SOCIAL MEDIA USE DURING NATURAL DISASTERS: AN ANALYSIS OF SOCIAL MEDIA USAGE DURING HURRICANES HARVEY AND IRMA

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INTRODUCTION

• Two recent natural disasters have demonstrated the power, ubiquity, and potential of social media platforms.

• During hurricanes Harvey and Irma ordinary citizens, organizations, and governmental entities used social media to communicate a wide variety of messages to a variety of audiences.
  • Iashia Nelson, in Houston posted messages and videos to Facebook pleading for someone to rescue her family from the roof of their house.
    • Her messages even drew the attention of traditional media, and she did television interviews from the roof of her house as her family waited for rescue.

• A local television news station in Houston, KHOU, was flooded during the hurricane, so the station’s reporters started broadcasting news via Facebook Live.

• These are just two examples of how social media platforms were used during Harvey and Irma.

• These examples led Nikki Usher, Associate Professor of Media and Public Affairs at George Washington University, to call Hurricane Harvey “the first major natural disaster of the social media age.” http://time.com/4921961/hurricane-harvey-twitter-facebook-social-media/

• This presentation examines the variety of uses social media during these disasters.
SECURING RESCUE

* Individuals needing rescue:
  
  * Iashia Nelson
    * Used Facebook Live and posts to secure rescue for herself, her children, and about a dozen other people from the roof where they were stranded in Houston.
    * She was also interviewed live, via Facetime, from the roof on Good Morning America. [https://www.facebook.com/ABCNews/videos/10156232017178812/](https://www.facebook.com/ABCNews/videos/10156232017178812/)
  
  * Maritza Ritz Willis
    * Tweeted, “I have 2 children with me and tge [sic] water is swallowing us up. Please send help.”
    * “Got picked up bty [sic] the fire rescue, Thank You. One of you had connections and all I can say is I’ll be eternally grateful!!!” [http://time.com/4921961/hurricane-harvey-twitter-facebook-social-media/](http://time.com/4921961/hurricane-harvey-twitter-facebook-social-media/)
  
  * D’Antrese McNeil—FEMA volunteer
    * “Social media played a big part [in our rescue efforts] as people provided addresses for themselves and family members, we were able to provide dispatchers with an address that made it easier to find them.” [https://psmag.com/social-justice/what-harvey-and-irma-taught-about-using-social-media-in-emergency-response](https://psmag.com/social-justice/what-harvey-and-irma-taught-about-using-social-media-in-emergency-response)
  
  
  * Lauren LeBlanc from Plano, Texas, find out her grandmother in Houston was stranded at home.
    * LeBlanc used social media to connect with a variety of officials from the Coast Guard and Office of Emergency Management, along with everyday citizens with boats.
SECURING RESCUE (CONTINUED)

- Hashtags #sosHarvey and #helphouston were used to let rescuers know that people were in need of help.

- The Twitter account @HarveyRescue was created to compile addresses and names of those in need of rescue.

- Twitter users tweeted addresses where victims needed rescuing, including details about how many people there were and their condition, for citizens who were out rescuing others with boats, kayaks, and just about any other vehicle they could use to make it through the floodwaters. [https://mashable.com/2017/08/29/social-media-harvey-rescues-force-for-good/#vhFRPUdPuOqa](https://mashable.com/2017/08/29/social-media-harvey-rescues-force-for-good/#vhFRPUdPuOqa)

- Zello walkie-talkie app used by the Cajun Navy during Hurricane Havey.

- Became the #1 downloaded app ahead of Hurricane Irma.

- The Texas Navy and Cajun Navy have shared a crowdsourced rescue map that allowed users to submit addresses for rescue, to see where rescues are still in need, and where they had been completed. [https://www.google.com/maps/d/u/1/viewer?ll=29.868275810180098%2C-95.58358157402347&z=8&mid=1qmePB5HrFSthl1DyK7lg9slEabY](https://www.google.com/maps/d/u/1/viewer?ll=29.868275810180098%2C-95.58358157402347&z=8&mid=1qmePB5HrFSthl1DyK7lg9slEabY)

- CrowdSource Rescue helped facilitate over 7,000 rescues in Houston, and helped Florida residents in need during Irma. [https://www.wsj.com/articles/for-hurricane-irma-information-officials-post-on-social-media-1505149661](https://www.wsj.com/articles/for-hurricane-irma-information-officials-post-on-social-media-1505149661)
VOLUNTEERISM

• D'Antrese McNeil—FEMA volunteer wanted to help.

• Shea Serrano a best-selling author living in Houston.
  • Has over 160,000 Twitter followers.

• Facebook pledged to match every dollar raised on Facebook, up to $1 million, for the Center for Disaster Philanthropy’s Hurricane Harvey Recovery Fund. [http://www.adweek.com/digital/facebook-hurricane-harvey-10-million/](http://www.adweek.com/digital/facebook-hurricane-harvey-10-million/)

• Airbnb encouraged hosts in Northern Florida and Georgia to make rooms on its site available for free to hurricane evacuees. Uber provided Floridians free rides to shelters. [https://www.wsj.com/articles/for-hurricane-irma-information-officials-post-on-social-media-1505149661](https://www.wsj.com/articles/for-hurricane-irma-information-officials-post-on-social-media-1505149661)
INFORMATION SHARING

• The City of Houston used Facebook Live to stream press conferences.

• The Harris County Sheriffs Office, Houston Office of Emergency Management, and the Houston Police Department all used Nextdoor accounts to get information out to residents affected by Harvey. [https://mashable.com/2017/08/29/social-media-harvey-rescues-force-for-good/#vhFRPUdPuOqa](https://mashable.com/2017/08/29/social-media-harvey-rescues-force-for-good/#vhFRPUdPuOqa)

• Seminole County Florida officials worked with Nextdoor to create a map of every residence inside one of its seven towns and every residence in a broader “unincorporated” area.
  • Ashley Moore, Community Relations Officer for Seminole County, said “The maps we load into Nextdoor allow us to lessen confusion, specifically when a message is only applicable to part of the County.” [https://www.wsj.com/articles/for-hurricane-irma-information-officials-post-on-social-media-1505149661](https://www.wsj.com/articles/for-hurricane-irma-information-officials-post-on-social-media-1505149661)

• Lamar University, Beaumont, Texas, used their Facebook page to keep students and parents updated on Hurricane related delays. [https://www.facebook.com/LamarUniversity/](https://www.facebook.com/LamarUniversity/)


• Floridians turned to GasBuddy, an app that crowdsources prices at the pump, to figure out where fuel was still available. [https://www.wsj.com/articles/for-hurricane-irma-information-officials-post-on-social-media-1505149661](https://www.wsj.com/articles/for-hurricane-irma-information-officials-post-on-social-media-1505149661)
ACTIVISM

• Joel Osteen and Lakewood Church

Front of @JoelOsteen's huge Lakewood Church in Houston at 11 am. Closed due to "flooding". Person who took it asked to be anonymous.
KEEPING FRIENDS AND FAMILY UPDATED

• Many Facebook users posted regular updates on their safety and whereabouts.

TAKEAWAYS

• In Houston, federal and local officials initially warned those needing assistance away from social media to traditional lines of communication like 911.
  • 911 and other emergency lines were quickly overwhelmed and people turned to social media platforms for help.
  • For Irma, Florida officials were proactive in working with social media based on what had happened during Harvey.

• It is essential that people have multiple ways to get information during disasters.
  • Federal, state, and local agencies need to understand the importance of using social media in disasters and build social media into their disaster plans.

• Agencies also need to recognize that social media users can be of great help in these situations.
  • Agencies need to find ways to capitalize on social media volunteers.

• Social media can also provide emotional support for people who need to be rescued.
  • According to Shea Serrano, best-selling author and social media volunteer during Harvey, “It's at least a tiny bit comforting for someone who needs to be rescued to be able to see that people on Twitter or Facebook or whatever are trying to figure out how to get help to them.”

TAKEAWAYS (CONTINUED)

• Social media may be valuable in reacting some people that might not be reached by traditional media.
  • For example, undocumented immigrants.

• Social media may help those who do not know how to or can not get in contact with emergency rescue services.

• Some people may consider information from social media to be more trustworthy than information carried in traditional media.
  • During Harvey, some people felt that official warnings were alarmist, but began to take them seriously after seeing panic spreading on social media.
  • LaDawn Fletcher, a Web content writer and resident of Houston, noted, "I think if people hear things from people they know, they respond better than they do to notices."  

• Organizations and agencies need to recognize that the pervasiveness of social media now means that nothing is private, and someone is always watching.