

Assignment Two: Needfinding, POVs, HMWs, and Prototypes

Introduction:

Group Members

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Studio Theme:

National Emergencies

Problem Domain

Our problem domain is National Emergencies. There is currently no early warning system capable of disseminating real-time alerts and information to a dangerous area during a widespread event, which can significantly benefit the protection and safety of lives and property.

Initial POV

We met with representatives from the National Emergency Management Organization (NEMO), who gave us valuable insights about different emergencies they have experienced and some of their challenges. We learned that several processes could be improved with technology whenever there is a widespread emergency including but not limited to enhancing the trust between civilians and the authorities. It would be a game changer if a solution could be developed that would alert and provide real-time information to people in a geographical area under an immediate threat.

Additional Needfinding:

Based on our initial need findings, we tried to narrow down our idea of what we would like to build by conducting four additional interviews. Below is what we learned.

First, we met Andrew Wade, the Communications officer of NEMO. We wanted to go to him because of his firsthand experiences while dealing with national emergencies. When we first met him, he made us realize that an app for emergencies was a great idea, but our initial proposal for what constitutes an emergency was too broad. He then suggested that we stick with national emergencies and build out to other larger organizations such as police, coast

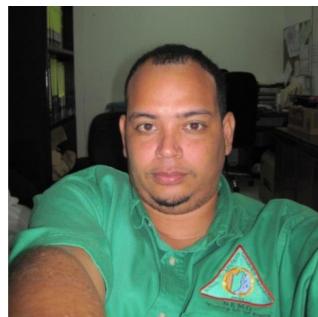
guard, etc. While giving us the advice that we needed to come up with a project like making us come up with a new way to alert the public when a national emergency is coming.

We then met with Jeimy Castellanos, a Medical intern who practices medicine. We wanted her perspective because, during some national emergencies where resources at a hospital or a medical tent are limited, some medics and nurses can't make it to people in time. It would be best if the app had some tutorials on what to do during medical emergencies where the EMT can't reach in time. She suggested that there needs to be an interactive graphic solution to perform first aid so stranded people can perform simple first aid to people who need it because in a scenario where every second counts, she prefers to visualize how a medical action should be done rather than reading them.

Lastly, we talked to Karla, a student at the University of Belize. We wanted her perspective on this matter because of her insight as a student at the University of Belize. She felt that there is a need for a handy solution that can be dynamic and provide timely and relevant information because she would like to know where the Emergency shelters are located. She would also use it to keep track of where she is in securing her home. She felt it would be game-changing if she could access concise information without going into a news app.

Revised POVs and HMWs:

POV #1



We spoke to Andrew Wade, The Communications officer at NEMO. He felt that there needs to be a way to alert the general public that a national emergency is expected or in progress because it is vital to him that they save property and lives. He felt that It would be game changing if there was a solution that can reach a wide audience in real time with information that can aid the public during an event.

Sample HMWs

- Demonstrate the app to organizations for approval
- Ensure data being uploaded is accurate
- Alert the general public of an emergency situation
- Let the user know they are sharing location data

POV #2



We talked to Jeimy Castellanos, who is a medical Intern. Jeimy said that any solution should include an interactive graphic because she prefers to visualize how an action must be done. She also felt that during a national emergency where resources are limited, some people might not get the proper help they need in time turning a person who needed simple things like CPR and people who need a wound attended to ending up being in a more serious situation if they just have gotten proper first aid. So she felt as if a tutorial on how to give this first aid to people would be a lifesaver to people who need it the most. It would be game changing if tutorials would be included in a solution that civilians could browse at any time.

Sample HMWs

- Create make tutorials easily accessible
- Use different types of media to get information across
- Provide “how-to” manuals in app with diagrams
- Create a tip section with some suggestions on what to do for a certain natural disaster.
- Make the solution be interactive

POV#3

We then talked to Karla Landero, a student at the University of Belize. Karla felt that during an emergency there needs to be a handy solution that can be dynamic and provide timely and relevant information because she'd like to know how to prepare in the case of an emergency situation. Karla felt that during an emergency because there are so many things you need to worry about she most often forgets about a few things from the store. She felt that there should be an app or something that can help her out to remind her of what she needs to do like securing your house or location of the nearest hurricane shelter. It would be game changing if she could access concise information without going into a news app like facebook where it is cluttered with so many different things.

Sample HMWs

- Allow for customization of what to display
- Get feedback from users on different features
- Implement suggestion feature for changes
- Respond to criticism online/ Listen to reviews on Appstore/Playstore

POV #4

We then talked to Celia Hernandez, A Belizean Youth/ Working Belizean who felt that in order for an app that deals with National Emergencies to thrive it needs an innovative solution that moves away from traditional ones which can be fun and refreshing because youth make up a large part of the population. She felt that while some adults will try to learn how to use this app it is mostly up to the younger generation to help those who aren't as tech savvy as most others. Celia felt that It would be game changing if the solution could be fun to interact with and useful at the same time.

Sample HMWs

- Make the solution somewhere people want to get notifications from?
- Get out app to remind users of critical tasks (New posts or content)?
- Assure that the solution doesn't overload the user with information?
- Make the solution easy to use and fun.

From these HMWs, we selected three to address and attempt to resolve in more detail:

How might We:

- Be able to reach the younger generation
- Determine what the user would like to see.
- Be able to share relevant and timely information to civilians that is clear and concise.
- Alert the general public to an emergency situation in a key geographic area or even nationally.

PROTOTYPES:

INITIAL ASSUMPTIONS:

When going around trying to test each of our prototype we had assumption of many different things like when we were making the prototypes that it may be clear to someone that red means danger or something is happening within the prototype that we thought would be obvious and clear for a certain amount of people will not be so clear for others.

PROTOTYPE TESTING:

In the pictures below we made these prototypes of what we want the interface to look like. We made this first prototype via online using Figma to give us a rough idea of the layout of this prototype. We then printed it out and tried to sample a number of different students from the university that we could get our hands on to get a wide range of different opinions. We learnt that some things needed to be changed like we need to indicate if an app is customisable so

people can see what they want the most first then everything else. We also got feedback from others saying that with the live location access that there should be a way to indicate that your location is being broadcasted rather than it just being changed from gray to red. During this mini prototype testing phase we learnt lots and we saw and heard concerns over many different perspectives.

Alert

Emergency Type
Description

Prepare

Check tasks in Preparation List

Tutorial Name

Step 1 Visual Instruction

Back **Next**

During this we had assumptions that many of the things we as a team are used to doing not of people realize that it was built in like changing the homescreen. For many different apps it is a thing you can do to have a sense of personality Or knowing that when something is red within the app it usually means something important is happening. So in the future we have to account for that. Our assumptions During this phase of testing were blown out of the water because we were thinking that some basic features would be common knowledge but we were wrong to assume that.

SUCCESSFUL PROTOTYPE

The prototype that we found to be the most successful was the one where it can be fully customisable to one person's needs. We found that when we explain to people that it could be customized to their preferences, that's when they start giving more suggestions on what to have within the app.