



# Achieving Agility in Disaster Management

*John R. Harrald, Virginia Polytechnic and State University, USA*

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## ABSTRACT

*A significant body of social science research has concluded that improvisation in distributed, collaborative, open systems is the key to success in responding to and recovering from extreme events. The evolution of emergency management in the United States since the 9-11 attacks has emphasized the development of doctrine, process, and structure. In earlier work I concluded that both the agility desired by the social sciences and the discipline created by the professional practitioners are essential. This article explores how agility can be developed within a disciplined system and concludes that the keys are the development of outcome based goals, adaptive leadership, and technology that supports collaborative sense-making and decision making in open, organizational systems.*

*Keywords:* agility; crisis management; decision making; emergency management; improvisation; leadership; sensemaking

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## WITHOUT AGILITY: BUREAUCRACY AND FAILURE

It was my honor to be a keynote speaker at ISCRAM 2005, where I discussed “Supporting Agility and Discipline When Preparing for and Responding to Extreme Events”. This talk grew out of my concern that, since the attacks of 9-11, the U.S. government has focused on strengthening the doctrine and structure of the nation’s emergency management system, while neglecting or even negating the factors that have historically fostered creative and adaptive problem solving actions by emergency managers when faced with unexpected situations. Taking terms from software and systems engineering

(Boehm and Turner, 2004), I identified the implementation of doctrine and structure as “discipline” and the ability to foster creative, adaptive, improvisation skills as “agility”. Leading social scientists (Drabek and McEntire, 2002, Tierney et al. 2006) have criticized the increased emphasis on command and control by the US Department of Homeland Security, and have urged a return to a more collaborative and coordinating approach based on decades of social science research (Dynes and Quarantelli, 1968, 1976, Dynes, 1994). Practitioners, however, continue to develop structural and doctrinal solutions to response management problems. The major point of my ISCRAM presentation was that agility and discipline are

both needed for successful disaster management, and that thinking of them as alternatives approaches presents a false choice. I concluded with the prediction that, by increasing doctrine and structure without also enhancing agility, the US response system was becoming more bureaucratic and procedural and would not function well when faced with the unexpected complexities of an extreme event.

Four months after ISCRAM 2005, Hurricane Katrina struck the U.S. Gulf Coast and flooded the city of New Orleans. Faced with extreme needs that overwhelmed local and state resources, the response of the U.S. government was slow, bureaucratic and inadequate. The Director of the Federal Emergency Management Agency (FEMA) was fired and much of the pre-designated structure was abandoned or modified. I have discussed my observations on the failure of the Federal system in other documents (Harrald, 2007). My intent in this article is to discuss in greater detail how a response system can be created that preserves needed structure and doctrine while also enabling the system to adjust more nimbly to the unexpected

Since Hurricane Katrina, the U.S. Government has made additional changes to the National Response System. The Post Katrina Reform act directed a reconfiguration and strengthening of the Federal Emergency Management Agency. Much of the emphasis continues to be on doctrine: the National Response Plan was revised and reissued as a National Response Framework with a greatly expanded focus on preparation and planning for potential catastrophic events. FEMA has attempted to define the nation's response needs by issuing a Target Capabilities List and a Universal Task List (available from [www.fema.gov](http://www.fema.gov)). Some of these actions taken will also contribute to enhancing agility. Regional response and leadership capabilities have been strengthened, deployable national Incident Management Assist Teams with skills and resources have been created, and investments have been made in information systems to support situational awareness and decision making.

In the remainder of this article, I will discuss three elements that I believe are essential for the creation of an agile, but disciplined, response system. These elements are:

1. Managing for success. Defining outcome based goals and management strategies for achieving these goals, thereby freeing managers from managing to procedure based rules and empowering them to be creative in reaching goals.
2. Developing adaptive leaders capable of establishing and communicating a vision of success and empowering those they lead to make that vision a reality.
3. Enhancing distributed decision making in open organizational systems, recognizing that the pre-designated nodes will not be the only or even the optimal location for strategic and operational decision making.

## **MANAGING FOR SUCCESS, THE IMPORTANCE OF VISION AND METRICS**

Reviews of the response to Hurricane Katrina concluded that FEMA and the Department of Homeland Security (DHS) failed (White House 2006, Senate Homeland Security and Government Affairs Committee 2006, Department of Homeland Security Inspector General 2006). What set of outcomes would have led the same reviewers to conclude that the response was a success? What set of measurable outcomes should FEMA and DHS leaders have established as their vision as they mobilized resources in anticipation of the hurricane strike? Interestingly enough, there is no a priori standard for success in disaster management. Success or failure is typically determined by the reaction of the media and the public after the fact, leading to political attempts to influence or "spin" the inevitable evaluation. The reason assessing success is difficult is that we do not have a good methodology for measuring the social

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