<u>**Market Analysis:**</u>

Title: Market Analysis Report on Localized disaster volunteer coordination system

Objective: To perform a thorough market analysis on implementing a localized disaster volunteer coordination system to understand the target audience, potential users, and competitors in the chosen domain.

Content:

Target Audience Identification:

The coordination system primarily focuses on creating a bridge between the people who volunteer themselves to help and the people who need help. To be more specific the system looks for volunteers who can help the disaster victims. The volunteer coordination system mainly focuses on identifying the volunteers who stay very close to the disaster-prone area and who are immediately available with right skills to save people from the disaster. It also includes other target audiences such as local businesses and service providers, philanthropists, educator, and trainers who can train skills for the volunteers who are interested in volunteering at disaster prone areas.

Considering stakeholders and investors, more detailed information about target audience can be defined as follows:

1. Volunteers/ Helpers
Volunteers or helpers are the main target audience of the platform. They are the one who drive the process where in they participate actively in looking for any disasters occurred locally that needs to be addressed. Volunteers should showcase certain skills which helps the platform in identifying them based on skills that are required to tackle disaster type such as fire, hurricanes or cyclone and other disasters. Some of the characteristics of volunteers are:

Demographic characteristics:

a. **Age:** It is important to identify the volunteer age to select the right range of age for the tasks that might require heavy muscle work. System suggests volunteers below 18 or above 50 might face difficulties in such volunteering and can be assigned a less effort and more effective volunteering works.
b. **Physical attributes:** the volunteer system requires volunteers information about physical attributes help in picking the right candidates for the disaster volunteering to help the victims by moving them to safe places.
c. **Geographic Location:** Since the localized volunteer coordination system focuses on the location specific volunteer identification, it is important to know the location of the volunteers to contact the nearest volunteers who are very close to the disaster site.
d. **Skills:** Volunteers should showcase their skills on the profile as a volunteer with experience which makes it easy to identify the right volunteer for the volunteering activities at the disaster site.
e. **Language:** Volunteers should mention their language which helps in adding them to the groups that are having common language for communication so that they can have smooth conversation and help each other during the volunteering.

Psychographic characteristics:

a. **Interest towards teamwork:** Volunteer should have the characteristic of a team player and should be ready to work as a team and keep coordination with the team members by doing work and parallelly helping other team members.
b. **Interest towards learning:** Volunteers should show eagerness to learn as the disasters are highly unpredictable and always pose a new situation and problem that needs to be eliminated. Volunteers should keep updating themselves for newer challenges and share their knowledge with other team members to gain knowledge on the volunteering work.
c. **Motivation to help:** Volunteers to have a self-motivated goal and aspiration to help the victims of the disaster. Volunteers should work for the humanity as the main soul purpose of the work and help victims to over come the disaster to build a new life.
d. **Personality:** This defines the person on his/her social health in the community. A person who is active in his/her social life and always looks forward to help people in need and have a kind vision for the harmony can be a volunteer.

2. Local NGOs

Local Non-Government Organisations play key role in this system where they identify the disaster struck areas in the local and call for help from the volunteers. They should maintain proper coordination amongst the volunteers and provide them with necessary information all the time during the volunteering process and look after their safety who are part of the volunteering process. Some of the characteristics of NGOs are:

Demographic characteristics:

a. **Geographic Location:** Nongovernment organisation should have an office or a unit near to the disaster-prone area which needs to be recorded in the system for identification. In other words, the system should be effective enough to identify the nearest available NGO and provide the information about the disaster.
b. **Communication:** NGOs should be able to understand the severity and type of the disaster and respond by requesting the identifying the right set of volunteers who are ready to contribute with right skills.

Psychographic characteristics:

a. **Motivation to help** NGOs should have strong motivation and determination to help the society and victims who need help. Here the system majorly focuses on identifying the NGOs that has goal to help victims of disaster.

3. Educators and Trainers
Educator and trainers are the one who have experience in volunteering activities and know the right skills used in the process of volunteering in disaster recovery. Volunteers or people who like to contribute and help victims but do not have the right skills and want to learn them can take advantage where they can use the system to learn skills and contribute their kindness by becoming a volunteer and help the disaster victims. Key characteristics of educators and trainers are:

Demographic characteristics:

a. **Geographic location:** The system can find the near by educators and volunteers with skills who wish to train young volunteers.
b. **Language:** The volunteer system is multilingual which makes it easy for anyone to learn and gain skills irrespective of language barrier.
c. **Skills:** Educators and volunteers have to update their skills and willingness to teach the skills.

Psychographic characteristics:

a. **Motivation:** Educators should be motivated through the system who desire to train volunteers and help them for the volunteering activities.
b. **Attitude towards learning:** Educators should show their interest in teaching and skill up the volunteers through the system.

4. Government and local Authorities

Government and local authorities should drive the system there by incentivising the volunteers by providing them with necessary aids such as insurances and benefits to attract more volunteers and help them to skill up to be ready to volunteer whenever a disaster situation occurs. Some of the key characteristics of government and local authorities are:

Demographic characteristics:

a. **Geographic Location:** The system should hold the geographic information system to easily locate the disaster areas and provide the necessary information to government and other agencies to provide resources and help.
b. **Communication:** The system should have systematic data about the disaster and the activities undertaken to resolve that should be available for the government to check.

Psychographic characteristics:

a. **Motivation:** The government should initiate campaigns through the system by training the volunteers and providing necessary actions.

5. Disaster Victims

Disaster victims are the one who are the subject of the system. They need to get all the help they need when they are part of the disaster. Although some of the victims who can take care of themselves and can join the volunteer groups and volunteer themselves in saving people from the disaster can be considered as volunteers and can be applied all the characteristics as the volunteer mentioned above.

Competitor Analysis:

During the market analysis and research on the building the localised disaster volunteer coordination system, the team was able to identify a few organisations that have very similar systems built out of which a few specifically looks after disaster volunteering system. Although they lack a few functionalities and a few having a deviated deliverables which are analysed below with the SWOT analysis on a few od the potential competitors. Some of the key competitors of the system are *ReDI by Galaxy Digital, Crisis Track, Vision link, Zelos*, etc.

1. **ReDI by Galaxy Digital:**

   ReDI by Galaxy digital is a disaster volunteer management system designed to assist organisations during the process of volunteering at the disaster site. This system helps in end-to-end collaboration from identifying the volunteers and coordinating them till the end of the volunteering process that includes excavating the victims and moving them to safe places to providing them shelter and necessary materials to survive. SWOT analysis on this system provides the following data.

   a. **Strengths:**

   - **Disaster Response System:** The system mainly focuses on gathering and mobilizing volunteers for disaster response. Provides end-to-end solution for disaster management.
   - **User Friendly Interface:** Has a easy interface to guide the usage of the system but has a long process to enroll.

   b. **Weakness:**

   - **Limited AI and analytics:** The system has very less exposure to usage of AI and analytics which makes it hard to identify the right set of action for the disaster based on previous disaster actions undertaken.
   - **No learning initiatives:** This system only focuses on gathering volunteers for disaster management but does not give interest on training and upskilling the volunteers.

   c. **Opportunities:**

   - **Integrating AI:** This system can expand its volunteer management system by integrating AI which makes platform enhances the process of volunteer coordination.
   - **Enhancing cross platform availability:** By introducing the system available on smart phones and other devices, the system can be widely used and can help victims in large volume.

   d. **Threats:**

   - **Cybersecurity risks:** Introducing the system to cross platform availability can cause potential cyber attacks and risks that needs to be handled to safeguard volunteers' data.
   - **Market saturation:** Since the system is non profitable initiative for the social cause, and other competitor's organisation should maintain strategy to keep the interest of volunteers' contribution.

2. **Crisis Track:**

   Crisis Track is a disaster management software that is built to facilitate government and local bodies to identify the disaster and the damage caused. It helps in damage assessment

reducing the paper works and gives real time resource management. SWOT analysis on the software provides the following information.

a. **Strength:**

- **Real time GIS Mapping and Data Integration:** the crisis track has implemented geographic information system that helps in identifying the location.
- **Comprehensive Resource Management:** Software helps in coordinating the volunteers and provides the necessary resources used to volunteer in the disaster-prone area.

b. **Weakness:**

- **Limited access to AI and Analytical solutions:** Software has not incorporated usage of AI to enhance the resource and volunteers' management.
- **Lacks real time data refresh:** Software lacks real time data refresh and updates need to be explicitly added to inform the process of volunteering work.

c. **Opportunities:**

- **Expansion to AI and Analytical solutions:** Software has the room for improvement by adding the AI and analytics that can improve the resource management system.
- **Work on scalability:** Crisis track can use new technologies available to work on scalability, there by having covered large area and locations for disaster management.

d. **Threats:**

- **Cybersecurity risks:** The software has potential risk of data security where the data of the volunteers needs to be secured.
- **Adoption of new technologies:** Software must be optimized and expand the objective by adding new functionalities of volunteer coordination and management to be recognised.

3. **Vision Link:**

Vision link's community operating system (CommunityOS) is a platform built to support organisations in manage communities and provide disaster responses. It is a suite of integrated tools to enhance the coordination system for various operations. Performing SWOT analysis on the platform provides the following information.

a. **Strengths:**

- **Comprehensive disaster management system:** The platform offers wide range of resources and coordination management amongst the volunteers.
- **Multilingual support:** Has exceptional multi language responses to reach a large audience to get volunteers and to interact with victims of different ethnicity.
- **Strong API and data integration:** Has APIs that can integrate and data sharing to get insights and information.

b. Weakness:

- **High customization cost:** The platform charges for the volunteering groups to maintain the volunteers.
- **Limited AI and predictive analytics:** Platform has not integrated usage of AI to improve the management of volunteers.

c. Opportunities:

- **Decentralizing the disaster management process:** Platform can move to a decentralized management system by incorporating the concept of blockchain and other decentralized concepts.
- **Use of cloud-based technology to provide better services:** using cloud services can expand the services and can incorporate new features.

d. Threats:

- **Make strategy to maintain the external funds:** Due to many competitors the volunteers' management system should update based on business dynamics to maintain the external funds.
- **Regulatory and compliance challenges:** Due to expansion and integration of government and other agencies it should be able to get over the compliance challenges.

4. Zelos:

Zelos is yet another volunteer management system capable of streamlining the coordination of teams which can be used for disaster management although which is a common platform for volunteer management on any task that needs like minded people work.

a. Strength:

- **Quick deployment and easy onboarding**: This system is more intended to create a community and deploy on a particular work which can be used for disaster volunteering.
- **User friendly interface:** Has simple interface design and easy to use the system.

b. Weakness:

- **Limited features for free plan:** Since the system is built for a small operation it has few functionalities. This only focuses on group formation of like-minded people.
- **Not advisable for heavy emergency logistics:** It has less access to manage the resources and no interaction with government and other agencies makes it difficult to manage the volunteers with necessary resources.
- **Basic Reporting and Analytics:** This shows only the basic progress of the work being carried out and does not explicitly show the phases of work done.

c. Opportunities:

- **Integration of AI and Analytics:** Using AI and Analytics can improve the quality of the system by enhancing the real time reporting and improving the volunteers' coordination through AI.

- **Can build stronger partnership with government and agencies:** Can focus on expanding the system by integrating with government compliances and manage resources required for volunteers.

d. **Threats:**

- **Potential competitors:** Competitors with similar functionalities makes it harder to survive with limited functionality.
- **Regulations and compliance challenges:** To expand services by allowing government and other agencies to access needs compliance challenges to sort.

Business values:

From the above competitor analysis, we were able to draw the intense and the widespread market of volunteer coordination system. Different system has different functionalities with some common features shared, but there are few gaps which makes it possible for the new product to achieve those features and compete with other competitors. Our proposed localised disaster volunteer coordination system can answer the gaps in the market in this domain.

Unique Selling Points:

1. **Integrated training and learning platform to learn volunteer skills.**

   Volunteering is not all about helping others in need of help. Volunteering is a need of humanity. It should be thought to newer generation and people who want to help but do not have right skill. This feature lacks in most of the above competitors' software. Along with volunteer coordination system, it should also have an option for the volunteers to upskill themselves in terms of volunteering activities and train themselves with skills that help them to volunteer themselves in disaster prone areas and improve their skills to help people with better techniques. Also, volunteers with experience can teach other young volunteers with their experience and skills that help young people in their volunteer works.

2. **Multilingual Support**

   The localised volunteer coordination system should be able to meet the needs of all people irrespective of their ethnicity, language, and region. Hence one of the core parts of the system is multilingual support, where in the volunteers and the victims can use the application without any language barrier and can get benefits from it. Volunteers can interact with the team with any language of comfort and participate in the volunteering activities with the help of the volunteer coordination system.

3. **Secured Donation Management**

   Since the localized disaster volunteer coordination system is a non-profit system built for the social benefit, it cannot be commercialized like a social platform. Although there can be a small registration and maintenance fee but major sort of financial transactions are through donations. So, to keep the record of donations made and use them wisely there should be a donation tracking system that has to handle the donations and keep the transaction data secure. This is another core feature that needs to be developed.

4. **AI and Analytics with GIS**

    One of the key concepts most of the above competitors have weakness and opportunity at the same time is integrating the concept of AI. Artificial intelligence can be a player in this sector and the organisation that incorporates it to its platform can drive the platform and handle complex volunteer tasks easily. AI and geographic information system (GIS) are important to accurately identify the location and type of disaster and alert the volunteers with right skills near the disaster to take part in the volunteering work and help the victims.

Value Proposition:

From the above detailed analysis of the topic with the functionality, understanding the potential competitors and their products which are later analysed using SWOT approach to identifying the key features and the features that are not implemented or the ones that is not rightly used in the system, we come up with a platform that improvises the previous features and also add new features which makes the system compete with the other competitors in the market.
The proposed Local disaster volunteer coordination system majorly focuses on helping the victims of the disaster by the platform where volunteers who would like to help and contribute in volunteering activities can join the platform and add their skills and preferences that helps in forming groups with right skills required to volunteer to help disaster victims. Also, the multilingual support makes it easy to reach a wide range of locations and help all who are in need. Also, the platform makes it easy for philanthropists to donate and become a volunteer who are unable to serve the people but can help in a way by donating and helping the volunteers through resources. The entire process should be tracked in the platform for a transparent process.

Further, the system should have simple and easy to use interface for the users to easily get the information and get notified of the volunteer work. Plus, as discussed it should hold a learning platform that can train volunteers with new skills that help them in volunteering themselves and taking precautions during the volunteering to safeguard themselves as well. Thus, the platform having real time analytics, volunteering profiles and notifications of the requirements and managing the resources along with the learning platform makes the volunteer coordination system unique.