

## Author's Accepted Manuscript

Analysing social media data for disaster preparedness: understanding the opportunities and barriers faced by humanitarian actors

Susan Anson, Hayley Watson, Kush Wadhwa, Karin Metz



[www.elsevier.com/locate/ijdr](http://www.elsevier.com/locate/ijdr)

PII: S2212-4209(16)30156-X  
DOI: <http://dx.doi.org/10.1016/j.ijdr.2016.11.014>  
Reference: IJDRR457

To appear in: *International Journal of Disaster Risk Reduction*

Received date: 11 April 2016  
Revised date: 18 November 2016  
Accepted date: 23 November 2016

Cite this article as: Susan Anson, Hayley Watson, Kush Wadhwa and Karin Metz, Analysing social media data for disaster preparedness: understanding the opportunities and barriers faced by humanitarian actors, *International Journal of Disaster Risk Reduction*, <http://dx.doi.org/10.1016/j.ijdr.2016.11.014>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain

Analysing social media data for disaster preparedness: understanding the opportunities and barriers faced by humanitarian actors

Susan Anson<sup>1\*</sup>, Hayley Watson<sup>1</sup>, Kush Wadhwa<sup>1</sup>, Karin Metz<sup>2</sup>

<sup>1</sup>Trilateral Research Ltd, 72 Hammersmith Road, London W14 8<sup>TH</sup>, United Kingdom

<sup>2</sup>Global Disaster Preparedness Center, American Red Cross, 8550 Arlington Boulevard, Fairfax VA 22031, USA

susan.anson@trilateralresearch.com

hayley.watson@trilateralresearch.com

kush.wadhwa@trilateralresearch.com

gdpc@redcross.org

\*Corresponding author

### Abstract:

The use of social media applications by citizens, public authorities, and humanitarian organisations generates vast quantities of data. Research predominantly focuses on the use of social media and associated analysis tools during the short-term response phase of a disaster. As such, the use of social media analysis tools to harness social media data for preparedness purposes is currently unclear. This research uses a combination of semi-structured interviews with 20 Red Cross Red Crescent and humanitarian actors, an online survey, two workshops and desk-based research to examine the opportunities and barriers faced by humanitarian actors in using social media analysis tools to analyse social media data for disaster preparedness. Whilst social media analysis tools provide humanitarian actors with an opportunity to understand the effectiveness of their preparedness communication on social media, to monitor risks and disasters, and to build community preparedness networks, this study identified a limited use of social media analysis tools by research participants. This (non) use of social media analysis tools was influenced by the interaction between seven categories of barriers relating to the user of the tool or the tool itself: language, culture, value, financial, human resources, technology, and data. In discussing these barriers, the authors highlight the key role that context plays in determining the significance of each barrier on the selection and use of social media analysis tools for preparedness.

### Keywords:

social media, data, analysis tools, preparedness, humanitarian

### 1.0 Introduction

The increasing use of social media, such as Twitter and Facebook, by humanitarian organisations, public authorities and citizens preparing for and responding to disasters generates vast quantities of information. In responding to disasters, including the 2010 Haiti earthquake, the 2012 Sandy superstorm and the 2013 Boston Marathon bombings, social media was used for relaying information, one and two-way communication, offering/requesting assistance and organising disaster response (Watson and Wadhwa, 2014). The vast amounts of information that social media generates during a disaster poses challenges in relation to identifying the most valuable information to save lives (United Nations Office for the Coordination of Humanitarian Affairs (OCHA), 2012). For example, the day after the 2011 earthquake in Japan, 572,000 new Twitter accounts were created

Download English Version:

<https://daneshyari.com/en/article/5116169>

Download Persian Version:

<https://daneshyari.com/article/5116169>

[Daneshyari.com](https://daneshyari.com)