Tabangay Ta —A Crowdsourced Solution for Disaster Response

Case Study

In December 2021, Super Typhoon Rai (also known as Bagyong Odette) made landfall in the Visayas and Mindanao regions of the Philippines, causing widespread damage and displacement. In the aftermath of the disaster, affected communities struggled to find and access basic resources such as food, water, shelter, and electricity. In response to this need, the Tabangay Ta Initiative was created as a crowd-sourced directory platform to help disaster victims efficiently locate and share resources. This case study will examine the process of designing and developing the Tabangay Ta web app, including the challenges and solutions encountered along the way. The main goal of the project was to improve the app's overall flow and find ways to populate the platform with more resources, in order to make it more convenient and useful for users in affected areas.

Background

The Tabangay Ta Initiative was created in the wake of Super Typhoon Rai (Bagyong Odette), which made landfall in the Visayas and Mindanao regions of the Philippines on December 16, 2021. The typhoon brought torrential rains, violent winds, landslides, and storm surges, causing widespread damage and displacement. The total affected population was estimated to be around 513,000 families, with approximately 9,800 families (40,300 people) remaining displaced in evacuation centers or at relatives' homes. The vast majority of these families had their homes completely destroyed.

In the aftermath of the disaster, affected communities struggled to find and access basic resources such as food, water, shelter, and electricity. With the extent of the damage varying across affected areas, it was difficult to determine which locations still had resources available. In response to this need, a developer in Manila who was originally from Cebu City (one of the hardest hit areas) created the Tabangay Ta Initiative as a crowd-sourced directory platform to help disaster victims efficiently locate and share resources.

The web app was built using a no-code platform called Bubble and was intended for use by affected communities in the Philippines. The project team included a UX designer, developers, and UI designers, and the UX designer was responsible for user research and conducting heuristic evaluations of the app. The team also helped with social media management and data entry. The main goal of the project was to improve the app's overall flow and find ways to populate the platform with more resources, in order to make it more convenient and useful for users in affected areas.

Design Process

The design process for the Tabangay Ta web app began with a thorough analysis of the problem at hand and the needs of the intended users. To gain a deeper understanding of the challenges and opportunities facing affected communities, the team conducted surveys and interviews with users in the affected areas using Facebook and Facebook Messenger. These surveys and interviews provided valuable insights into the types of resources that were most in demand, as well as the difficulties that users were facing in accessing these resources.

Based on the insights from the surveys and interviews, the team developed a number of design concepts and prototypes, using a variety of ideation and prototyping techniques such as speedy sketching and paper prototyping. These prototypes were then tested and refined through a series of user testing sessions, in which real users were asked to interact with the prototypes and provide feedback on their usability, functionality, and overall user experience.

Through this iterative process, the team was able to identify and address a number of key challenges and opportunities, including the need to improve navigation and resource discovery, and the importance of providing clear indicators of resource availability. Based on the feedback from user testing sessions, the team made several key changes to the app, including adding indicators for resource availability and improving navigation.

Overall, the design process for the Tabangay Ta web app was focused on gathering and analyzing user data, generating and evaluating design ideas, and testing and iterating on the final design solution in order to create a product that was both effective and user-friendly.

Key Insights

During the design process for the Tabangay Ta web app, the team encountered a number of key insights and challenges that influenced the direction of the project. One of the primary challenges was the limited internet access and availability of data in the affected areas. This made it difficult to gather user data and conduct user testing sessions, as well as to populate the platform with resources in a timely manner.

To address this challenge, the team utilized social media (Facebook) as a primary platform for the communication and recruitment of participants. This allowed them to reach a larger number of users and gather both qualitative and quantitative data through surveys and interviews.

Another key insight that the team gained was the importance of providing clear indicators of resource availability. Based on feedback from user testing sessions, the team realized that users needed a way to quickly and easily determine which resources were available in their area. To address this need, the team added indicators for resource availability to the app, which allowed users to see at a glance which resources were currently available.

Overall, these key insights and challenges played a significant role in shaping the design and development of the Tabangay Ta web app. They helped the team identify areas for improvement and guided the design decisions and direction of the project, ultimately resulting in a more effective and user-friendly product.

Solution

The final design solution for the Tabangay Ta web app was a crowd-sourced directory platform that helped disaster victims in the Philippines efficiently locate and share resources. The app was built using a no-code platform called Bubble, and was designed to be easy to use and navigate, with a clear and intuitive interface.

One of the key features of the app was the ability to search for resources by location. Users could enter their location (either by manually typing in an address or by using the app's built-in geolocation feature) and browse a list of resources in their area. The app also featured a map view, which allowed users to see the location of resources in their area

on a map.

Another key feature was the ability to crowd-source data on resource availability. Users could contribute information about the availability of resources in their area, which helped to ensure that the app's data was as up-to-date and accurate as possible. To encourage user engagement and participation, the app also included a rewards system that rewarded users for contributing data and helping to populate the platform with resources.

In terms of functionality, the app was designed to be as efficient and user-friendly as possible, with a simple and streamlined flow that made it easy for users to find and access the resources they needed. To further improve usability, the app also included a number of helpful features such as resource filtering, tagging, and commenting, which allowed users to more easily find and share relevant resources with others.

Overall, the final design solution for the Tabangay Ta web app was a robust and user-friendly platform that helped disaster victims in the Philippines access the resources they needed during a difficult and challenging time.

Results

The results of the Tabangay Ta web app project were overwhelmingly positive, with the app making a significant impact in the affected communities in the Philippines. One of the key metrics of success was the number of users who accessed the app and the amount of resources that were listed on the platform. In the first week alone, the app had over 2,500 users and over 1,000 resources listed. This number continued to grow as more and more people in the affected areas became aware of the app and began using it to find and share resources.

Another measure of success was the feedback and reactions from users and stakeholders. Many users reported that the app was extremely helpful in finding and accessing resources during a difficult and challenging time. The team also received positive feedback from local organizations and government agencies, who praised the app for its effectiveness and usefulness in helping disaster victims.

Overall, the results of the Tabangay Ta web app project demonstrated the effectiveness and value of the design solution in addressing the

needs of affected communities in the Philippines. The app was able to make a significant impact and provide valuable assistance to those in need and was met with positive feedback and reactions from users and stakeholders alike.

Lessons Learned

Throughout the Tabangay Ta web app project, the team learned a number of valuable lessons and best practices that can be applied to future projects. One of the key lessons learned was the importance of adapting to changing circumstances and being flexible in the face of unexpected challenges. Given the emergency nature of the project, the team had to adapt and pivot quickly in order to meet the needs of affected communities in a timely manner. This required them to be flexible and open to new approaches and ideas and to be willing to make changes to the design and development process as needed.

Another important lesson learned was the value of user research and testing in the design process. By conducting surveys and interviews with users in the affected areas, the team was able to gain a deep understanding of the needs and challenges facing affected communities. This helped to inform the design of the app and ensure that it was tailored to meet the specific needs of the intended users.

Finally, the team learned the importance of utilizing social media as a primary platform for communication and recruitment. By building out a separate Facebook page for the project, the team was able to reach a larger number of users and gather valuable data and feedback from them. This helped to inform the design of the app and ensure that it was effective in meeting the needs of the intended users.

Overall, the Tabangay Ta web app project was a valuable learning experience that provided a number of valuable lessons and insights that can be applied to future projects. These lessons will be instrumental in helping the team to design and develop more effective and user-friendly products in the future.

Conclusion

The Tabangay Ta web app project was a successful and impactful project that made a significant difference in the lives of disaster victims in the Philippines. Through a combination of user research, design thinking,

and agile development methodologies, the team was able to design and develop a robust and user-friendly platform that helped affected communities access the resources they needed during a difficult and challenging time.

One of the key accomplishments of the project was the ability to reach a large number of users and provide them with valuable assistance. In the first week alone, the app had over 2,500 users and over 1,000 resources listed, and this number continued to grow as more and more people in the affected areas became aware of the app and began using it to find and share resources.

Another key accomplishment was the positive feedback and reactions from users and stakeholders. Many users reported that the app was extremely helpful in finding and accessing resources during a difficult and challenging time, and the team received positive feedback from local organizations and government agencies who praised the app for its effectiveness and usefulness.

Overall, the Tabangay Ta web app project was a successful and impactful project that made a positive difference in the lives of disaster victims in the Philippines. Through a combination of user-centered design and agile development methodologies, the team was able to design and develop a product that met the needs of the intended users and made a meaningful impact in their lives.