Messaging & Risk Communication

Presented to the NAS Workshop on Alerts and Warning on Mobile Devices

Matthew W. Seeger, Ph.D.

Department of Communication

Wayne State University

National Center for Food Protection & Defense

National Center for Immigration & Border Security

New Technology: "We don't know what we don't know."

- 1). Rapid Change and Adoption
- 2). New Applications
- 3). Emergent Organization (Selforganization)
- 4). Resilient Technology

Who tweets?

```
More users are female (55%)
Largest single age demographic, 18 to 34 (45%)
Over 50 demographic (14%)
Majority Caucasian (69%)*
African American (16%)
Hispanic (11%)
Income distribution associated with use
30% + 100K
March, 2010, Quantcast
```

"Old" Media System

- 1) "Command post perspective" (Quarantelli, 1982)
- 2) "Mediated disaster:" Time, Space (access) Gatekeeper / Filter
- 3) Universal Audience
- 4) Vicarious Participation

"New" Media System

- 1) Speed
- 2) Not "mediated" "Participant" as source and "On-the-ground" perspective
- 3) Selected (Limited) Audience
- 4) Immediacy / Presence
- 5) Vicarious Participation

"New" Media System

- Disasters Promote Adoption
- System Uses:

Response Management

Uncertainty Reduction -

Sending/Receiving

Psychological Security

The Need to Talk about Crisis

Recovery – Reconstituting Community

"New" Media & Crisis

Information Seeking / Sharing

Information Vacuum

Gender Differences

Social Network Size

Credibility

Functionality

(Spence, Lachlan, & Westerman, 2009)

"Old" + "New" Media System

Tweet and Re-Tweet

Media Convergence

"Citizen Journalist" & "First Communicator"

Complex System with Human & Technical Components

Tweet Contents

Providing information (37.1%)

(Warnings, updates, answers)

Commentary (33.6%)

Personal (Impact) (25.6%)

Asking for information

(For officials, media, or others)

Promotional (4%)

(Media coverage, unrelated products, services)

(Vultee & Vultee, 2009)

Example

2007 San Diego Wild Fires

KPBS

Twitter

Google Maps

Focused Information

Two Way

First Hand Accounts



kpbsnews The CA Department of Insurance is sending fraud investigators to assistance centers and neighborhoods to reduce the chance of scam artists about 1 hour ago from web

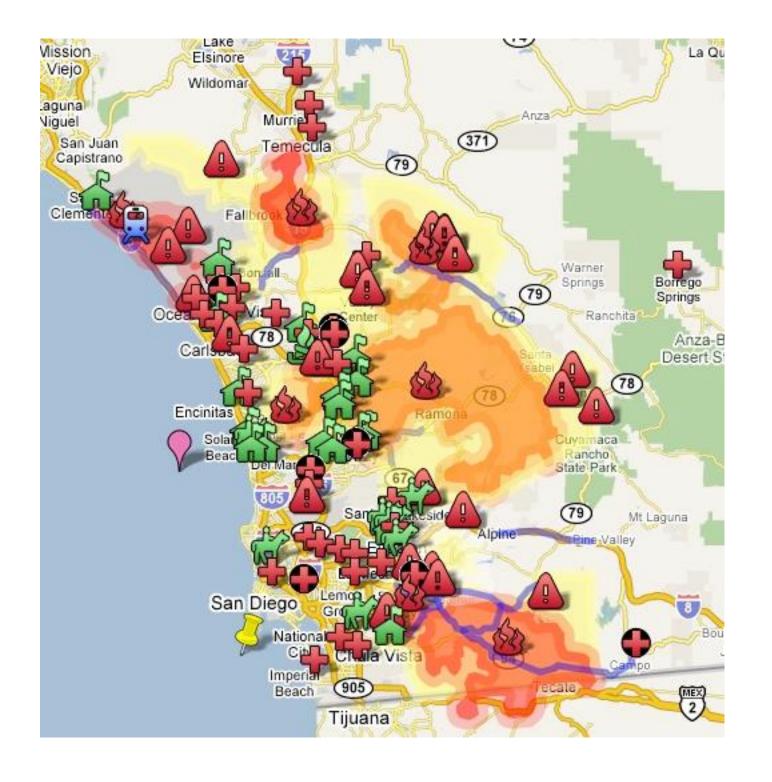
kpbsnews Fire victims can register with FEMA online by visiting http://tinyurl.com/yolpfj about 1 hour ago from web

kpbsnews Santa Clarita area update: Buckweed Fire now joins the Magic Fire in being 100 percent contained about 1 hour ago from web

kpbsnews Resource: people suffering with stress following the wildfires can contact the Orange Co Emergency Op Center hotline at (714) 628-7085 about 1 hour ago from web

kpbsnews The Malibu fire has been fullly contained. about 1 hour ago from web

kpbsnews Caltrans says Route 74 will remain open in both directions tonight. about 1 hour ago from web



Caribbean under Tsunami watch: Sections of the Caribbean are now under a Tsunami watch following an .. http://3sxm6.tk #caribbean

3:55 PM Jan 12th via twitterfeed



Haiti Earthquake count: 16:53 ET 7.2 mag., 17:00 ET 5.8 mag., and 17:12 ET 5.6 mag. #Haiti #HaitiQuake

3:01 PM Jan 12th via Tweetie



words on the streets part of Hotel Montana Fell, exagone is cracked. houses in canape vert fell down #haiti

#eq

3:05 PM Jan 12th via Tweetie



J'ai l'impression qu'une nouvelle secousse s'est produite car j'ai perdu contact avec mon ami sur Skype... #Haiti #HaitiQuake

3:14 PM Jan 12th via Tweetie



Where do we go from here?

Development of integrated "New" & "Old" Media Systems

Consistency of Messages

Reach to Multiple Audiences

Credibility

Technology

Where do we go from here?

Strategies for Adoption

Technology + Factors of Human Use

Message Characteristics:

Inadequate room for details/ The why question.

Driving traffic to other sources

Where do we go from here?

Exploring Capacity
Remote Sensing Devices
Situational Awareness
4 Square

References

Spence, P. R., Lachlan, K. A. & Westerman, D. (2009). 'Presence, Sex, and Bad News: Exploring the Responses of Men and Women to Tragic News Stories in Varying Media', <u>Journal of Applied Communication Research</u>, 37:3,239 — 256

Hughes, A. L. & Palen, L. (2009). Twitter Adoption and Use in Mass Convergence and Emergency Events. Proceedings of the 6th International ISCRAM Conference – Gothenburg, Sweden, May 2009 J. Landgren and S. Jul, eds.

Vultee, F. & Vultee, D. M. (2009). What we tweet about when we tweet about disasters: The nature and sources of microblog comments during emergencies. Presented at the Meeting of the National Communication Association, Chicago, Ill. November, 2009.