World Trade Center Response: Information Needs were Critical

Albany, NY - Educating policy makers about the benefits and limitations of information technology and developing a comprehensive plan for business continuity are just two of the recommendations supported by the University at Albany’s Center for Technology in Government in a report titled "Information, Technology, and Coordination: Lessons from the World Trade Center Response."

“Our study looked at this immense response and recovery process through the lenses of information, technology, and the people and organizations who used them to address a massive urban emergency,” said Sharon Dawes, CTG director and lead research investigator. "What we learned can help all organizations improve the way they use information for day-to-day operations and business continuity planning."

In the immediate aftermath of the terrorist attacks, government decision-makers were faced with unprecedented problems, and responded with creative, often unorthodox, solutions. Available evidence indicates that information technology helped them cope with and respond to the multiple crises and ongoing recovery demands that resulted from the attack, while areas for future action emerged from the study that can enhance the prospects for long-term learning and improvement in the structures and functions of government, businesses, and civic organizations.

A number of preliminary lessons and areas for further study have been identified:

• Communications networks that were thought to be redundant were actually running on the same infrastructure and constituted a crucial point of failure. However, other technologies including the Internet, geographic information systems, remote sensing, and mobile and wireless communications proved to be powerful tools for recovery.
• Information quality, availability, and integration were all essential but problematic. These problems persist and present ongoing barriers to effective information sharing.
• Competence, experience, and long-term relationships in all agencies paid off. In several instances, the main difference between routine operations and crisis operations was the scale of the effort. In many cases, years of interaction and trust building laid the foundation for quick action in the absence of formal procedures.
• Preparation for "Y2K" was invaluable for both government and business. For many organizations, preparation for the Year 2000 date change was the first time they had considered business continuity and business recovery strategies. Many of these were activated following the attack.

This research into what government agencies did in the midst of these crises, and the role of IT in the events, can provide valuable lessons for improving crisis response and emergency management and planning, as well as benefit overall government operations in normal times.

"Looking at the response from these perspectives sets this project apart from other research and makes our results applicable to any size or type of organization," said Dawes. "Developing capacity for managing and sharing information and increasing networks of relations across organizations in the community can improve day-to-day operational effectiveness as well as preparedness for any type of emergency."

The research study included interviews with individuals who participated personally in the immediate response and subsequent recovery. These individuals represented departments and agencies from New York City, New York State, the Federal Government, and the nonprofit and private sectors. The project team also carried out extensive document analysis of materials associated with the response and recovery. The project was conducted by the CTG in partnership with Urban Logic, Inc. with the support of the National Science Foundation (NSF).

The report is available online at http://www.ctg.albany.edu/publications/reports/wtc_lessons.

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