

THE RESILIENCE WHEEL

Navigating Social Media and Crowdsourcing in Disasters

Motivation

Managing disasters is a complex task requiring the right knowledge, resources and experience within and across organisations. Social media and crowdsourcing may enable and alter these efforts if applied with sensitivity to the organisation's structure and procedures as well as the context in which efforts are targeted.

The Resilience Wheel supports initial discussions and assessments on how social media and crowdsourcing may support and challenge disaster management processes within and across organisations. It simplifies the complexity of managing disasters through technology into a set and subset of factors through which the link between disaster management and technology can be understood.

Description

The Resilience Wheel is a strategic tool for discussing and assessing what authorities, NGOs and private sector organisations need to consider when using social media and crowdsourcing in disaster risk management processes. It is a tool that kick starts holistic and context dependent conversations about potentials and challenges associated with using social media and crowdsourcing in disaster management processes. It provides a framework to map organisations' capacities to apply these technologies in disasters.

The Wheel consists of two layers: a set of drivers that reflect the most important focal points to alter resilience-building through social media and crowdsourcing. Connected to each driver is a set of characteristics that describe the needed qualities for building disaster resilience through social media and crowdsourcing in an organisation.

Goal: To support initial discussions and assessments of the potential application of social media and crowdsourcing in disaster risk management processes

Profile

Target group: Disaster management organisations

Developers: **The Copenhagen Centre for Disaster Research**, University of Copenhagen and University College Copenhagen based on Arup/ Rockefeller Foundation, 2015

Functions

Communication tool: The conceptual base for a holistic discussion on how to apply social media and crowdsourcing in disaster management processes.

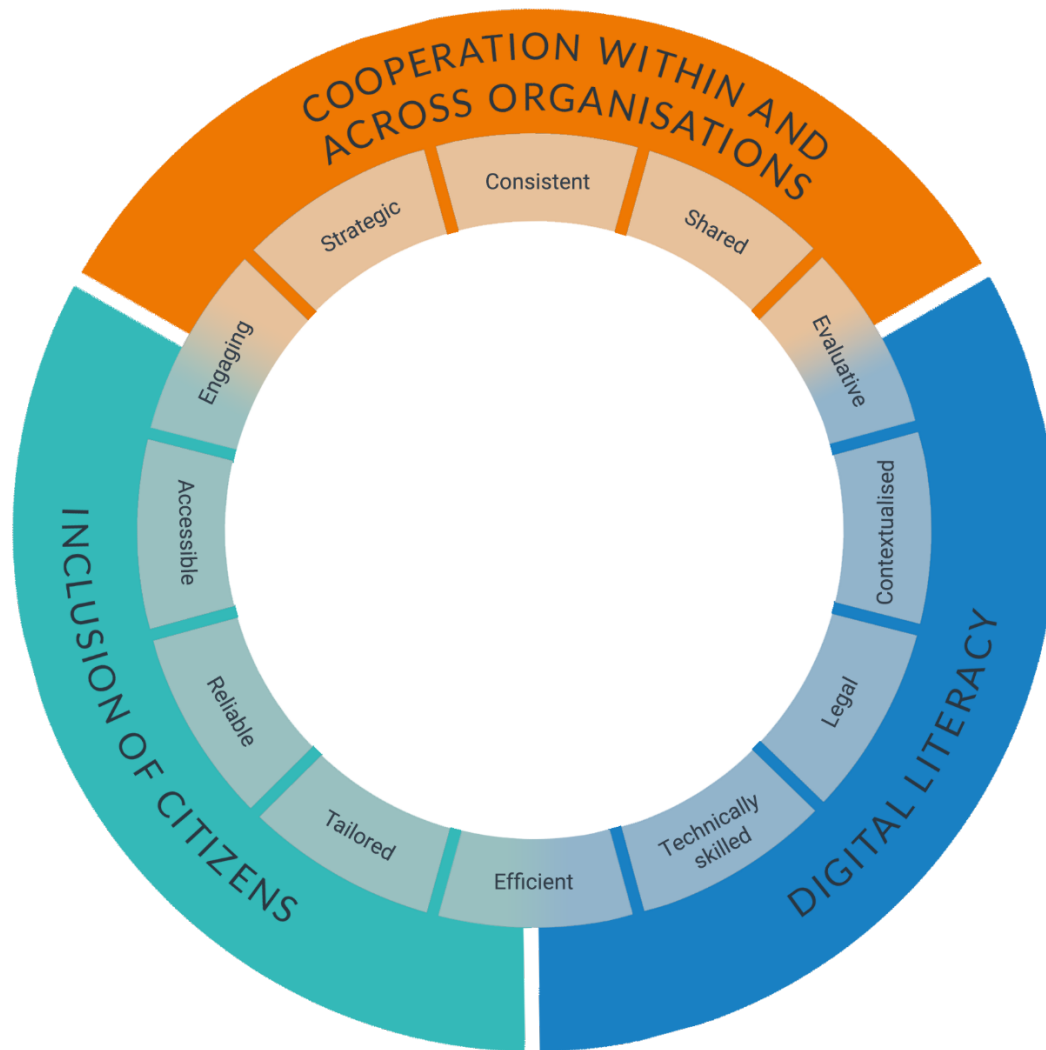
Assessment tool: A base for a deeper assessment of current activities and uses of social media and crowdsourcing in disasters

Value

Promoting holistic policy and planning

Status

Timeframe: 2020 - 2022



Sources

Theory: The Wheel is based on a systematic review of all existing research linking social media and crowdsourcing with disaster risk management.

Empirics: The Wheel was co-designed with a wide range of disaster management organisations across Europe. Drivers and characteristics were based on and further informed through qualitative expert interviews across various hazard scenarios, organisation types and socio-political contexts.

Practice: The Wheel is influenced by the City Resilience Framework developed by the Rockefeller Foundation and Arup for the 100 Resilient Cities Network. Yet, developed and translated to fit the specific aim of linking technology and management processes aiming at increasing disaster resilience.

DRIVERS & CHARACTERISTICS

DIGITAL LITERACY

- SMCS platforms and processes should be selected and **contextualised** to the needs and identity of the organization(s) using them;
- The use of information obtained through SMCS platforms should be grounded in **legal** principles and adhere to existing regulations concerning privacy and data protection;
- Organisations need the right **technical skills** and know-how to act digitally in disaster management processes;
- SMCS use should support a direct, fast and **efficient information** communication and allocation of resources in disaster risk management.

COOPERATION WITHIN AND BETWEEN ORGANISATIONS

- Organisations should take on an **evaluative** approach to lessons learned within and across organisations;
- SMCS use should be **strategic** and integrated in communication plans and cooperation agreements. The purpose of using SMCS and its audience should be taken into consideration in the strategic planning;
- Information communicated through SMCS should be **consistent** across organisations to avoid confusion and mistrust in the information communicated from different organisations;
- Experiences and know-how of applying SMCS should be **shared** within and across disaster management organisations to allow for better integration and coordination.

INCLUSION OF CITIZENS

- SMCS use has immense potential of informing and mobilising citizens if it is active and **engaging** allowing for citizens to contribute and partake in disaster management efforts;
- Information communicated through SMCS should be made **accessible** to all citizens across digital divides. This includes considerations about the extent to which information provided through SMCS also must be provided via other means for those outside the digital world;
- **Reliable** and trust-worthy communication between organisations and citizens allow for greater coordination and collaboration of action and limits false information;
- The use of SMCS should be carefully **tailored** to diverse perceptions of risk and be sensitive to a broad range of people with different cultural, social and economic backgrounds.

IMPLEMENTATION

COMMUNICATION TOOL

Learn from SMCS applications in other organizations and discuss common mistakes and examples. Help to kickstart SMCS usage internally and establish networks externally.

The Wheel may serve to kick-start conversations *across organisations* with a stake in the same disaster management processes. It provides a framework with a common language to focus discussions on how SMCS is used, and may be used, in disasters.

Scope: Across organisations

Level: Strategy / management

Approach: Workshop

Participants: Stakeholders representing public authorities / business / civil society working with disaster risk management. For example representatives from emergency management services / civil protection, local businesses, research institutions and businesses playing a role in managing risks.

Results: Common understanding of how SMCS are used across the organisations working in a community / with a certain disaster.

Additional Resources:

- [Workshop template](#)
- [Wheel template](#)

ASSESSMENT TOOL

Map potentials of SMCS usage within an organization. Where could SMCS be usefully applied? What potential caveats must be taken into account? How can SMCS be employed in a holistic manner to increase resilience?

The Wheel may serve as an assessment tool providing an overview of existing SMCS application in disaster risk management processes *within an organisation* or in the context of a disaster scenario.

Scope: Within an organisation

Level: Strategy / management / business development

Approach: Workshop and interview activities

Participants: Should represent the organisation. For example representatives from strategic and operational units and/or communication, management and technical departments.

Results: Overview of the existing uses of SMCS within an organisation its challenges and potential for further use. This includes existing SMCS practices (if any) within the organisation, the involved departments, guidelines and policies. This map can be used to streamline SMCS applications and uncover potentials for improvement and expansion.

Additional Resources:

- [Workshop template](#)
- [Wheel template](#)