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# #SMEM: Social Media for Emergency Management

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## INTRODUCTION & BACKGROUND

Emergency management and first responder organizations around the world are exploiting social technologies to prepare for, respond to and recover from crisis. The Calgary Emergency Management Agency and the Toronto Police Service are two examples of official agencies that have built a significant social media presence and that are finding real value in engaging their communities online. Digital volunteer organizations, such as CrisisCommons, Standby Task Force or Humanity Road are making a significant contribution to international disaster relief efforts and are leading the way in volunteer-driven crisis-mapping and crowd-sourcing of crisis information. Social media offer the opportunity to connect and cooperate with the networked public, take advantage of the capabilities and innovations of virtual volunteers, and reach people quickly with alerts, warnings and preparedness messages. Efforts supported through the Canadian Safety and Security Program (CSSP) are exploring the role of social media in emergency management.

CSSP is a federal program led by Defence Research and Development Canada's Centre for Security Science (DRDC CSS), in partnership with Public Safety Canada.

## PROJECT OBJECTIVES

- To understand the state of maturity of the use of social media in emergency management as well as to create a "roadmap" for an effective use of this capability in Canada; and
- To address an awareness and expertise gap that exists within the Canadian emergency management community in the domain of social media and online collaboration.

## METHODS

The research involved conducting an environmental scan, consultations with experts and case study analysis.

As part of the project, DRDC CSS partnered with the Calgary Emergency Management Agency to hold an "Expert Roundtable" that brought together experienced practitioners and subject matter experts including government emergency management agencies, first responders, digital volunteer groups and non-governmental organizations. The workshop gave participants the opportunity to connect and bring forward critical issues, such as the potential of digital volunteers in bridging SMEM capacity gaps.

## Public Expectations

**63%** SAY EMERGENCY RESPONDERS SHOULD BE PREPARED TO RESPOND TO CALLS FOR HELP POSTED ON SOCIAL MEDIA



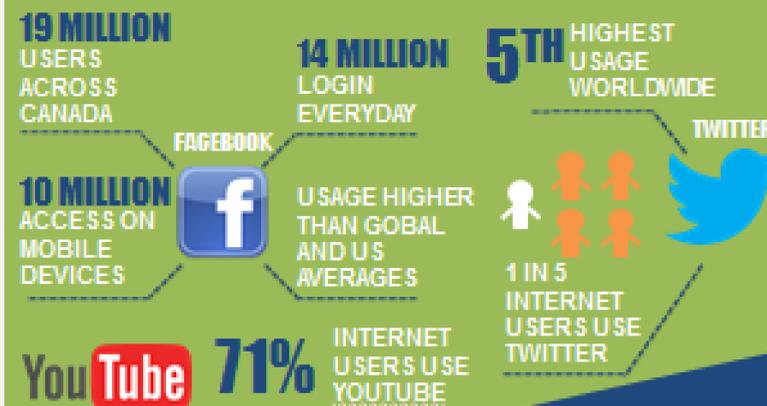
1 in 3 think emergency responders will respond to a request for help posted on social media



ABOUT HALF WOULD SIGN UP FOR EMERGENCY ALERTS VIA EMAIL, TEXT MESSAGE OR SMARTPHONE APP

## #SMEM in Canada Facts and Figures

### POPULARITY OF SOCIAL NETWORKING



### CASE STUDY – 2013 CALGARY FLOODS



## RESULTS AND DISCUSSION

This research assessed the conditions required for improving emergency management and disaster relief through the exploitation of social media technologies, as well as cooperation with the public, non-governmental organizations, and digital volunteers. It identified characteristics and conditions that an organization should address to enable an increasingly mature use of social media in emergency management.

We found that there exists an awareness and expertise gap between the community of internationally experienced virtual volunteers and the emergency management organizations in Canada, and that the potential of social media and online collaboration remains unfulfilled. One of the main challenges to implementing an effective capability is resolving how to bridge the command-and-control, hierarchical culture of emergency management organizations to the horizontal, networked culture of the digital domain.

## CONCLUSIONS

Social technologies have enabled citizens to exert significant influence in areas of society that were previously viewed as the exclusive domain of large institutions, industry and government, including public safety and security. Adapting to changing public behaviours and expectations—related to the use of social media technologies—is not a choice. It is a necessity in order to remain relevant among an increasingly networked public.

Exploiting SMEM deliberately requires a culture that embraces openness and public accountability, appreciates the public's knowledge, expertise and connectedness, and values relations and partnerships with digital volunteer communities and others that use online technologies to support emergency management, aid and recovery. The necessary culture change can be achieved by building digital knowledge and leadership and gradually increasing the use of networked social technologies for collaboration with citizens, virtual volunteer organizations and other stakeholders.

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