



Joining the dots: Using social media to connect with more vulnerable Victorians during emergencies

Dr Peter Hayes^{1,2}

Dr Stan Karanasios^{1,2}

Prof Vanessa Cooper^{1,2}

Assoc Prof Marta Poblet-Balcell^{2,3}

¹School of Business IT & Logistics, RMIT University;

²Centre for People, Organisation and Work, RMIT University;

³Graduate School of Business & Law, RMIT University



Background to this EMV funded NDRGS project

- Over the last 15 years Australians have increasingly used social media (SM) to connect with one another and to source information about what is going on.
- Yellow (2018) estimate that on average:
 -  – Facebook users access this site 37 times each week
 -  – Instagram users access this site 33 times each week
 -  – Twitter users access this site 23 times each week
- Emergency response organisations, government agencies, NGOs, and community groups have responded to these changes and increasingly use SM to inform and interact with the wider community.

Background literature on social media use in the context of emergencies: Three main themes

Multilayered and complex landscape of converging organisational actors

- Breakdown in the traditional barriers between organisations and activities, with new actors playing a role in this space.

Evolving technology

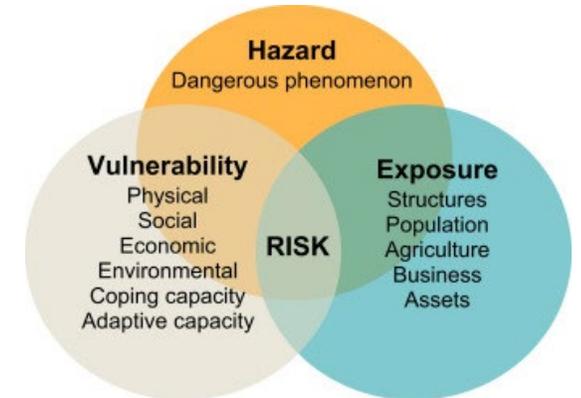
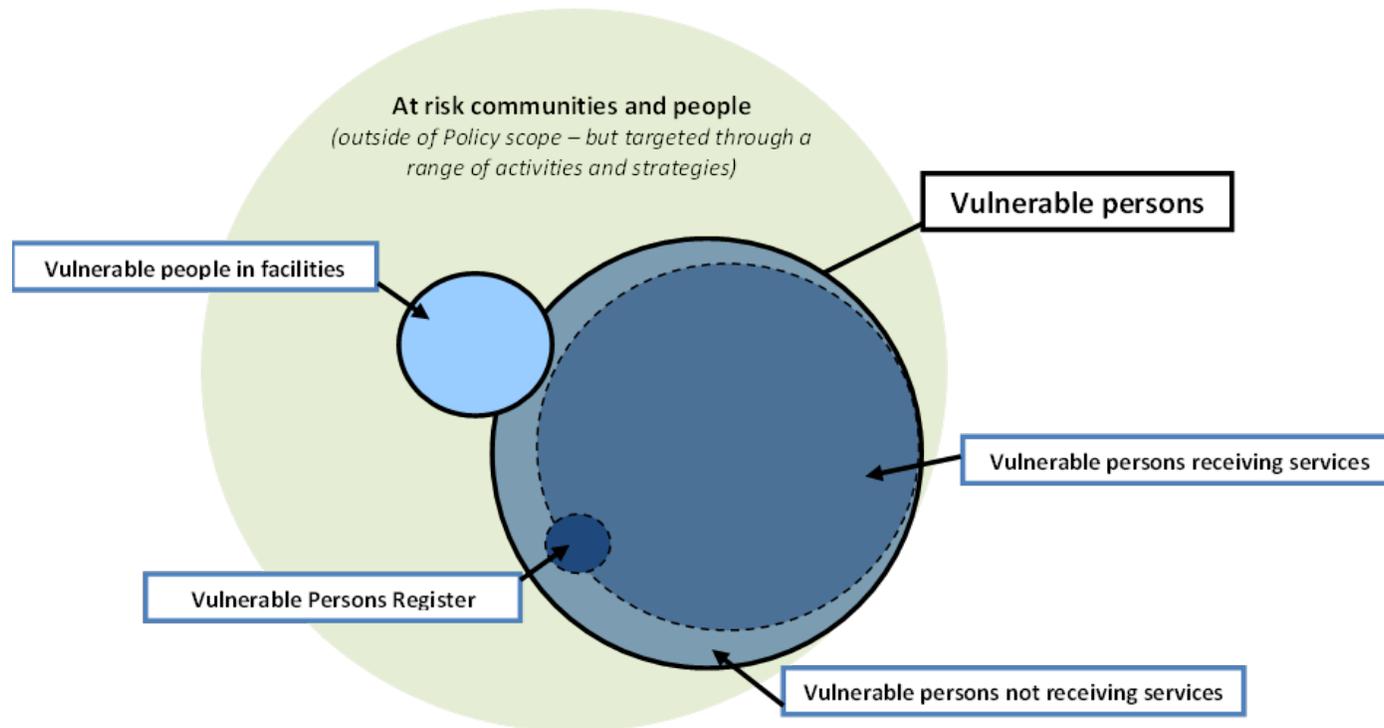
- Is enabling swift transmission of clear information and advice.

Focus on vulnerable people

- Community members who may be considered more vulnerable are disproportionality and adversely affected by emergency events (Deacon, 2018; IFRC, 2013; Nakahara & Ichikawa, 2013).

Vulnerability

- As a starting point we used the Nick et al. (2009) definition of vulnerability as broadly referring to those whose circumstances create challenges to seeking, obtaining, or responding to information, or their ability to respond to the same information as the general population.



(de Brito, Evers & Hollerman, 2017)

Our approach – Three streams of research

1. Organisational perspectives

Interviewed 43 people from 28 organisations in Victoria from state and local government, emergency response agencies (EROs), NGOs, and community-based groups.

2. Social media analysis from extreme weather events

Analysed social media posts from the public Facebook pages of 13 organisations comprising 3 EROs (1,864 posts) and 10 regional community groups (3,246 posts).

3. Individual perspectives

- Individual and focus groups interviews with 47 community members.
- Online survey of 215 Victorians identifying as belonging to different vulnerable groups (i.e., 60+ years old, geographically or socially isolated, suffering from physical limitations and/or low socioeconomic means).

Findings from organisational interviews

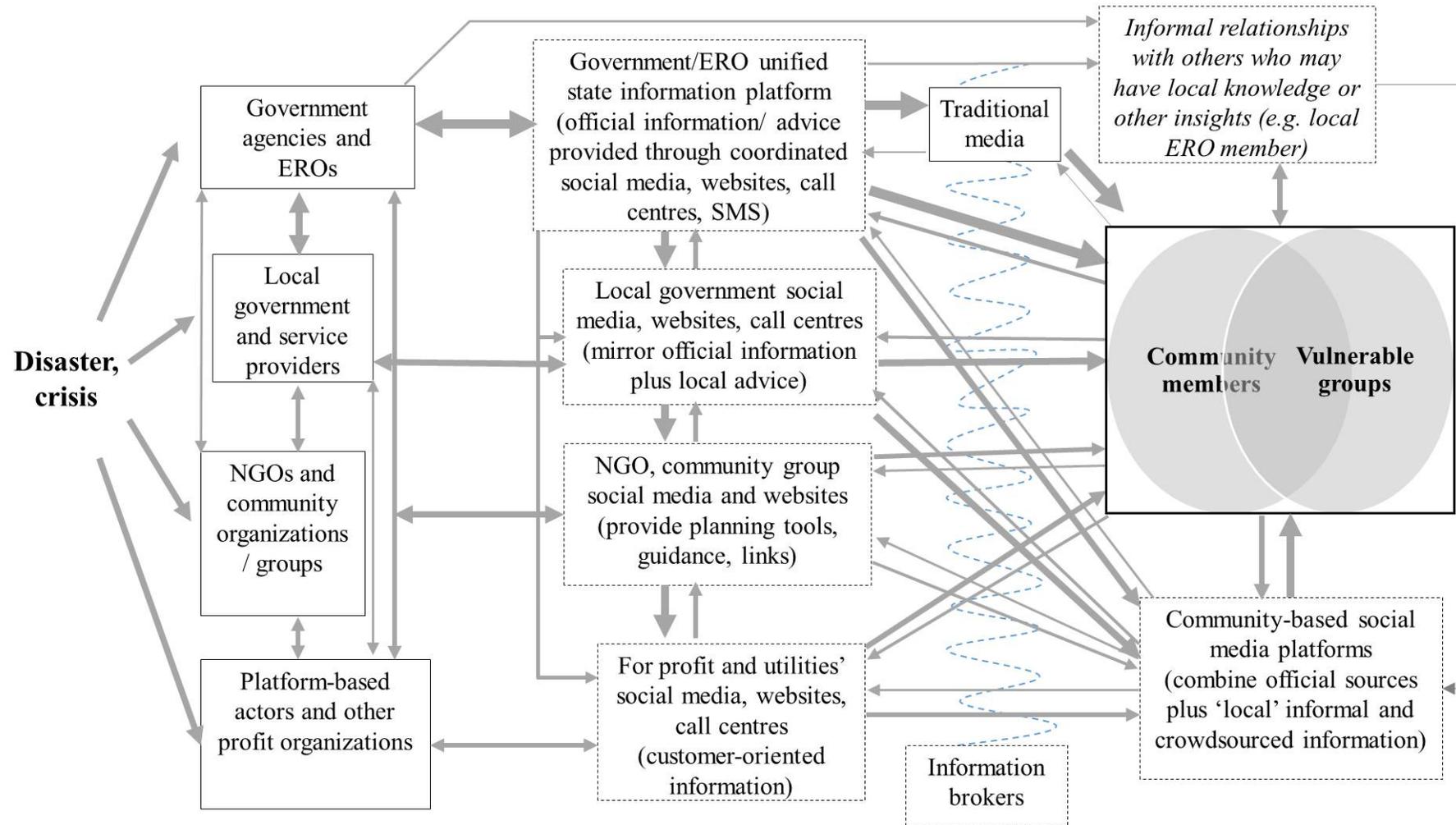


Figure 5: Simplified view of information flows between different organisations

Social media analysis: Findings

- < 1% of messages potentially related to vulnerable populations.
- Use of messages that highlighted the need to check on neighbours and vulnerable groups within families or communities (e.g., look after, keep an eye on).
- With the exception of folk with lung/heart/asthma conditions messages targeted the general population rather than specific groups.
- Suggests that organisations expect that SM will be shared across networks and perhaps importantly, shared offline.
- The task of filtering, adding context, and translating these messages is left explicitly to social media users as information brokers with a duty of care.

**Know someone who might be struggling in today's heat?
Check on those most at risk – the elderly, the young,
people with medical conditions and don't forget about
your pets!**



The screenshot shows a Facebook post from 'Vic Emergency' dated January 6. The post text reads: 'Know someone who might be struggling in today's heat? Check on those most at risk – the elderly, the young, people with a medical condition and don't forget about your pets! #SurviveTheHeat with our top 5 tips - Drink plenty of water - Stay somewhere cool - Plan your activities for the coolest part of the day - Check in on others - Never leave anyone or pets in a car Learn more about the signs of heat stress at https://www.betterhealth.vic.gov.au/heat'. The post has 98 likes and includes 'Like', 'Comment', and 'Share' buttons.

Findings: Individual perspectives

Trust and attitudes towards SM as a reliable and helpful information source

- **61% of respondents said that they would not trust messages on SM, except for messages posted by official sources.**
- **Over 70% of respondents rated EROs and government agencies' SM as very or extremely helpful, and the third highest rated SM provider for these 2 categories was local groups (49%).**
- **68% of respondents agreed that the information provided on SM by EROs meets their needs.**
- **61% of respondents believed that their information needs during extreme weather events are very specific, with 50% preferring to use community groups on SM to obtain information because it is tailored to their needs.**

Findings: Individual perspectives

Use of SM by EROs

- **87% of respondents thought that it was important that EROs use SM.**
- **There was a mixture of responses to the question asking *whether EROs should regularly monitor SM*:**
 - 75% said they should,
 - 53% said they should expect a response within one hour, and
 - 62% said emergency services were too busy to monitor SM during an emergency.



Implications from this research:

The nature of the information flows and roles of actors

- **Top down information flows:** There is a tension between the top-down model and the demand for contextualised information.
- **Overcoming bias against vulnerability:** For vulnerable groups, a challenge is the balance between consistent/clear information and targeted information.
- **Convergence of actors:** There is a need to better explain how all the actors fit in the emerging information landscape, in particular new actors.
- **Improving informational resources and capabilities:** Understanding that not all information channels are well suited to some sections of the community.



Implications from this research: Technology, practices and capabilities

- **Some unevenness in capability and resourcing:** Our study found 88% of individuals expect to use SM more in the future for emergencies.
- **Staying abreast of changing patterns of social media usage**
- **Complementing not substituting:** A need to ensure SM complements traditional information and communication channels.
- **Ensuring consistent good practice around managing local Facebook groups**
- **Challenges of evaluating the effectiveness of communication and information programs**



Implications from this research: Engaging at risk groups and vulnerability

- **Vulnerability:** Work required to better understand when, why and how long people are vulnerable, as this is not part of the mainstream or SM discourse.
- **Three main SM strategies are used to engage vulnerable communities:**
 - Use SM to broadcast emergency related information, advice and warnings.
 - Use SM to crowdsource and thus tap into local knowledge, images and local updates.
 - Use SM to find and engage information brokers, trusted intermediaries for vulnerable persons.
- **Identification and visibility of vulnerable persons:** A need to more effectively identify vulnerable persons in light of the multifaceted and fluid nature of vulnerability.

Acknowledgements...

This research was funded by the EMV National Disaster Resilience Grant Scheme.

We would like to thank all the study participants for their time, insights, and support.

We would also like to thank the following researchers who contributed to the study: Dr Mari Fitzpatrick, Mrs Farjana Chowdury, Mr Giang Hoang, Dr Miji Choi, and Mr Peter Nowotnik (RMIT University), and Dr Anouck Adrot (Paris Dauphine University).