

What are the current and potential sources of impact data for Disaster Risk Reduction?

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Key Points

- Impact data are usually collected for very specific purposes and it is important to know which data source or type is suitable for users' needs.
- Findings show that impact data needs and challenges are:
 - **trust in the data,**
 - **systematic and standardised data collection,**
 - **partnerships and data interoperability,** and
 - **data custodianship and cost.**
- A **tension** appears to exist between trustworthiness and timeliness, as officials require both timely and trustworthy data, but often must compromise on either factor.

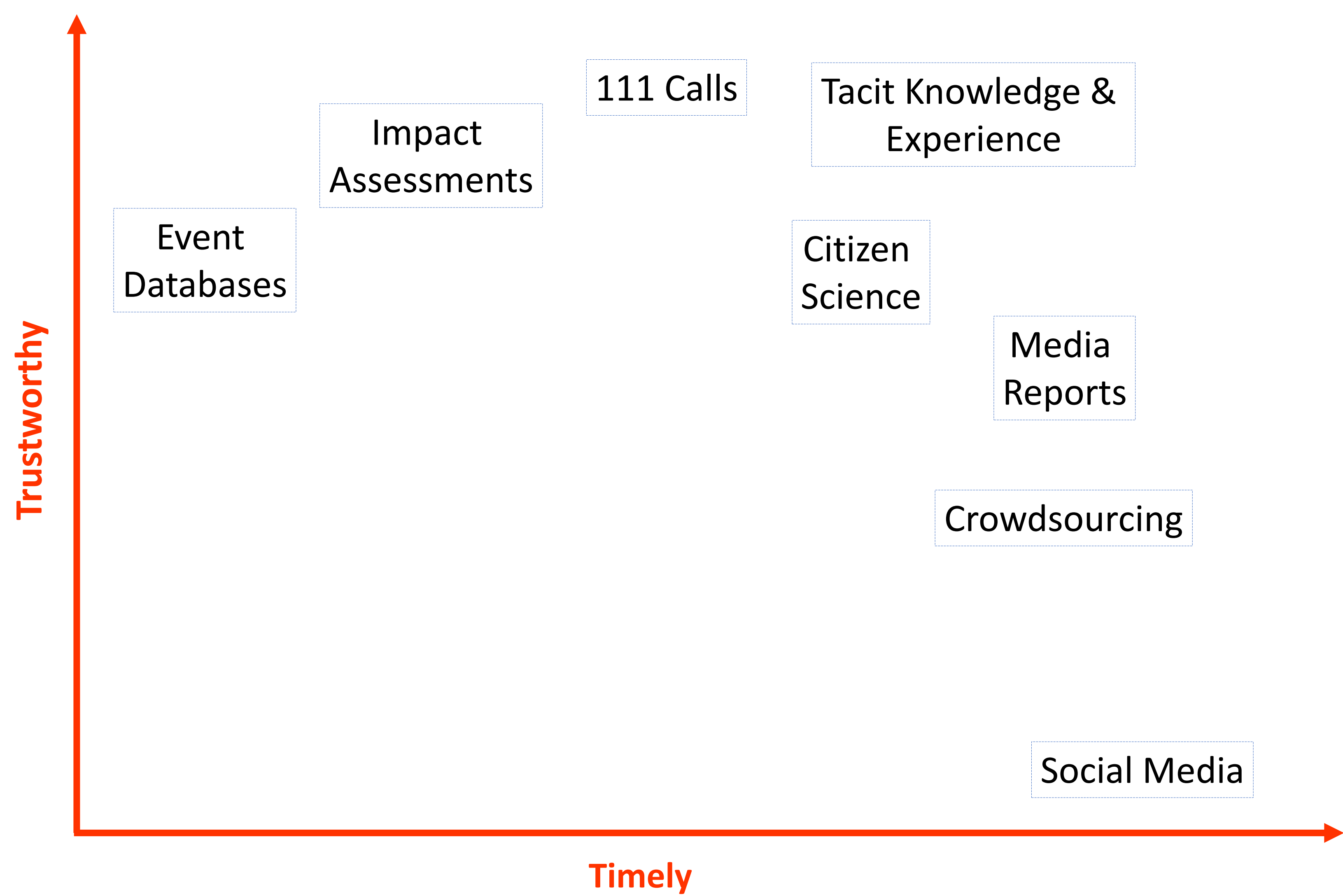
Context

- Understanding disaster risk is the first priority of the Sendai Framework.
- Countries and regions must promote the collection, analysis, management, use and dissemination of relevant data and practical information according to users' needs.
- There is a need for better collection and access to impact, vulnerability, and exposure information.
- This poster presents a portion of an ongoing PhD study investigating the current data sources and datasets available in New Zealand for understanding disaster risk.

Methods

- Interviews were the primary data collection method and involved:
 - Officials from national meteorological services (n=9) inside and outside of New Zealand (including Australia, Austria, the UK, Argentina, and the USA)
 - Officials from New Zealand's Civil Defence and Emergency Management Groups (n=6)

A wide variety of impact data sources exists; however **trustworthiness** and **timeliness** appear to be two influential factors in the choice and use of a potential data source.



Trust in the data

- Emergency management agencies need to be perceived as trustworthy, as such they need to be able to trust the data that they use to inform decisions and warning messages.

Systematic & standardised data collection

- Many countries, including New Zealand, lack standardised and systematic collection of impact information.
- Standardised and systematic collection can support evidence-based planning and decision-making, model comparison, etc.

Partnerships, data sharing, and integration

- Many sources of impact data exist in many formats as it is collected by different groups for different purposes.
- Formal and informal partnerships are needed, and may already exist, to share required information between agencies.
- It is difficult to integrate the various formats of data in any meaningful way.

Data custodianship and cost

- The responsibility and cost of collecting and storing impact data into one place were concerns for interviewees.
- Agencies' remits do not include data custodianship, and costs are an issue.

Future Research

- This study is limited to the scope of impact data for disaster risk reduction. Yet, knowledge of vulnerability and exposure is also needed for enhanced disaster risk reduction.
- Future research will investigate the various data sources for exposure and vulnerability and explore the opportunities and challenges of integrating these datasets.

References

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The results presented on this poster aim to be published in the following manuscript:

Harrison, S. E., S. Potter, R. Prasanna, E. E. H. Doyle, and D. M. Johnston, 2020: Data needs for impact-based forecasts and warnings. *Manuscript in preparation*.