

Alerts and Warnings Using Social Media: Current Knowledge and Research Needs: A Workshop

February 28-29, 2012

Beckman Center, Huntington Room, Irvine, CA

AGENDA

TUESDAY, FEBRUARY 28, 2012

8:30 am Welcome and Opening Comments

Bob Kraut, Chair, Committee on Alerts and Warnings Using Social Media
Denis Gusty, Department of Homeland Security

9:00 Fundamentals of alerts, warnings, and social media

Much is known about the public response to alerts delivered by sirens, radio, television, and weather radio. As social media play an increasingly important role in societal communication, it will become increasingly important to understand the implications of these new capabilities for disaster alerts and warnings.

What is known about how the public responds to alerts and warnings?
Dennis Mileti, University of Colorado, Boulder

What is known about the use of social media during a disaster?
Kristiana Aleida, American Red Cross

What are barriers to official use of social media during a disaster?
Edward Hopkins, Maryland State Emergency Management Agency

What technologies are in development for alert dissemination and situational awareness via social media?
Emre Gunduzhan, Johns Hopkins University Applied Physics Laboratory

Tim Sellnow, University of Kentucky, moderator

10:30 Dynamics of social media

The social aspect of these tools makes them especially attractive because of the ability to leverage the trust people place in their connections. Information about an event that is provided by neighbors, colleagues, friends, or family is often viewed as more credible than a mass alert or a news report. Social media may also provide a useful complement to other tools by providing a way to rapidly disseminate time-sensitive information that may be important to an affected community but not rise to the level of an official alert or warning. How connections form, how information is disseminated, and why users volunteer their time and knowledge to solve problems has been examined by researchers in human-computer interaction, psychology, and computer science. The panel will explore what motivates people to participate in knowledge sharing, what drives self-organizing, and what mechanisms exist for self-correction of information.

Influence mechanisms in social media
Duncan Watts, Yahoo!

Incentivizing participation in time-critical situations
Manuel Cebrian, University of California, San Diego

How the Standby Task Force harness the power of the crowd
Melissa Elliott, Standby Task Force

Jon Kleinberg, Cornell University, moderator

Noon Lunch

1:00 pm Credibility, Authenticity, and Reputation

During disasters, citizens often post first-hand information and pictures and repost information they have received from official or unofficial sources. Although both types of information are useful to both emergency officials and the public, it raises questions about how to assess the credibility and authenticity of first-hand reports and redistributed information. For example, although the reach of an official message may be widened if it is redistributed (e.g., retweeted), the message may have been modified in ways not anticipated or desired by its originators. The panel will explore credibility, authenticity and reputation in the context of social media and disasters.

Information verification and rumor control
Paul Resnick, University of Michigan

Mechanisms for Determining Trustworthiness
Dan Roth, University of Illinois, Urbana-Champaign

Training the public to provide useful data during a disaster
David Stephenson, Stephenson Strategies, Medfield, Mass.

Leysia Palen, University of Colorado, Boulder, moderator

2:30 Personal Privacy

The use of social media by emergency officials raises privacy concerns that were not present with traditional methods of sending alerts and warnings. Also privacy-sensitive, but of potential value to emergency managers, is official monitoring of social media to better detect or understand unfolding events. For example, the networked nature of social media may provide a substantial amount of information about a single individual: based on who one follows on Twitter one may be able to infer where she lives or works and what school her children attend. The panel will consider such questions as:

- What are the public's perceptions and expectations of privacy, and how can they best be addressed? For example, the communications being monitored by government officials, while technically public, may have been sent with certain expectations of privacy such as not being intended to be read by government officials.
- What is the appropriate balance of interests between achieving effective situational awareness and privacy? For example, how should location-tagged information be handled?
- What are best practices in providing adequate notice to the public and ensuring that collected information is used appropriately? For example, how can or should users whose

public information is being monitored be made aware of that? How frequently should notice be provided?

- Are there existing features of social media that could be used to help protect privacy? For example, would asking people to use designated mechanisms (e.g., hash tags in Twitter) to label information they intend to be read by government officials constitute an adequate opt-in approach?

Privacy decision making

Lorrie Cranor, Carnegie Mellon University

Social-psychological challenges of social media use in crises

Gloria Mark, University of California, Irvine

Implementation of the “See Something, Say Something” campaign – how privacy can be protected

Bryan Ware, Digital Sandbox

Today’s framework for privacy protection and its application to alerts and warnings using social media

Peter Swire, Moritz College of Law, Ohio State University (remotely)

Alessandro Acquisti, Carnegie Mellon University, moderator

4:00 Break

4:15 **Breakout discussion** on opportunities and challenges.

5:30 Reception

WEDNESDAY, FEBRUARY 29, 2012

8:30 am Report backs from breakout sessions

9:30 Case Studies of Uses of Social Media in Disasters

Social media is already being used both formally and informally by emergency managers. Researchers have also begun to examine social media communication streams to learn how social media is used during a disaster. This panel will examine recent experience and research on social media use.

Currently used tools for monitoring social media for situational awareness

Brian Humphrey, LA Fire Department.

Use of Twitter for earthquake detection and alerting

Paul Earle, USGS National Earthquake Information Center

The use of social media tools to disseminate information during a health crisis

Keri Lubell, Centers for Disease Control and Prevention

Leslie Luke, Office of Emergency Services, County of San Diego and Richard Muth, Maryland Emergency Management Agency, moderators

10:30 Use of social media by non-government organizations

News organizations and technology firms have used social media during crisis and disaster to provide and gather information from the public. This panel will explore lessons for government from this private-sector experience, partnerships between the public and private sector, and how new technology may shape those partnerships.

Brad Panovich, News Channel 36, Charlotte, NC

Nigel Snoch, Google

Bob Kraut, Carnegie Mellon University, moderator

11:15 Looking ahead: Opportunities and Challenges

What changes in preparation, management, and analysis will be needed to incorporate social media as an information tool?

Murray Turoff, NJIT (remotely)

Social Media: Legal Perspectives on First Responder Responsibilities

Aram Dobalian VHA Emergency Management Evaluation Center

Spontaneous and organized digital volunteerism in the future of emergency management

Leysia Palen, University of Colorado, Boulder

Michele Wood, California State University, Fullerton, moderator

12:30 pm Wrap-up Panel and Plenary Discussion

Denis Gusty, DHS

Robert Kraut, Carnegie Mellon University

Leysia Palen, University of Colorado, Boulder

1:00 pm Adjourn/Lunch