Learning about Interoperability for Emergency Response: Geographic Information Technologies and the World Trade Center Crisis

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Geographic information technologies (GIT) have the potential to integrate information among multiple organizations. In fact, some of the most impressive advantages of using geo-spatial data are derived from the power of bringing together geographic data covering territories that may well be administered by different organizations and from layering geographic data with other social and demographic data sets. However, building the GIT infrastructure necessary for interoperability and integration has been very challenging. Technical capabilities are available, but organizational, institutional and political factors are seen as powerful barriers. Using structuration theory, this paper argues that the World Trade Center crisis was a catalyst for a change in the conceptualization of GIT for emergency response and, consequently, much was learned about interoperability and inter-organizational geographic information systems.

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