

# Participant perceptions of learning an online collaborative tool for asset mapping

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## Abstract

Disasters like the Lac-Mégantic train explosion and Hurricane Sandy demonstrate the importance of effective and efficient response and community resilience to recover from adverse events. The EnRiCH Project was developed to promote community resilience through the implementation of an asset-mapping intervention in 4 different communities across Canada. This UROP project was conducted as a sub-study within the larger EnRiCH project to explore the perceptions of the participants who took part in the intervention phase, and collaborated in the development of an asset- database for their communities using Google Docs as an online collaborative tool. As part of the UROP experience, I conducted a literature review on information systems (IS) user-engagement. I also completed transcription for one of the focus groups that was recorded with a community as they learned how to use the Google Docs program. Once the transcription was complete, I assisted with coding one transcript and doing qualitative content analysis to identify emergent themes to answer the research question. The findings from this research provide direction for future IS developers to consider facilitators and barriers to learning how to use an online collaborative tool for community asset-mapping, as an intervention to enhance community resilience before a disaster occurs.

## Introduction

The EnRiCH Project is a community based asset-mapping intervention that was created to identify the supports and services that exist in the community and to enhance emergency preparedness and protect high-risk populations. High-risk populations are people living with functional limitations that increase their risk of experiencing the negative impacts of disasters. Google Docs was used as an online collaborative tool for communities to list in a spreadsheet all the services and resources that could assist with disaster response and recovery, through direct and indirect support for high-risk populations according to CHAMPSS Functional Capabilities Frameworks (O'Sullivan et al., 2013). The CHAMPSS framework has 7 categories of functional capabilities, and the participants fill out the asset spreadsheet according to those categories. The intervention was done in three phases. Phase 1 was a full day orientation session which involved introduction of the framework and the Google Docs tool, in a focus group format. Phase 2 was the online collaborative asset-mapping process where participants populated the spreadsheet over a 10-week period. Phase 3 was a tabletop exercise where the participants tested the tool with a disaster scenario. This UROP project focused on the learning process of the Google Docs during the training focus group session in one of the four communities. The purpose of this study was to examine participant perceptions while they were learning how to use the online asset-mapping tool.

## Methods

The EnRiCH Project utilized a community-based participatory approach. For the purposes of this study, we used data from the first phase of the EnRiCH Community Intervention (O'Sullivan et al., 2013), which was a focus group to show participants how to use Google Docs for asset-mapping with the CHAMPSS Functional Capabilities Framework. The focus group was audio-recorded and participants were asked to 'think aloud': to express their thoughts and feelings. For this research, one recording was transcribed verbatim. The first two authors then read the transcripts separately and met to identify emergent themes. All three authors met to revise and finalize the themes.



## Results

### What will we use it for?

The participants questioned the purpose of the tool in relation to its potential to improve resilience in their community

*"So, where we want to find out is by investing in this tool how does it make our community more resilient than it is already. And I think until we answer that question we haven't helped you to see the point."*

### But where do we stop?

Participants discussed the possibility to set geographical boundaries to ease the management of the online tool

*"We don't have to do the whole region. So that narrows it down a little bit more. I think if we can narrow it down to something that feels like it's manageable that part will probably get done."*

### What is the scope of the services we will map?

Participants discussed the need to limit the scope of the online tool to organizations providing care and services to high risk population groups.

*"Do we need to have people who have mental health and addictions training, counseling, critical incidence, stress debrief? We need to think about what we really need. We can't do it all. We can't have every agency involved in this."*

### Who will manage the database?

Ownership of the tool was perceived as being an important management aspect, which should be delegated to organizations with previous knowledge about existing community databases

*"Somebody needs to own it. [...]. That's my point. And it has to be an organization in my mind that already links with the other systems that we already have in place. So that leads me down the three paths as either the regional police or the fire department or some consortium of the three of them."*

### Learning this tool triggered a discussion on community resilience.

The learning of the online tool initiated a multi-sectorial dialogue between community stakeholders and provided a launching platform to push forward the emergency preparedness agenda in their community

*"This is a great tool because just having everyone here and talking about emergency management you'll learn a little bit. I've always wanted a rolodex of phone numbers, contact information and partnerships over the last seven years and was unable to get that. [...] we start building better partnerships and we're going to be better if there's an emergency or disaster. So just to have that rolodex in this format is the best thing possible because if we ever have to meet at that EOC [Emergency Operations Center], right, at least there's a working group and there's a fan out of all these numbers and we're going to better serve our community."*

## Conclusion

This research shows the importance of participant perceptions in the development and the management of an online-asset mapping tool. It is necessary for participants to identify and understand a purpose for the tool, establish geographical boundaries, determine a scope for the services being mapped, and to determine who will manage the tool. The training session prompted a discussion on emergency preparedness, between the stakeholders in the community, which is useful for developing awareness and relationships between different organizations in the community.



<http://redcrossweblog.org/2013/05/23/thank-you-thank-you-thank-you/>

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