

Microblogging for Crisis Information Sharing: Violent Crises

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Background

Social media tools are changing crisis communication. Citizens can now create and share information in real time with a wide audience while bypassing official communication channels.



Microblogging

Twitter is the most popular microblogging site with over 150 million users:

- Messages (tweets) are 140 characters in length
- Tweets are publically available unless marked private
- Tweets often contain links to photographs, videos, text files, websites, blogs, and other sources
- Hashtags are a user-driven method for categorizing tweets about a specific topic with the # symbol

Purpose

The purpose of the research is to analyze the use of Twitter during violent crises.

Research questions:

- What types of information are transmitted over Twitter during violent crises? Who is creating and sending the information ?
- How can official response agencies use the information created by citizens on Twitter during violent crises?

Preliminary Results

Study in progress: Twitter usage in response to ambush and killing of four Seattle-Tacoma area police officers in 2009. 48 hour search for suspect.

- 6013 tweets sent using #washooting hashtag
- 1668 unique authors, 91.5% citizens
- 79% tweets information-related

Examples of information shared:

- Photos and videos of suspect
- Background information of suspect
- License plate of get-away car
- Twitter and Facebook profiles of suspect
- Information on suspect's alleged accomplices



Approach

- During crises, collect tweets via Twitter Search API based on various keyword searches and observations of hashtags used
- Qualitatively code tweets based on author information, content of tweets, information resources, and retweets
- Quantitatively analyze data to find trends in Twitter usage
- Interview official response agencies on use of microblogging and use of information created by citizens

Research Contributions

- Further understanding of microblogging use during violent crises
- Further understanding of information shared via microblogging during violent crises
- Inform design of tools for extracting information from social media