Special Session, ISCRAM 2012:

Improving Information Systems for Crisis Response and Management through Modeling and Analysis of Humanitarian Workflow

Intent and objectives for Special Session:

There is a critical, world-wide need to improve the quality, effectiveness, appropriateness, cost and accessibility of information systems intended to facilitate crisis response and management in the face of devastating international disasters. Information systems have great potential to support the complex community of humanitarian stakeholders involved in these efforts, but the potential of information systems remains largely unrealized. Development and adoption of these systems faces resistance based on serious concerns, such as large start-up cost, difficult transition of systems across organizations, unpredictable benefits, and disruption to established humanitarian workflow. Popular design paradigms for information technology focus on software features without making a clear, predictable connection to the way people and organizations actually work, and how these features will achieve gains in efficiency and quality. Failure to make this essential connection can have the unfortunate side effect of changing workflow and decision making by accident rather than by design. In order to exploit the potential of IT in crisis situations, designs must be based on an understanding of how response and management activities are actually performed, including an analysis of constraints and problem areas to prioritize how IT should be applied to achieve measurable gains in efficiency, quality and coordination.

This session will explore the feasibility of an NGO/Academic collaboration that will bring together researchers and practitioners who can together model complex humanitarian activities and the flow of information in support of those activities. We will employ state-of-the-art methods to acquire and model this work and information flow, including new software tools and techniques that have been developed specifically for this purpose under funding from the Office of the U.S. National Coordinator for Health Information Technology (ONC). The current plan is to conduct this workshop in conjunction with ISCRAM 2013 (May 2013) in Baden Baden, Germany.

Proposed session participants (alphabetical):

Mark Haselkorn, Professor, Human Centered Design & Engineering (HCDE) and Director, Interdisciplinary Program on Humanitarian Relief

Nick Macdonald, Director of Performance Analytics and Learning, Mercy Corps

Robin Mays, Ph.D. Student, HCDE and former Logistician, World Vision International and U.S. Army

Amanda Pennington, Communications Officer, World Vision Global Pre-Positioning Resource Network

Roy Williams, President and Chief Executive Officer, Center for Humanitarian Cooperation and former Director of the Office of Foreign Disaster Assistance