



2011 Social Media + Emergency Management Camp

Transforming the Response Enterprise

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On March 24, 2011, more than 150 members of the U.S. emergency management community convened for the 2011 Social Media in Emergency Management (SMEM) Camp. This was the first time members of this community convened on such a large scale to discuss how social media and emerging technologies are affecting response operations. Hosted by the National Emergency Management Association (NEMA) and the SMEM Initiative, in collaboration with CrisisCommons, the event included representatives from the Federal Emergency Management Agency (FEMA), the American Red Cross, Twitter®, state and local emergency management agencies, private sector interests, and various volunteer technology communities (VTCs). The Camp was a direct response to changes in societal expectations of emergency responders (e.g., the timeliness of response) brought about by the emergence of social media and related technologies over the past decade.

Purpose and approach

Working with event organizers from CrisisCommons and the SMEM Initiative, CNA led a volunteer research team to record discussions at the Camp. The team analyzed data from pre- and post-event surveys and a constructed archive of comments posted to Twitter during the event.

Using a theory of enterprise transformation to frame the Camp discussion, we identified six critical areas (or inputs) that need to be addressed in order to create and capture the potential value of social media and related technologies in emergency management:

1. Resources
2. Laws, policy, and guidance
3. Engagement and community-building
4. Buy-in and adoption through demonstrated value to others
5. Reliability and verification
6. Structure and integration

Key findings

Camp discussions revealed that, despite progress in each of these six areas, a gap remains between the way in which many advocates for social media adoption in the emergency management community would like to see these technologies used and the way in which they are currently being used. The gap between the current state and the desired state of social media usage persists in part because of considerable concerns and challenges that remain in the six areas, not the least of which is the need for buy-in at senior leadership levels.

The body of the report contains area-specific findings. However, at an aggregate level, Camp discussions revealed:

- The need—akin to FEMA’s whole community initiative—to redefine the domestic response enterprise to be more inclusive of all response stakeholders (e.g., individual citizens and private sector organizations), not just governmental organizations. Further work is needed to spell out exactly who these players are, what structures guide their interactions and participation, and how their contributions can be taken into account prior to an event.
- The need to define future goals for a domestic response enterprise, particularly as it relates to the integration of new technologies and their associated effects. Although Camp participants highlighted several desirable functions and processes that they would like to see incorporated in such a system, room remains to define a long-term strategy for the transforming enterprise.
- The need to identify the relationships between system inputs and the effect of those relationships on the transformation of the response enterprise.

Recommendations

We recommend that the emergency management community focus on the following:

- **Baseline establishment:** Conduct a survey of domestic emergency management agencies to provide a baseline of social media and mobile technology capabilities (e.g., How many agencies in the United States are currently attempting to use social media tools, and of the ones that are, how are they using them?).
- **Messaging value:** Expand prior work on social influences on citizen preparedness and response behavior to include the effect of social networks when coupled with various messaging strategies. Presumably, the ability to “view” the behavior of others in a given social network will have an effect on citizen decision-making beyond that of messages delivered through traditional media. Concrete data on the extent to which this is true and can be measured stand to bolster the case for increased investment.
- **Operational benefits:** Demonstrate the value of integrating social media into operations by capturing improvements in the speed and effectiveness of response. Such a demonstration is critical to gaining buy-in. One area where these improvements can potentially be seen most clearly is in disaster relief routing and logistics decision-making. Information gathered through social media platforms could be used to optimize real-time disaster relief routing decisions, resulting in response improvements. Using the gathered information in this way could help lead to the development of a set of meaningful metrics as well.
- **Exercises and real-world events:** Continue efforts to integrate social media tools and data into response exercises. These efforts are critical not only to understanding the value of social media, but also to creating a level of comfort in their use by emergency managers. In addition, efforts to capture the role of social media and the response of VTCs through post-event analysis and after-action reports should be funded and formalized before an event occurs.
- **Reliability and usefulness:** Work on determining thresholds for data corruption and general reliability in response, as defined through post-event analysis. Underlying the issue of social media’s value are issues of data reliability and usefulness, which are essential to obtaining the buy-in of leadership at all levels of government.
- **Training and education:** Make the continued creation and refinement of training and knowledge-sharing opportunities for emergency management practitioners a priority.

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