What is the title of your vision statement?

Refugee Information App

What is your name?

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What is your ONID username?

foxed

What world problem are you concerned about?

I am concerned with the record breaking number of displaced people / refugees, which have been forced to flee their homes due to persecution, wars, and conflict. This large number of refugees has tremendous social and economic consequences, both in the countries they flee from and the countries that they flee to.

What is one statistic or quote showing that this is a major problem? (Be sure to cite your source.)

According to the U.N Refugee agency, the number of displaced individuals is at the highest level in human history, even exceeding the number at the end of World War II. By the end of 2015, 65.3 million people were forcibly displaced worldwide[1]. This means that roughly 1 in 113 people worldwide are displaced, and this number is expected to only increase. While 40.8 million people are internally displaced (within the countries border), there are over 20 million refugees worldwide.

What is one anecdote about how this problem might possibly play out in real life for somebody?

Refugees are forced to flee their country in fear for their lives. They are forced to leave behind family, friends, lifestyle, and more, pursuing an uncertain future in another country. In the updated version of the vision statement, I will probably use specific examples of real refugees and add specific imagery, but for now, I am restricting discussion to the general experience of refugees.

Within this world problem, what is one subproblem that bothers you?

The huge number of displaced individuals and refugees is the result of immensely complicated sociopolitical causes, and it will take much more than software to address this. Software can, however, help to ameliorate the consequences of these causes to some degree.

Living in another country has numerous logistical, wealth based, and legal barriers, meaning that the problems of a refugee do not simply end at the borders of their home country. Refugees need

help legally applying for asylum, affording lodging, transportation, getting a job, getting necessary healthcare, etc.

What is one quote illustrating that this subproblem is important?

"Imagine traveling thousands of miles through unfamiliar, tense and frightening conditions with only the belongings you're able to carry. You journey by sea, then by foot, for days at a time without food, water or much money.

You must keep moving and each new day brings with it new surroundings, new languages and new uncertainty about where to find the basics — a meal, a bed, a bathroom — let alone directions to your next destination.

To make matters worse, you don't know where many of your loved ones are, or even if they're OK.

You are desperate, terrified and disoriented: How do you find the information you need to survive?

This agonizing scenario is reality for 1.2 million people from the Middle East and Africa who have crossed the Mediterranean Sea in search of security in Europe since the beginning of 2015."[2]

What is one anecdote about how this subproblem might possibly play out in real life for somebody?

A person arrives in a new country uncertain of even such basics as where they will spend the night or what they will eat. They have a smart phone, but are uncertain of where they can find information to answer these, and other vital questions.

I think that the quote that I gave above gives a great example of this subproblem playing out in real life. In the updated version, I will be able to provide greater specifics.

What is a second anecdote about how this subproblem might possibly play out in real life?

Imagine a scenario of a somewhat more prepared refugee who has lodging and food for some time. But where can they find training / employment and undertake the legal steps of applying for asylum? Where can they find the information needed for the next steps in their life beyond survival?

What is one possible software system that could help to solve this problem?

There are technological resources, such as websites that can help refugees with these issues, but they may be decentralized, meaning a refugee would have to search multiple websites or apps to get all the help they need.

I envision a singular app that acts as a one stop app for all of a refugees needs. It would provide all the information that refugees need, such as training / education, job opportunities, lodging, food, access to charitable / volunteer organizations, shelters / refugee camps, legal information etc. It would be powerful and comprehensive, yet have a user friendly interface and numerous languages. First, there would be the languages of the countries that are fleed to and from the most, and then gradually expanding.

By having a singular app that could service all needs instead of multiple disconnected apps or websites, it could quickly spread through media and word of mouth as a place to go for refugees, who could install it on their phones before fleeing to another country. This would allow them to hit the ground running instead of being confused / having to spend precious time pulling information from multiple resources.

What are the three most important features that this helpful software system should have?

- 1. Information on lodging and food, in order to satisfy basic and immediate physical needs.
- 2. Information on job training / job opportunities after immediate physical needs are met.
- 3. Information on legal documentation for applying for asylum, legal registration, etc,

For the 1st of these three features, why is this feature important?

The first feature is important so immediate physical needs can be met.

What is some sort of hypothetical example about how a person would use the 1st feature?

A person uses the app for information on lodging to food and is given directions to a nearby refugee camp that has internet, food, and temporary lodging. In the long term, they are matched with a family willing to shelter them for a year while they gain legal status / employment.

For the 2^{nd} of these three features, why is this feature important?

The second feature is important for long term sustainability in another country. This allows an individual to transition from being the recipient of aid from charitable individuals and organizations to a self-sustaining and independent person.

What is some sort of hypothetical example about how a person would use the 2nd feature?

A person uses an app for job training, giving them identify and advance skills in areas of strengths. After brushing up skills / creating resume, the app has information on volunteer / job opportunities. Honestly, I'm not so sure on this one, because while important for a refugee, it might be better to use a specialized job search app. I might come up with a better second feature down the line.

For the 3rd of these three features, why is this feature important?

The third feature is important so that the individual does not encounter legal problems down the line.

What is some sort of hypothetical example about how a person would use the 3rd feature?

After being situated with physical needs such as lodging and food, a person uses the app for legal information on applying for asylum in their new country, and beyond.

Which of these three features is most important? Which is least important/optional? Why?

The first feature is the most important because if a person doesn't have any food or place to live, they will eventually die or suffer greatly decreased quality of life. Immediate physical needs must be met before anything else. The second is also very important so they are not dependent on / strain the charitable resources of others, and eventually sustain themselves. But as previously mentioned, this feature might be better suited for a specialized job training / job search app, and fall out of the scope of stuff specialized for refugees. Of course, being legally legitimate and recognized is important, but generally you have a period of time to apply for asylum after reaching a new country.

How would you ensure that your system is economically viable?

According to the UN, more people have cellphones than toilets[3]. While this is hard to imagine, based on the image that the media has given us of destitute and technologically archaic refugees, smartphones are relatively easy to acquire in the developing world, where "a basic cellphone can be purchased for under \$10, a smartphone for only a few dollars more."[2]. Unlike developed countries such as the United States, which used older, more expensive landline networks, which are expensive to maintain, developing nations rely more on cheaper mobile networks. According to the International Telecommunication Union, 95% of the global population is covered by at least a 2g network[4].

All these statistics point to the infrastructure for the app being in place and cheap, and due to the widespread prominence of smartphones, even in developing countries, it is extremely likely that refugees would be able to download and use the app, especially if it spreads via word of mouth as the best app to use. It might take time to research the multitude of charitable organizations / volunteer organizations in the world, and translate the app into all relevant languages, but the app could start from a base of the most well known organizations and languages and gradually spread outwords. This expanding approach that starts with the most critical areas can also be used for information on lodging / food, for example, although information on these topics is probably highly related to information on the charitable / volunteer organizations. Practically, this could be realized by compiling information for and releasing the app in the most critical countries first, before expanding.

How would the world be a better place if the system was actually implemented?

The world would be a better place because refugees would be able to download an app with all the information they need to acclimate to a new country, instead of either:

- A. being confused at where to find information
- B. Needing to use extra time to piece together information from multiple sources. Time is especially important in the early days in a new country.

What are your references? (On each line, put a bracketed number such as [4] and then the reference. It is a good idea to leave blank lines between the references.)

- [1] http://www.unhcr.org/576408cd7 . Global Trends: Forced Displacement in 2015. UNHCR (The UN Refugee Agency). June 2016.
- [2] https://www.mercycorps.org/articles/afghanistan-iraq-syria/how-technology-affecting-refugee-crisis. How technology is affecting the refugee crisis. MercyCorps. June 6, 2016.
- [3] http://www.un.org/apps/news/story.asp?NewsID=44452#.VGvCDTTF9EI . Deputy UN chief calls for urgent action to tackle global sanitation crisis. UN News Centre. March 21, 2013.
- [4] https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2015.pdf . ICT Facts and Figures: The world in 2015. International Telecommunication Union Data and Statistics Division. May 2015.