism for, considering this approach to be elitist where the rich give to the rich, instead of to those who are actually in need. Opportunities for Freecycle's growth is creating their own app, to make it more accessible and easier to use for their users.

Freecycle can also thrive in strengthening their brand to extend their reach.

Mutual Aids

Mutual aid is a form of solidarity-based support, in which communities unite against a common struggle, rather than leaving individuals to fend for themselves. In mutual-aid systems, people work cooperatively to meet the needs of everyone in the community. It's different from charity, which features a one-way relationship between an organization and recipients, and often responds to the effects of inequality but not its causes. This form of support is an act of solidarity that builds sustained networks between neighbors, and it is not just a response to a crisis, but instead, a more permanent alliance between people united against a common struggle. Mutual Aids typically start out at someone's residence, where the resident sponsors their property to be a place to meet up for the trading of goods, and volunteers to oversee the upkeep of goods at their location, but goods are made available by community effort. (See Figures 6 and 7)

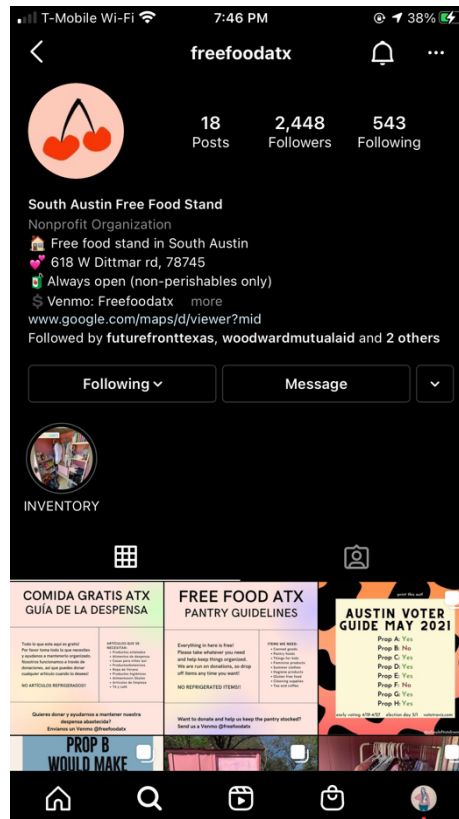


Figure 6 – Instagram page of local Austin, TX mutual aid FreeFoodAtx, a pantry located in front of someone’s residence

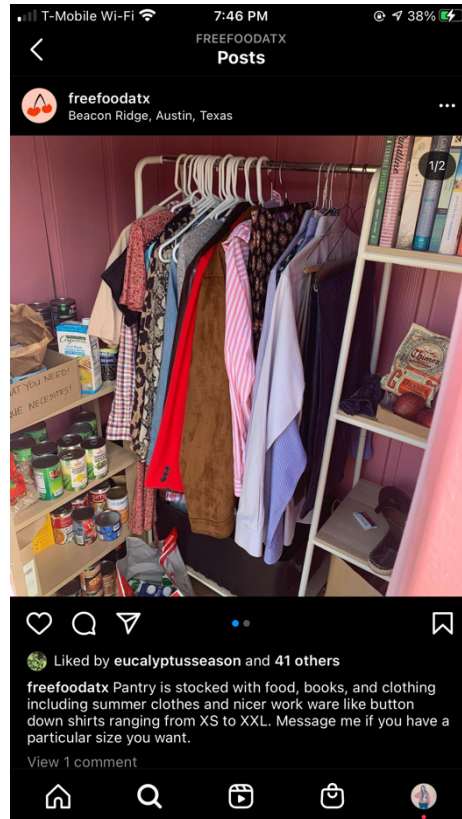


Figure 7 – Detail of Instagram post of local Austin, TX mutual aid FreeFoodAtx, a pantry located in front of someone’s residence

There are various forms of mutual aid such as little libraries, food pantries, or plant stands, and rely on word of mouth or social media to get the word around of their existence. (See Figures 8 and 9)

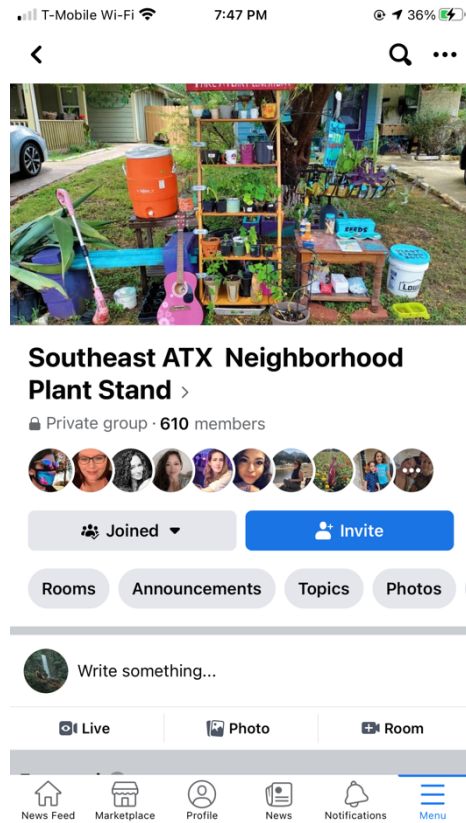


Figure 8 – Facebook group of local plant stand in front of someone’s residence



Figure 9 - Facebook post of a local community plant stand a

Although there were many mutual-aid groups that surfaced in response to the Covid-19 pandemic of 2020, these groups started in Google Docs and Slack channels. People came together to discuss how to support each other within their neighborhood but could not reach beyond that. Unfortunately, there is not currently an extensive database that outlines all the mutual-aid efforts across the country. They can be hard to find online or in person and typically only work via word of mouth, or if someone happens to come across one by chance.

GoodUse

GoodUse seems to be the competitor that most closely aligns with *The Buy*

Nothing Project. Once the user downloads their mobile app, there is an introductory video that allows them to get acquainted with GoodUse and their mission. (See Figure 10)

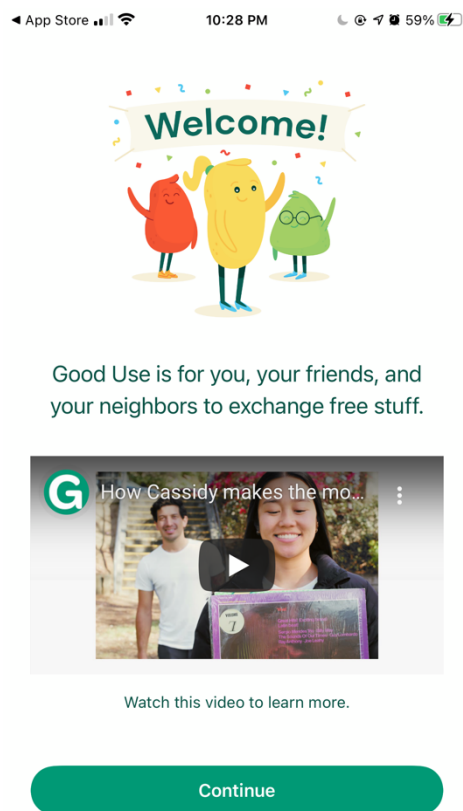


Figure 10 – Good Use Intro video

This is the only competitor of the *Buy Nothing Project* that is app-based and has a strong brand to communicate with their users. The strengths of the current app are that they have a consistent brand and brand voice and is easy to use. However, the app could use some more features that make it so that it is more organized, and not an endless scrolling app, which is a feature that many interviewees noted they desired. (See Figure 11)

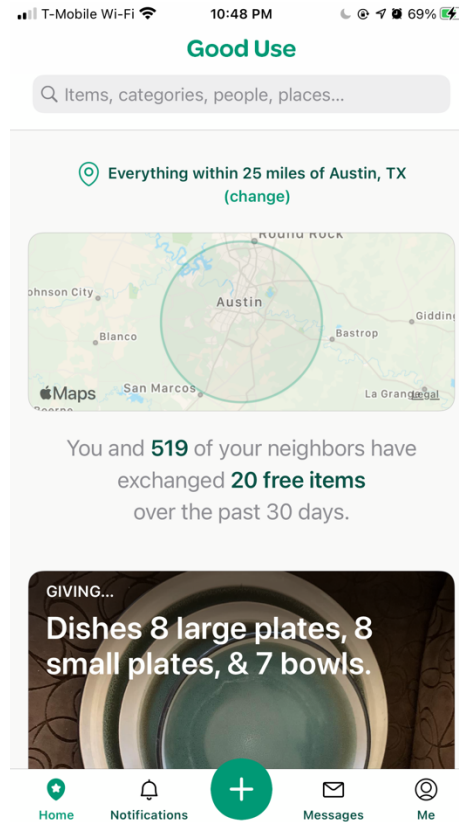


Figure 11 – The Home Screen of the GoodUse app

None of the competitors provide an experience to the user that show them how their actions are positively impacting the environment, or how they could change habits to reduce their carbon footprint. From the interviews, this was a desired objective from current users of the *Buy Nothing Project* and could be the competitive edge that they need to be successful.

CHAPTER 3 – STATEMENT OF THE PROBLEM

Why Facebook is not the proper app to host the *Buy Nothing Project*

Without social media, the sharing economy would not exist, however users participating via Facebook's Groups platform, they are unknowingly a part of Facebook's monetization strategy. It is ironic that a group that encourages its users to buy nothing and share with one another is hosted on a platform inundated by ads that tempt them to buy.

Liesl Clark, founder of the *Buy Nothing Project* addresses this irony by stating: "I want people to give things away but also ask for what they need instead of going to the store. Relying on and helping neighbors creates healthier communities and happier people. The project does have a subversive element. A frequent question is why the project uses Facebook. In addition, Clark notes that's where the people are and, "we need to use the master's tools to dismantle the castle." (Cornish, A. 2018)

Clark notes in the same interview, that the *Buy Nothing Project* is attempting to get off Facebook completely, to encourage deeper connections and share more in person instead of purely relying on devices. However, it might not be possible for the *Buy Nothing Project* to succeed without some sort of technological element. During the writing of this research, the *Buy Nothing Project* did move forward with creating a mobile application. However, as it currently stands, it only duplicates the functions used on Facebook without the improvements that this research will suggest improving usability and attracting new users.

From the survey conducted by the researcher, out of the people who selected that

they do not utilize their local *Buy Nothing Project*, 36% stated that the reason being that they do not use Facebook. And during the interviews that took place, every user who is a current participant said that if they were not part of their local *Buy Nothing Project*, they would rather not utilize Facebook at all. Some of the frustrations that the users noted about using Facebook to participate were that they did not find it aesthetically pleasing, it was difficult to navigate and search specific items they would be looking for, and the notifications they receive are inconsistent. One respondent mentioned: “I’m not a huge Facebook user, so without the *Buy Nothing Project* I wouldn’t use Facebook much at all. I do like the fact that people can message me, easily and quickly. It’s a great way to coordinate.”

Organization

All *Buy Nothing Project* users that were interviewed stated that they were frustrated with the current organization of the *Buy Nothing Project*. Currently the *Buy Nothing Project* exists on a chronological timeline style of a feed. Objects are listed in the order that people make them, meaning that if a user only logs on once a day, they must spend too much time scrolling through all the posts of the day to search for something they might find appealing. This might result in items being hidden, going unclaimed, or becoming missed opportunities. Aside from the frustrations of having to deal with Facebook, all users mentioned the frustrations with this chronologic style of their feed, with one noting: “On Facebook it’s really hard to search for things, you have to be on there constantly to find things that you’re interested in.” and another mentions, “It would be nice if there was some order to it instead of just a feed. The organization can be

improved, even if it's separated between ask, give, and gone.”

Information Design

Information design is the practice of presenting information in a way that makes it most accessible and easily understood by users. Currently, the *Buy Nothing Project* has no Information Design of its own, as it completely relies on the aesthetics and design of Facebook. Focusing on improving the information design, users would be inclined to use their *Buy Nothing Project* group much more frequently. As stated by one interviewee: “I think I was more active at first, when I was new, and I got rid of what I needed to. I check weekly, and I give or receive like once a month. If it was better organized or more appealing, I’d probably use it more.” Focusing on information design to better tailor the experience of users, would greatly increase their usage of the *Buy Nothing Project* services, and decrease the amount of goods that they discard, which end up in landfills.

Attracting new environmentally conscious users

Out of the interviewed users, 50% noted that they personally joined the *Buy Nothing Project* because they were personally searching for ways to improve their low-waste lifestyle and ease their carbon footprint. These users noted that being a part of the *Buy Nothing Project* has created positive habits such as their buying habits, and that they consider asking their Buy Nothing Group if it is an item they’ll only use once or buy second hand if it is an item they intend to use repeatedly and choose to buy new as a last resort.

However, these users mentioned that they worry that other users did not join their

group with the same intentions of creating a positive impact on the environment with one respondent saying they would like to see “More focus on the environmental aspect of the project. Shifting the environmental focus so that way more people can reposition how they buy. Having an educational component somehow would be great.” If all these suggestions are considered, it would increase usage from the current users, and the *Buy Nothing Project*’s mission would be much clearer to new users while interacting with it.

Thesis Statement

To increase usage and awareness of the *Buy Nothing Project*, one must create a self-standing mobile app, that separates itself from Facebook and improves organization and overall information design. Fixing these issues would result in a more engaging experience for the project’s users while falling in line with the project’s intentions and attracting new environmentally conscious users.

One must empathize with users through interviews and finding out their goals for participating in the *Buy Nothing Project*, and simultaneously be mindful of the Project’s mission of creating a positive impact financially, environmentally, and increasing a sense of community. If one can create with both parties in mind and turn them into features of the app, it will greatly improve its usability and increase usage.

CHAPTER 4 – METHODOLOGY

To design a more cohesive solution for the *Buy Nothing Project*, this research will utilize User Centered Design methods and tools common in the design industry. These tools include steps from IBM's framework, otherwise known as Enterprise Design Thinking, which was created to help interdisciplinary teams to collaborate on complex projects and create innovating results that focuses on users. This is an iterative process that involves users every step of the way from understanding, exploring, prototyping, and validating ideas. Keeping the user involved in every step of the way ensures that their needs are being met and that the product that is being created is efficient.

Designing for the User Experience

What is User Centered Design?

User-centered design is an iterative design process in which designers focus on the users and their needs in each phase of the design process. In User-centered design, the end-users influence how a design takes shape and there are a variety of ways in which users are involved, some types consult users about their needs and involve them at specific times during the design process; typically, during interviews and usability testing.

The term 'user-centered design' originated in Donald Norman's research laboratory at the University of California San Diego in the 1980s. Norman built further on the User-Centered Design concept in his book *The Psychology of Everyday Things*. He offers four basic suggestions on how a design should be:

- Make it easy to determine what actions are possible at any moment.
- Make things visible, including the conceptual model of the system, the alternative actions, and the results of actions.
- Make it easy to evaluate the current state of the system.
- Follow natural mappings between intentions and the required actions; between actions and the resulting effect; and between the information that is visible and the interpretation of the system state. (Norman, 2002, p.188)

These recommendations place the user at the center of the design. Making the role of the designer to create features specifically for the use, making sure that the product is not only useful and works as intended, but that the product requires minimum effort from the user to learn how to use it. For example, Norman specifies that manuals that typically accompany products are not user centered, in that they are typically too long and can have complex language. Instead, he suggests that products should be accompanied by a small pamphlet that can be read very quickly and draws on the user's knowledge of the world, making it easy to understand and digest.

Norman's work stressed the need to fully explore the needs and desires of the users and the intended uses of the product. The need to involve actual users, often in the environment in which they would use the product being designed, was a natural evolution in the field of user centered design. Users became a central part of the development process. Their involvement led to more effective, efficient, and safer products and contributed to the acceptance and success of products (Preece, Rogers, & Sharp, 2002).

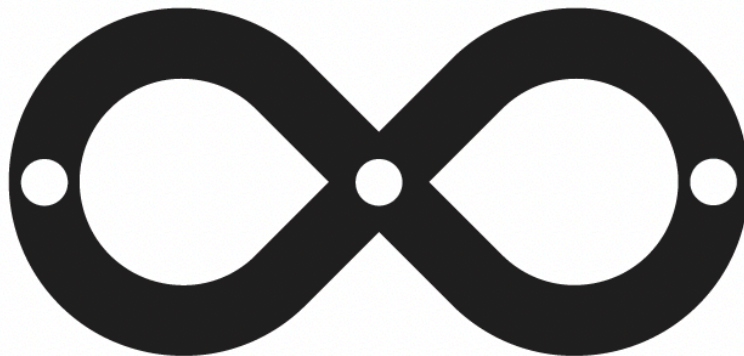
IBM Design Thinking Model: The Loop

IBM defines design problems as those with no predetermined solution, and to encourage innovation within their work, have developed a design practice model named: The Loop. (See Figure 12)

IBM Design Thinking: **The Loop**

UNDERSTAND USERS' NEEDS AND DELIVER OUTCOMES CONTINUOUSLY

At the heart of IBM Design Thinking is a behavioral model for understanding users' needs and envisioning a better future: a continuous loop of observing, reflecting, and making.



OBSERVE

Immerse yourself in the real world to get to know your users, uncover needs, learn the landscape, and test ideas.

REFLECT

Come together and form a point of view to find common ground, align the team, uncover insights, and plan ahead.

MAKE

Give concrete form to abstract ideas to explore possibilities, communicate ideas, prototype concepts, and drive real outcomes.

Figure 12: IBM's Loop from their Design Thinking Field Guide

The loop is a continuous cycle of observing, reflecting, and making, following this model supports designers from feeling stifled, or as if they are making the wrong move in their methods. Design Thinking involves iteration, experimentation, and a focus on user's needs.

However, agile methods do not necessarily foster an innovative approach. Agile methods tend to focus primarily on activities within production processes, whereas Design Thinking offers an innovative way of thinking based on a mixture of activities. This thesis will involve users throughout the process through surveys, interviews, usability testing, and will involve several IBM Design Exercises to best understand and empathize with users such as Empathy Maps and Needs Statements.

Observe - Survey and Results

To start involving users in this project, a survey was conducted comprised of 31 questions to find out the user's current involvement with the *Buy Nothing Project*, the survey had a total of 46 responses. (See Appendix) Interesting findings of the survey included:

- Over 50% of survey takers had obtained higher education
- User's household income did not seem to be a deciding factor, as survey takers spanned across different incomes
- Most survey takers also participated in other eco-friendly habits such as recycling

and monitoring how much waste their household produces

- 86% of survey takers felt a personal responsibility to be environmentally conscious
- Survey takers agreed that it is a collective responsibility to be environmentally conscious, however felt it necessary to focus on regulating corporations via supporting them or not
- Survey takers found out about their local *Buy Nothing Project* from their own research of how to become more environmentally conscious, from social media, and word of mouth from their friends

Reflect - Interviews and Results

A total of five interviews were conducted spanning from current avid users of the *Buy Nothing Project*, and those that had never heard of the *Buy Nothing Project* before.

From these interviews, the most common themes were:

- Every interviewee agreed that Facebook was not an app that they frequently utilized, and they would be happy if the *Buy Nothing Project* were disconnected from it.
- The overall sense of feeling overwhelmed when they scroll through their *Buy Nothing Project* group and wishing there was a way that items were better organized.
- The feeling that the sense of community was forced, and that interviewees felt the stories that other members would attach to items they were asking for brought discomfort and guilt.

These points were taken into consideration and helped to begin to form the direction of the project. It was confirmed that the *Buy Nothing Project* should no longer rely on Facebook, and instead should be its own stand-alone app. Ideas for features that came from the interviews included: safety protocols in the forms of background checks to be a part of the *Buy Nothing Project*, and providing safe options in meeting with one another to ensure the safety of all members involved, as well as making it convenient for users to give their unclaimed items to local non-profit organizations that are in need.

Reflect Continued - Creating Personas

From the information gathered between the survey results and the interviews, to further understand the users and find potential for innovating features, User Personas were developed. In design, User Personas are archetypical users whose goals and characteristics represent the needs of a larger group of users. Usually, a persona is presented with descriptions that include behavior patterns, goals, skills, attitudes, and background information, as well as the environment in which a persona operates. Using this research method helps understand the user and the context in which they will be using the product and help steer the direction of further research for implementing features.

In the context of this project, a User Persona was created for someone who is unaware of the *Buy Nothing Project*, (See Figure 13) and a Persona of an avid user of the *Buy Nothing Project*. (See Figure 14)

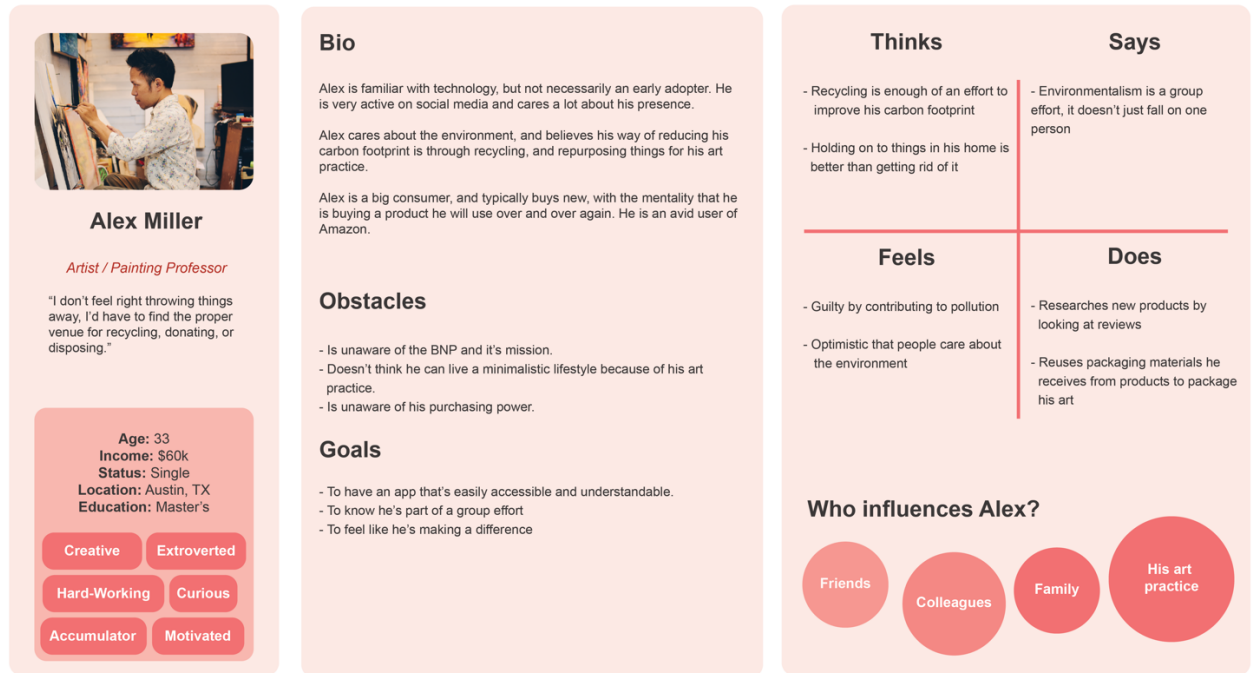


Figure 13: User Persona of someone who is unaware of the *Buy Nothing Project*

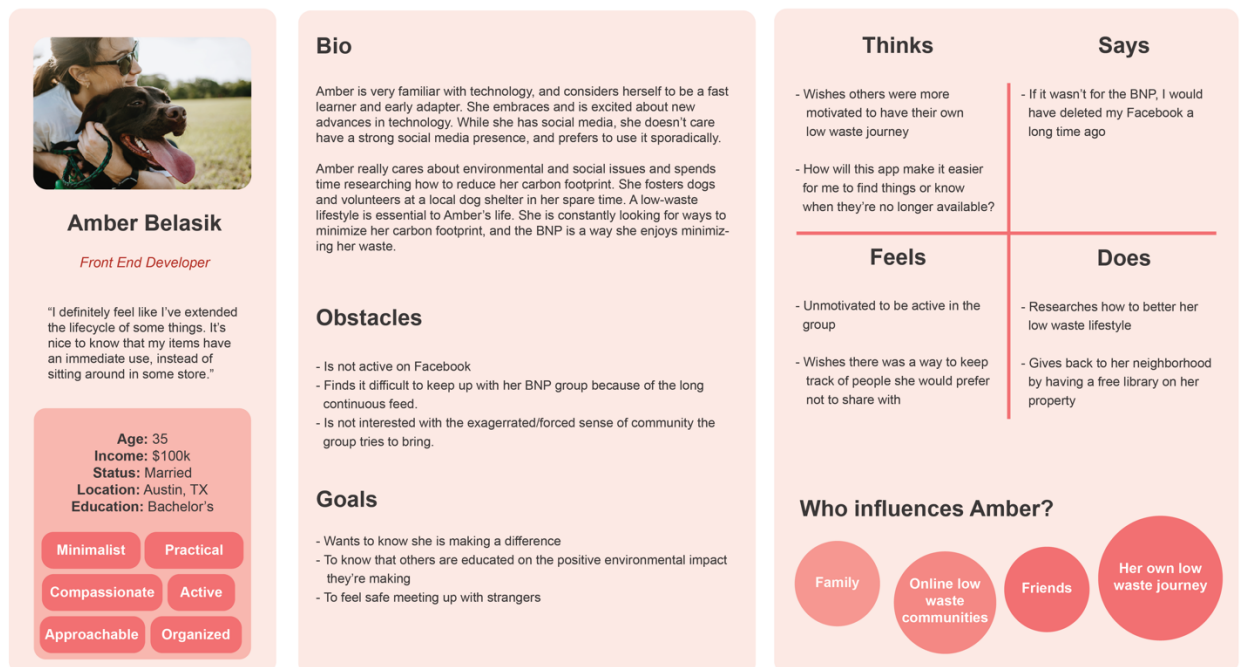


Figure 14: User Persona of an avid *Buy Nothing Project* user

From these User Personas, there is potential to create features to teach users of the positive environmental impact they are making when participating in the *Buy Nothing Project*, to ensure the safety of the users, and ensure that unclaimed goods can be redistributed to local nonprofits that need them.

From doing this exercise, I created a persona named Amber, which help me solidify the obstacles and goals of *Buy Nothing* users which included:

- If users do not hear about the *Buy Nothing Project* by word of mouth, they typically have found it themselves by researching how to reduce their own carbon footprint or create a more sustainable lifestyle for themselves.
- Amber would like for other people who utilize the *Buy Nothing Project* to be more aware of their own habits and become aware of their environmental impact.
- Amber loves to participate in other low waste activities.
- Amber gives back to her community by participating in mutual aids and providing a small neighborhood library on her property.

Make – Paper Prototypes

Paper prototypes are an important part of the design process, to not only begin to implement ideas and features that were taken from user data, but also create a feeling of low stakes when user testing. Initial sketches showed the implementation of features deemed necessary from user interviews, such as an icon ensuring that the owner of the profile's identity has been verified (See Figure 15)

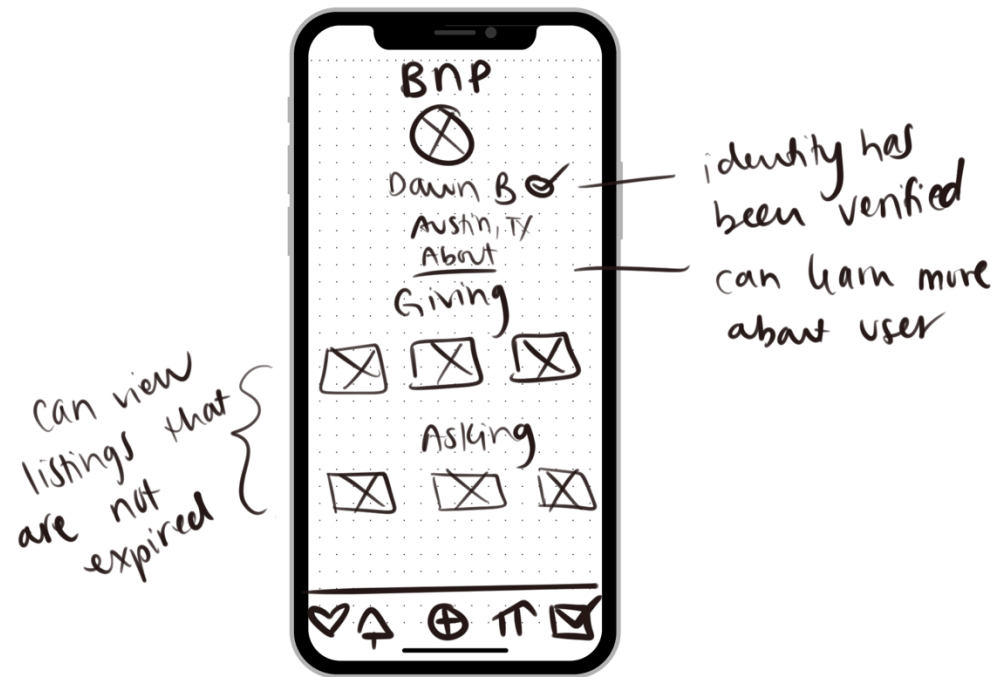


Figure 15: Paper Prototype of potential User Profile

or creating time limits/expiration dates for their posted items, so that they do not overwhelm the feed (See Figure 16).

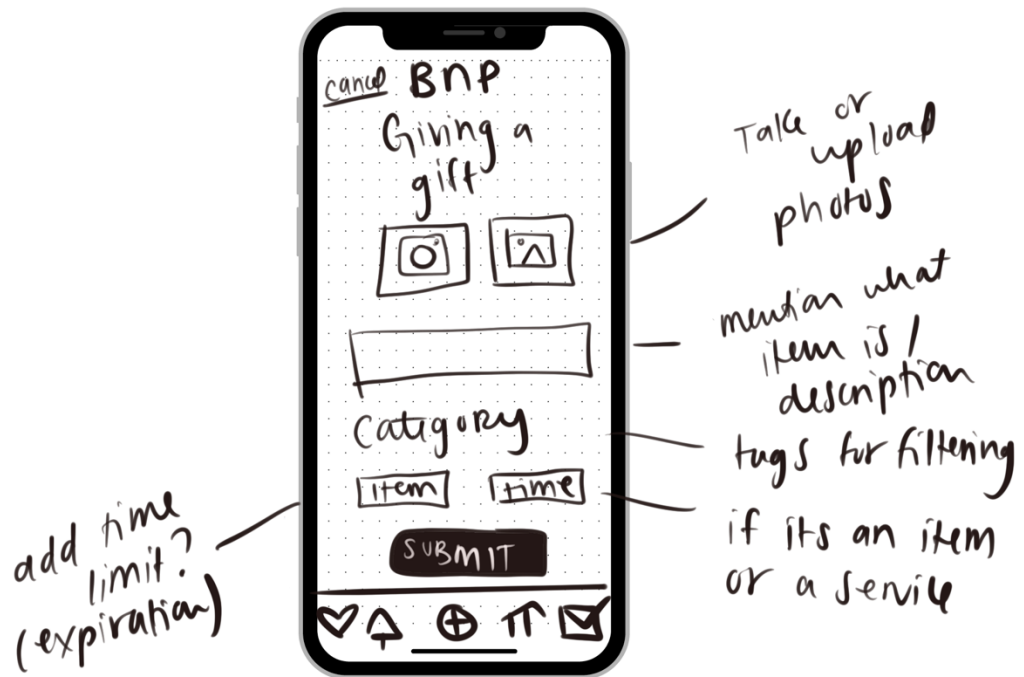


Figure 16: Paper prototype of potential flow of giving a gift

Usability Testing 1

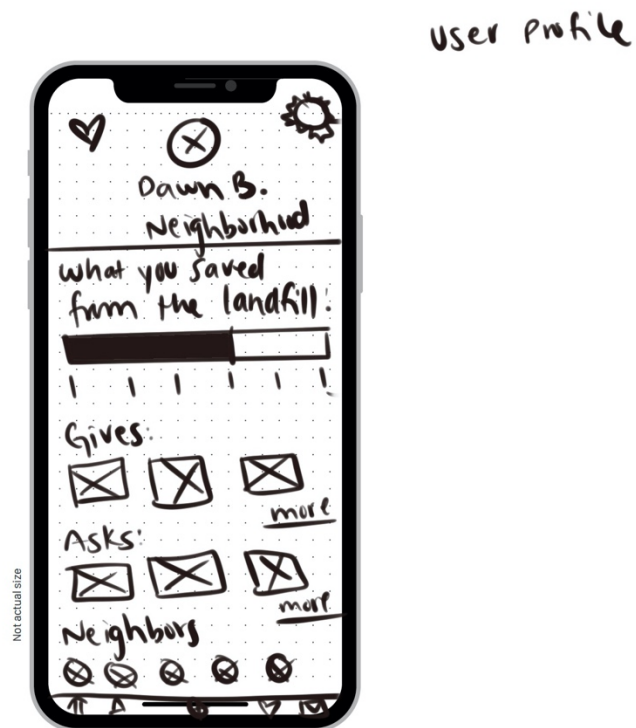
Testing with paper prototypes is an important step of the process, because it allows the User to give feedback without putting unnecessary pressure on them from wondering if a lot of effort was made into the creation of the product. For the first round of Usability Testing, three users were asked a set of tasks and asked a series of questions:

- “Take me through what you would do if you were looking for a blender”
- “How would you post an item to give?”
- “How would you get in contact with Dawn?”
- “What are your first impressions of the user Profile?”

- “What is your impression of the layout of the content?”
- “What was the feature you found most helpful/What was the feature you found least helpful?”
- “How would you compare this app experience to the current *Buy Nothing Project* experience?”

From the answers that were received from the users, both verbal responses, and actions that were noticed by the researcher, these were the changes that were made when creating wireframes:

- Making the purpose of the bar on the User Profile clearer, and creating an incentive that is worthwhile (See Figure 17)



(Figure 17 –Paper Prototype of the User’s Profile)

- Adding a map when looking up your location while setting up profile for the first time
- Allowing the ability to click and confirm neighborhood once it's been found
- Switching the layout of the post to feature the poster's picture and name, as they have been trained by Facebook to view it in that way
- Providing an option of reposting item once it has expired
- When item has expired, and the user is given the option to donate to a local non-profit, providing all necessary information of organizations such as address, phone number, hours of operation, and how close it is to their location

Wireframes

Wireframes help the designer test with the proposed content, button labels, headlines, body copy, and placeholder images without the distraction of branding for the user. This allows the user-testing to focus its attention solely on the usability, and helps the researcher target what changes are needed to create a tailored and pleasant experience. This is also the first-time user testing will occur on the actual target device. (See Figure 18).



(Figure 18 – Wireframes of asking for an item, the User Profile, and a post of an object)

Usability Testing 2

In the second round of Usability Testing, users were asked to browse through the app and do their best to think aloud and provide feedback as they went through the app whether it was positive or negative. Questions that were asked during the first round of usability testing stayed the same as they were still relevant, and this group of User testers were brand new to the project.

The answers that were received from the users, were considered for the final iteration and visual design of the mobile app, and included:

- A User wondering why they would have to verify themselves. Their confusion prompted the addition of a feature that explains verification is needed for the safety of all users involved.
- A User mentioned they were unsure if the “neighbors” in their profiles were automated or if they were people they chose to follow. This remark prompted the researcher to make following another *Buy Nothing Project*

user more obvious and influenced the section name change from “My Neighbors” to My Circle”.

- A User was unclear on what CO2 was and asked for clarification. Once they were explained, they questioned how the app was measuring it, and mentioned they would like for it to be explained in more detail to know how they are creating a positive environmental impact. The user added that they did appreciate this feature but would like for it to be clearer.
- A User suggested that when listing a request for a product, it would be useful to be prompted when a similar item is already available on the feed to help reduce redundancies on the app.
- Once the feature of notifying a user that an item they were requested was already on the feed was implemented, another User suggested to move that option to be the last step in the flow as they did not want to lose their progress while they were making a post.
- User suggested changing the name of “My Activity” to “My Impact” as they said it made the section clearer that the reason for the app is to create a positive environmental impact, and it added to its purpose.

Prototype

After the second round of usability testing, it was clear that the usability of the app was clear and concise, which meant the design was starting to become finalized and only required minor edits. The next step in the design process was to create a prototype that was accurate to be aesthetically close to being what the final product would look like

by adding branded elements such as the *Buy Nothing Project's* logo, a color palette, and typographic treatments. (See Figure 19)



(Figure 19 – Finalized Prototype Screens of an expired item, the User Profile, the main feed, and community tab)

Usability Testing 3

The third and final round of usability testing also featured a click through mobile app prototype that the user could interact with, and it was visually accurate to what the final product would look like. The users that were asked to participate were current users of the actual *Buy Nothing Project*. They were once again prompted to browse through the app and provide positive or negative feedback or to bring up any questions or concerns, they may have. Questions that were asked during the final round of usability testing included:

- When asked if the app provided a sense of community, one respondent said: “I really like the community tab, but I question if I would use it. It

would make me curious, and I would like to be able to search by areas if possible. It would be great if it was tailored to specific hobbies.”

- A second user added: “I love to see what is going on around my neighborhood. I find it exciting to see how much is going on around my neighborhood, and I would definitely check it out.”
- When asked if the app made them aware of the positive environmental impact that were are making by participating in the *Buy Nothing Project* they mentioned: “I appreciate that it feels like a game, it makes me want to participate more. However, I question how the values of CO2 are being calculated.”
- Another user made a valid point, mentioning: “I worry about how the CO2 is being calculated, but it does make me feel very good about myself that my actions are making an impact.”
- The researcher proceeded to ask the users if they wanted to change any current habits to make a bigger impact at reducing their carbon footprint, to which the users replied: “I like the challenges; I wish it was made public so I can see other’s challenges and maybe cheer them on.”
- Another user added to their concern of the challenges: “These challenges seem fun, but I probably would not participate in them. For example, being vegan for a week is not a lifestyle that is for me, but I appreciate seeing them.”
- The researcher asked: Does this app make you aware of the financial benefit of participating in the *Buy Nothing Project*?, to which the user

replied: “I had never considered it before, so it’s cool to see it. But I wonder about how accurate it is and if people would actually post the value of the items they are giving or if that is something that the app would recommend.”

- The second user added their concerns regarding the financial benefit: “It is interesting to look back on it and see savings, but that’s not why I joined the *Buy Nothing Project* so it wouldn’t impact me either way. I’m more interested in giving items instead of throwing them away.”
- The researcher asked: How does this experience compare to the current experience of the *Buy Nothing Project*? And the first user provided their response with: “It is 100% better. The usability is so much better and does not require so many instructions. I love that I can see my sustainability in action. I just wish I had more creative freedom when creating posts.”
- The second user added: “It is so much better. It is tailor made to the purpose of the *Buy Nothing Project*. It is much more visual, clearer, and so simple.”

CHAPTER 5 – CONCLUSION

This research project aimed to improve the overall digital experience and increase usage and awareness of the *Buy Nothing Project* by targeting three domains: showing and educating users on the positive environmental impact they are making by being a part of the project, the financial relief they receive by exchanging goods and services and creating a sense of community amongst members. Results that came from the final round of user testing indicated potential success and an overall more positive experience than the current state of the *Buy Nothing Project*. Users did feel like they were making a positive impact on the environment, and were now aware of their carbon footprint, although they still questioned how the app was measuring it. Users appreciated that the app was reducing redundancies, and it granted potential to reconnect them with their community. Users noticed that being a member of the project helped them save money but questioned how often they would use the feature to investigate their savings and questioned the accuracy of the values being given considering the products being swapped are used. Users agreed that there was a huge improvement in the current experience of the *Buy Nothing Project*, that the proposed app flowed well, was visually aesthetically pleasing, and information was organized in a way that made it the overall experience better.

Future Research

Potential for future research could include ways to collaborate with a nonprofit organization that specializes in measuring levels of Carbon Dioxide and how to reduce one's carbon footprint to provide accuracy to the app. This seemed to be the biggest concern of users during testing and was a feature that the researcher could not solve

during the time of this project. Another area of future potential research is figuring out how to better integrate the financial aspect of the *Buy Nothing Project*. The current solution provided by the researcher was to leave it up to the users to add value to their items, but perhaps there is a way to accurately automate this flow. There is also potential for the researcher to investigate guerilla marketing tactics to promote the *Buy Nothing Project* in an effective way. A touchpoint that was considered by the researcher was to create a branded trunk for *Buy Nothing Project* members to place on their property to not only assist with porch pick-ups that are common ways for *Buy Nothing Project* members to give to one another but would also attract non-members to question and potentially investigate becoming a member on their own.

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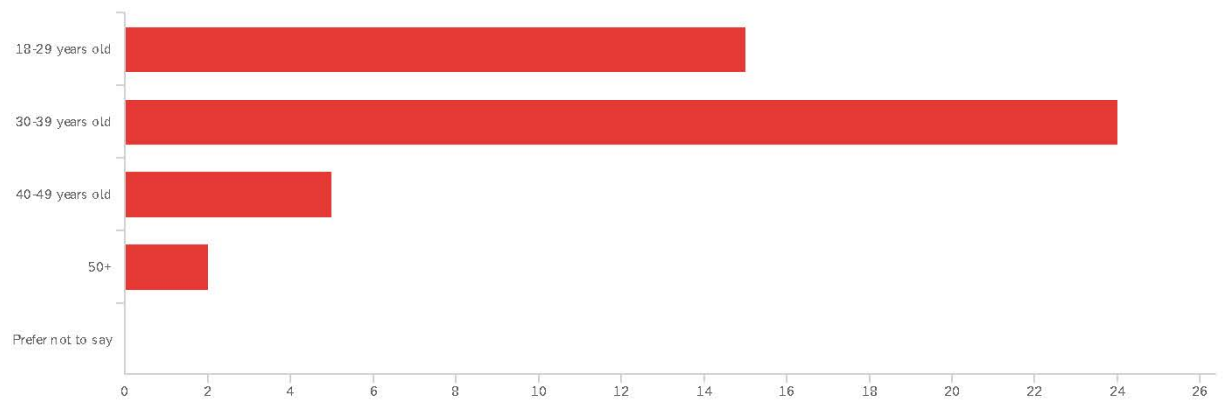
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APPENDIX

Appendix A: Initial Survey Report

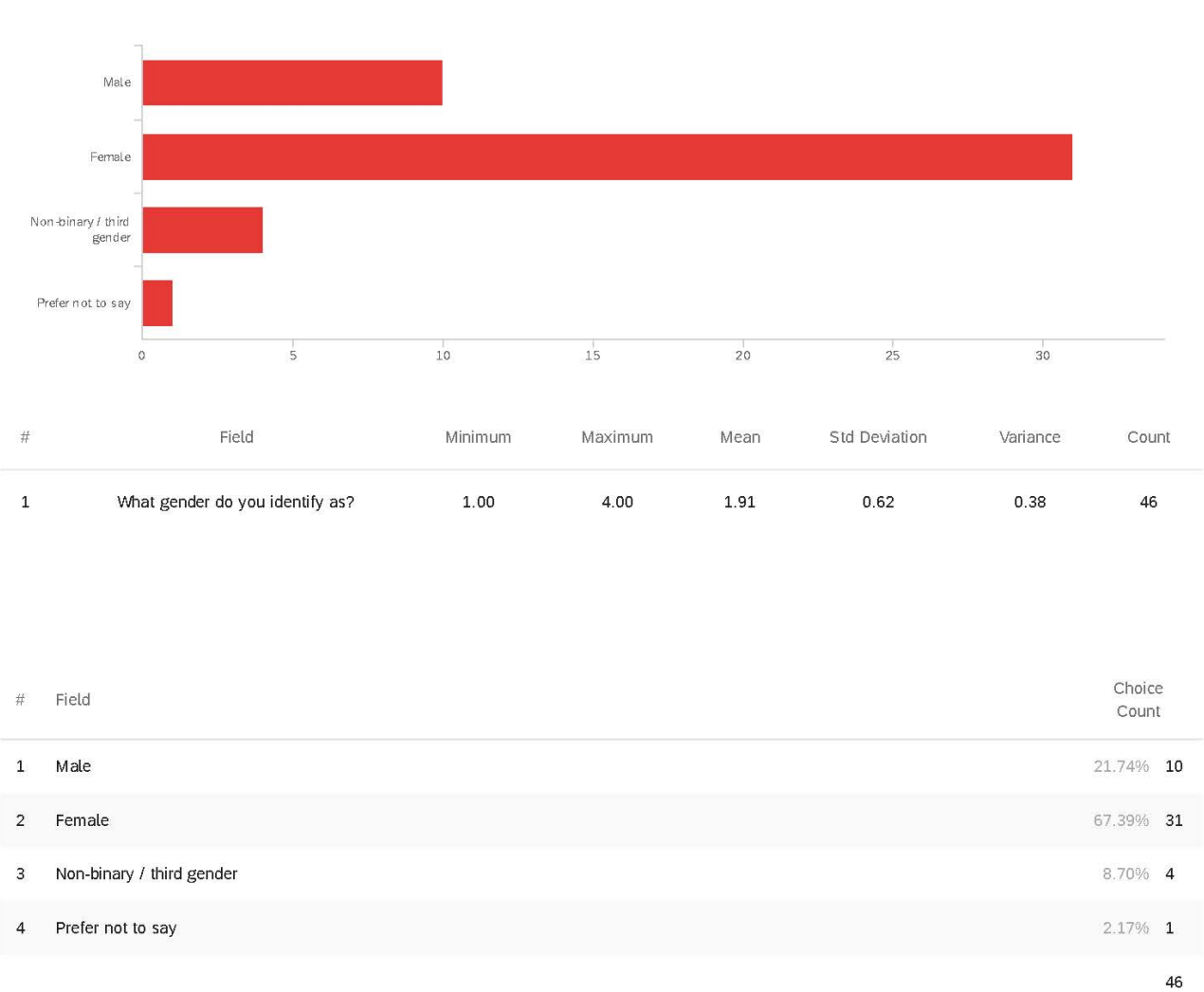
Q1 - What is your age range?



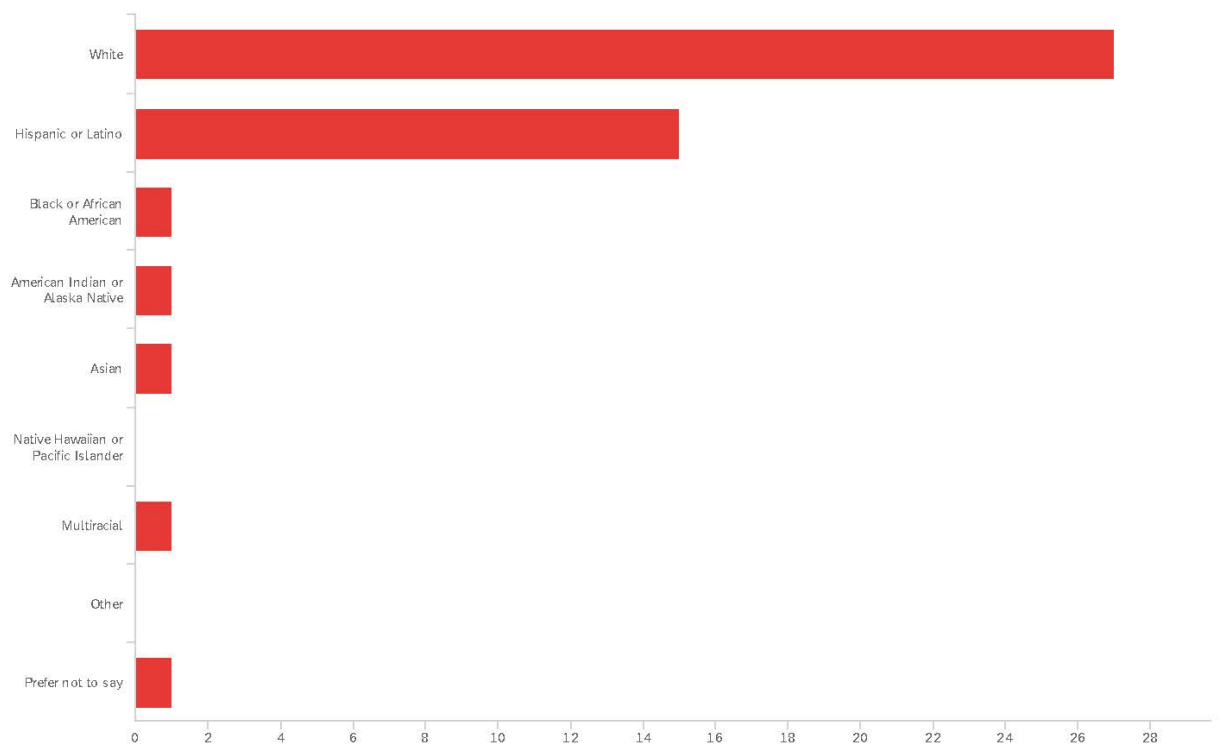
| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|-------------------------|---------|---------|------|---------------|----------|-------|
| 1 | What is your age range? | 1.00 | 4.00 | 1.87 | 0.77 | 0.59 | 46 |

| # | Field | Choice Count |
|---|-------------------|--------------|
| 1 | 18-29 years old | 32.61% 15 |
| 2 | 30-39 years old | 52.17% 24 |
| 3 | 40-49 years old | 10.87% 5 |
| 4 | 50+ | 4.35% 2 |
| 5 | Prefer not to say | 0.00% 0 |
| | | 46 |

Q2 - What gender do you identify as?



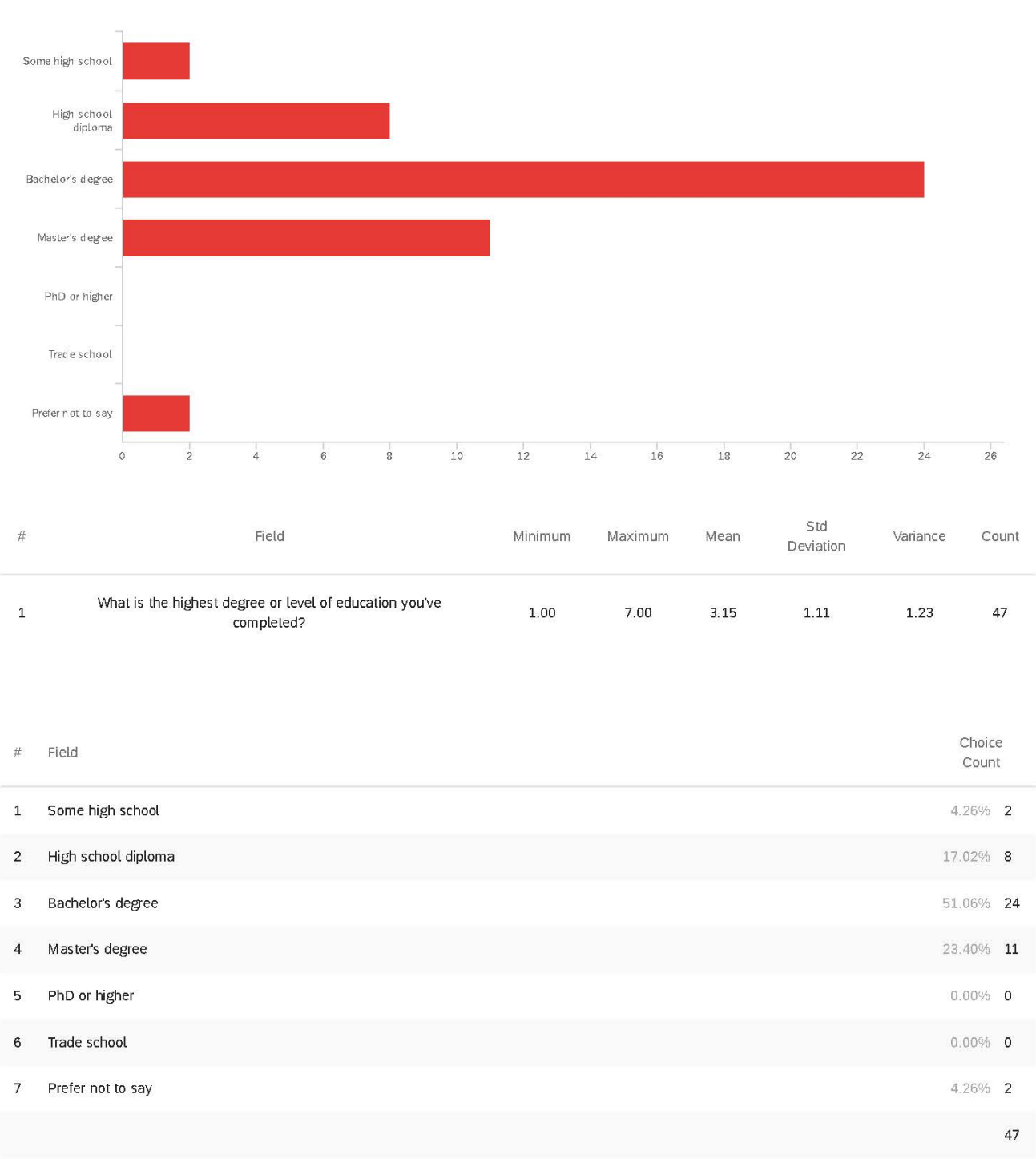
Q3 - Please specify your ethnicity:



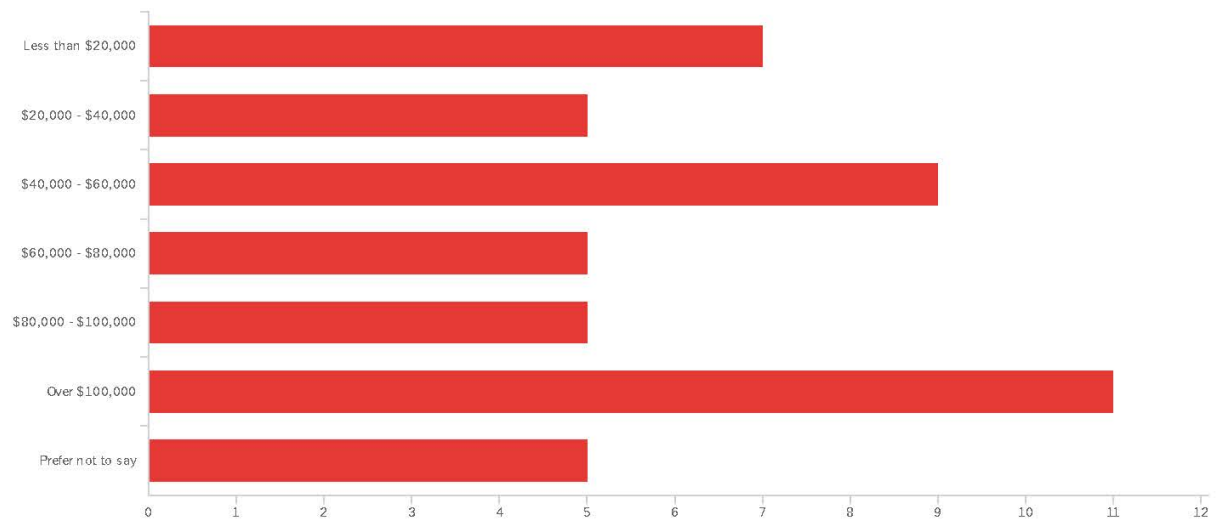
| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--------------------------------|---------|---------|------|---------------|----------|-------|
| 1 | Please specify your ethnicity: | 1.00 | 9.00 | 1.81 | 1.55 | 2.41 | 47 |

| # | Field | Choice Count |
|---|-------------------------------------|--------------|
| 1 | White | 57.45% 27 |
| 2 | Hispanic or Latino | 31.91% 15 |
| 3 | Black or African American | 2.13% 1 |
| 4 | American Indian or Alaska Native | 2.13% 1 |
| 5 | Asian | 2.13% 1 |
| 6 | Native Hawaiian or Pacific Islander | 0.00% 0 |
| 7 | Multiracial | 2.13% 1 |
| 8 | Other | 0.00% 0 |

Q4 - What is the highest degree or level of education you've completed?



Q5 - What is your annual household income?



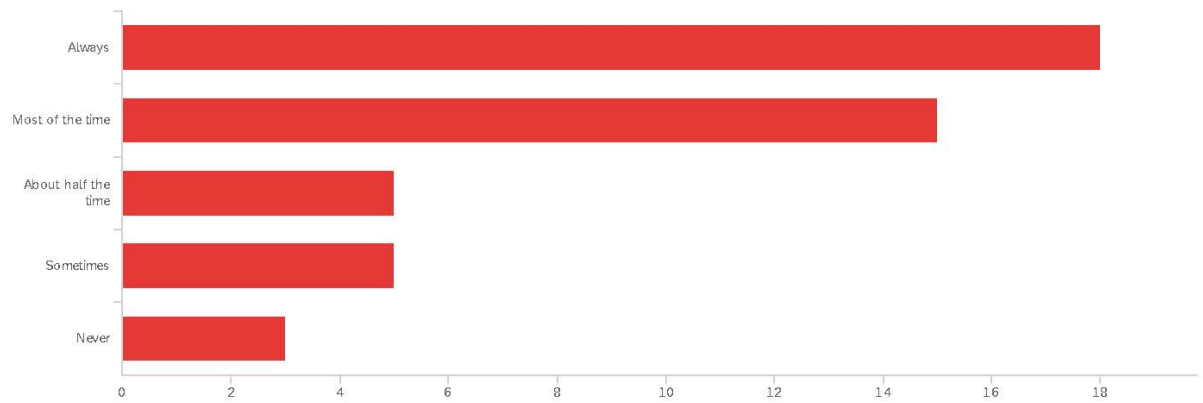
| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---------------------------------------|---------|---------|------|---------------|----------|-------|
| 1 | What is your annual household income? | 1.00 | 7.00 | 4.04 | 1.99 | 3.96 | 47 |

| # | Field | Choice Count |
|---|----------------------|--------------|
| 1 | Less than \$20,000 | 14.89% 7 |
| 2 | \$20,000 - \$40,000 | 10.64% 5 |
| 3 | \$40,000 - \$60,000 | 19.15% 9 |
| 4 | \$60,000 - \$80,000 | 10.64% 5 |
| 5 | \$80,000 - \$100,000 | 10.64% 5 |
| 6 | Over \$100,000 | 23.40% 11 |
| 7 | Prefer not to say | 10.64% 5 |
| | | 47 |

Q7 - On a scale of 1 - 5, how environmentally conscious would you rate yourself? (Being environmentally conscious means that you partake in many different activities to reduce your carbon footprint such as research, recycling, and making environmentally conscious purchases.)

| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---------------------------|---------|---------|------|---------------|----------|-------|
| 1 | Environmentally Conscious | 0.00 | 4.00 | 2.85 | 0.99 | 0.98 | 47 |

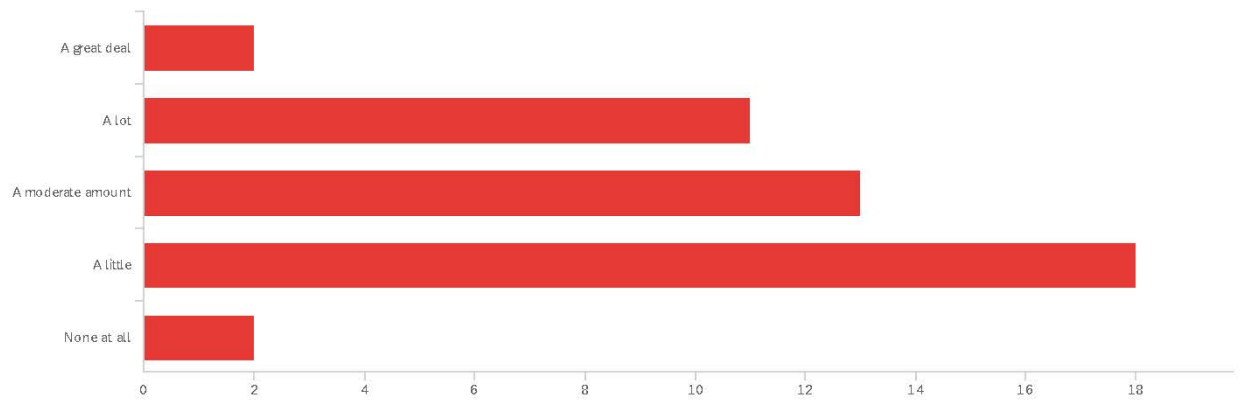
Q8 - How often do you recycle in your home?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | How often do you recycle in your home? | 1.00 | 5.00 | 2.13 | 1.23 | 1.50 | 46 |

| # | Field | Choice Count |
|---|---------------------|--------------|
| 1 | Always | 39.13% 18 |
| 2 | Most of the time | 32.61% 15 |
| 3 | About half the time | 10.87% 5 |
| 4 | Sometimes | 10.87% 5 |
| 5 | Never | 6.52% 3 |
| | | 46 |

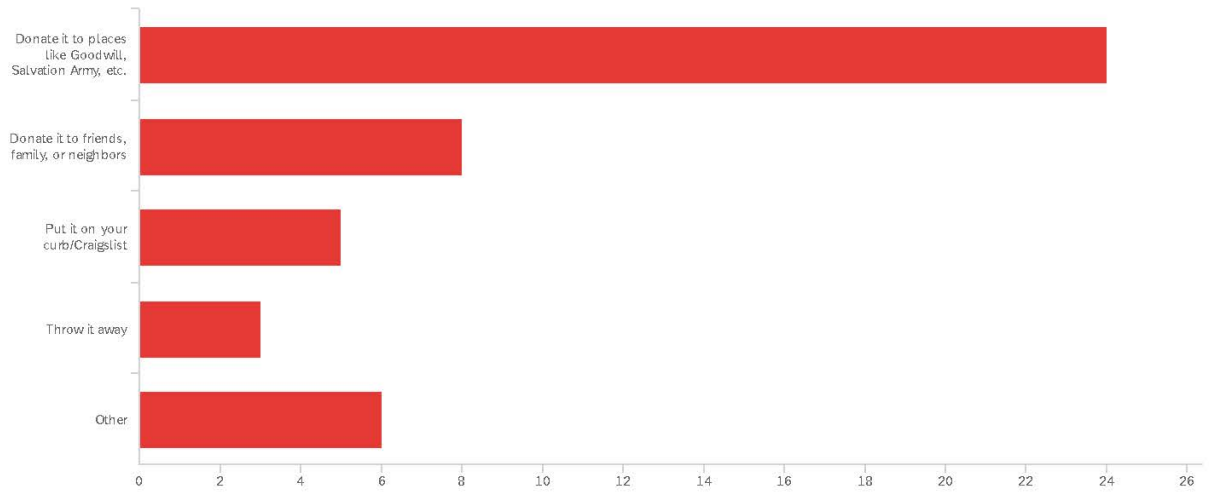
Q10 - How often do you monitor how much waste your household produces?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | How often do you monitor how much waste your household produces? | 1.00 | 5.00 | 3.15 | 0.98 | 0.96 | 46 |

| # | Field | Choice Count |
|---|-------------------|--------------|
| 1 | A great deal | 4.35% 2 |
| 2 | A lot | 23.91% 11 |
| 3 | A moderate amount | 28.26% 13 |
| 4 | A little | 39.13% 18 |
| 5 | None at all | 4.35% 2 |
| | | 46 |

Q11 - When getting rid of an item in good use that you no longer need, do you donate it or throw it away?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---|---------|---------|------|---------------|----------|-------|
| 1 | When getting rid of an item in good use that you no longer need, do you donate it or throw it away? - Selected Choice | 1.00 | 5.00 | 2.11 | 1.43 | 2.05 | 46 |

| # | Field | Choice Count |
|---|---|--------------|
| 1 | Donate it to places like Goodwill, Salvation Army, etc. | 52.17% 24 |
| 2 | Donate it to friends, family, or neighbors | 17.39% 8 |
| 3 | Put it on your curb/Craigslist | 10.87% 5 |
| 4 | Throw it away | 6.52% 3 |
| 5 | Other | 13.04% 6 |
| | | 46 |

Showing rows 1 - 6 of 6

Q11_5_TEXT - Other

Other

Other

all of the above

I usually keep it in case I need it again... but if I do get rid of it, it's usually throwing it away

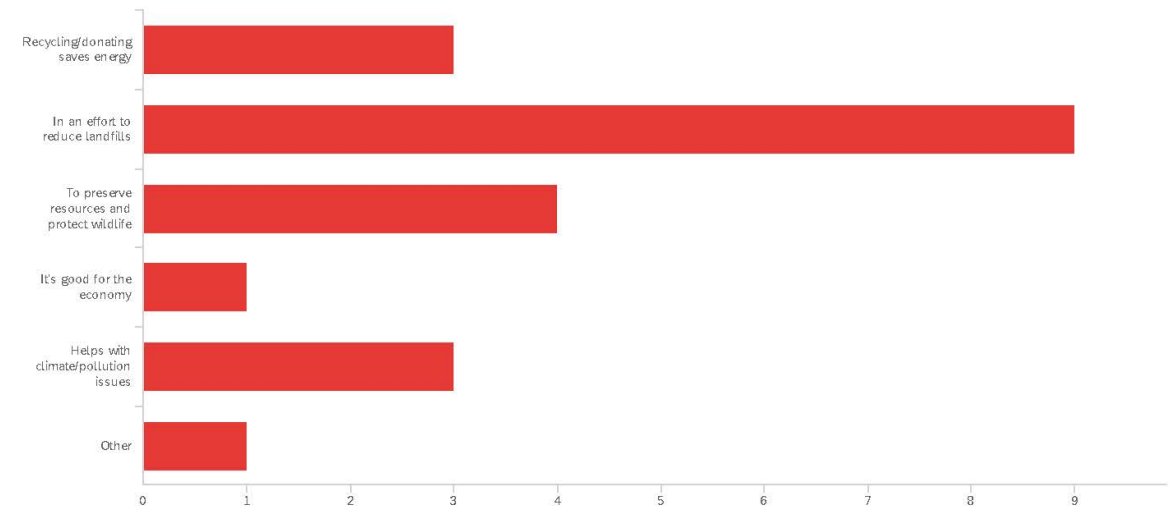
Buy nothing

List it on eBay

Buy Nothing group, or find a specific organization that may have a need for the item (ie: sunscreen to disaster relief organization)

Post it on my Buy Nothing group

Q12 - Why do you recycle or donate items?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---|---------|---------|------|---------------|----------|-------|
| 1 | Why do you recycle or donate items? - Selected Choice | 1.00 | 6.00 | 2.76 | 1.41 | 1.99 | 21 |

| # | Field | Choice Count |
|---|--|--------------|
| 1 | Recycling/donating saves energy | 14.29% 3 |
| 2 | In an effort to reduce landfills | 42.86% 9 |
| 3 | To preserve resources and protect wildlife | 19.05% 4 |
| 4 | It's good for the economy | 4.76% 1 |
| 5 | Helps with climate/pollution issues | 14.29% 3 |
| 6 | Other | 4.76% 1 |

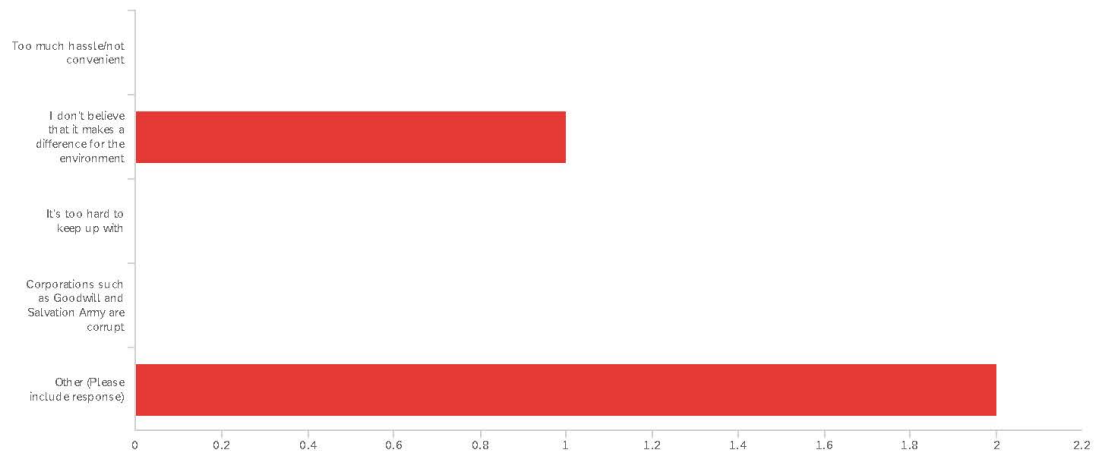
21

Showing rows 1 - 7 of 7

Q12_6_TEXT - Other

| |
|-------|
| Other |
|-------|

Q13 - Why don't you recycle or donate?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | Why don't you recycle or donate? - Selected Choice | 2.00 | 5.00 | 4.00 | 1.41 | 2.00 | 3 |

| # | Field | Choice Count |
|---|--|--------------|
| 1 | Too much hassle/not convenient | 0.00% 0 |
| 2 | I don't believe that it makes a difference for the environment | 33.33% 1 |
| 3 | It's too hard to keep up with | 0.00% 0 |
| 4 | Corporations such as Goodwill and Salvation Army are corrupt | 0.00% 0 |
| 5 | Other (Please include response) | 66.67% 2 |
| | | 3 |

Showing rows 1 - 6 of 6

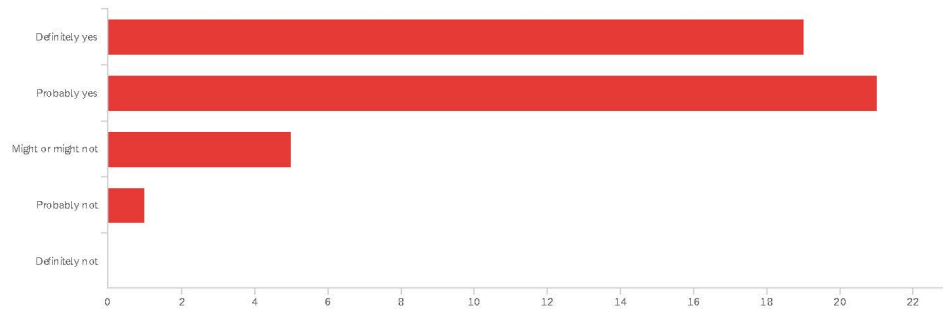
Q13_5_TEXT - Other (Please include response)

Other (Please include response)

My town does not have a recycling plant and does not accept recycling

D

Q14 - Do you feel a responsibility to be environmentally conscious?

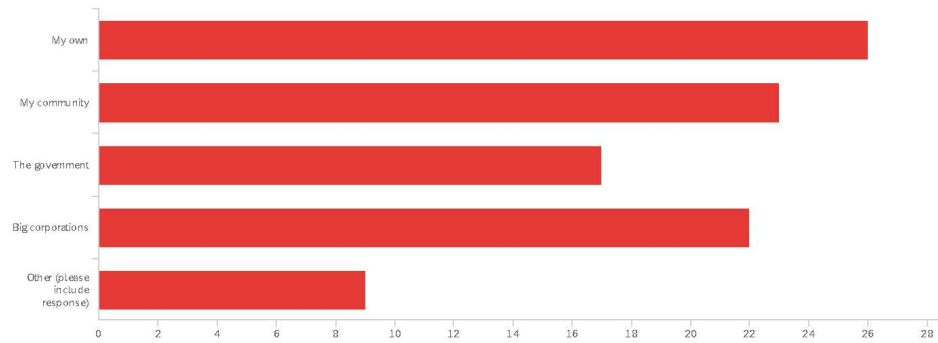


| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---|---------|---------|------|---------------|----------|-------|
| 1 | Do you feel a responsibility to be environmentally conscious? | 1.00 | 4.00 | 1.74 | 0.74 | 0.54 | 46 |

| # | Field | Choice Count |
|---|--------------------|--------------|
| 1 | Definitely yes | 41.30% 19 |
| 2 | Probably yes | 45.65% 21 |
| 3 | Might or might not | 10.87% 5 |
| 4 | Probably not | 2.17% 1 |
| 5 | Definitely not | 0.00% 0 |
| | | 46 |

Showing rows 1 - 6 of 6

Q15 - Whose responsibility do you think it is to be environmentally conscious?



| # | Field | Choice Count |
|---|---------------------------------|--------------|
| 1 | My own | 26.80% 26 |
| 2 | My community | 23.71% 23 |
| 3 | The government | 17.53% 17 |
| 4 | Big corporations | 22.68% 22 |
| 5 | Other (please include response) | 9.28% 9 |
| | | 97 |

Showing rows 1 - 6 of 6

Q15_5_TEXT - Other (please include response)

Other (please include response)

everybodys

Everybody who isn't incredibly poor and has the option to be

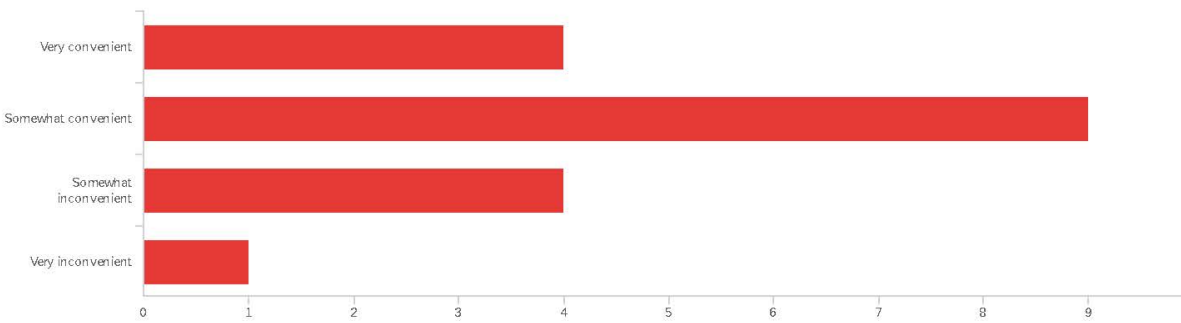
either everyone, or no one (probably no one)

All, focus on regulating corporations via govt via people

All of the above

All of the above should make conscious efforts but corporations cause the most damage and pollution. Even if every private citizen recycled perfectly they could not make as much of an impact as big corporations choosing most sustainable/less harmful methods of production

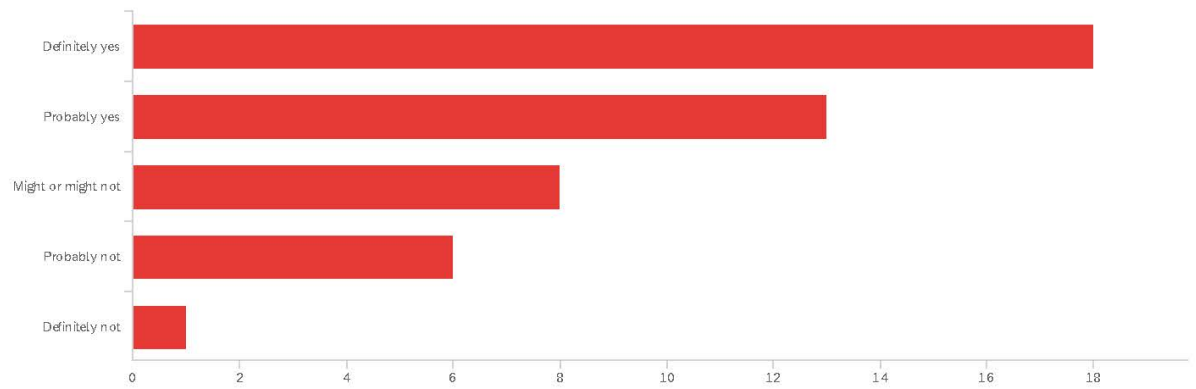
Q16 - How convenient do you find it to recycle or donate items?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---|---------|---------|------|---------------|----------|-------|
| 1 | How convenient do you find it to recycle or donate items? | 1.00 | 4.00 | 2.11 | 0.81 | 0.65 | 18 |

| # | Field | Choice Count |
|---|-----------------------|--------------|
| 1 | Very convenient | 22.22% 4 |
| 2 | Somewhat convenient | 50.00% 9 |
| 3 | Somewhat inconvenient | 22.22% 4 |
| 4 | Very inconvenient | 5.56% 1 |
| | | 18 |

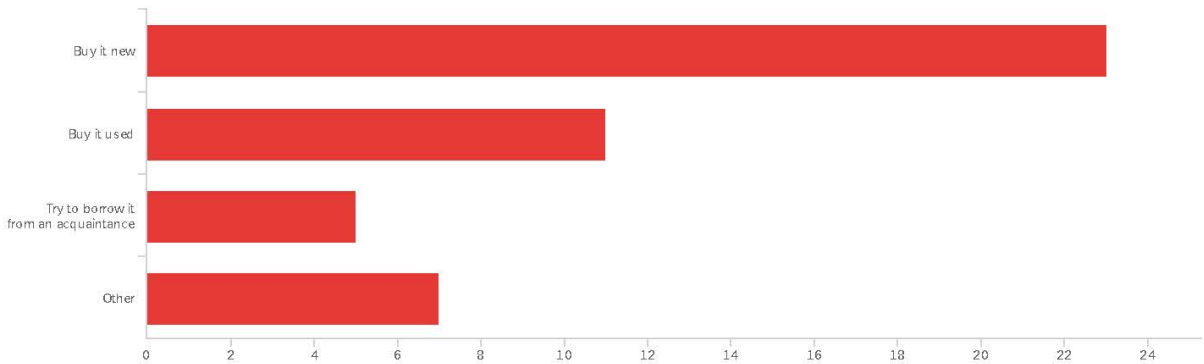
Q17 - Do you consider yourself to be budget conscious?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | Do you consider yourself to be budget conscious? | 1.00 | 5.00 | 2.11 | 1.13 | 1.27 | 46 |

| # | Field | Choice Count |
|---|--------------------|--------------|
| 1 | Definitely yes | 39.13% 18 |
| 2 | Probably yes | 28.26% 13 |
| 3 | Might or might not | 17.39% 8 |
| 4 | Probably not | 13.04% 6 |
| 5 | Definitely not | 2.17% 1 |
| | | 46 |

Q18 - When you need a product that you don't currently own, do you:



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---|---------|---------|------|---------------|----------|-------|
| 1 | When you need a product that you don't currently own, do you: - Selected Choice | 1.00 | 4.00 | 1.91 | 1.10 | 1.21 | 46 |

| # | Field | Choice Count |
|---|---------------------------------------|--------------|
| 1 | Buy it new | 50.00% 23 |
| 2 | Buy it used | 23.91% 11 |
| 3 | Try to borrow it from an acquaintance | 10.87% 5 |
| 4 | Other | 15.22% 7 |
| | | 46 |

Showing rows 1 - 5 of 5

Q18_4_TEXT - Other

Other

depends

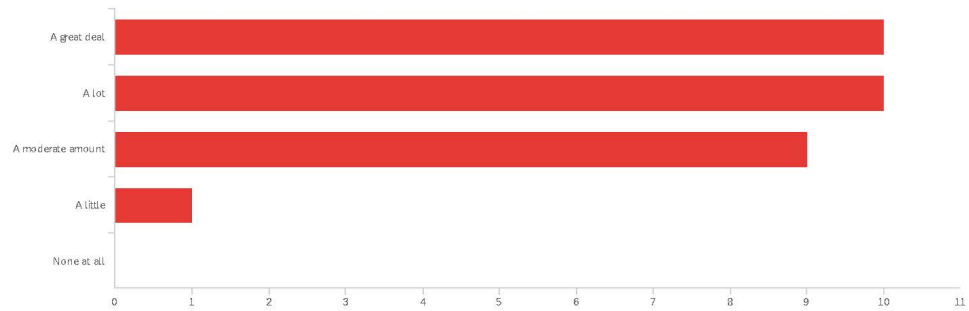
depends

Really depends what the product is, any of these but most likely buy it new

Ask on Buy nothing

Try to find it used first, and if not purchase a new one

Q19 - When shopping for a new product, how much does price affect your decision?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | When shopping for a new product, how much does price affect your decision? | 1.00 | 4.00 | 2.03 | 0.87 | 0.77 | 30 |

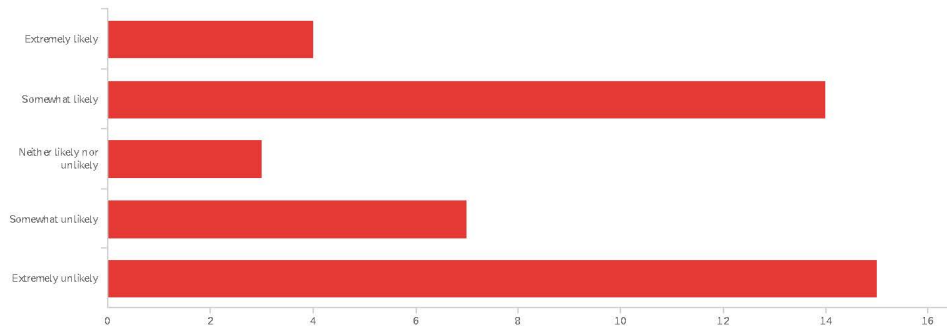
| # | Field | Choice Count |
|---|-------------------|--------------|
| 1 | A great deal | 33.33% 10 |
| 2 | A lot | 33.33% 10 |
| 3 | A moderate amount | 30.00% 9 |
| 4 | A little | 3.33% 1 |
| 5 | None at all | 0.00% 0 |
| | | 30 |

Showing rows 1 - 6 of 6

Q20 - On a scale of 1-5, how well do you know/friendly are you with your neighbors?

| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|-------------------------|---------|---------|------|---------------|----------|-------|
| 1 | Friendly with neighbors | 1.00 | 5.00 | 3.55 | 1.18 | 1.39 | 42 |

Q21 - How likely would you ask a neighbor for help or to borrow something?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | How likely would you ask a neighbor for help or to borrow something? | 1.00 | 5.00 | 3.35 | 1.46 | 2.13 | 43 |

| # | Field | Choice Count |
|---|-----------------------------|--------------|
| 1 | Extremely likely | 9.30% 4 |
| 2 | Somewhat likely | 32.56% 14 |
| 3 | Neither likely nor unlikely | 6.98% 3 |
| 4 | Somewhat unlikely | 16.28% 7 |
| 5 | Extremely unlikely | 34.88% 15 |
| | | 43 |

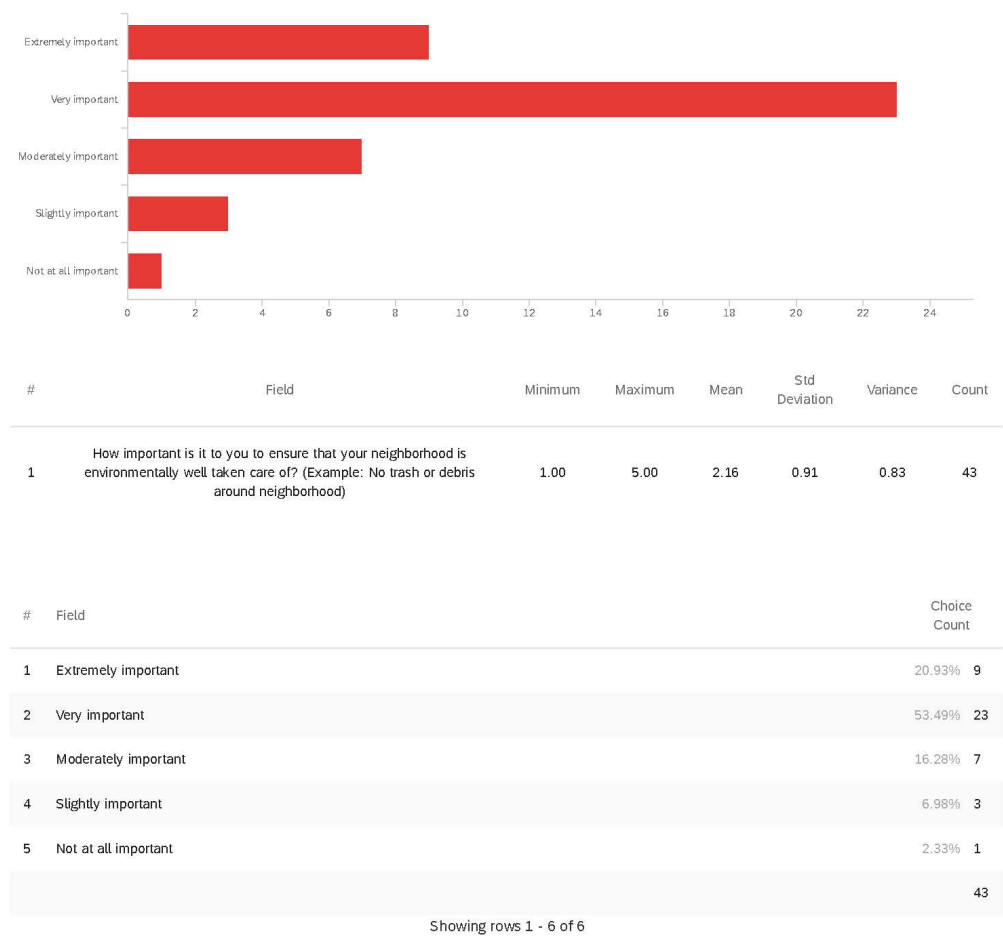
Showing rows 1 - 6 of 6

Q22 - On a scale of 1-5 how much do you wish you could connect with people living in
your neighborhood more?

| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | How much more do you wish to connect with your community | 0.00 | 5.00 | 3.28 | 1.59 | 2.53 | 43 |

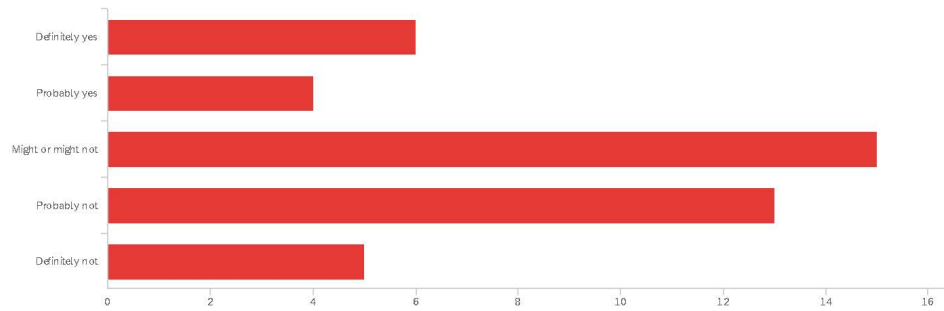
| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | How much more do you wish to connect with your community | 0.00 | 5.00 | 3.28 | 1.59 | 2.53 | 43 |

Q23 - How important is it to you to ensure that your neighborhood is environmentally well taken care of? (Example: No trash or debris around neighborhood)



Q24 - Have you noticed a difference in the environmental quality of the neighborhood

you live in since you moved there?

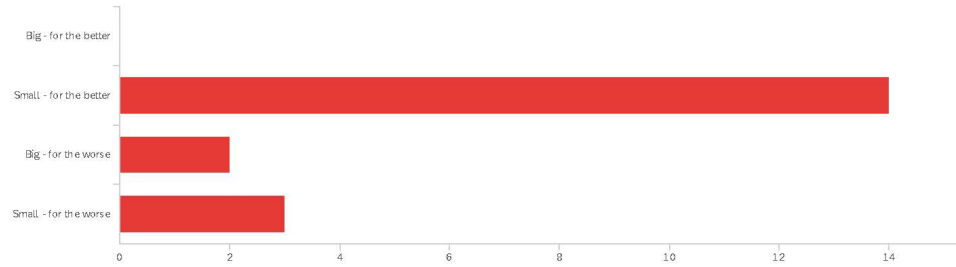


| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---|---------|---------|------|---------------|----------|-------|
| 1 | Have you noticed a difference in the environmental quality of the neighborhood you live in since you moved there? | 1.00 | 5.00 | 3.16 | 1.18 | 1.39 | 43 |

| # | Field | Choice Count |
|---|--------------------|--------------|
| 1 | Definitely yes | 13.95% 6 |
| 2 | Probably yes | 9.30% 4 |
| 3 | Might or might not | 34.88% 15 |
| 4 | Probably not | 30.23% 13 |
| 5 | Definitely not | 11.63% 5 |
| | | 43 |

Showing rows 1 - 6 of 6

Q25 - How noticeable has this difference been?



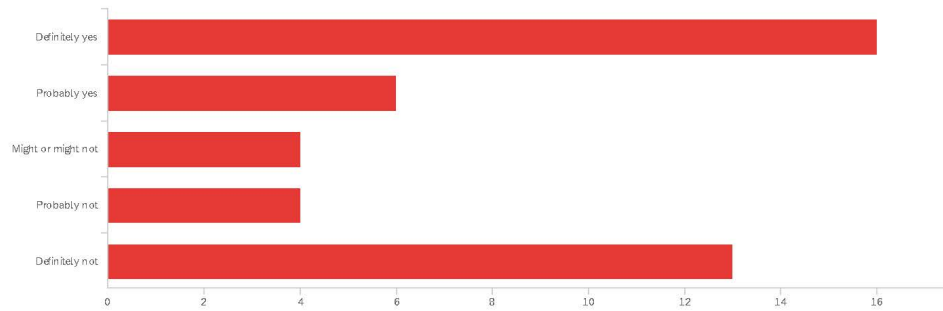
| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | How noticeable has this difference been? | 2.00 | 4.00 | 2.42 | 0.75 | 0.56 | 19 |

| # | Field | Choice Count |
|---|------------------------|--------------|
| 1 | Big - for the better | 0.00% 0 |
| 2 | Small - for the better | 73.68% 14 |
| 3 | Big - for the worse | 10.53% 2 |
| 4 | Small - for the worse | 15.79% 3 |

19

Showing rows 1 - 5 of 5

Q26 - Are you familiar with the Buy Nothing Project?

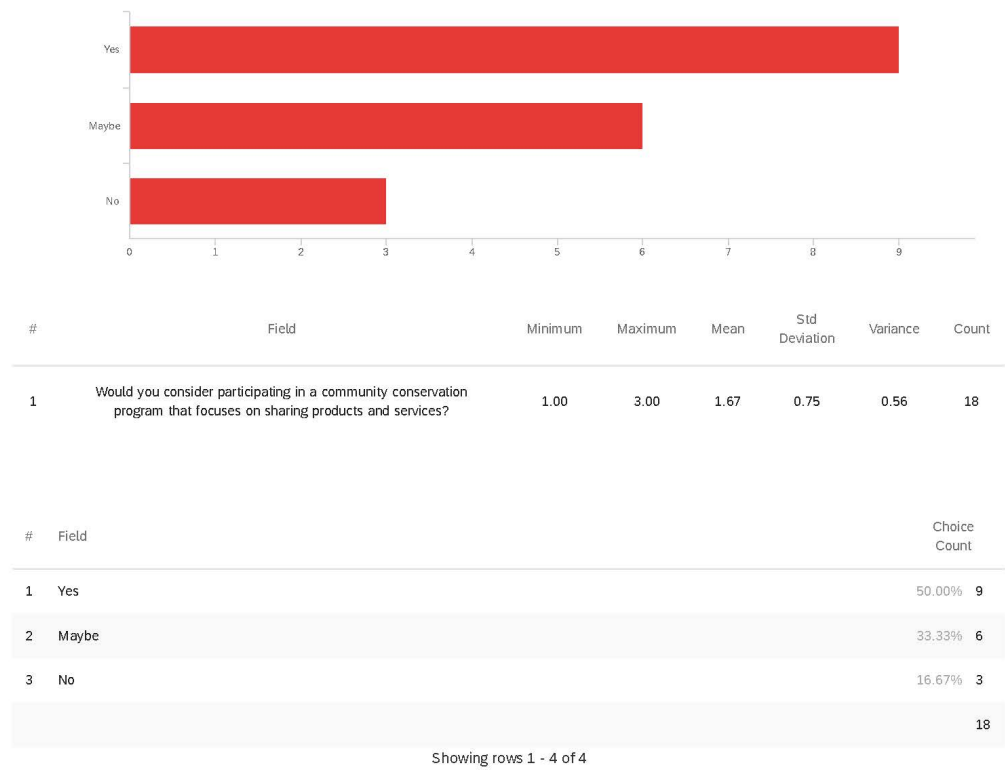


| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | Are you familiar with the Buy Nothing Project? | 1.00 | 5.00 | 2.81 | 1.70 | 2.90 | 43 |

| # | Field | Choice Count |
|---|--------------------|--------------|
| 1 | Definitely yes | 37.21% 16 |
| 2 | Probably yes | 13.95% 6 |
| 3 | Might or might not | 9.30% 4 |
| 4 | Probably not | 9.30% 4 |
| 5 | Definitely not | 30.23% 13 |
| | | 43 |

Showing rows 1 - 6 of 6

Q27 - Would you consider participating in a community conservation program that focuses on sharing products and services?



Q28 - How did you hear about the Buy Nothing Project?

How did you hear about the Buy Nothing Project?

Vlog

From the media

Local community

Reddit

online

Ravelry forums, I think (knitting website)

Facebook

Social media

Friends

A neighbor and fellow mom in my old neighborhood

A friend

Social media

Sister

Facebook

A coworker uses it in her neighborhood

Friend

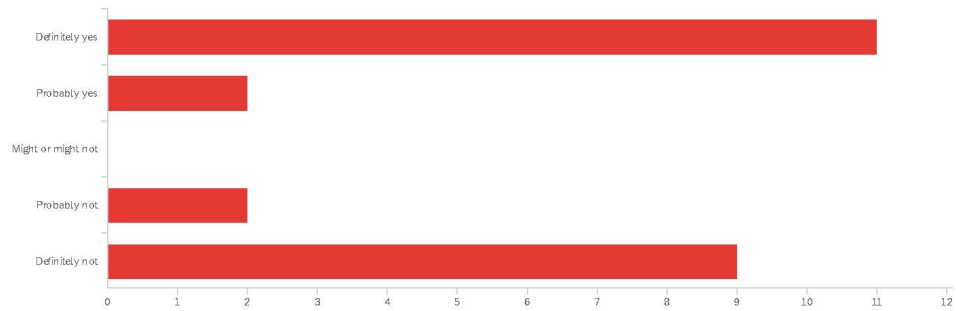
a friend

From a family member

Facebook

Friends

Q29 - Do you currently participate in your local Buy Nothing Group?

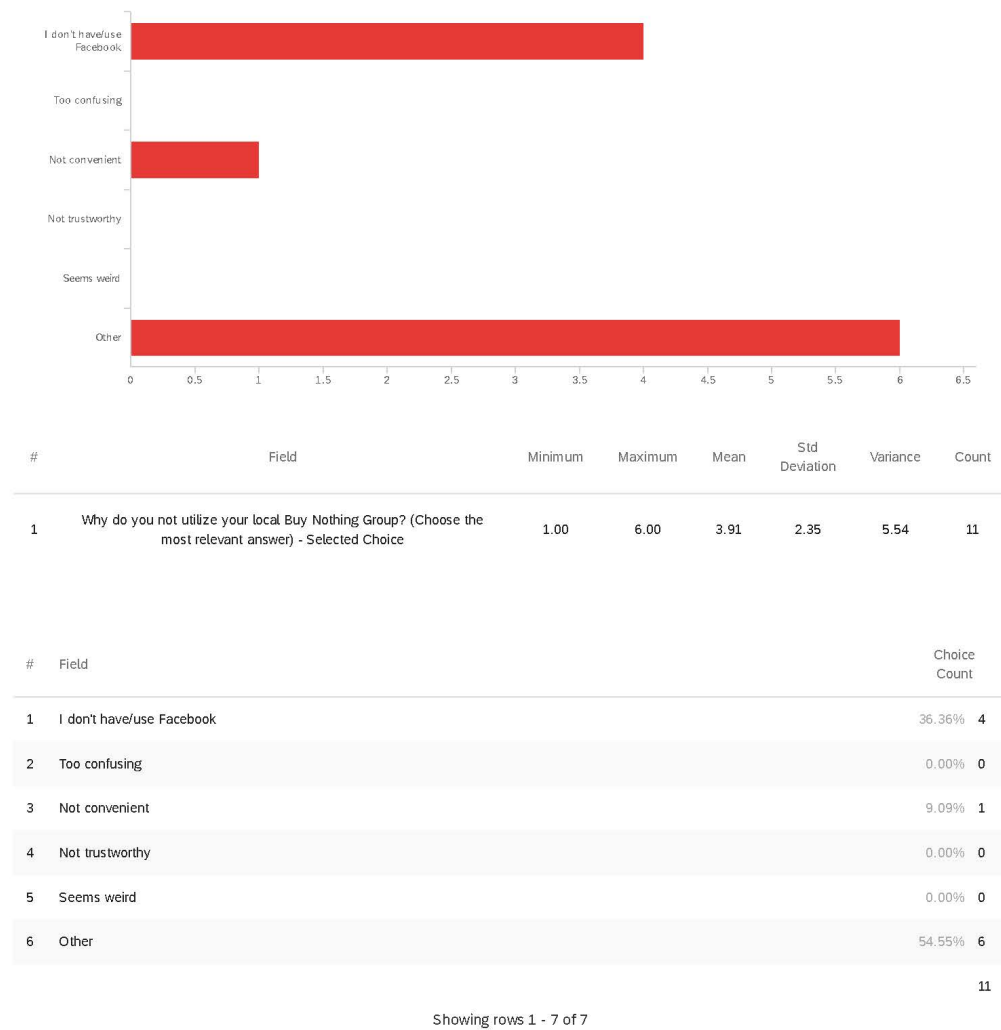


| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|---|---------|---------|------|---------------|----------|-------|
| 1 | Do you currently participate in your local Buy Nothing Group? | 1.00 | 5.00 | 2.83 | 1.86 | 3.47 | 24 |

| # | Field | Choice Count |
|---|--------------------|--------------|
| 1 | Definitely yes | 45.83% 11 |
| 2 | Probably yes | 8.33% 2 |
| 3 | Might or might not | 0.00% 0 |
| 4 | Probably not | 8.33% 2 |
| 5 | Definitely not | 37.50% 9 |
| | | 24 |

Showing rows 1 - 6 of 6

Q30 - Why do you not utilize your local Buy Nothing Group? (Choose the most relevant answer)



Q30_6_TEXT - Other

Other

Other

Not available in my area

no such group exists because it is considered illegal (tax/ social insurance evasion)

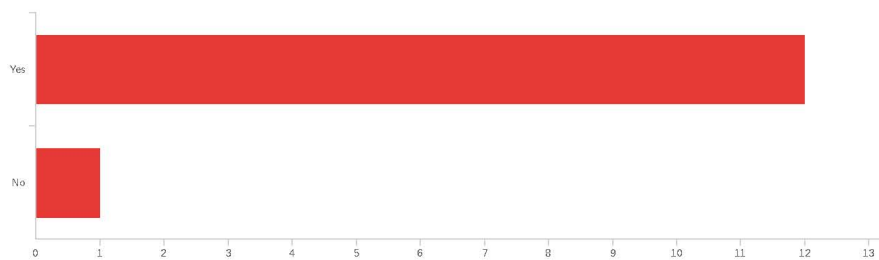
Not at all active

Not ready to commit

Haven't thought about it

Laziness

Q31 - Have you ever recommended the Buy Nothing Project to anyone?



| # | Field | Minimum | Maximum | Mean | Std Deviation | Variance | Count |
|---|--|---------|---------|------|---------------|----------|-------|
| 1 | Have you ever recommended the Buy Nothing Project to anyone? | 1.00 | 2.00 | 1.08 | 0.27 | 0.07 | 13 |

| # | Field | Choice Count |
|---|-------|--------------|
| 1 | Yes | 92.31% 12 |
| 2 | No | 7.69% 1 |

13

Showing rows 1 - 3 of 3

Q33 - Why did you select to buy a new product that you don't currently own?

Why did you select to buy a new product that you don't currently own?

Depends on the product. Some products are hard to obtain used.

It depends on the product. If I want something specific it can be hard to find used, and I don't always want to gamble on the condition with certain things

Because I have money and no bills to pay

It's less trouble than buying used, and I already have more money than I know how to spend

Because that is what I mostly do

Unknown state of used products/ reduced longevity

market for lemons

I don't trust people

Often times it is cheaper to buy new

If I can't find the product on buy nothing from a neighbor, I usually buy new. But it depends on the type of product. We definitely buy some things used!

Depends what it is to be honest. Especially during covid. Clothes I will be used. But electronics I buy new

Because I prefer new

I can afford to

Usually a new product is more readily available or easier to find versus a used product.

Child could use it

I like the new feel

Because that's what I usually do!

Q34 - Why did you select to buy a used product that you don't currently own?

Why did you select to buy a used product that you don't currently own?

Well the answer is all 3 depending on the product. Borrow if I need something that I won't use often; buy new if it's a sanitation thing; buy used whenever possible.

Cheaper, more environmentally friendly, I enjoy personal interactions when buying from within my community

Usually less expensive and in good shape

Many reasons

Technology advances so quickly. If I bought a new item I would likely need to replace it quickly with the new better thing. Getting mine second hand allows me to divert waste from a landfill and save money on a product I need in the moment. Additionally I try not to have too many unnecessary possessions. So if I didn't already own something it is either new to the market, gimmicky, or only useful in a few instances. Not worth investing in.

Try to buy used first to avoid adding unnecessary things to the earth

Because most of the time it's inexpensive

It's cheaper

Cost savings; often just as good as new

Q35 - Why did you select to borrow a product you don't currently own from an acquaintance"?

Why did you select to borrow a product you don't currently own from an acqu...

If its not necessary to make the purchase when somebody already owns the product. only if its necessary to i purchase the product

lack of funds, no plans to keep it long term

The context of the situation matters. If I'm a first-camper, I'll ask a friend for a sleeping bag before committing to purchasing one.

m