

2007 Publications (14)

Reports (4)

Exploring Regional Telecommunications Incident Response Coordination

Aug 2007

In an increasingly interconnected world, neither the public nor the private sector can claim sole stewardship of the critical infrastructure. These interdependencies require new kinds of coordination in a variety of areas, particularly in response to incidents that threaten the stability of the critical infrastructure. Events such as the World Trade Center attacks and Hurricane Katrina have generated new discussions among stakeholders about the coordination necessary to ensure continuity of operation of the critical infrastructure.

Knowledge Sharing Innovations in the Natural Resources Community: A toolkit for community-based project teams

Aug 2007

The Electronic Commons: a community led natural resource knowledge portal was a collaborative program developed by the Wood Education and Resource Center of the United States Department of Agriculture (USDA) Forest Service, Northeastern Area States, and Northern Initiatives. The program was designed to increase understanding of the potential benefits of and challenges to using information technology for communication and knowledge sharing among natural-resource professionals and volunteer organizations, schools and communities neighboring national forests, as well as individuals interested in learning about natural-resource management. Eight project teams were funded to explore technology-based strategies such as Web sites and Webinars as tools for sharing knowledge on natural-resource topics of concern to their communities and to build communities of practice.

Using XML for Web Site Management: An Executive Briefing on streamlining workflow, reducing costs, and enhancing organizational value

Jun 2007

Many of the new directions and developments on the Web have a basis in XML, which is becoming a critical technology for all types of information services. The features of XML emphasized in this Executive Briefing—open standard, reusability, technologically neutral—make it an ideal strategy for preparing for the future, while achieving efficiencies today.

Assessing Mobile Technologies in Child Protective Services

Jan 2007

This assessment report was prepared by the Center for Technology in Government (CTG) under a contract with the NYS Office of Children and Family Services (OCFS). The purpose of the work was to assess the performance of mobile technology deployed in a pilot test program with child protective service (CPS) workers. The mobile technologies were deployed to a sample of CPS workers for use in their field work and reporting responsibilities. The pilot was conducted in three Local Departments of Social Services (Local Districts): the New York City Administration for Children's Services (NYC/ACS), Westchester County Department of Social Services, Family and Children's Services, and Monroe County Department of Human Services, Child and Family Services Division. OCFS engaged the Center for Technology in Government to conduct this assessment and provide a report to the Commissioner of OCFS to assist in decision making and planning for possible further deployment of these technologies.

Journal Articles and Conference Papers (6)

Informal leadership and networks: Lessons from the response to the West Nile Virus outbreak in North America

Paper presented at the eChallenges e-2007 Conference, The Hague, Netherlands, Oct 2007

Sharing information across organizational boundaries in support of a governmental response to crises requires intergovernmental collaboration and information sharing. Examining these efforts provides an opportunity to explore questions about the role of various actors in such response efforts; in particular, informal leaders. This paper, based on a comparative case analysis of the response to West Nile virus (WNV) in two US states, New York and Colorado, extends what is known about leadership by providing new understanding about how informal leadership affects collaborative information sharing. The case analysis contributes to current knowledge about government leadership in complex networked environments such as a public health crisis. A set of propositions drawn from the analysis provides a preliminary model of the mechanisms through which informal leadership affects intergovernmental information sharing in crisis response. The findings also provide lessons about the role informal leaders play in cross-boundary information sharing and, consequently, in generating government capacity to respond to complex public problems as well as the foundation for a set of recommendations for practitioners.

Government leadership in multi-sector IT-enabled networks: Lessons from the response to the West Nile Virus outbreak

Paper presented at "Leading the Future of the Public Sector" – The Third Transatlantic Dialogue, Newark, DE, Jun 2007

Government leaders at all levels are realizing that sharing information across organizational boundaries is essential to effectively respond to the most pressing public problems facing governments. A public health crisis, such as the outbreak of the West Nile virus in the United States, represents one of these pressing public problems. Sharing information across organizational boundaries in support of a governmental response required intergovernmental and multi-sectoral collaboration and information sharing. Examining these efforts provides an opportunity to explore questions about various actors in such response efforts; in particular, executives and informal leaders. This paper, based on a comparative case analysis of the response to West Nile virus (WNV) in two US states, New York and Colorado, extends what is known about leadership by providing new understanding about the mechanisms through which executive involvement, and formal authority, informal leadership affect multi-sector collaborative information sharing. The case analysis contributes to current knowledge about government leadership in complex, multi-sectoral network environments such as a public health crisis. A set of propositions drawn from the analysis provide a preliminary model of the mechanisms through which leadership variables affect intergovernmental and multi-sector information sharing in crisis response. The findings provide new insight for practitioners about the mechanisms through which executives and informal leaders influence cross-boundary information sharing and ultimately the capability of government organizations to respond to complex public problems.

Emergence of the governance structure for information integration across governmental agencies: A system dynamics approach

Proceedings of the Eighth Annual International Conference on Digital Government Research: Bridging Disciplines & Domains (dg.o 2007), May 2007, pp.47-56

The purpose of this paper is to describe a dynamic theory of the socio-technical processes involved in the definition of an Integration Information problem in New York State (NYS). In April 2003, the Criminal Justice Information Technology (CJIT) group of NYS was tasked with developing a framework to give users of criminal justice data and information systems "one-stop shopping" access to information needed to accomplish their mission. CJIT collaborated with the Center for Technology in Government (CTG) for an eight-month period during 2003 to accomplish this task. The theory consists of a system dynamics model for understanding the dynamics of the collaboration involved in the problem definition stage of a project. The model was developed in facilitated group modeling sessions with the CTG team. The model is capable of generate interesting scenarios that show the importance of social accumulations in project management. Moreover, the model illustrates a powerful way to use modeling and simulation as theory-building tools.

From Agency to Structure: Analysis of an Episode in a Facilitation Process

Human Relations, Volume 59, Number 4, Mar 2007, pp 533–565

In recent publications in organizational communication, the phenomenon of nonhuman agency has been highlighted as a key element whose recognition might allow researchers to better account for the nature and functioning of organizations. This approach consists of showing that the roles machines, tools, documents, architectural elements, and artifacts more generally play in collectives tend to be neglected in social sciences in general and organizational studies in particular, and that recognizing the active contribution of these elements might help us solve both theoretical and analytical problems.

Authority and Leadership Patterns in Public Sector Knowledge Networks

The American Review of Public Administration, Volume 37, Number 1, Mar 2007, pp 91-113

Knowledge and information-sharing networks are emerging in an increasing number of government programs and policy arenas. This article reports the results of an exploratory investigation into ways in which leadership and formal authority shaped the course of four knowledge network initiatives. The study treats authority as both formal and perceived. Leadership is assessed in terms of style, focus, and communication strategies. Analysis of the various authority and leadership patterns found in the case studies generated a set of hypotheses with regard to their influence on success of knowledge networks. Findings reveal that formal authority, perceived authority, and a variety of leadership behaviors appear to have important influence on the development and performance of public sector knowledge networks. These factors affect the ability of such networks to achieve their substantive goals and the degree to which these efforts provide satisfying and useful networking relationships among the participants.

Understanding Context through a Comprehensive Prototyping Experience: A Testbed Research Strategy for Emerging Technologies

Proceedings of the 40th Annual Hawaii International Conference on System Sciences (CD-ROM), January 3-6, 2007, Computer Society Press, Jan 2007, Ten pages

Information and Communication Technologies (ICTs) are rapidly changing and new technologies, processes, and skills are constantly emerging. An important challenge for the research community is to gain knowledge about these emergent technologies in specific contexts, sometimes before they are actually implemented. This paper draws on our experience in the use of comprehensive prototyping as a methodology for building understanding of emerging technologies in new contexts. A Testbed research strategy combines various prototyping, business analysis, team work, and training techniques to understand the specific characteristics of a technology and the context in which it is going to be embedded. The paper presents three cases of Testbed research approaches developed within a 10 year period and presents some insights based on those experiences to inform the efforts of both practitioners and researchers.

Issue Briefs (4)

Collaboration and Information Sharing: Two Critical Capabilities for Government

Sat, 05 May 2007

Information is one of the most valuable resources of government. Government managers, however, are finding that the information needed to plan, make decisions, and act is often held outside their own organizations, collected for widely different purposes, and maintained in disparate formats. As a consequence, governments around the world are increasingly turning to information sharing as a strategy for maximizing the value of information in providing services and responding to problems. New practices are emerging at all levels; from town governments creating performance-based management capability by sharing information between departments such as police and highway, to state-level efforts to coordinate public safety practices, to national efforts responding to public health crises.

Advancing Return on Investment Analysis for Government IT: A Public Value Framework

Fri, 04 May 2007

Every investment decision requires a leap of faith—sometimes a large one—into an uncertain future. However,

after decades of investments in information technology (IT), running into billions of dollars, governments worldwide are largely unable to convincingly demonstrate a return on investment (ROI) that is widely understood or based upon well-grounded measures. While most can agree that government has been dramatically changed by IT, and many programs and services are more effective and less expensive as a result, government agencies are finding it increasingly difficult to communicate the public benefits of these investments.

Tools for Enabling the Next Stage of e-Government

Wed, 02 May 2007

As e-government advances beyond the early stages of basic information access and simple interactions toward active engagement of citizens and agencies, the tools enabling this progression will be those that promote networking and collaboration while addressing issues of data portability, reusability, and longevity. The flow of information will be the focus as government adapts to new demands for sharing, accessing, and distributing information.

Internationalizing Digital Government Research

Tue, 01 May 2007

For most of us, the idea of “government” is linked to a particular place. We associate government with a town hall, state house, or capital city and with the laws and policies that apply to the people and organizations located within a specific piece of political geography. Your local government provides fire protection, your state issues professional licenses, the national government defines what it means to be a citizen of your country. At the same time, we recognize that governmental jurisdictions and programs often overlap within a single country. Think about taxation structures, emergency services, transportation networks, and schools as just a few examples.