REDUCING STIGMATIZATION OF LGBT+ REFUGEES

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TEAM MEMBERS:
Daniel Alvarado
Alexandra DeHeer
Bryan Gass
Veronica Gurnawan

ADVISORS:
Professor Sarah Stanlick
Professor Katherine Foo

SPONSOR:
ORAM
Organization for Refugee, Asylum & Migration

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Refugees and asylum-seekers that leave due to sexual orientation or gender identity-related discrimination are an underrepresented minority within the global population of displaced migrants. Their very existence is under threat; due to this vulnerability, their migration has an added layer of complexity and risk of isolation. The goal of this project was to design a web application that connects LGBT+ identifying refugees and asylum-seekers with targeted asylum information, as well as developing a body of well-researched documentation to help in future iterations of the project. Through our research, we’ve identified that communication and security are the two biggest concerns when it comes to providing LGBT+ refugees and asylum-seekers with the assistance and support they need. Communication is an essential service for supporting marginalized populations, with security being the most important consideration when working with vulnerable people’s information on the internet. We decided a web application was the best way to solve the communication issues faced by relief agencies trying to assist this marginalized population. In order to inform our application design as well as provide further context into the usefulness of the app, we’ve surveyed and interviewed refugees/asylum-seekers as well as humanitarian workers respectively to get both essential perspectives. We’ve addressed their feedback by designing an application prototype that streamlined our sponsor’s asylum resources onto one platform, creating a form that allows users to filter and find relief agencies and services closest to them without storing their data, and developing a database to store the information of these resources as well as a tool that would aid our sponsor in adding more entries to the database. We hope this project will help support existing efforts to advocate for the LGBT+ refugee and asylum-seeking population, and provide a framework for streamlining communication and support strategies in the humanitarian sector.
Preface

Our project was initially slated to be completed in Berlin, Germany, in D-Term of the 2019-2020 school year. Unfortunately, 2020 will be remembered as the year of the COVID-19 pandemic and its long-term, lasting effects on the collective memories of society. This project was conducted remotely from the United States, with regular correspondence with our sponsor in Berlin, Germany. At the time of writing, all the teammates collaborating on this project were in Massachusetts, New Jersey and New York, which are three of the most affected states in the country by COVID-19. We hope this project stands as a testament to this crucial moment of adversity for Worcester Polytechnic Institute and their community.

Communication was a strong running theme throughout our project and has been one of the most important considerations since ID 2050 in C-Term, when it all began. It may seem fortuitous that, when COVID-19 arrived and nations across the world placed stay-at-home orders, our project would have even greater implications on communication and its importance for supporting other communities and the helpers that advocate for them. As we navigate the relationships between humanitarian workers and the LGBT+ refugee and asylum-seeking population for this project, we hope readers will keep in mind the unique, historical moment from when these efforts were conducted.

Introduction

LGBT+ rights are being threatened across the world. The freedom to present as one’s true self is not present in every country. As citizens of an informed global society who believe in the concept of universal human rights, it is imperative to bring into attention the plights of LGBT+ identifying individuals in perilous situations worldwide and support their efforts in achieving body autonomy and safety. The fight for LGBT+ rights continues across the world, with 35% of active United Nations member states criminalizing consensual same-sex acts. Over 31 UN member states place legal barriers to expression of sexual orientation and gender identity. Their rights are everyone’s rights, and the fight for any underprivileged group’s right to exist and thrive is a fight for all of humanity.

As evident from Fig. 1, the struggles for LGBT+ rights are witnessed worldwide, where four out of the six populated continents have countries that criminalize some aspect of LGBT+ identity. Two out of the six continents have at least half of the countries criminalize same-sex acts: Asia, where it
is illegal in exactly half of the countries, and Africa, where it is illegal in most countries. Many countries such as Libya do not have the proper language in legislation to describe sexual orientation or gender identity, describing LGBT+ members as “immoral” or “sexually deviant” in official court documents and written law\(^2\). While showing improvement from previous decades, progress on LGBT+ treatment worldwide is slow. Lives are at stake every second crucial legislative changes to prevent mistreatment and discrimination are held back.

The United Nations recognizes discrimination based on sexual orientation or gender identity as a legitimate claim to refugee and asylum status\(^3\). It is important to note the distinction between refugees and asylum-seekers: an asylum-seeker is a person who leaves their country due to persecution or threats to their human rights and seeks protection in another country, while a refugee is a person who has been forced to leave their country due to the same reasons and feel their government cannot protect them. Due to both groups of people seeking migration under similar pretenses, they will be referred together throughout this project. Applications sent for asylum based on LGBT+ discrimination have noted threats of serious violence including physical, psychological and sexual torture once suspected of LGBT+ status\(^4\). It is unsurprising that applying for refuge is a path that many LGBT+ individuals worldwide will take; however, it is not as simple as one would think.

Applying for refugee status is a difficult, bureaucratic process that requires an application, interview and review stage, as evident by the United States’ procedures\(^5\). For an individual seeking refugee status due to their sexual orientation or gender identity, the process is even more difficult. Due to LGBT+ status being either explicitly criminalized and/or heavily discriminated against in impacted nations, individuals rarely have much support or access to resources in their communities. How could one ask for help if doing so would potentially “out” them to their families, peers and communities, which may add more layers of danger to their journeys? The next step would be trying to find support in relief agencies that specialize in their unique situations.

Unfortunately, activism for LGBT+ issues is illegal in most countries in the Middle East and Africa, where the two largest refugee camps in the world exist\(^6\). This means that relief agencies specifying in LGBT+ assistance cannot have local offices in those regions\(^2\). Thus, a serious problem arises—how can relief agencies communicate crucial resources and aid to struggling potential LGBT+ refugees when they are isolated from the rest of their communities?

The project goal was to design an application that helps LGBT+ refugees connect with much-needed asylum resources as well as collect a body of research and documentation that would support future iterations of this project. Our design is primarily informed by feedback received from surveying and interviewing refugees and humanitarian workers, which is combined by further research into the technical needs of the application. This project sought to provide a solution to the communication problem faced by LGBT+ refugees located in countries where LGBT+ rights and issues, including activism, are threatened.

### Background

#### The Legal Criminalization of LGBT+ Existence

In 2016, the International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA) concluded that over seventy-three countries still criminalize or persecute same-sex relations. For example, while rarely implemented, the death penalty is legally permissible for homosexual acts (defined loosely as “acts against nature with an individual of [his] sex”) in Mauritania and Brunei Darussalam. Likewise in Uganda, in 2009 lawmakers approved a law imposing the death penalty for homosexual acts; while this was later shot down by Ugandan courts, Uganda has since repeatedly tried to enter anti-LGBT+ laws into legislation, with the most recent being the 2014 Anti-Homosexuality Act\(^7\). These are examples of some of the explicit legislation policing sexual orientation that exists in the world.

In addition to explicit laws against non-heterosexuality, vaguely expressed “morality laws” are used by law enforcement to enforce “correct” sexuality in the public. Without explicitly defining what makes an action “indecent”, the law can
then be used against people they deem engaging in non-heterosexual behavior. Egypt is one example of a country that uses morality laws: an “anti-debauchery” law that was initially signed into legislation in 1951 for the purpose of criminalizing sex work has since been used by authorities to discriminate against suspected same-sex behavior. Other forms of law enforcement abuse have been noted in Lebanon, Kuwait, Iraq and other countries, where accounts of physical violence, social-emotional torture, and community shunning are common.

Discrimination, whether explicit or implicit, also targets the gender-nonconforming community. For example, Kuwait signed a law in 2007 that specifically warns against “imitating the opposite sex”, with Oman punishing “any man dressed in women’s clothing”. Likewise, in Mexico, the city of Tecate changed their Police and Good Governance Code in 2002 to forbid “men dressed as women in public spaces”. These morality laws can then be used to invalidate and endanger the transgender community. From an explicit legislation perspective, there also exists no legal provisions in many nations for people to change their gender on official government documents, nor allow for the categorization of a gender other than “male” or “female”. This forces gender-nonconforming individuals into gender spaces they do not belong in, which carries risks of psychological consequences or threats to their personal safety.

### Societal Responses to LGBT+ Violence and Discrimination in Impacted Nations

LGBT+ individuals can experience a myriad of discrimination due to a combination of hostile attitudes towards “outsiders” with the LGBT+ population and existing discriminatory views that persist despite legislative gains. Arab Barometer, a research network that does studies in the Middle East, found low acceptance of homosexuality across the Middle East, with Algeria being the most tolerant country at 26% (people deeming it acceptable). Similarly, a study by the Transgender Law Center at Cornell University found that, despite the successful passing of legal LGBT+ protections in Mexico, backlash from certain sections of the Mexican community actually increased violence towards transgendered people. According to Fig. 3, murders targeting transgendered people for their identity remained under fifty between 2008 and 2013 until the passing of Mexico’s same-sex marriage law, at which point there was a spike. This demonstrates how discrimination against the LGBT+ community can persist in society despite the existing legislation.
The prevalence of discriminatory views in countries where refugees are resettled to is a very dangerous reality. Refugees escaping due to LGBT+ discrimination find themselves resettled in countries that also have issues with bigotry and homophobia. For example, the United States attracts the most refugees and asylum-seekers than any other country in the world. While 60% of responders polled in the United States supported homosexuality, a sizable 33% rejected it. If this is an accurate model of the views on homosexuality in the United States, that means over a hundred million people in the country reject its inclusion into society, potentially endangering the scores of refugees and asylum-seekers resettling in the nation due to their LGBT+ status. Successes in bringing about legal protections and real, positive change to the community does not mean existing discriminatory views go away overnight. It is important to note that discrimination, violence, and inequality exist even in countries that have legally recognized certain LGBT+ issues; as long as there is a need to defend LGBT+ identities anywhere in the world, there will be risks for every individual regardless of where they are located.

An Overview on the Asylum Process

The process for applying for asylum can be challenging to anyone going through it but can be especially hard for those in the LGBT+ community because they often are faced with discriminatory interviews, a lack of access to available resources and uneducated asylum officials. Asylum-seekers are defined by the UNHCR as “individuals who have sought international protection and whose claims for refugee status have not yet been determined, irrespective of when they may have been lodged.”

As of the end of 2018, there are 3,503,284 asylum seekers out of 74.79 million displaced people throughout the world. The asylum process can be broken down into three main steps: the application, the interview, and the decision. These steps can be complex and overwhelming for asylum-seekers due to language barriers and the invasive nature of the process.

As an extra layer of complication, LGBT+ identifying asylum-seekers must also having to meet the unreasonable expectation of “proving” their LGBT+ status. A man in the UK was rejected asylum because he did not “act effeminate enough”, which was a subjective decision made by the judge. Prior to 2014, it was common in Europe for LGBT+ asylum seekers to be asked questions about sexual activities and given phallometry tests or “‘arousal tests”. These tests were to determine how aroused the asylum seeker was by what they were shown in order to prove that they were gay. These methods that were used had negative mental health effects on tested individuals and were considered degrading by the greater community to experience. In 2014, the European Court of Justice ruled on a ban of such tests, saying that LGBT+ asylum seekers should not have to prove that they are of LGBT+ status through describing sexual activities. Even though this form of interrogation is now illegal, emerging ways on how to measure a person’s LGBT+ status continue to prevail in the asylum system.

LGBT+ identifying refugees and asylum-seekers also have to go through this extensive, sometimes discriminatory process while potentially on their own. Due to the societal and legislative

Fig. 3: Transphobic murders by year in Mexico, Transgender Law Center.
discriminatory views outlined in the previous sections, refugees and asylum-seekers oftentimes lack the support network that other asylum-seekers may have, such as support from their families, communities and workplaces. Due to this, they are often isolated from resources and require greater support, especially given how even more difficult the asylum process is for them. Therefore, there is a great need for streamlined communication services to properly inform refugees and asylum-seekers of the obstacles ahead along with providing them with better access to asylum and refugee information.

Advocacy Groups and Communication Technologies

LGBT+ advocacy groups are some of the first reliable resources that vulnerable LGBT+ people look for, however their existence in these hostile countries are frequently challenged. In countries where freedom of expression is restricted on all LGBT+ issues and both explicit and implicit laws police the existence of differing sexual orientations and gender identities, LGBT+ advocacy is also illegal. Prohibitions on freedom of expression as well as personal threats to the safety of the advocates themselves makes it difficult to establish communities in certain Middle-Eastern and West-African countries, where some of the largest refugee camps exist. Establishing a community is the first crucial step to supplying vulnerable individuals with the resources they need, which is made difficult by law enforcement crackdowns, media censors and more. Georges Azzi, the executive director of the Arab Foundation for Freedoms and Equality, stated that his organization would often have to evacuate activists in the country due to the authorities cracking down on expression of LGBT+ rights and issues. Unless advocates can connect with the vulnerable population of LGBT+ folk, it will continue to be difficult for people to speak out under threat of violence, discrimination and certain harm. Due to the lack of support and the threat of their communities posing as more obstacles if outed, LGBT+ folk face a particularly difficult process when attempting to apply for asylum.

One major complication for relief agencies is the ability to effectively communicate with the people they are trying to help. For organizations that work with LGBT+ people in hostile countries, it is especially hard to reach people in every region because LGBT+ activism and advocacy itself is usually illegal as well, leading to a lack of direct representation in key affected areas. In areas where LGBT+ issues are criminalized or culturally unacceptable, advocates for such issues are similarly stigmatized, leading to key organizations like ORAM not being able to perform outreach services from a local outpost. This means a lot of key interactions between potential refugees and relief organizations rely on the internet, which allows for communication among people regardless of distance.
and can be used as a hub for important stored data. Communicating with asylum-seekers and potential refugees is incredibly difficult. The UNHCR “partnered with Translators Without Borders in order to translate the most relevant information into Farsi, Pashto and Arabic, and to broadcast it over a loudspeaker system that had been set up at what was once the main entry point from Greece to the former Yugoslav Republic of Macedonia”\textsuperscript{14}. While broadcasting content is a good attempt at communicating with the general asylum-seeking population, there is an opportunity here to reach people, specifically LGBT+ identifying people, in a more personalized and intentional way. Thus, LGBT+ relief agencies striving to connect with vulnerable populations will have to do so in a way that encourages some level of confidentiality while also making it accessible.

**Security: Protecting Vulnerable People**

In an age where 53.6% of the world has internet access (along with 86.6% of developed countries), the internet becomes a promising way for millions of vulnerable individuals everywhere to connect with almost anyone worldwide\textsuperscript{15}. However, as anyone could have access to the internet, that means the risks of navigating it are exponentially higher. For those who have a marginalized identity or are in a vulnerable position, such as an LGBT+ refugee, there are increased concerns such as doxxing, exploitation, and information security.

“Doxxing” is a form of online attack where an individual’s private, identifying information is leaked onto the internet, rendering them completely vulnerable to the online viewers who may be watching. While doxing is a crime committed on the internet, its consequences can translate devastatingly to the physical world. In 2019, a Russian LGBT+ activist by the name of Yelena Grigoryeva was murdered after her personal information was posted on a website designed to expose and hunt down LGBT+ activists\textsuperscript{15}. This underscores the very dangerous consequences of being doxxed, especially with regards to information that could be used to discriminate against you.

Communications between people on the internet are not necessarily private; if these conversations are ever compromised, people’s identities could be revealed to the public and manipulated against them. Thus, security concerns arise when attempting to facilitate communication between LGBT+ refugees/asylum-seekers and relief agencies, as sensitive information about their identity could be exchanged on the internet, where it is reliant on the security measures of that platform.
While social media and email appear as obvious solutions to the communication issue, relief agencies would be completely dependent on the security practices of the companies that own those platforms to secure their communications. Take WhatsApp, a popular communication platform used by many relief agencies to converse with certain international populations. In 2019, Facebook (owner of Whatsapp) announced there was a massive problem with the security of the application that led to a spyware company being able to insert surveillance software on users’ devices\(^{16}\). Whatsapp has been heralded in many communities as being one of the most secure communication platforms in the world and is a favorite in many markets outside of the United States. Therefore, people who use these platforms must acknowledge the risk of relying on other platforms and services for security. It is vital relief agencies can reach individuals heavily isolated across the world; however, there must also be comparable protections held in place to ensure their identity is not revealed to more abusers.

Fig. 6: Modern-day social media platforms. *Wikimedia Commons.*
Methodology and Results

The goal of this project was to research the unique obstacles and communication issues facing LGBT+ refugees and asylum-seekers. This would then be used to inform the development of an application design that seeks to connect refugees and asylum-seekers with crucial migration resources. We were tasked by the Organization of Refuge, Asylum and Migration (ORAM) to understand the critical communication issues and improve the efficiency of a branch of their communication operations.

Fig. 7: The project objectives and how we accomplished them.

Objective 1: Understand the challenges and opportunities for resettlement of LGBT+ Refugees and their access to support and resources.

The purpose of this objective was to understand humanitarian workers’ needs in their fight to support the LGBT+ refugee/asylee community. The insights gathered gave us a benchmark on how to utilize already existing strategies while giving us the expert perspective on how to identify and approach issues experienced by refugees and asylum-seekers, which we examine in Objective 2. This was achieved for this objective in two ways: by conducting surveys and interviews with humanitarian workers internationally, and by conducting weekly design reviews with ORAM throughout the project.
The surveys aimed to gauge what resources the humanitarian workers needed, their experience with existing communication and outreach strategies, and the meaningfulness of the application. The survey was designed and distributed to maximize the potential of connecting with possible interviewees. It was developed using the survey platform Qualtrics and distributed through email, with facilitation from Professor Sarah Stanlick and ORAM. Those contacted include officials from the state of Pennsylvania, Lehigh Valley Refugee Community, and other LGBT+ advocates and community members. Our survey was filled out by 20 people from a variety of different backgrounds including 54.45% who identify as being part of the LGBT+ community. Those who filled out the survey also had varying areas of expertise, with most of them specializing in LGBT+ advocacy and refugee/asylum services. In order to gather information about how they engage with these communities, the survey asked what their preferred methods of communication were, what difficulties they have encountered when trying to reach these refugees and how they would prioritize features in the interest of their communities. These questions were also framed with the COVID-19 pandemic in mind; those surveyed were encouraged to speak to their experience, if any, navigating remote advocacy work.

Surveyed humanitarian workers were also given the option of sitting down with the team in interviews; these interviews were used to develop a better perspective on the unique insights and considerations faced by advocates in the field. We wanted to conduct interviews because even though the surveys provided us with more awareness, the interviews provide us with deeper insight from firsthand experience. Interviews questions were like those on the survey, but the interview format allows for more open-ended questions and discussion. Interviews were conducted over the video conference application Zoom with two members of the project team present. One member led the interview and discussion while the other took notes and recorded the interview audio. We were able to conduct one interview.

In addition to conducting surveys and interviews, our team hosted weekly design reviews with ORAM that would call upon their firsthand knowledge and experience with supporting the LGBT+ refugee and asylum-seeking community. These reviews culminated in developing insights into the day-to-day lives of their advocates as well as seeking guidance from ORAM to identify their strongest needs and considerations in communicating with marginalized populations. This means that not only were we sampling humanitarian workers from across the world to gauge the common needs and goals of advocates, but we were also in regular contact with our sponsor, a fellow relief agency, to continually inform and direct our research and field work efforts.

![Humanitarian workers providing aid for displaced refugees and asylum-seekers in Kenya. Picture provided by ORAM.](image-url)
The surveys and interviews raised key insights into the relationship between relief agencies and the populations they seek to support, as well as unique obstacles faced by humanitarian workers in their efforts to communicate with said populations. Most of our responses were from people who either worked in LGBT+ advocacy or in refuge/asylum services (7 responses each), with 3 who also indicated working in humanitarian aid, 1 in mental health support and 2 in another related field. Specifically, we identified three key obstacles that humanitarian workers face in communicating with LGBT+ refugees and asylum-seekers: unique poverty and literacy-related issues, language barrier problems and a need for a streamlined communication strategy. Secondly, surveyed humanitarian workers spoke of a need to have a consolidated, secure platform to communicate with people and more effective strategies to better connect this population with necessary resources. They also made suggestions that further expanded on this relationship and provided more insight into the real-life considerations of advocating for LGBT+ refugees and asylum-seekers.

Our surveys and interviews gave us unique insights into lives and obstacles of refugees and asylum-seekers, especially concerning poverty and literacy. First, broader conditions of economic impoverishment shape their clients’ ability to access resources. One research participant commented, “Internet can be scarce with various populations due to poverty.” This would affect their clients’ communication styles and make regular check-ins difficult. Another participant described the difficulty of staying in touch with clients who frequently changed phone numbers. This reflects the migratory patterns of people affected by poverty, who need to keep moving in order to find work and housing opportunities in addition to going through the asylum process. Second, language literacy significantly affects the ability for clients to access resources. Multiple research participants spoke of clients who were illiterate even in their own language. This supports a greater need for interpretation that can also handle unique vernacular languages. During an interview with an official from the State Refugee Resettlement Program in Pennsylvania, they highlighted programs to host online ESL classes in order to ensure that refugees and asylum-seekers still have access to crucial language skill-sharing and education. These unique, broad issues underline a need to develop solutions that address the poverty and literacy concerns of the LGBT+ refugee and asylum-seeking community.

Insights from Humanitarian Workers

"Internet can be scarce with various populations due to poverty. People may not have phones or laptops. Many don’t speak English. Word of mouth in the community is highly valued but information can be wrong.”
- A Humanitarian Technical Advisor

"We often had to go through resources in person to be sure the information was understood. In a case like this, I would be worried that terms like "LGBTQ+" or "asylum" maybe not be in their regular vernacular, even if they identify with these terms. They may be interested in LGBTQ+ resources, but if they are not familiar with the term, they will likely set the information aside without asking for clarification.”
- A Humanitarian Worker

"It is hard to stay in touch with clients who have phone numbers that are constantly changing. Some clients are illiterate in their own language which poses new challenges to communication and other times it is hard to find an interpreter that speaks their language. Phone interpretation is not always reliable but using in person interpretation can be hard for niche languages where the interpreters are members of the same community as the client and the client worries that the interpreter will share what they are communicating with others. This can be particularly challenging when discussing sensitive topics.
- A Project Coordinator in Refugee/Asylum Services

"We heavily use volunteer interpreters. The majority of clients are limited English speakers.”
- Former Resettlement Agency Site Director

Fig. 9: Notable responses from surveyed humanitarian workers.
One of the main problems with service delivery centered around language barrier issues faced by humanitarian workers in communicating with the LGBT+ refugee and asylum-seeking population. After asking those surveyed what they found most difficult in reaching their intended audience, we found that language barriers made up 33.3%, trouble reaching people through existing channels made up 22.2% and accessibility issues were 18.5% of the total responses (see Figure 10). As noted in Figure 9, a former resettlement agency site director mentioned, “We heavily use volunteer interpreters. The majority of clients are limited English speakers.” The issue of language barriers was further corroborated during an interview with an official with the State Refugee Resettlement Program in Pennsylvania, who emphasized the need for ESL courses and other language resources. During that interview, the official outlined the need for translator services when connecting refugees with resources; it is particularly vital when assisting resettlement efforts for refugees that do not speak the language of their new location.

In addition to language barriers, surveyed humanitarian workers indicated a use of multiple communication strategies and preferred platforms when reaching out to their clients. The survey results revealed they most relied upon email (30%), social media (24%), and phone calls (20%) were the biggest forms of communication that are used by humanitarian workers (see Figure 11). Their reliance on use of the internet affirmed that a platform utilizing the internet and mobile services would best aid humanitarian workers. One of the main obstacles outlined in Figure 10 illustrated a need for streamlining the use of communication platforms. For instance, one person commented, “Phone interpretation is not always reliable but using in-person interpretation can be hard for niche languages….” This shows a need to use a communication platform that can provide the interpretive benefits a phone-call could, but without the potential bias and pressures of one.

Thus, the need to have better ways to bridge the language barrier, provide unique solutions to get around the accessibility issue and develop a streamlined communication process were indicated as the top considerations that the humanitarian workers had when directly supporting the LGBT+ refugee and asylum-seeking population. This was further corroborated by ORAM, who directed us to consider adding multiple language translation features to our design, provided insight into potential security issues over accessibility and gave us firsthand experience into their communication strategies and process. Having established the humanitarian perspective, we then examined the user experience needs of the target population itself: LGBT+ refugees and asylum-seekers.
Objective 2: Streamline communication channels for vulnerable LGBT+ refugees/asylum seekers to get resources while staying protected.

The purpose of this objective was to understand how to streamline communication between relief agencies and LGBT+ refugees/asylum-seekers and determine the different ways this could be accomplished. Based on the previously identified communication issues, we wanted to address them by developing use cases of actual potential users, which we did by creating a survey to gain feedback. In this case, the potential users are LGBT+ refugees as well as those who are seeking asylum. Our survey incorporated specific questions on user experience and accessibility to gauge potential security concerns as well as usability issues from the potential users. The results show that respondents considered the list of local relief agencies was deemed the most important feature (17%). A brief explanation of the asylum process was regarded by 14% as the second most important feature and 17% thought that the map of friendly LGBT+ spaces was the third most important (see Figure 12). These features were proposed by ORAM and used as a basis for the application design.

Akin to the humanitarian workers’ survey, we developed and administered a survey using the online platform Qualtrics. This survey was designed to measure the user experience requirements as well as collect insight into the security and accessibility concerns faced by refugees going through the migration process. Questions were framed in non-technical, indirect terms to connect with the broad user experiences and perspectives; for example, gauging security-related concerns led to asking questions about device accessibility and ownership, which provided more insight than broadly asking, “what are your security concerns?”

We sent out the survey to a refugee camp in Tijuana, Mexico, as well as members of a camp in Kenya, through contacts affiliated with ORAM. The survey asks them how often they have access to the internet, what devices they use to take the survey, how useful each feature of our app is to them, and which out of the three proposed features are the most important to them. We surveyed 21 people, with 96% of them considering themselves a part of the LGBT+ community. Due to the language barrier concerns outlined in our conversations with...
humanitarian workers, the survey given to the Tijuana refugees was translated into Spanish by Daniel Alvarado and facilitated by our sponsor. The insight gained from the refugee camps then informed our understanding of how to amend previously identified communication problems and create a usable, user-friendly design that maximizes long-term use of the application.

Fig. 12: Chart displaying responses from survey question that asks humanitarian workers to rank, by priority, the three proposed features of our application design.

Fig. 13: LGBT+ refugees/asylum-seekers from Tijuana, Mexico. Picture provided by ORAM.
Our survey findings suggested prevalent accessibility problems along with feedback to planned application features. For the first part of our survey we asked how often they had internet access, what device were they taking the survey on, and whether they owed said device. When asked about their access to the internet about 90% of the responses indicated that they either have or sometimes have reliable internet access (see Figure 14). Eighty six percent reported that they took the survey on a smartphone (see Figure 15). Seventy percent said that they owned their device (see Figure 16). However, since almost half (47.6%) of those surveyed stated not always having reliable internet, this indicated potential security concerns: for instance, it can be inferred that an application that can store information offline would be beneficial for them. However, a sizable minority (28.5%) indicated not owning their device, which means any storing of personal information, without proper authorization, could be compromised due to multiple users having access to a single device. It is important to take note of accessibility issues because they can translate to potential security concerns and user experience issues.

The second part of the survey focused on the features themselves and was designed to gauge the meaningfulness of the proposed features regarding the average refugee and asylum-seeker’s user experience. When asked how useful a list of local relief agencies would be, 50% thought it to be extremely useful (see Figure 17). When asked how useful an explanation of the asylum process would be, 52% thought it to be extremely useful (see figure Figure 18). When asked how useful a map of friendly LGBT+ spaces would be, 55% thought it to be extremely useful (see Figure 19). After we asked them to rank which feature they thought to be the most important. The results of this question showed us that 21% of people thought a list of relief agencies and a brief explanation of the asylum process were the most important features. When asked what their second highest priority is, 10% chose a list of local relief agencies, and 12% chose the map of friendly LGBT+ spaces as their third priority (see Figure 20). Due to most responses indicating the list of local relief agencies and the asylum process explanation as the two most important features, we determined that there was a need to compile and direct these resources to clients. Our results from the surveys allowed us to focus on what the community needed out of an application and for us to tailor it to their needs. When we compare the results from both humanitarian workers and refugees we can see that both communities needed a space where a list of local relief agencies and a brief explanation of the asylum process could be accessible easily.
Data from our three main proposed features:

Fig. 17: **Usefulness of a List of Local Relief Agencies.** The ratio of responses over the usefulness of proposed app feature, “list of local relief agencies.”

Fig. 18: **Usefulness of an Explanation of the Asylum Process.** The ratio of responses over the usefulness of proposed app feature, “an explanation of the asylum process.”

Fig. 19: **Usefulness of a Map of LGBT+ Friendly Spaces.** The ratio of responses over the usefulness of proposed app feature, “map of LGBT+ friendly spaces.”
Objective 3: Make ORAM’s Help-Line operations more efficient.

The purpose of this objective was to take the insights gathered for the first two objectives and translate that into the design of our application solution. This is to help improve ORAM’s current communication process as well as to design a model for ideal outreach and communication platforms that would better support relief agencies. The initial design of the application was influenced by the weekly design reviews conducted with ORAM as well as outside research, but the design of the app was continually being informed by the insights we gathered from our surveys and interviews with humanitarian workers and potential users (refugees and asylum-seekers). As we received fieldwork feedback and continued to hold design reviews with ORAM, we would update the design to account for these new considerations.

The application development took place over the course of five weeks, with each week being considered a “sprint” as per the Scrum method, which is a project management system commonly used in software development and business production. A development sprint would take place for three to four days depending on the speed of feature development, but by day four we moved into the bug testing phase regardless of any unfinished work. Any unfinished work would then be pushed to the following week.

At the end of each sprint we tested the new features of the application to make sure they worked as intended. We spent this time polishing the application before moving on to the planning phase for the following week. All members of the team ran through all parts of the application multiple times trying to find any bugs or poor designs. This process took a portion of our last day of development and we attempted to fix any problems before moving on to our design review. If any problems persisted, we took the feature out for this iteration and moved it into the next week.

On the last day of each iteration we held a meeting with ORAM and all members of the team. We prepared a presentation about the progress made that week of development and prepared a live demonstration of the newest version of the application. The presentation and live demonstration took ten minutes and afterwards ORAM gave feedback on the application. Their feedback was recorded, and this information was used during the following weeks development.
After deciding on the application, it became clear with our Objective 2 findings that security through accessibility issues was the most important insight when designing our prototype. During the design and development process, we had three main considerations: first, to develop a base, user-friendly, executable prototype that made ORAM’s previous equivalent more efficient and demonstrate a basic application of the design; second, to address and streamline the communication issues outlined by the humanitarian workers and reconcile it with the user experience needs of the target users; third, to design an application that could achieve all of that while adhering to the safety and security considerations of this marginalized population. The final version of the web application of ORAM’s Help-Line has 2 main features: streamlining ORAM’s previous process into a form and database experience (the first Help-Line), and a database tool that would be used to automatically organize and transfer resources from ORAM’s spreadsheet into an actual database.

For the first consideration, we developed a prototype of one of the main features in the overall application design that would improve the previous Help-Line process that ORAM already had. The previous Help-Line consisted of an ORAM employee reading an email sent by a refugee or asylum-seeker seeking resources and then responding by going through a spreadsheet of listed relief agencies and manually pasting those resources in a response email. This could prove to be a tedious and time-intensive task that is hampered by possible human error or time limitations. The current Help-Line automated this process through the creation of a form that allows users to filter resources based on their responses, eliminating the need of an email exchange that could take potentially days to fulfill. As a companion piece, we also developed a database tool that would be used to load resources from ORAM’s spreadsheet database into a functional database that acts as the backend for the tool. This would allow ORAM to add and change entries to the database through editing their own spreadsheet.

For the second consideration, we took the insights gathered in the first two objectives and implemented them into the design of the application and the prototype. The fieldwork we did supported our research into the initial base features as well as expanded our understanding of the needs and knowledge of experts in the advocacy field. It also provided us user experience insight from the perspective of refugees and asylum-seekers. Lastly,
our base design was influenced by the weekly design reviews, where changes to our user interface happened on the recommendation of our sponsor and from the fieldwork gathered for that week.

The development of the database tool began with the choice of the programming language. The choice of python was decided upon because of its ease and large library set that can be used. However, during the earlier process of figuring out the logic of the database tool consideration into the language C was considered to build more precise functions that would go into building the tool. This library enabled functionality that would have taken additional weeks to build allowing more straight forward logic to be implemented. This implementation could now disregard things like accessing cells of an excel sheet and could now focus on looking at the contents of specific cells, the core of the problem that was to be tackled.

ORAM’s use of the excel spreadsheet for the source of inputting information was an excellent medium between ORAM and the web application. The database tool can now take the old system ORAM used for inputting information into their excel file and now update the firebase database where the web application can pull from. This not only allows for all of ORAM’s resources to now be accessible online in convenient formatting but also allows ORAM to add, remove and update information well after our team has left the project. This is invaluable for general user groups to maintain a website.

To conclude, it is evident from our initial background research and further supported by our communications with humanitarian workers and refugee/asylees that security is a major consideration. Storing personal information will always carry some risk of being compromised if said information is saved somewhere on the internet. We have opted to not store any personal or identifying information in our prototype. Instead, the information that is being hosted on the website comes from ORAM’s excel spreadsheet database of resources, which they can continue to use due to the database tool.

Fig. 22: Our Help-Line prototype, desktop version.

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Fig. 23: Our Help-Line prototype, mobile version.
Fig. 24: The database tool will pull from an Excel spreadsheet and update the Firebase database. This is what an entry looks like in Firebase.

Fig. 25: Recommendations on where to go from here.

**Recommendations**

For those interested in continuing this project:
- We suggest replacing the current Database Tool with a web portal that either interfaces with Firebase or replace the current database system with a more efficient way of updating the web application.
- Expanding on the proposed features we had planned for, but could not execute within the scope of our IQP (i.e. the map, forums, etc.)
- Implement social media features or other community-building aspects. This would require a considerable prioritization of security due to the high risks involved with saving personal information on the internet.
- Creating data analysis/data science tools that would further aid ORAM in understanding the people that use the application.

For those interested in learning more about the relationship between humanitarian workers and the populations they serve:
- Understand the existing efforts by advocates to support these communities. These are experts in the field who dedicate their lives and careers to supporting marginalized populations.
Conclusion

Before we even began designing our application to assist part of ORAM’s outreach procedures, it became evident that we needed to develop a framework for how to approach application development within the context of the social sciences. Throughout this process, we found key insights with communication on behalf of both the humanitarian workers and the refugees/asylum-seekers we communicated with. From the humanitarian workers, we learned of the unique obstacles faced by refugees and asylum-seekers caused by poverty and literacy, the language barriers that can complicate conversation and the need to have better, streamlined communication platforms. From the refugees/asylum-seekers, we learned about their user experience concerns and needs, and how they translated to potential security concerns. One of the most important tenets in app development is to understand a target population before creating a product for them; the failure to do so risks underrepresenting their needs and views. Creating an application used by LGBT+ refugees/asylum-seekers and humanitarian workers alike required a thorough understanding of the needs, considerations and perspectives from both sides.

For those interested in developing advocacy tools in support of relief agencies:

- The issue of language barriers was the highest rated concern by surveyed humanitarian workers. It is highly recommended that any tool created for refugee populations be optimized for multilingual capabilities.
- Accessibility as it translates to security concerns is similarly of high importance; remember to acknowledge and represent the unique situations found throughout the refugee and asylum-seeking community.
- Anything that connects users with physical or digital community spaces must be built with considerable caution due to the risks posed by doxing and other forms of malicious intent.

Moving forward, we hope this project brings awareness to the communication needs and unique situations of refugees and asylum-seekers, especially within the LGBT+ community. We also hope that the prototype and database tool will have a long shelf-life and support ORAM’s goals of helping countless people in need. Veronica found this term to be a great opportunity to develop her leadership skills as well as supporting her interest in activism and service. Bryan learned that project development requires attention to detail from the very beginning. His hope is that his actions within the project will continue to help people, and is grateful for the project managers on the team. This was our D-Term 2020 experience.

Fig. 26: Picture by ORAM, taken in Mexico.
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References


9 Middle East survey sees patchy progress on women and LGBT rights. (n.d.). Retrieved from https://news.trust.org/item/20190624162433-z87rz


