Crowdfunding analysis collaboration between citizens and response actors for Crisis Communication in Disaster Relief

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ABSTRACT

In 2022, the global Emergency Event Database EM-DAT documented 387 occurrences of natural hazards and disasters, leading to the death of 30,704 individuals and impacting the lives of 185 million people. Crisis communication technology can help to support this scenario, providing appropriate support and efficient response to the affected community. The communication between response actors, composed of professionals from operational centers, citizens, and affected communities should flow collaboratively. The population in the surrounding area where the event is provoked should be notified or may provide information for the response actors by means of some platform for crisis communication and management.

Collaborative platforms for crisis communication are a research topic that is still under investigation. It is known that nowadays there are difficulties related to establishing effective crisis communication. The problems are related to delays in responses, conflicting information, diverse public opinion, bad resource allocation, and geographical mapping issues. In this scenario, a collaborative platform could be used as a model to serve as communication support.

Collaborative computing, cooperation, location-based, disaster response, blockchain, and trust are the most related subjects to this area and represent an open field for future research. In this way, we started to research crowdfunding platform as a solution that can englobe all these features. About crowdfunding supported by govern, the research Lee et al. 2016 shows that: crowdfunding can offer an efficient mechanism to improve participatory budgeting and facilitate private–public collaboration while providing a high level of transparency in the budget decision process. Besides, the platform could allow the involvement of the population, for example in providing survival resources such as food, water, and medicines for disaster victims, medical assistance, and other critical services. For example, during a pandemic scenario, crowdfunding platforms assisted in augmenting traditional relief efforts. Besides, it is important to know insights into the needs of those affected communities Saleh et al. 2021. Crowdfunding platforms indicate to the governmental institutions which communities are affected and where the available funds can be directed.

This PhD research proposal aims:

- To study the factors that influence the success of the crowdfunding approach by applying techniques of sentiment analysis, geographical mapping, and duration of the campaign and collected amount.
- To conduct a systematic review of guidelines for how to use crowdfunding to mobilize resources and support for the response effort.
- To develop a case study of crowdfunding in the Brazilian context, compared with other scenarios, and how government can use crowdfunding to map and support the flood incidents in the Brazilian Northeast area. Develop a model based on crowdfunding aiming to improve collaboration between response actors and citizens.

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Crowdfunding platforms show the progress of a campaign, helping to improve the transparency and accountability in the response effort. By making progress of the outcomes of the response effort visible to the public. Crowdfunding campaigns can serve as a community engagement and participation in the response effort. By involving the citizens in the response effort, government helps to build a sense of ownership and responsibility among the community.

**Keywords**

Crisis communication, Disaster Relief, Crowdfunding, Collaboration

**REFERENCES**


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