Chapter 15

Implementing Social Media in Crisis Response Using Knowledge Management

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ABSTRACT

Social media is being used by individuals during a crisis to alert rescuers to their location, status others on their condition or on environmental conditions, warn of issues, and so forth. However, organizations have been slower to adopt social media for crisis response. This paper explores issues affecting social media adoption by organizations for crisis response and proposes the use of knowledge management strategy as a process for mitigating these issues and guiding organizations in adopting social media into their crisis response plans.

INTRODUCTION

Organizations need to be prepared to respond to crises. Traditionally organizations prepare themselves for crisis response through planning, preparing response procedures and a crisis response system, and performing at least basic overview training to expected crisis responders. Crisis planning involves identifying potential crisis scenarios and determining what resources and actions will be needed to mitigate them (Raman et al., 2010). Crisis response procedures provide direction to responders on how to recognize the crisis, what immediate actions to take, what communications to make, what long term actions are to be taken, and how to end the crisis (Jennex, 2004a, 2008). Crisis response systems support communications, data gathering and analysis, and decision-making.

To aid in preparing for crises individuals and organizations use available knowledge and technologies. A set of technologies of rising significance is social media. Social media can be described as web supported technologies used to connect users. Individuals are using social media to meet and share data, information, and knowledge with people usually outside their immediate

geographical area. Organizations are using social media to connect with customers and employees for sharing data, information, and knowledge.

Social media are also being used in crisis response. Most of this usage is by individuals with many organizations struggling to implement social media in ways that clearly demonstrate value to the organization. This paper discusses organizational issues associated with using social media and proposes using knowledge management, KM, and specifically KM strategy, to ensure that organizational use of social media for crisis response will either generate value or prevent value from being lost.

To do this the paper will provide an overview of crisis response system, discuss KM and social media, issues associated with social media, and finally, an approach for implementing social media by organizations to support crisis response using KM strategy.

CRISIS RESPONSE SYSTEMS

Crisis response systems are rarely used but when needed, must function well and without fail. Designing and building these systems requires designers to anticipate what will be needed, what resources will be available, and how conditions will differ from normal. A standard model for a crisis response system is from Bellardo, Karwan, and Wallace (1984) and identifies the components as including:

- Database
- Data analysis capability
- Normative models
- User interface.

This model has been modified by Jennex (2004a, 2008) using experience with the Year 2000, Y2K, response, Hurricane Katrina, the Strong Angel III and Golden Phoenix exercises, and the 2007 San Diego Wildfires to add:

- Trained users (where users are personnel using the crisis response system to respond to or communicate about the emergency)
- Dynamic and integrated (yet possibly physically distributed) methods to communicate between users (responders, concerned citizens, and victims) and between users and data, information, and knowledge sources
- Protocols/ontology to facilitate communication
- Geographical information systems or other mapping tools
- Processes and procedures used to guide the response to and improve decision making during the crisis.

The goals of the expanded crisis response system model are to:

- Facilitate clear communications
- Improve data, information, and knowledge transfer and use
- Improve the efficiency and effectiveness of decision-making
- Manage data, information, and knowledge to prevent or at least mitigate information overload.

Crisis response training prepares expected responders to use the crisis response system and respond effectively to the crisis. Training can take several forms, from table top exercises to full blown dress rehearsals. Also, it can be done once, annually, or at some other interval as determined by the organization (Patton & Flin, 1999; Turoff, 2002; Andersen, Garde, & Andersen, 1998; Lee & Bui, 2000; Fischer, 1998; Renaud & Phillips, 2003).

Unfortunately, crises can happen at any time making it difficult for organizations to have appropriate resources (responders, expertise, and material) where and when they are needed. Additionally, most organizations have little to

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