

Understanding the gaps that exist between potential clothes donors and charitable organizations

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In this study, we analyse the gap that exists between the potential donors and charitable organizations while donating clothes to these organizations. We deploy descriptive online surveys and in-depth qualitative interviews to explore how people perceive, acquire knowledge, and form attitudes and practices concerning these clothing donations. Our research indicated three core themes: (1) Little awareness about these charitable organizations; (2) Lack of communication between the potential donors and organizations; and (3) absence of trust in the donors. We reflect on these findings and develop a mobile application that facilitates the entire procedure of donating clothes to the relevant entities. After designing and prototyping the application, usability testing was conducted with the target audiences to ensure that the application is attractive to the user, easy to operate, and specific to our target groups.

Additional Keywords and Phrases: Health – Wellbeing, Empirical study that tells us about people, Interview, Qualitative Methods, Survey, target groups

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INTRODUCTION

With growing populations, there is a constant need for a continuous supply of clothes in donations for those who are not affording this necessity. This supply is made possible due to many reasons. The clothes that people buy almost inevitably become obsolete at some point. They might not fit anymore, they might go out of fashion because of rapidly changing trends in the industry, or they might just be replaced by newer clothes, which become the preferred choice for the buyers.

How these clothes end up differs from case to case, and a wide variety of disposal practices are adopted by their owners depending on circumstances. These clothes are often kept in closets for years because of excessive attachments [14] or a general indifference or lack of knowledge of other ways to discharge them. The act of throwing them away has been looked down upon in recent times due to the adverse impact on the environment, but unawareness still exists, and dumping clothes remains a common habit. Some families prefer reusing these clothes in rags or dusting mats to make use of these damaged clothes [12]. Finally, many people indulge in the practice of giving away clothes to the underprivileged and deserving.

When giving away clothes, people have to choose between handing them directly to someone, which could be their helper or even a family member and donating them to organizations that collect these clothes and distribute them on their own. This decision is influenced by various factors. While it is true that people tend to prefer that these clothes end up with someone they are acquainted with, it is also undeniable that a lack of know-how about organizations and the processes that they offer plays a role. This lack of awareness among people about organizations means people who want to donate have limited access to such organizations. As a result, they prefer the other methods of giving away or discharging the same clothes they would otherwise give to organizations.

These problems hinder the process of clothing donation in our country from reaching its true potential. This study hoped to produce a combined platform that can be a comprehensive way to address this gap; it can help in raising awareness about the various organizations, be a means of communication between the organizations and donors, which could, in turn, help boost people's confidence in these organizations.

RELATED WORK

Several research works [4],[10] explore the concept of fast fashion and the increase in unworn and unwanted clothes among people that it has caused. Fast fashion is defined as 'cheap fashion that is not durable and is rapidly disposed of by consumers' [1]. The fate of such unwanted clothes, as highlighted by Laitala [23], has a severe impact on the environment and possible reuse of clothes and has been of great interest to researchers who try to observe and explain the trends in clothing disposal.

Ways of disposal

It is reported that many people do not dispose of all and keep their clothes based on positive experiences, memories, and family ties associated with those clothes [14],[15]. Disposal behaviour differs, and if simplified [1],[21],[24], it can be said to consist of: giving away to family and friends, selling online or to stores, and throwing away. Alarming, the waste from throwing away these clothes accounts for 13 million tons of solid waste per year [3]. Studies have indicated a need for government and related authorities or organizations to develop strategies to encourage consumers to increase the clothes recycling rate [8].

Trends in disposal behavior

The relationship between demographics and disposal behavior has been of core importance in many studies that attempt to understand disposal decisions. Statistics show that females are more likely to give away used clothes than males are, and older individuals are more likely than their younger counterparts, owing to greater awareness about the environment and recycling habits [5],[11],[8]. Income has also proved to be a significant factor, with individuals with higher income showing greater inclination to donate and those with lower income preferring to reuse the clothes as rags or giving them to family or friends [12].

Scope of Donation

Some papers focus on obstacles that still exist, as Frazer [7] points out that people abstain from donating because it negatively impacts textile production. Fashion consumers, especially, are more prone to reselling, exchanging, and disposing clothing items back to stores because they know the textile value [28]. However, others are more hopeful and argue that through creating awareness and providing assurance to encourage the donation of clothes to charitable organizations, people are prompted to consider the 'usable life' and 'personal nature' of garments and eventually give them away [6]. Rational and emotional methods have been tipped to convince people to change their minds and donate clothes. Of the two, emotional appeal, especially, has proven to give favourable results in this regard, and a right balance between the two has been studied and praised [16].

Existing products

Akhuwat Foundation already engages in the distribution of clothes to the needy, who are in their database of borrowers. For collection, donors are required to drop their belongings at their nearest office, which are then sent to their head office for further processing. Edhi foundation's warehouses are open around the clock to provide clothing in case of an emergency. They serve refugees from Kashmir, Sindh, Balochistan, and abroad at the sites of calamities, fire, and riots [30]. Donors can go to their orphanages or offices to donate. Walls of Kindness exist in multiple cities of Pakistan, and donors can hang their clothes on the walls, and deserving people can take it from there. The Rising Sun provides clothing donations to the underprivileged kids studying in their schools and others in their database. Though such ventures are operating on traditional models of receiving donations, one initiative involved modern technology in procuring donation clothes; Uber partnered with SOS village for a short period to support their inbound logistics. Uber provided its users the option of 'UberGive' in their app by which people could order rides free of cost to pick up the belongings that they want to donate [32]. This initiative was the only facility that would pick clothes from the potential donors and drop them off to the different organizations that would distribute them further.

USER RESERACH

We conducted a pilot survey, for which we collected around 40 responses, to check the validity of our questions. Some questions were open-ended to get individual responses and then changed to closed-ended in the questionnaire, forming the choices based on responses we got in the pilot survey. Additionally, we also conducted interviews with

14 donors and 5 charitable organization representatives, to gain insights about the procedure from both sides. From donors, we wanted to know the different kinds of experiences and issues they face engaging in the donation process and from organizations, we wanted to find out the management issues that could possibly occur in the procurement of clothes.

User details

Our application has two target users: Charitable organizations that donate clothes to the end recipient and potential donors who want to donate clothes to the deserving individuals.

From the 142 survey participants 78 were female and the interview participants consisted of 71% females. Most of our participants were young adults of around 18-29 years (88%) and lived in Punjab (76%). From the study it was observed that young females have a greater shopping frequency and are more aware of the environment around them [5],[11],[8]. As a result of this, they donate more clothes, and they refrain from throwing away old ones.

Procedure

We conducted a mix of semi-structured interviews from both the donors and organizations. Due to lack of mobility and coronavirus, we took most of the interviews through Zoom and video-recorded the interview. Some of the interviews with potential donors, especially those among our acquaintances were held in person. Similarly, we were able to visit one of the organization's head offices to conduct their interview after setting an appointment. In-person interviews were recorded through a voice recorder. We proceeded with preliminary questions about demographics, area etc. For donors, our questions were tailored towards asking for details about what they normally do with the spare clothes they have while organizations were asked about the work they conduct, the procedure of collecting from donors and giving to the needy and the problems they face throughout the process. In addition, we asked them about recipient anonymity, and the criteria on who classifies as a needy person to their organizations.

USER RESEARCH FINDINGS

The ethnographical data was collected from the surveys and the interviews that were conducted. Data was then anonymized by assigning a unique ID to both the organizational leads and potential donors. The charitable organizations' authorities and potential donors are designated a unique ID starting from O-1 and D-1. The data was analysed, and a regression model was used to visualize the survey results. The two significant findings that emerged from the analysis are as follows:

1. Attitudes towards donation behaviour

1.1 Convenience

Most of the participants in our study donated clothes away directly to individuals who needed them. These participants want to help individuals who serve them because they feel that those who work in their homes deserve it the most.

"Charity starts at home, so I usually give it to the house help, my Quran teacher, my driver's daughter. These are all the people I know will be comfortable and be happy after receiving" (D-9)

"A lot of people in my area require clothes. Usually, our maids and common workers ask for clothes, and we give them." (D-6)

Others found it very hard to take out time from their busy day to day lives to donate clothes to organizations. The reasons for donating clothes to those in their vicinity arise from observing these individuals in their day-to-day lives and developing feelings and attachments towards them.

"I used to have this caretaker in my area, and he would wear the same shirt every day. I gave my shirt to him because I knew he was deserving and needed it." (D-10)

Other respondents would donate clothes to whoever would come to their door and ask for help. They were hesitant in sending those people empty-handed who would come to their doorstep for donation. These respondents would not check if these individuals were deserving but would solely donate because they believed in what they would say. Additionally, some participants took out time and visited charitable organizations to donate the clothes, but they struggled to find their way and found the process to be complicated. Therefore, this process discouraged them from donating clothes in the future, continuing the cycle of donating to those in the donor's immediate vicinity.

"[About an organization] It was hard for me to locate their centre because its located on the side of the road under a tree in a small room and it wasn't registered on google maps, so I had to ask around to reach the place" (D-2)

The problems faced over sending clothes to different charitable organizations has brought about concerns. Packing clothes, providing details about them, and following the donation procedure require a lot of effort, making the entire donation process even more complicated. However, some of the participants found the donation process of the organizations to be very convenient. This convenience was due to new organizations that facilitated these participants by visiting their houses and collecting donations. Since these participants did not have to go to the organizations, they were satisfied with the existing process of donation. The charitable organizations were aware of these problems that were experienced by the donors. However, some of them shared concerns that arose from facilitating the user, especially in the places that were not that accessible to them.

"They want us to provide convenience and want us to collect the clothes from them. We understand that going out is a challenge, but how many societies can we visit if we go door to door? Especially in remote areas?" (O-2)

Most participants in our study found organizations' existing donation procedure to take a lot of time and effort. As a result, they would donate the clothes they no longer required to the community members who needed them. These donations made the process more convenient and cultivated a feeling of wellbeing in the community. The charitable organizations are aware of the issues that potential donors face, but they also have a few restrictions due to the accessibility of different areas.

1.2 Values

The study reveals that the donation process's primary motivation is self-satisfaction, promoting happiness and feelings of accomplishment between different individuals. The fulfilling sense of giving back and contributing to society is unparalleled. Additionally, religious obligations also drive individuals into reducing the bulk of clothes they have stored in their wardrobe, which they know they will not wear in the future.

"The more you give, the more it drives out the selfish in you since these donations are a voluntary charity and I think this is what our society needs." (D-12)

"I do not want to be responsible in front of God that I wasted so many clothes. Thus, I do not want to waste what I have been blessed with" (D-13)

Through the daily experiences of potential donors, they come across various videos about the situation of those who deserve these clothing items. Since they know about the miserable condition of those individuals in their society who do not have access to the necessities of life, they empathize with these individuals, and they want to help them. Other study participants expressed concerns about throwing the clothes away: they want others to utilize the clothes rather than causing environmental damage. For them, donations not only help people in need but also help in overcoming ecological waste.

"I don't like to see anything going to waste: Whether it is a food or a decorating piece, I want someone else to utilize it in a better way if I'm not using it. This act gets a smile on the face of the recipients, which eventually makes me happy". (D-

A few participants have a systematic procedure to prevent their cupboards from cluttering. The values of the respondents in the study impacted their donation behaviour. Donation behaviour depended on self-satisfaction, religious obligations, promoting the country's development, day-to-day experience, and preventing waste. These factors influence donors to donate more so they can improve the conditions of their fellow compatriots. Promoting this unique sense of purpose in those individuals who do not donate would encourage them to contribute to their community.

1.3 Awareness

Our research hints at a lack of awareness on the users' part about organizations that facilitate clothing donation, which acts as a hurdle in the clothing donation process. Upon being asked, some interviewees stated they had never heard about any such organizations. It is important to note that these were people who did claim to have clothes that they no longer required and could benefit these organizations. Even those who were able to name organizations only mentioned two or three renowned ones. Furthermore, among people who had heard about organizations, some said that they still did not have sufficient knowledge about the procedure observed by these organizations, which is why they abstain from donating.

"I haven't heard of these organizations in large numbers. I have heard of only very few, and I see their Facebook reviews or posts on Facebook about their service. If they are doing it in the right manner, it is fine. If they aren't, I don't go ahead with them. I don't give my clothes in their hands." (D-14)

Some of them showed interest in learning more about the organizations but were unsatisfied with the available resources to acquire relevant knowledge. Additionally, our study confirms that organizations recognize this gap in awareness. More than one representative from these organizations expressing that little or no know-how among people about their service acted as a hindrance and prevented them from reaching their full potential.

"I think what we can do is make our work clearer and market our donation drives." (O-1)
"We have a problem of awareness in that many people do not know about the work we do. There is not much publicity for it either." (O-5)

Aside from both organizations and donors explicitly mentioning unawareness, this gap was also evident when both parties' answers to similar questions were inconsistent on some levels. While many potential donors among our interviews stated that they found the procedure of delivering clothes to these organizations' head offices inconvenient and still went ahead because no other option existed, one representative from organization X did mention that they had a pickup service in case the donor requested for it.

"I put my clothes in a big bag and asked my driver to go there and give it to them so they could use it. I had to get them dropped off because there isn't any other option. There isn't any system in place at the moment. It would be ideal if there were one." (D-13)

"First, we must make people aware of what we do here, that there is a clothing bank that donates used clothes to needy people. People can visit our website, or they can call to get in contact with us, and we can collect the clothing items directly from their houses." (O-5)

Thus, if fully informed about the available service, some people would consider changing their opinion about donating clothes and contributing more to the system, which reiterates the need for a platform where people can find this information. Indeed, a representative from organization Y extended her support for such a platform. All in all, our findings demonstrate that there is great potential for growth in the clothing donation system if people are made more aware of the existence of organizations and details of their operation. And organizations and potential donors alike have given a positive response to the idea of a platform that acts as a bridge and attempts to fill this void.

2. Disparity between the perspectives of the user and organizations

2.1 Trust

Our study revealed that some participants were hesitant to donate to organizations as they lacked trust between the two parties. The donors believe that the clothes they donate to organizations might not be utilized in the right way.

"No, I am not sure if the clothes that I give to other organizations go to the deserving people in our society. So, I usually try to give it to people who I know of or I resale my clothes." (D-3)

Some participants were not aware that the organizations were competent enough to carry out the donation procedure efficiently. To get assurance, they visited the organizations' offices to see how they operated and how they carried out the donation process.

"I think I like the process of going to the organization, looking at how they work, knowing what they do so that I am more comfortable with my donations." (D-5)

Another significant reason for mistrust revealed by the study was that people wanted the organizations to help and donate their clothes in their community. They believed that their neighbours should be helped first. However, sometimes the organizations had to transport the clothes to areas where they were more deserving than the people of that community.

"When they ask us where we will give away these clothes, they get surprised to find out that the clothes are sent far away as everyone wants to help people in their own community" (O-2)

Most participants want to give their clothes to the organizations they saw working and taking part in donation drives. They had built trust with a specific organization over time and were more comfortable donating to them. People currently are not aware of the process that the organizations employ while donating. Our survey suggests that most people (125 out of 141 respondents of the study) strongly agreed with the statement that they wanted to know more about the donation process. Whereas, 129 out of 141 respondents said that organizations should be more transparent about the whole donation procedure. When giving clothes to organizations, many participants highlighted that they relied on the reviews that the organizations had and the reviews that their close friends had given them. These reviews on the internet influenced people's beliefs about that organization. If many people have bad reviews, they were unwilling to donate to that specific organization.

"I think I will trust organizations if I get reviews from family and friends or generally if I see reviews on their websites, which would enable me to trust these organizations, and I would want to donate to them." (D-5)

The donors were not satisfied and distrusted the organizations; our results revealed that the organization had trust barriers with the clothes donors. According to the survey result, 61.7 % of the survey respondents and 10 out of 14 clothes donors we interviewed told us that they washed all their clothes before donating.

"All my clothes are ironed, dry cleaned. I put them in a bag, and then I give them to the maid." (D-11)
"I check if they are torn, have any stains, etc. In case they do I throw them away; Otherwise, I wash them and pack them into bags so I could distribute them." (D-2)

However, the Vice President of Organization X said that this is not the case. The clothes the organizations receive are mostly unwashed and just handed to them. The organization themselves must wash and dry clean the clothes.

"It's an assumption that people wash clothes. But they do not." (O-1)

Another interviewee, the Vice president of Organization Y, told us of the unmindful behaviour of donors. They did not consider the type of clothing items they were donating and whether they would utilize their clothes to the lower class. Concerns were also expressed that the people were unthoughtful of the stuff people presented and created a hassle for them to sort out the relevant clothing items. As the organizations had to collect items from multiple people, it began a hassle for them. By making their procedure transparent and showing their work on a social platform, the

organizations can help establish confidence in people about their activities, which can persuade more people to participate in this noble cause. On the other hand, the donors could be more conscious about the clothes they are donating and the clothes' condition, reducing the amount of work done by the organization, and the clothes reach the required recipient swiftly.

2.2 Anonymity of the donor and the recipients

Many of the participants interviewed expressed views that the identities of the donor needed to be kept private.

"Speaking for myself, I wouldn't want the receiver to know that I sent these clothes. Similarly, I think the receiver also wouldn't want the donor to know because they don't want to show that they are needy individuals and would have to wear their clothes." (D-7)

Even from the organizations' point of view, the recipient's identity should not be revealed as upon knowing that the organization's employees would take pictures of them receiving the clothes, they would become reluctant. They would show hesitance while the clothes are being offered to them.

"Some recipients do not even accept clothes even if we want to give them because they feel we are taking things out in pity and don't like the feeling, so I think it is vital. For the donor, it's not as important, but I think it could be optional as some donors do not want their identity to be disclosed either" (O-2)

However, some participants had other views. They were adamant that if they were donating clothes to an organization, they should know where their donations were going. To cater to such individuals, the organizations must take pictures and videos to prove that they indeed conducted the clothes donation drive, and it was successful. This evidence is then used to attract further potential donors. However, this clash of interests between the donor and recipient brings a barrier in giving the clothes and only receiving them.

"We had to take pictures, and we used those pictures to get sponsorships, but we asked for their consent before taking pictures." (O-4)

A commonality between the participants was that they only wanted to know of the areas where their donations were going instead of the exact name and address of the house of the person. This idea was favoured both by the organization and the donors.

"People who are giving clothes should know where their clothes are going to. Not their name or identity, but which city or which area they are distributing should be shared with the donor." (D-14)

One of the participants deemed anonymity so essential that she believed that not even the organization's vehicles should go to the recipient's house. Still, it should be so private that a delivery service could be used to send the clothes so that not even the neighbours are informed that a person in their locality has been offered clothes. The dignity of the person must be kept intact, and it is their right to be anonymous. Helping others without taking pictures and names develops a sense of security in them. It helps establish faith that people are helping them due to goodwill and not because they want to show the world.

"Some people, such as white-collar individuals, do not ask for clothes. They can maintain a standard but are unable to spend on clothing and trying to spend on their children's education." (D-13)

In the current procedure that the organizations employ, the details are not usually shared with the donors. This procedure is necessary as the organizations must build the recipient's trust and ensure that if they are conducting drives in the future, the needy people who need clothes come forward and feel no hesitation in taking them. The study showed a mixture of views about how the participants felt regarding the donor and recipients' anonymity. Some donors wanted the organizations to reveal the recipient's names; however, some organizations could not do so because the recipients were not comfortable enough. Some donors were aware of how the recipient felt about

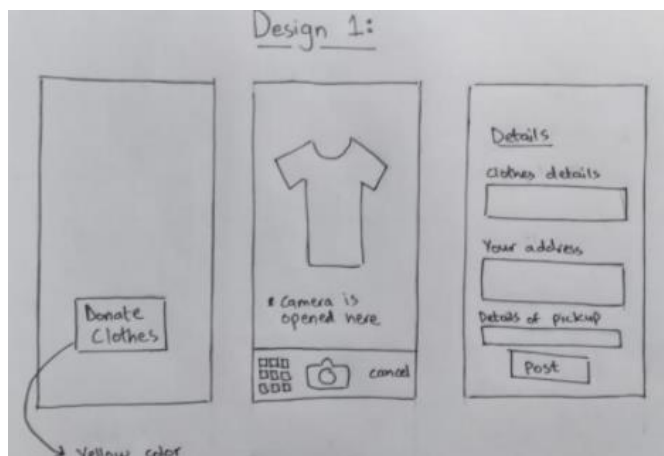
disclosing their identity and making sure their clothes were being utilized. They wanted the organization only to reveal the area where their clothes went.

DESIGN

Our user research equipped us with the data to establish the theme and consequently the features for our application and we came up with three different alternative designs.

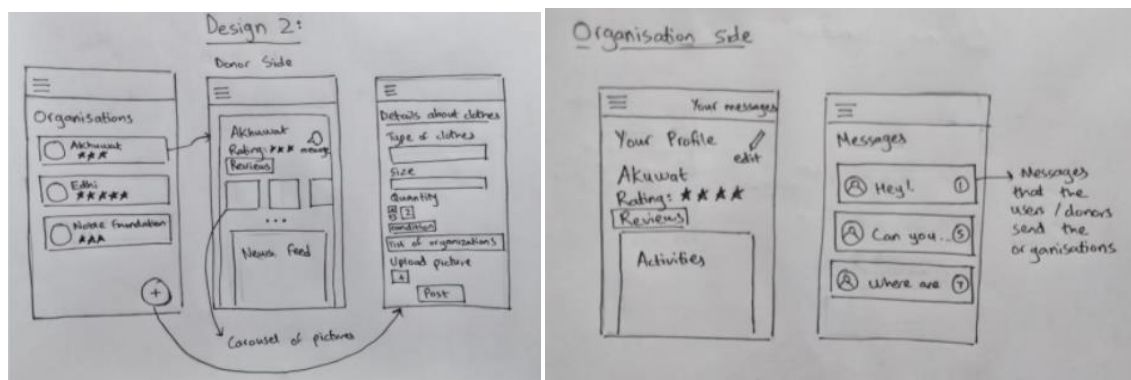
Alternative design 1

Our first design alternative deals with a simplistic view of the entire donation process. Our focus was on speeding up this process for greater donations. We kept our theme yellow and white which would evoke pleasant emotions. For the donors, they would just be required to upload pictures of clothes and their details and a random organization would be assigned for the pickup. The organizations could view and accept the donations they are getting on their side. They however will not be able to see the progress bar or donor applications. It would be very basic to ensure convenience



Alternative design 2

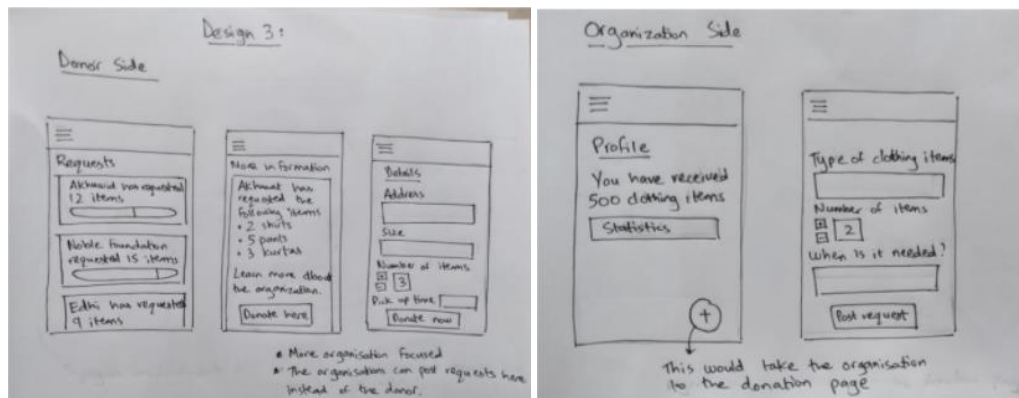
Our second design alternative is focused on the awareness that donors have of the organizations and their work. In this, the donation process would ensure that the organizational work is highlighted. For this reason, we chose a purple theme as it signifies trust. We want the donors to break the chain of donating to their specific organizations and search for other options as well. This app would have all the organizations listed on the homepage. Donors would have to specify details about the clothes they are donating, take its pictures and enter pickup details as well. Apart from that, donors can check reviews, message organizations. The organizations could view the images of items the donors want to donate and could view the ratings too. They can also put up posts to ensure the user knows of their donation process.



Alternative 3

Our third design alternative would be organization centered. This design would be very interactive as it would focus on the needs of the organizations and the recipients the donors would be donating to. This design would incorporate a red and white theme to symbolize urgency. It would indicate that the organizations need clothes. The donors could

login and view progress bar for each organization. The bar would indicate number of clothes donated and number of clothes required. If the donors have clothing item, the organization needs then he could click on the request bar to donate those clothes. The organization would make progress bars and track the progress of their donations in real-time. They also have an alert option on the side of the progress bar to urge users to donate to them



Existing work

A lot of work has gone into exploring donation through third party for clothes and other items alike and while the features of each project are different and tailored to suit the needs of the area as well as time they are developed in, there are points we can take inspiration from and include in our application or shortcomings that we can learn from.

Gone for good

This is a UK based charity pickup service. They collect goods ranging from electrical goods to furniture, clothing, and toys for free. One can donate to charities of his own choice for free by using gone for good application. On the homepage, there are terms and conditions at the bottom and two main options, Donate item(s) and Major property clearance. Terms and conditions entail the details of what they do and how they operate, and some terms of using the application and service. [3] This application has a vibrant and convenient design and a catchy user interface but its defining feature and what makes it stand out its distinct options for single item donating (Donate item(s)) and bulk donating. Each has its own set of protocols. The point is that those bulk donating do not have to fill in too much details for so many items as it is not

Foodshare

This was an application that became part of the research community but did not reach the industry [5]. It was similar to our idea. It was based on a pickup service for food donations. The application was meant to be used by three sets of users: Restaurants, Individuals and Organizations. Restaurants and individuals would use it to donate food whereas organizations would be the recipients. For signup, it would require basic information from the users and some additional information from restaurants and organizations. To make a food availability post, restaurants and individuals would have to login their account first. Then they would have to choose the designated option, which would open their camera and ask them to take a picture of the food they want to donate. The next step would be to provide some information about the food: item name, quantity etc. Afterwards, they would be asked to specify pickup time and location and post. Once the post is made, it would be visible on the Organization's newsfeed. For organizations to request pickup, they would have to login first. Then, they can select the post from their newsfeed and request pickup. Upon requesting, the potential donor would be notified about the request and he would be asked for confirmation. Once the request is confirmed, the organization can pick-up from the donor's location and distribute to hungry people. After distributing the food, organizations are required to make a distribution post, which will be shown in the newsfeed of both the parties.

Givit

This is an online charity based in Australia that aims to act as a mediator between organizations, donors and the needy. [4] Their primary platform is their website. The website has features that provide a lot of detail with regards to what items are required and who requires them. Anyone willing to donate will first scroll through a list of items, select the relevant one and see a list of people/families in need of the items with brief information provided about their story and condition, which are uploaded by the organizations. Furthermore, it facilitates pick-up and drop-off as well as all different kinds of exchange of items and cash, depending on the preference of relevant parties. All in all, their website is built to be comprehensive as well as to personalize the process in order to alleviate trust problems and better satisfy donors. The design of the website is image-focused for greater emotional appeal; the first thing on the homepage is two hands joined to hold a heart to signify the importance of looking out for each other. Furthermore, it displays stats in very large font to communicate the urgency and need of donation to anyone who visits the website. The color scheme is consistent throughout division of sections that helps break down the features and makes navigation easier.

reGAIN

This is another mobile application that deals solely with the donation of clothes. reGAIN is built on a reward-based principle, providing donors with discounted coupons to various shopping stores. [6] In addition to this, they center their appeal around the negative environment effect of throwing away clothes, their promise being a simple one: that the clothes people donate will help make the world cleaner and raise money for charity simultaneously. They combine with British Red Cross to provide convenient delivery service and give the user an option to select a drop off point close to their house after packing the parcel they wish to dispose. Once the process is complete, the user gets access to the discount coupons and reGAIN handles the rest of the work. The design of the application is minimalistic but greatly effective; it consists of only 4 screens and 3 colors throughout with large font and icons, which make it clear as well as easy to use. The homepage consists of a list of coupons, which serve to best incentivize a first time (or old) user of the mobile application. From the drawer the user can access a video, which discusses the principle of the application and appeals to the users. All in all, the application attempts to make it a convenient experience for any user.

PROPOSED SOLUTION

After conducting extensive user research, we concluded that when giving away clothes, individuals choose between handing them directly to someone or donating them to organizations that collect these clothes and distribute them on their own. This is influenced by various factors as in some cases people tend to prefer that these clothes end up with someone they are acquainted to. It is undeniable that a lack of knowhow about organizations and the processes that they offer plays a role. This lack of awareness among people about organizations means people who want to donate have limited access to such organizations. As a result, they prefer the other methods of giving away or discharging the same clothes that they would have otherwise given to organizations. KapraEid is one such application which aims to bridge this gap by developing a platform which could provide an efficient communication between the organizations and donors, which could, in turn, help boost people's confidence in these organizations. The problems highlighted by the targeted user and the corresponding solutions that have been promoted through our application are as follows:

Providing description about the organization

To ensure the users are aware about the motive of the organization, the application provides various organizations that the user can choose from according to their preferences and needs. Since the targeted audience wanted the ability to choose between the organizations, this freedom has been provided to them. After logging into the application, the user can view the various organizations and the motives behind their donation. They could click the organization they want to know more about, and that would direct them towards the information, motives and pictures of the organizations. The organizations on the other hand can write and edit their descriptions, pictures so the users know more about them, how they could contact them, how they could help in their program and they could determine the organization that is the best fit for them. This realization would build the trust between both the parties and the organizations could also upload pictures that the users can view. Since building trust and encouraging awareness is the most important feature of the application, this would be the homepage of the application.

Indicating the past drives conducted by the organization through posts

The organizations that have already conducted several drives are aware about the donation procedure. However, the donors who would be donating for the first time to an organization would have trouble trusting the organization unless social proof is provided. This social proof would be provided through various drives that they have previously conducted and the results of those donation drives. Looking at images and posts from past donation drives, it would appeal to the donor's emotions and they would be encouraged to donate even more items as they would know their donation would make a difference. The organizations could add the donation drives they have conducted along with a short caption about the drive and the donors could then like the posts that have been uploaded by the organizations to support the organizations in their cause. Upon appreciation from other donors, the organizations would be more motivated to upload posts as evidence of the drives they had conducted which would in turn motivate those donors who have donated clothes to these clothing drives.

Ratings and reviews for the organization

While conducting the user research study, potential donors added that they were more likely to trust organizations when they heard about them from different individuals. Many of them also stated that they would check reviews on Facebook groups when choosing the organization, they wanted to donate to. Therefore, this feature would enable them to choose reliable organizations and build trust. To implement this in our application, the donors would be presented a rating/review pop up once they have donated their clothing items. They could then either rate the organization anonymously, based on the user requirements in the research phase, or add their name alongside the

rating and review. The review field would be optional to keep the design simplistic and easy to use. The organizations can view the ratings and reviews a donor has added to their page for a constructive feedback so they can improve their process and ensure they build trust with the user.

Donation drives

If an organization wants clothes for a certain area, they could post a new request. They would be required to enter the name, ending date and the description of the drive. The donation drive would then be posted on the donor's home screen. They donor would be displayed a list of all the drives that are being conducted and the place it is being carried out. The organizations name, the time remaining, and the clothes donated to the specific drive would be displayed on the home page. The donor would have the liberty to choose any drive they want, and they could be shown extra information about it. The donors would be satisfied to know where the clothes are going to and at the same time it would reduce the organizations hassle of telling every donor about their specific donation area. This would ensure the anonymity is preserved and the recipient's information is not being giving out to the public. Furthermore, the drives that are getting less attention would be placed in front so that it increases visibility, and they are given a higher priority. This would enable the new organizations to be in the limelight and help them establish themselves as well.

Donate now

People usually had clothes lying around but they don't want to go through the inconvenience of looking around the donation drives and choosing from them as some of them don't really care about which area the clothes are being donated. They want to get rid of the clothes as soon as possible. Furthermore, some donors have established a brand loyalty to an organization and do not want to donate to any other organization. If their specific organization has not posted about any donation drive, then they could go to the organizations profile and donate directly to them instead. This feature is put in place as some people find it very difficult to donate to all the organizations and want to be certain that their donations are helping the community.

Providing minimal description for the clothing items

Since the potential donors do not receive any material gains while donating clothes, the process should not be overly complicated. Keeping this in mind, the donation of clothing items is kept very simple for the targeted audience. The user needs to take a picture including all the clothes he/she will be donating to the organization at that time. The picture can either be taken through the devices camera or it could be chosen from the device's gallery. After uploading the picture, the user needs to specify the clothing items he/she will be donating and can chose to write an optional description about the clothes. The picture and the description could help the organization in understanding the condition and the type of clothes the user would be donating before the pickup. Since the organizations expressed concern over the usability of some of the clothes the users have donated previously, this feature is targeted towards ensuring that the right amount of information is asked from the user, so they do not get frustrated while donating to their items.

Indicating a step-by-step procedure for the donation

The convenience for the user can be further highlighted from the fact that the users can view a step-by-step donation process just like when they are going to go donate clothes themselves. Since the donation procedure contains a lot of steps and actions that need to be performed from the user's side, the tasks are divided into subtasks. Breaking tasks into different chunks and providing a feedback map for the donation procedure ensures there is minimum complexity for the user at one time. This enables the users to connect with the application and since the steps are logically connected to each other, the user can proceed easily through them. This ensures that first time users who do not have much time for the process of donation can connect with the application and identify the various tasks they need to perform for donation along with the time taken for the entire procedure.

Adding contactless pickup and Cashless payment

Keeping the pandemic in consideration, we want to minimize the contact for both the organization and the donor. Therefore, more facilities are offered to the user to ensure they do not find the process to be painstaking. If the user clicks on a contactless pickup, the donor could leave the items at their doorstep according to the time they have specified, and the rider would collect it and send a confirmation message to the potential donors. Moreover, in order to make the payment of the pickup service more convenient we allowed the user to pay through their credit card. They will have the option to save their credit card and use it for a later donation as well. This feature would be highly useful for people who opt for cashless pickup. They could pay through their credit card and leave their clothes outside their house. The rest of the pickup procedure would be handled by the organizations themselves.

Messaging

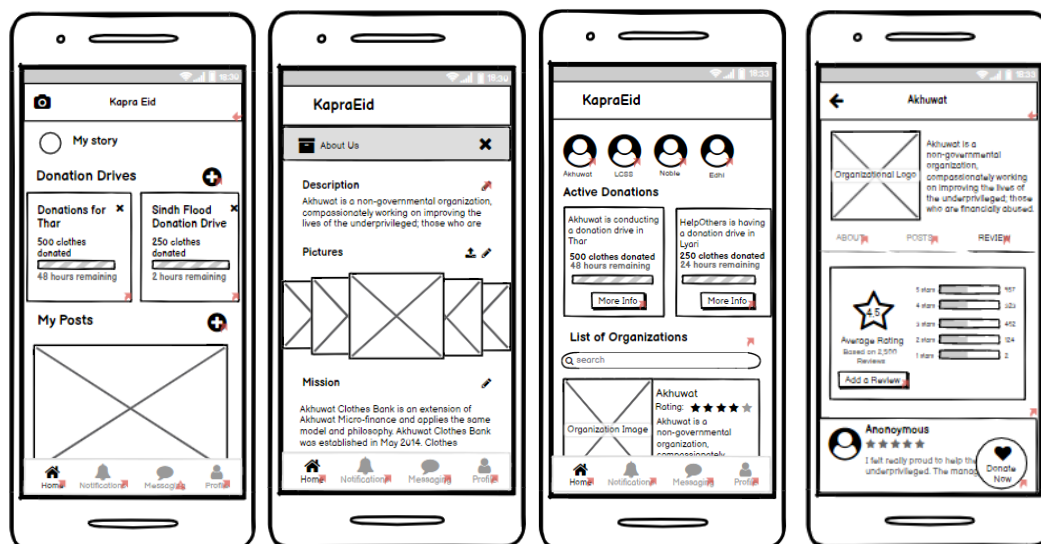
Having the ability to talk to an organization's representative promotes a feeling of security. The donors could contact the organization and can have any query that they want to be answered rapidly. Donors could learn more about the organization's donation procedures. They could also contact them if a specific rider has delayed the pickup of clothes or is not finding the house location. In case of any unforeseen issue the organization could also contact the donor and inform them about the delay.

Stories

If an organization is carrying out a donation drive or they want to tell the donors how they are utilizing their resources; they can add images and a text on the images. These images could be posted as stories on the donor's side of the application and would be visible to the donors for 24 hours. These stories promote a feeling of good will as the donors can view who these clothes have been donated to. The donors could follow up on the stories learn more about the organization. By being familiarized with the organizations procedures the donor would be encouraged to donate more to these organizations in future.

Complete history of the user's donations

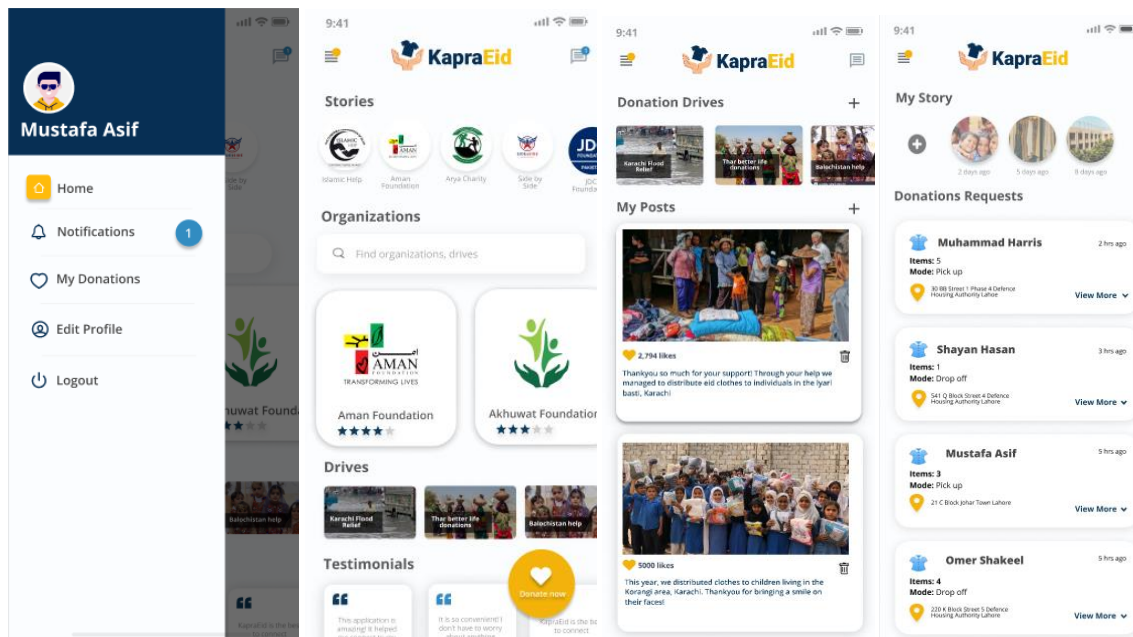
The user would want to know about the number of clothes they have donated, the drives they have contributed to, their current donation and their pending donations. All the activities would be displayed in their profile and they can easily navigate and check their history. The user would have complete access to the successful and pending donations that they have offered. These would be displayed in his/her profile. If the user has offered donation to the organization and it has not been picked up by the organizations, it would be included in the pending section of his profile. However, if the rider has picked up the clothes and the organization is in possession of the clothes then it would be marked as a successful donation. The organization can also benefit from the application if the application keeps the donations organized, highlighting the contributions that have been made so far and evaluating the progress that needs to be made so they could reach their targets. To help them monitor the progress they have made so far, and the time period that is left for the clothing donation drive to conclude, there is a progress bar along with the charts and graphs for each of the donation drive that the organizations are conducting. This ensures that everything is managed and organized in the application so the organization would know the success of the drive to help them improve based on the user feedback.



PROTOTYPE DEVELOPMENT

Our design theme consisted of a contrast between blue and yellow colour palettes for easy accessibility to our users. On the donor side, we added a list of organizations on the homepage, added a "donate now" option, provided feedback at every step of the donation process and added testimonials from the user about their experience. On the organization side, we kept the stories and donations section as they were essential in communicating organizations' activities to the donors. We removed the camera icon as many users did not understand its purpose during lofi

testing and instead added a plus sign under the stories so that the user could add stories. White screens were used in the interface for pop-ups and we did not use borders to make the interface easier on the eyes. Task bar was also redesigned according to importance of tasks and notifications were given a separate heading because of frequency of use. A few samples are attached below for reference.



EVALUATION

To check if our hi fi models met the goals established in our user research model, we conducted thorough usability testing with the primary aim to test the efficacy, efficiency, learnability, memorability and safety of our system. Our application was circulated among selected users to measure time on task, task completion, consistency of design, overall satisfaction and error recovery. A screening process was conducted to ensure a demographic variety and 15 donors as well as 5 organization representatives were selected to perform a set of distinct tasks depending on their role. A pre-test questionnaire was distributed which was followed by a zoom session, designed to be interactive and fun where the participant shared screen and navigated through the Figma prototype to perform the given tasks.

To analyze the findings that we had gathered over our testing phase, we evaluated a few aspects during the user testing. To understand user comfort, response, participation and awareness during the tasks he/she completed we collected both quantitative and qualitative data to evaluate the performance of the participants. We observed a few aspects of the usability ranging from the completion of the task assigned, their success rate, error rate and their subjective satisfaction during the testing. There were two types of data collected: process data which is the observations of what the users are thinking and doing and the bottom-line data, which is the summary of what happened during the testing. The data collected from the interviews helped in doing comparing results between different participants, and we ensured that there were minimum unexpected interferences while they carried out the tasks. The technique was used with combination of pre and post-test questionnaires which enabled us to interpret both quantitative and qualitative data. To conduct this, we identified several goals when we conducted our usability testing and identified a few things that were needed when we were designing the application. These goals are outlined as follows:

Time taken for users to complete the task

While we conducted our usability testing, the time taken for the user to complete a task was noted as the user was asked to perform different tasks. We noted the average time that the user required to complete a particular task which was used to derive the problems that were associated in the prototype. Some of these times were a consequence of the users switching between different parts of the application that they were a part of and was used to estimate if the application was user-friendly. The users would be expected to explore the application conveniently.

However, there were a few anomalies that we noticed in the process as well which have been explored in the findings section.

Success rate

We evaluated the success rate of a user when they performed a task. The rate was defined as the percentage of tasks that the user completed correctly. This quantitative data was collected from the testing while the user was testing the application and were a great method to collect and show the statistic. If the users were not able to complete a particular task, then they had a lower success rate for that task. The success rate is the bottom line of the usability testing and are easy to measure. If the user was not able to perform a task properly, then his/her success rate was the least as and the user can either complete the task or not.

Error rate

We evaluated the error rate when they performed a task. This was defined as the number of errors the user faced when they had been assigned a task. This quantitative data was collected as when the user performed the task, his/her behaviour was analysed and noted to see if they performed any errors when they performed a particular test. This is quantifiable and was different from success rate as a user who performs errors in the function of the application might not necessarily fail the task. For instance, if a user eventually ends up achieving the end goal of the application but performed several mistakes along the way would be given a good success rate but a lower error.

EVALUATION RESULTS

Donors

To assess how the users felt after using the app we provided them with a questionnaire. The results could then be used to improve the applications experience. During our testing we found out that 14 out of 16 users were satisfied with the aesthetics of the application while only 2 users were somewhat satisfied. No user was neutral, somewhat dissatisfied and dissatisfied with it. Where asked to rate their experience out of 5, 7 participants gave full rating, and 9 users gave a rating of 4/5. There were no participants who gave a rating of 3 or below as shown by figure 1. Figure 2 shows us satisfaction level of the users in terms of the flow and consistency of KapraEid. 11 out of 16 participants were completely satisfied while the rest were somewhat satisfied. We did not get any responses that suggested that they were neutral, somewhat dissatisfied or dissatisfied

Overall, how would you rate the experience when you are using the application?
16 responses

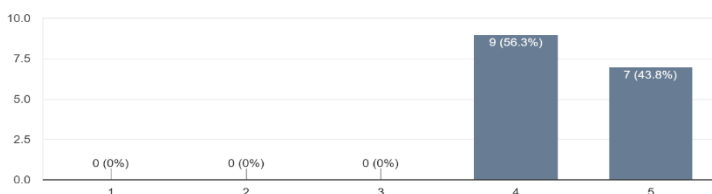


Figure 1

How frequently would you like to use this application?
16 responses

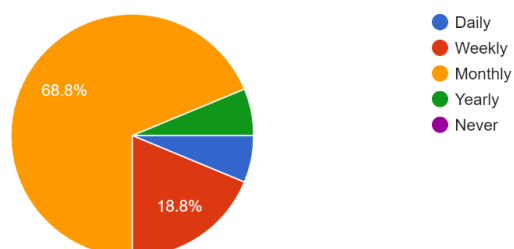


Figure 2

Furthermore, we were given interesting suggestions and we got both recommendations and the good things about the application. This was an important question to be asked right after the testing of the application because it would identify if there were any implications the participants had experienced during the testing procedure.

P-1 pointed out that the application was similar to other existing applications he/she had been using and therefore, found it easy to use. She pointed out a few suggestions like she explained the problems behind finding the notifications section. Therefore, this was something that needed work as they pointed out the notifications bar had to be scrolled through the navigation bar. Also, she pointed out that to go back to the application, she would have preferred if she would not have to click the homepage. These considerations would be dealt with in our developed application.

"I think it is a well-constructed app. Easy to use. It is very user friendly. It is like Facebook and other apps which we are used to using. If any person has not used it before and they try to use it, it would be very easy for them because it is built on a similar format. Just a couple of things that I would prefer are that the notification be on the main screen. Also, I would prefer that if I want to go to the homepage, I would not have to go to the side left toggle bar and click homepage. There should be an option on the main screen or on top that is always permanent, so it is easier for me to move to the home screen or view my notifications or messages. Looks like a professionally built application. Given the fact that LUMS students have made it, it is really well built."

P-3 highlighted a few issues in our application and wanted us to make them better. She talked about how it took her a lot of time to reach the chat box and that could be made more prominent and up-front to ensure that the user felt convenient

"It took me some time finding a few things, like the chat box so you can try to make the things more prominent"

P-5 pointed out how the interface was easy to go through and it built a relationship of trust which was the aim of our application

"I thought that the application would be busy but it wasn't. I liked the interface. It was really easy to donate. I would prefer to donate to this application if I am sure that the needy people get the clothes"

P-7 pointed out how the application was easy to donate to except one problem with the donation task. The font color might not be visible for her and other than it there was a comfortable testing ensured.

"Generally navigating through this application was quite easy. I had a bit of a problem in the donation task. But the reason for that was that the font was light and not that visible. I didn't see the Thar Foundation. Other than that, the interface was easy to use"

P-9 wished us the best for our application and was impressed by our application.

"I liked everything about this application, I feel like it will be super successful and will make it easier for people out there"

P-10 liked the application and felt the procedure was smooth except for the stories of the organization which she had skipped out during testing. The problem, he said lied in the alignment or logo of the organizations. We took this into consideration and decided that instead of having logos we could have miniature pictures of the stories. He also suggested that the stories feature could be added on the organizational page and wished that the support button for the stories was different.

"Except the part where I couldn't see the stories of the application since stories logo were the same as organizations or maybe the alignment. I got confused from then on and I wasn't sure whether I should click Aman Foundation organization or the story. Maybe you could access the story through the organizational panel. Apart from that it is a very easy to use process specially the pickup process. One thing that was confusing was by pressing the support button, I was not sure if I was going in the organization or the thar one. Rest of it was amazing and I enjoyed the process"

P-11 did not have many things to say about the application and liked the aesthetic design and colour of the application.

"Not really, the navigation was very straightforward, user friendly and easy to use. Had it been any difficulty for me I would have given recommendations. Most importantly the application is very appealing: in terms of color and aesthetics"

P-13 advised us to add titles to the posts in the organizational pages.

"Like I said before, title could be included in the posts. I really liked the donation process and think it was very well done. Generally, I think it is a very good experience"

P-14 liked the experience and found it very convenient. She only wanted us to remove the payment option but we argue, that if this was done there would be a cost that the NGO/Organization would have to pay for pickup which they might not be willing.

"It was a pretty smooth experience. I liked it. It was very convenient to use. It looks good to me. There should not be a payment option because no one wants to be charged to donate clothes."

P-15 had an interesting perspective and wanted it to have a similarity to Facebook. She liked a minimalistic white background and wanted minimal items on the homepages as well. She felt that the drives and testimonials both are unnecessary items for the application. However, we argue that while testimonials provide a review and builds up trust, the drives ensure that the users know about drives and the user can conveniently chose whatever they want on the homepage.

"I found the application very convenient and easy to use as this app is mostly like other easy to use apps. One thing you can do is you can link this app to WhatsApp just like you have done with Facebook. I like the white background because it makes other things easier to view. There was a lot of stuff on the home page. You don't need to put everything in the homepage. Stories and organizations would be fine but the drives and testimonials are unnecessary and one of them should be removed"

Organizations

To assess how the users felt after using the app, we provided them with a questionnaire the results of which could be used to improve the app. Our findings suggest that half of our user were completely satisfied with the app, while half were *somewhat* satisfied with it. Furthermore, our users were satisfied with our application as shown in figure 3 below. Most of the participants were also satisfied in terms of the flow and consistency of the application. One was completely satisfied while the other three were somewhat satisfied with it. Figure 4 shows that half of our users would use this application monthly while the rest would use it daily.

Overall, how would you rate the experience when you are using the application?

4 responses

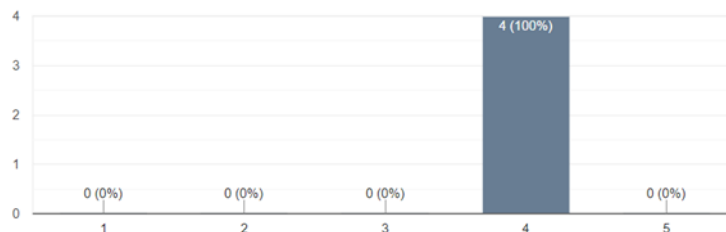


Figure 3

How frequently would you like to use this application?

4 responses

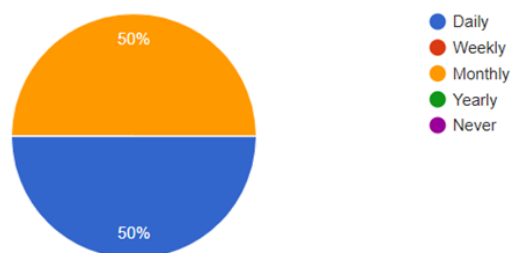


Figure 4

After conducting the test, we took little insights from the organizational representatives about our application and the tests that we had conducted. The findings are shown below:

P2 pointed out one main thing that she didn't like which was the accessibility of the donations button she couldn't find it when doing the task.

"It was very easy to use, was simple the only problem was I didn't know where to find the donations button which was underneath profile. You should consider making that more prominent. The rest of the app was very well done and didn't cause any confusion."

She also pointed out that there was no location mentioned when she proceeded to accept Harris's request and that going to Harris's profile would be a hassle for her and that we should consider connecting the two together. Other than that, she felt the rest of the app was very well done and didn't cause any other confusion.

These considerations would be dealt with in our developed application.

The rest if the participants had no complaints and said that they had no trouble navigating the app. They also remarked on its ease of use and convenience too

DISCUSSION AND LIMITATIONS

While conducting this study, we received several recommendations from the sample population of donors that could enhance the user experience in the future. One of the implicit recommendations that we got was to make notifications more prominent as many of our participants were confused about exploring them through the navigation bar. Secondly, the text color could also be made darker because some participants found it hard to understand some of the text because of the light grey color. We also received some explicit recommendations from our sampling population, which we will be implementing while developing our application. Several participants suggested changing the way the stories were accessed and the notifications. Although they agree that this is a bonus when discovering organizations, they feel that it puts too much information for the user to access. We were also asked to add a short tutorial of the application that we will add in the future. Some participants also wanted a summary statistic for the donations, which would help them with pending donations. However, this feature had already been implemented in the application with the pending and completed donations.

While testing the organization side of application prototype, we felt that most of the key features offered to the organization are in the profile icon in the drawer. Our solution for this would be to bring all of the options underneath "Profile" as the drawer's primary elements, reducing the number of steps required to access these options. Another efficient change could be to restructure the home screen when we develop the application. Messaging icon on the home screen was well-structured. A lot of times, the application will be used by the organizations to communicate with the user. Therefore, adding the icon a click away from the user seems logical. Another aspect we want to improve upon is the pending donations section. We could add useful elements to the pending donation cards, such as the time elapsed since the donor has made a request. This would help the organizations prioritize the requests made earlier, and this would help them enhance their donor's experience donating to this organization.

It is important to note that there were a few limitations encountered while conducting this study. The social distancing and lockdown measures during the COVID-19 pandemic prohibited us from conducting many interviews. As a result, we resorted to convenience sampling for gathering the bulk of our data. Even with the age requirement and a screening process to ensure that our data is spread out, our sample is classified to be a non-random selection and an unqualified volunteer sample. The survey's online nature also prohibited us from ensuring that our respondents believed in the selected answers, which gave rise to a small sampling error. While conducting our study, we were also careful only to discuss how our participants felt about our application and not the public. Furthermore, the participants also wanted to further explore the application but were limited to the screens that we had designed only.

CONCLUSION

Clothing donations are widely made throughout the nation as a ritual. In addition to the motivation of fulfilling human rights, there is also a religious motive that makes people in Pakistan donate clothes extensively. Most of the people prefer giving away to their help house or needy people nearby because of the lack of awareness, trust and inconvenience in the process of donating to charitable organizations. For this reason, a large chunk of less privileged people who do not have proximity to wealthy people are not able to benefit from this redistribution process.

KapraEid aspired to fulfil these gaps by bringing the charitable organizations and donors on the same platform and making the donation process convenient and transparent.

While we have tried to bridge the gap between our target groups by increasing communication, enabling convenience, raising awareness, and making the application easy to use, other problems could also be addressed through the application. Conducting the interviews emphasized the gaps in the donation process that remain untapped. Tracking of the donations can be introduced to make the procedure more transparent. Additionally, there are several other features that can help the organizations in collecting and sorting the donations. Organizations can be facilitated to forward the donations to the riders like food delivery applications do. More importantly, sizes and types of clothing can be separated by collecting the relevant data from the donors that would free the organizations from sorting them manually. We aim to explore more about these ideas by conducting another research and then incorporate the results in the final product to increase the user experience and usability of the application.

REFERENCES

- [1] Bianchi, C., & Birtwistle, G. (2010). Sell, give away, or donate: An exploratory study of fashion clothing disposal behaviour in two countries. *The International Review of Retail, Distribution and Consumer Research*, 20(3), 353-368. <https://doi.org/10.1080/09593969.2010.491213>
- [2] Louisa K  chler, Guido Hertel, and Meinald T. Thielsch. 2020. Are you willing to donate? relationship between perceived website design, trust and donation decisions online. In *Proceedings of the Conference on Mensch und Computer (MuC '20)*. Association for Computing Machinery, New York, NY, USA, 223–227. <https://doi.org/10.1145/3404983.3409993>
- [3] Brewster, Katherine & Hawley, Jana. (2014). What Consumers Do with Their Unwanted Clothing?
- [4] Hoang, N. (n.d.). Clothes Minded: An Analysis of the Effects of Donating Secondhand Clothing to Sub-Saharan Africa. Retrieved October 08, 2020, from https://scholarship.claremont.edu/scripps_theses/671/
- [5] Aydin, H. (2017). Used Clothing Disposal Behavior within the Scope of Sustainable Consumption. *International Journal of Academic Research in Economics and Management Sciences*, 6(3). <https://doi.org/10.6007/ijarems/v6-i3/3148>
- [6] Norum, P. (2017). Towards Sustainable Clothing Disposition: Exploring the Consumer Choice to Use Trash as a Disposal Option. *Sustainability*, 9(7), 1187. <https://doi.org/10.3390/su9071187>
- [7] Frazer, G. (2008). Used-Clothing Donations and Apparel Production in Africa. *The Economic Journal*, 118(532), 1764-1784. <https://doi.org/10.1111/j.1468-0297.2008.02190.x>
- [8] Yee, L. W., Hassan, S. H., & Ramayah, T. (2016). Sustainability and Philanthropic Awareness in Clothing Disposal Behavior Among Young Malaysian Consumers. *SAGE Open*, 6(1), 215824401562532. <https://doi.org/10.1177/2158244015625327>
- [9] Shim, S. (1978, January 01). Environmentalism and Consumers' Clothing Disposal Patterns: An Exploratory Study - Soyeon Shim, 1995. Retrieved October 08, 2020, from <https://journals.sagepub.com/doi/abs/10.1177/0887302X9501300105>
- [10] CONSUMERS' CLOTHING DISPOSAL BEHAVIOUR: WHERE DO WE STAND? (n.d.). Retrieved October 8, 2020, from https://repositorium.sdum.uminho.pt/bitstream/1822/60649/1/5A_0520.pdf
- [11] Bubna, J. M., & Norum, P. (2017). Male apparel disposal: case study of consignment versus donation. *Journal of Fashion Marketing and Management*, 21(2), 235–246. <https://doi.org/10.1108/JFMM-11-2016-0105>
- [12] Norum, P. S. (2015). Trash, Charity, and Secondhand Stores: An Empirical Analysis of Clothing Disposition. *Family and Consumer Sciences Research Journal*, 44(1), 21–36. <https://doi.org/10.1111/fcsr.12118>
- [13] Hsieh, G., Hudson, S. E., & Kraut, R. E. (2011). Donate for credibility. *Proceedings of the 2011 Annual Conference on Human Factors in Computing Systems - CHI '11*. <https://doi.org/10.1145/1978942.1979454>
- [14] Niinim  ki, Kirsi. (2010). Forming sustainable attachments to clothes. Proceedings of the 7th International Conference on Design and Emotion.

- [15] Hirscher, Anja & Valle-Noronha, Julia. (2014). Open Ends: On Chance and Attachment in Clothing Design.
- [16] Lindauer, M., Mayorga, M., Greene, J. D., Slovic, P., Västfjäll, D., & Singer, P. (2020). Comparing the Effect of Rational and Emotional Appeals on Donation Behavior. <https://doi.org/10.31234/osf.io/5wjuvv>
- [17] Shim, S. (1995). Environmentalism and Consumers' Clothing Disposal Patterns: An Exploratory Study. *Clothing and Textiles Research Journal*, 13(1), 38–48. <https://doi.org/10.1177/0887302X9501300105>
- [18] Ein-Gar, D., & Levontin, L. (2013). Giving from a distance: Putting the charitable organization at the center of the donation appeal. *Journal of Consumer Psychology*, 23(2), 197–211. <https://doi.org/10.1016/j.jcps.2012.09.002>
- [19] Ha-Brookshire, J. E., & Hodges, N. N. (2009). Socially Responsible Consumer Behavior Clothing and Textiles Research Journal, 27(3), 179–196. <https://doi.org/10.1177/0887302X08327199>
- [20] Morgan, L. R., & Birtwistle, G. (2009). An investigation of young fashion consumers' disposal habits. *International Journal of Consumer Studies*, 33(2), 190–198. <https://doi.org/10.1111/j.1470-6431.2009.00756.x>
- [21] Brewster, Katherine & Hawley, Jana. (2014). What Consumers Do with Their Unwanted Clothing?
- [22] Hanson, J.W. A proposed paradigm for consumer product disposition processes. *J. Consum. Aff.* 1980, 14, 49–67.
- [23] Laitala, K. (2014). Consumers' clothing disposal behaviour - a synthesis of research results. *International Journal of Consumer Studies*, 38(5), 444–457. <https://doi.org/10.1111/ijcs.12088>
- [24] Jacoby, J., Berning, C. K., Dietvorst, T. F., Jacoby, J., Beming, C. K., & Dietvorst, T. F. (2014). Disposition? 41(2), 22–28.
- [25] Young Lee, ji, Halter, H., Johnson, K. K. p., & ju, H. (2013). Investigating fashion disposition with young consumers. *Young Consumers*, 14(1), 67–78. <https://doi.org/10.1111/ijcs.12088>
- [19] Domina, T., & Koch, K. (2002).
- [26] Convenience and frequency of recycling: Implications for including textiles in curbside recycling programs. *Environment and Behavior*, 34(2), 216–238. <https://doi.org/10.1177/0013916502342004>
- [27] Norum, P. S. (2015). Trash, Charity, and Secondhand Stores: An Empirical Analysis of Clothing Disposition. *Family and Consumer Sciences Research Journal*, 44(1), 21–36. <https://doi.org/10.1111/fcsr.12118>
- [28] Weber, S., Lynes, J., & Young, S. B. (2017). Fashion interest as a driver for consumer textile waste management: reuse, recycle or disposal. *International Journal of Consumer Studies*, 41(2), 207–215. <https://doi.org/10.1111/ijcs.12328>
- [29] (Akhuwat Clothes Bank – World's largest interest free micro-finance organization. (n.d.). Retrieved October 12, 2020, from <https://akhuwat.org.pk/akhuwat-clothes-bank/>
- [30] Charitable Shop – Edhi Welfare Organization. (n.d.). Retrieved October 12, 2020, from <https://edhi.org/charitable-shop/>
- [31] Disappearing 'Walls of Kindness.' (2017, December 6). *Dunya Blog*. <http://blogs.dunyanews.tv/18798/>
- [32] Staff, P. (n.d.). *Call Uber to Collect Your Donations for SOS Schools*. Retrieved October 12, 2020, from <https://propakistani.pk/2016/06/10/call-uber-to-collect-your-donations-for-sos-schools/>