Crisis informatics in the context of social media crisis communication: theoretical models, taxonomy, and open issues

ABSTRACT

The involvement application and use of crisis and emergency management and communication are increasing rapidly. This study conducts a systematic literature review to identify the development of theoretical models in the area of social media crisis communication and management. The study aims to review and analyse the relationship of social media-based crisis communication in the context of crisis informatics and its taxonomy and the related crisis communication theoretical models to derive the challenges and limitations. A total of 207 articles were selected for the evaluation based on quality, relevancy, and contribution. The findings revealed that the situational crisis communication theory (SCCT) is the most dominant theory, followed by social-mediated crisis communication (SMCC) and integrated crisis mapping (ICM) models. The study identified theories such as the STREMII model, social media crisis management matrix/framework (SMSMF), and an interactive crisis communication model (ICCM) as emerging models. Moreover, the result of the finding shows that stakeholder interaction is an understudied field, while information reliability and processing for decision-making purposes, the wider application of social media sites, privacy issues, and how social media interaction can improve community resilience or build stakeholders relationships remain suitable topics for future research.