All (222)

Guides (20)

Opening Gateways: A Practical Guide for Designing Information Access Programs
Apr 2012

This Guide was originally published under the title of *Opening Gateways: A Practical Guide for Designing Electronic Records Access Programs* in 2000 and revised in 2002. Since it was issued, technological advances have given us a much broader array of tools and approaches to providing access to information. These advances have created a broader and in some ways more sophisticated community of potential users and stakeholders whose expectations of ease of access and immediacy of information have grown exponentially. These changes, combined with a social and political environment that demands public sector entities be more open and transparent in their operations, have put increased pressures on government to provide access to more and better information through readily accessible means such as the Internet.This guide is designed to help government agencies develop affordable, manageable, and effective information access programs. Given the changing technological and social environment, the type of planning processes facilitated by this Guide are more relevant than ever. The revisions have focused on updating many of the examples provided and language used as well as including an expanded discussion of program models available due to technological advances.

Designing social media policy for government: Eight essential elements
May 2010

Government agencies are increasingly looking to leverage social media to improve the quality of government services and elicit greater citizen engagement. Developing a social media policy can be an important first step for government agencies considering using social media and can ultimately serve as a key enabler for responsibly and effectively leveraging social media tools. Yet, many governments are struggling with what such a policy should encompass and convey. This report outlines the different reasons government employees engage in social media use and begins to answer the question, what are the core elements of a government social media policy? Our analysis identified eight essential elements for a social media policy: 1) employee access, 2) account management, 3) acceptable use, 4) employee conduct, 5) content, 6) security, 7) legal issues, and 8) citizen conduct. The report closes with brief guidance on strategies for getting started.

Using XML for Web Site Management: Getting Started Guide
Sep 2006

Despite the clear advantages of XML, government confronts many obstacles to the adoption and implementation of XML-based Web site management. By using the guide, government agencies can gain new insights into how they can benefit from XML and develop strategies to address the technical and organizational issues to get started.

Why Assess Information Sharing Capability?
Dec 2005

Government faces many challenges that can be addressed more successfully when information is shared across organizational boundaries. Initiatives that depend on these kinds of information sharing are typically complex,

difficult, and prone to failure. They are more likely to succeed when they include a comprehensive and systematic assessment of both organizational and technical information sharing capabilities.

Sharing Justice Information: A Capability Assessment Toolkit
Nov 2005

The justice enterprise faces many performance challenges that can be addressed more successfully through better information-sharing initiatives.This toolkit is designed for justice professionals to use when considering or planning for a justice information-sharing initiative.

Building State Government Digital Preservation Partnerships: A Capability Assessment and Planning Toolkit, Version 1.0
Aug 2005

Decisions to invest in digital preservation projects must be grounded in a full understanding of the ability of those involved to identify and fill the gaps between current and required capability. This toolkit is designed for library, archives, records management, and information technology professionals to assess where capability for digital preservation exists and where it must be developed in order to achieve the goal of preserving significant at-risk government information.

Return on Investment In Information Technology: A Guide for Managers
Aug 2004

New information technology (IT) systems are serious, and potentially risky, investments for government agencies and nonprofit organizations. This guide is designed to help public sector managers better understand how a return on investment (ROI) analysis can take some of that risk out of their next IT investment.

Making Smart IT Choices: Understanding Value and Risk in Government IT Investments
Apr 2004

IT innovation is risky business in every organization. In the complex public sector environment, these risks are even greater. This handbook is designed to help any government manager evaluate IT innovations before deciding (with greater confidence) to make a significant investment.

Untangle the Web: Delivering Municipal Services Through the Internet
Dec 2002

The Web offers people and organizations a new way to interact and communicate. This report provides a framework for helping local governments achieve the benefits of the Web without being overcome by its complexity.

Making a Case for Local E-Government
Jul 2002

Local and county governments are exploring the best ways to implement e-government. This report details the strategies, funding, barriers, and benefits brought to bear by several New York State local e-government pioneering initiatives, with insight and advice for their colleagues.

And Justice for All: Designing Your Business Case for Integrating Justice Information
May 2000

Efforts to improve public safety in the United States are pointing to an increasing need for justice agencies to share information. This guidebook offers a series of lessons and tools justice officials can use to build business

cases to win support and funding for integrated justice information systems.

Conducting Best and Current Practices Research: A Starter Kit
Jan 2000

Best and current practice research can help government managers learn from the experiences of others and discover what works and what doesn't. This starter kit contains step-by-step instructions for how to conduct that research.

Practical Tools for Electronic Records Management and Preservation
Jan 1999

Most organizations are increasingly managing work and making decisions based on electronic information. This guide provides the tools that were developed to help information and program managers integrate essential records management requirements into the design of new information systems.

The Records Requirements Analysis and Implementation Tool
Apr 1998

In order to design sound electronic recordkeeping practices within an organization, the necessary requirements must be identified and understood. This paper presents the two components of a tool that can help organizations complete that work.

A Cost Performance Model for Assessing WWW Service Investments
Jun 1997

Creating an effective Web site at an efficient cost is a goal for most government agencies. This guide was created to help organizations develop Web sites that meet their needs at a cost that they can estimate in advance.

Tying a Sensible Knot: A Practical Guide to State-Local Information Systems
Jun 1997

State-local information systems must recognize and account for enormous diversity of community settings, organizational cultures, structures, staff. This report, based on eleven initiatives in New York State, presents principles and practices for ideal state-local information systems.

Developing & Delivering Government Services on the World Wide Web: Recommended Practices for New York State
Sep 1996

The anytime, anywhere character of the Internet allows government information and services to be more available to more people. These guidelines present principles to help government agencies in New York State decide how best to design, manage, and market Web services.

A WWW Starter Kit
Apr 1996

Being on the Internet can mean many different things. For most government organizations, it means creating a Web site. This starter kit is designed to help begin the process of getting on the Web without having to reinvent the wheel.

Making Smart IT Choices: Understanding Value and Risk in Government IT Investments
003

IT innovation is risky business in every organization. In the complex public sector environment, these risks are even greater. This handbook is designed to help any government manager evaluate IT innovations before deciding (with greater confidence) to make a significant investment.

Making Smart IT Choices: Understanding Value and Risk in Government IT Investments
003

IT innovation is risky business in every organization. In the complex public sector environment, these risks are even greater. This handbook is designed to help any government manager evaluate IT innovations before deciding (with greater confidence) to make a significant investment.

Online Tools (6)

Open Government Portfolio Public Value Assessment Tool
Apr 2011

The **Open Government Portfolio Public Value Assessment Tool (PVAT)** offers government leaders with an approach to making better informed decisions about their portfolio of open government initiatives. This tool provides a structured way to assess the public value of an initiative so that an agency can review the expected public value across their entire portfolio of open government initiatives. The information generated from using this tool can then support decisions about the mix of initiatives in a portfolio and how to adjust the mix to enhance the agency's public value

The XML Toolkit
Apr 2006

The XML Toolkit is a Web site product of CTG's Web Site Management Using XML: A Testbed Project, which served to assist New York State agencies in examining the benefits as well as the challenges of Web site management using the emerging technology of XML. It contains a library of XML resources and is intended to grow over time and benefit from the contributions of the online community.

New Models of Collaboration for Delivering Government Services: A Guide for Managers
Jan 2004

Governments around the world are experimenting with public service delivery systems that rely on cross-boundary collaboration among government agencies or between government and the private and non-profit sectors.This guide focuses on the key elements of these new working arrangements of particular importance to the people who will design and manage them.

Opening Gateways: The Guide and Online Workbench
Dec 2003

The online workbench is provided as a companion piece to **Opening Gateways: A Practical Guide for Designing Electronic Records Access Programs**. It is an interactive version of the Guide enhanced with features that support groups of people as they collaborate on the development of electronic records programs.

e-Gov FirstStop
Apr 2002

The Internet offers an overwhelming amount of information about e-government. This new Web resource provides the top quality material by providing a carefully selected collection of e-government resources including executive-level briefings, research and best practice reports, case studies, and Web sites. Please note that **e-Gov FirstStop** was developed as a prototype resource and was operational from April through September of 2002. It has not been updated since September of 2002 and will not be updated in the future.

Insider's Guide to Using Information in Government
Nov 2000

Every day, the people inside government use information to develop policies, make decisions, evaluate programs, and deliver services. This Web resource draws from real agency experiences to provide a practical resource for government professionals who use information to do their jobs.

Reports (99)

The Dynamics of Opening Government Data
Nov 2012

The information polity perspective described in this paper provides government a way to identify the various stakeholders and their patterns of interaction that influence or control the generation, flows, and uses of enhanced information resources in open data initiatives. The dynamic modeling techniques used highlight the ways different constraints can impact the system as a whole and affect value creation. These tools support planners' ability to generate informed hypotheses about changing patterns of interaction among existing and potential new stakeholders. In this way, governments can better evaluate the costs, risks, and benefits of a wide variety of open data initiatives.

Building On-ramps to International Research Collaboration: Replicable strategies for entry, productivity and sustainability
Oct 2012

Globalization presents important opportunities and difficult challenges that demand internationally-trained, culturally-aware researchers to collaborate on topics that cross borders, political systems, and cultures. International research collaborations on topics such as livability of cities, political participation, or the health of civil society offer potentially great benefit, but such work tends to be sporadic and informal because traditional research training and funding structures make it logistically and financially impractical. In response to this problem, from 2007 through 2010, we experimented with two low-cost innovative approaches or "on-ramps" to international collaboration in digital government research: a set of three international working groups composed of scholars from a variety of countries and disciplines and an annual residential research institute for PhD students to develop an early appreciation for the global impact ICTs on the public sector. This evaluation report shows that both approaches are low cost, high impact strategies to forge lasting networks of relationships as well as long-term career benefits.

Modeling the Informational Relationships between Government and Society: A Pre-Workshop White Paper

Jul 2012

This white paper is part of a year long CTG thought leadership project with SAP focused on developing new research and practical tools for helping government produce public value from their open government initiatives. In June of 2012, the paper was shared with an international group of open government experts from government, academia, and the private sector; 25 of which convened at CTG in Albany, NY at the end of June. Workshop participants provided feedback on the conceptual model presented in the paper and crowdsourced ideas for improvement. CTG is using the results from the workshop to develop a final version of the paper and identify opportunities with the workshop participants for testing and implementing the approach with governments pursuing open government initiatives.

Developing Public Value Metrics for Returns to Government ICT Investments
Jun 2012

This report presents a new approach to assessing public value returns as part of an overall return on investment analysis for government information and communication technologies (ICT). The approach addresses one basic question about public value assessment: What constitutes good evidence of public value impacts? The answers provided here are intended to augment the return on investment analysis methods found in the *E-Gov Economics Model: Real Impact for Better Government*, developed by Microsoft. However, the approach here has potential uses beyond connection with that Model, and can be more generally useful in the assessment of public value returns to government programs and investments. The approach consists of a way to identify, collect, and interpret a variety of evidence, both quantitative and qualitative, that can be used to assess public value impacts. The approach is designed for use by government practitioners and analysts in connection with return on investment (ROI) analyses. It is particularly aimed at use in connection with the *E-Gov Economics Model* to examine ICT investments by national and sub-national governments. The report includes recommended methods to collect and analyze these forms of evidence. The approach is based on prior work of the Center for Technology in Government and a thorough review of available research and professional writing on the subject of measuring public value. That review includes research in the related scientific literature and a survey of best practices reported in literature about government IT value assessment in the US and other countries. A draft version of this report was shared with a sample of knowledgeable government officials and analysts for review and comments.

Opening Government's Official Legal Materials: Authenticity and Integrity in the Digital World
Feb 2012

Increasingly, state governments are moving toward making primary legal materials available online via state government websites. The goal in these efforts, and also the challenge, is to provide users with more efficient access while ensuring that the electronic versions of primary legal materials are as "official" as their paper originals. The desire of state governments to make this a priority is strong. However, they currently lack the necessary policies and management practices necessary for success. State legislators and their staffs, legislative reference librarians, state archivists, and chief information officers all have important roles to play in laying the foundation for these efforts through the creation of new policy, management, and technology capabilities. This brief provides background to the recently approved Uniform Electronic Legal Material Act (UELMA), explores the concepts behind authenticated electronic materials, defines what it will take to create, maintain, and make available official electronic legal material, and provides recommendations for states.

Does Mobility Make a Difference? A Cumulative Study of the Impact of Mobile Technology in New York State Child Protective Services
Jan 2012

Over the past six years, the New York State (NYS) Office of Children and Family Services (OCFS) has invested in a mobile technology strategy to support child protective services (CPS) work. This report presents results from a multi-year assessment on how the use of mobility technology has affected CPS casework. Findings suggest that laptop use has transformed on-call work processes, provided caseworkers with access to critical information while away from the office, and enabled an immersive community experience for caseworkers. These results have also led to modest, but meaningful improvements in productivity. The report also outlines elements of supportive mobile environments and offers recommendations for improving OCFS' mobile technology strategy.

Information, Technology, and Governance: A Grand Challenges Research Agenda Workshop Summary Activity Report
Nov 2011

In February 2010, a group of leading social and information scientists and government practitioners came together to develop a new understanding of the way technology and social forces shape the workings of government. The workshop—Information, Technology, and Governance: A Grand Challenges Research Agenda—was sponsored by the National Science Foundation, with additional support from the National Association of Chief Information Officers (NASCIO). The Center for Technology in Government (CTG) at the University at Albany led the organizing effort of this two-day workshop with over 40 participants from across the country. This document presents a non-attribution account of the contributions made at the workshop as well as a brief analysis of the discussions and findings. The information presented in this report begins to shed light on complexities of identifying and addressing grand challenges in information, technology, and governance.

AIRNow-I Shanghai: Crossing Cultures, Sharing Knowledge
Aug 2011

AIRNow-International (AIRNow-I) is an initiative led by the US Environmental Protection Agency (EPA) to redesign the US air quality monitoring and public reporting system to be scalable, interoperable, portable, and affordable to any country. Its guiding vision is a readily usable worldwide platform for sharing air quality information to improve public health. This case study assesses the internationalization of AIRNow through the lens of a collaborative project between EPA and the Shanghai Environmental Monitoring Center (SEMC) in China. We trace the history of air quality policy and management in both countries and then explore the structure and dynamics of their joint effort to build AIRNow-I Shanghai. This report describes the influences of the separate Chinese and American contexts on the participants and their interactions, and identifies the ways in which they bridged many types of contextual distances to produce successful results.

An Open Government Research and Development Agenda Setting Workshop: A Summary Activity Report
Jun 2011

The Open Government Research and Development Agenda Setting Workshop was sponsored and conducted by a collaborative team from the Center for Technology in Government (CTG) at the University at Albany, the Tetherless World Constellation (TWC) at Rensselear Polytechnic Institute, the Institute for Law and Policy (IILP) at New York Law School, and Civic Commons was organized to outline a research agenda focused on opening up, federating, and using data to improve the lives of citizens. This activity report is an account of the contributions made at the workshop. Following the release of this activity report, we will focus on the analysis of the results working toward a set of recommendations and action steps.

Broadband Internet Service Adoption and Use in New York State Households
May 2011

Broadband access for households has become an important resource for individuals and communities. A high speed connection to the internet provides opportunities for a great many economic, social and cultural benefits. This study was to done to explore the extent to which those opportunities and benefits are currently available to households in New York State. With the support of the NY State Office of Cyber Security, and the New York State Broadband Development and Deployment Council, the Center for Technology in Government partnered with Stony Brook University to conduct the study. We surveyed 3044 New York households to discover the extent of availability and adoption of broadband services and how they are used. We also asked about the social and economic characteristics of the households to explore how those factors affect broadband adoption and use. The results presented here cover 1002 surveys covering the state as a whole and an oversample of 2042 surveys in low income counties.

Information and Technology: Improving Public Sector Capability to Address Societal Challenges

Oct 2010

This paper argues for a dedicated, social science-based research program to address the question "How do the societal context and institutional character of government interact with emerging information and communication technologies to shape the capabilities and performance of the public sector?" The ability to answer this question can only result from non-domain specific research that studies the societal context of government and the information resources and technologies affecting government. Because of government's inherent complexity and unique role as the leader in addressing the world's grand societal challenges, there is an urgent need to understand the practice context of government and how it influences the policy, management, and organizational political, and public factors that shape information use and IT applications. Currently there is a lack of research on the public sector and while there are devoted resources to government areas there is little scientific attention to the government organizations and processes that are both the sources and customers of the programs. With focus on this cross-cutting research, government can improve its capacity to serve society and researchers can seek opportunities for new theory development that links government context to the fundamental questions of organizational and technical action.

Information, Technology, and Governance: A Grand Challenges Research Agenda Pre-Workshop Paper
Feb 2010

Information, Technology, and Governance: A Grand Challenges Research Agenda was a project sponsored by the National Science Foundation to craft a multi-year research program to address the grand challenges of government and governance in an environment of rapidly evolving social and technical change. The key event in the project was a workshop that brought together leaders from social and information science research and government to explore these grand challenge questions and develop a next generation research agenda, with a particular focus on socio-organizational contexts. The Pre-Workshop Paper was used to introduce the ideas behind the workshop and spur discussion on the issues.

Exploratory Social Media Project Phase I: Identifying benefits and concerns surrounding use of social media in government
Dec 2009

In response to growing interest in and concerns about social media in the public sector among government professionals, CTG launched a project aimed at exploring some of the issues and benefits connected with social media tools. This report summarizes results from two workshops held with government professionals from New York State (NYS) as part of this project. The workshops were designed to collect information on the value NYS agencies seek in their current or future use of social media, as well as their most pressing questions and concerns regarding that use. The report summarizes the results from workshops, with full results provided in three apendices, and concludes with a section outlining the next steps in the project.

Assessing Mobile Technologies in Child Protective Services (2008-2009): A Demonstration Project in 26 New York State Local Departments of Social Services
mber 2009

The New York State (NYS) Mobile Technology Demonstration Project is a multi-year initiative to assess the use of mobile technologies in child protective services (CPS) work in New York State. Starting in 2006, this collaborative effort among the NYS Office of Children and Family Services (OCFS), county Departments of Social Services (DSS or local district), and the Center for Technology in Government (CTG) at the University at Albany has had four distinct evaluation studies. This assessment focuses on the most recent effort in 2008-2009. Starting in January 2009, twenty-six NYS local social service districts received mobile technologies for CPS. There were 505 mobile devices deployed CPS caseworkers and supervisors and managers. This assessment solely addresses measures of productivity and efficiency.

Mitigating Cross-Border Air Pollution: The Power of A Network
Oct 2009

This report describes how a diverse mix of individuals and organizations representing two countries, three states, multiple levels of government, private industry, academia, and the public were able to successfully organize and then respond to improve air quality along the U.S. and Mexican border. The focal point of this study is the Joint Advisory Committee for the Improvement of Air Quality in the Ciudad Juárez, Chihuahua/El Paso, Texas/Doña Ana County, New Mexico Air Basin (the JAC). It was through the JAC that this diverse mix of key actors were able to navigate the complex web of political, cultural, legal, and economic factors that posed challenges to developing a unified response to this shared air quality problem. The JAC's strategies and methods were powerfully shaped by the characteristics of the physical setting and the organizational and political context. Many of these strategies and methods have considerable promise for other air shed regions, but must be tailored to the unique physical and social situations of each one.

IT Governance Capability: Laying the foundation for government interoperability
Oct 2009

Creating interoperability in the governmental context requires government leaders to take responsibility for improving the capabilities of government agencies to effectively partner with other agencies and governments as well as the private sector, non-profit groups, and research institutions. Governance is a foundational capability for creating and improving government interoperability. Recent research conducted by the CTG draws on a comparative case study of IT governance to illustrate that while effective governance structures include a consistent set of elements or capabilities, there are also a wide range of context specific issues that must be responded to in the governance design, development, and implementation processes.

Factors Influencing Government Cross-Boundary Information Sharing: Preliminary Analysis of a National Survey
Sep 2009

This report summarizes the results of a national survey of cross-boundary information sharing in the public sector conducted by the Center for Technology in Government (CTG). This national study, conducted by CTG and supported by a grant from the National Science Foundation, was designed to understand how effective information integration and sharing occurs within and across boundaries of organizations. The purpose of the survey was to test the generalizability of a preliminary theoretical model of how policy, organizational, social, and technical factors interact to create criminal justice and public health information sharing capabilities. CTG developed this model based on the data collected and analyzed during earlier phases of the research project.

International Digital Government Research: A Reconnaissance Study (1994 - 2008) UPDATED
Aug 2009

Today, digital government (DG) research is being conducted all over the world. Most of this work is focused within the geographic and political contexts of individual countries. However, given the growing influence of global economic, social, technical, and political forces, the questions embedded in digital government research are now expanding to international dimensions. A reconnaissance study such as this one focuses on the defining characteristics of a topic rather an in-depth analysis. In this report, we describe the size, scope, variety, and trajectory of the field illustrated with selected studies and organizational profiles. This study is part of a multi-year effort funded by the United States (US) National Science Foundation (NSF) to create a framework for a sustainable global community of digital government researchers and research sponsors.

Creating Enhanced Enterprise Information Technology Governance for New York State: A Set of Recommendations for Value-Generating Change
Aug 2009

New levels of capability for coordinated action across organizational boundaries are required in order for government to realize the transformative potential of technology and cope with new economic imperatives. This report outlines five recommendations for change developed through a collaborative, consensus-driven process conducted by CTG on behalf of the New York State CIO community. These recommendations are targeted at building new capability for enterprise information technology investment decision making for New York State. The recommendations extend existing enterprise IT governance capability by introducing a new level of transparency

in decision making, increasing the opportunity for alignment of IT investments with New York State's strategic priorities, and fostering the development of policies and standards to guide those investments.

Enterprise IT Governance in State Government: State Profiles
Aug 2009

Over the last fifteen years, the role of IT in state government has grown in prominence, which has drawn attention to how IT is governed at the state level. This report reviews enterprise IT governance arrangements in thirteen states (California, Florida, Georgia, Kansas, Kentucky, Maine, Michigan, Minnesota, New York, North Carolina, Pennsylvania, Texas, and Virginia). These states were selected to create a diverse set of examples and to gain a broad picture of state enterprise IT governance efforts in the United States. There are a total of five data summaries included within the report. First is a high-level comparison of state enterprise IT governance elements. This comparison is followed by a more detailed overview of three enterprise IT governance components: state CIO Councils, state executive IT boards, and budgetary authority for IT decisions. Finally, the report concludes with in-depth profiles and models of state enterprise IT governance arrangements in each of the thirteen states. Together, these resources provide one of the most comprehensive reviews of public sector IT governance currently available.

Maximizing Current and Future Mobile Technology Investments in New York State Child Protective Services
Dec 2008

NYS's Office of Children and Family Services (OCFS) and the Center for Technology in Government (CTG) partnered to conduct an extended study of the use of connected laptops in child protective services (CPS). Previous pilot and demonstration assessments established a solid foundation of information to support a reasonably clear picture of the short term impacts of deploying and using laptops in CPS work. This assessment allowed a longer time period for data collection (8-10 months) and provided an opportunity to learn more about how laptops are integrated into CPS work, including examining mobility, productivity and satisfaction. This study also examines the long-term impacts and conditions necessary to maximize current and future mobile technology investments in NYS's child protective services.

Government Worth Having: A briefing on interoperability for government leaders
Oct 2008

While public officials at all levels of government play important roles in interoperability efforts, government leaders alone have the power to alleviate the institutional constraints that impede these potentially transformative, but highly complex enterprise initiatives. Unfortunately, while leaders have the unique power to make these changes, experience shows that the policy environments they have created, or in many cases inherited, often limit the capability of governments to share authority, to collaborate, and to jointly and strategically manage enterprise initiatives. To change this, leaders must understand the link between their policy decisions and the capability of governments to create the systems necessary to share information and other resources across boundaries. This paper is for government leaders and presents a unique focus on creation of the policy and management capability, rather than technical capability, necessary to create interoperable government,. It presents a set of recommendations to guide these leaders in the development of policies and principles for action.

Improving Government Interoperability: A capability framework for government managers
Oct 2008

This paper presents a framework for governments as they begin to move beyond the vision of a more effective government to the reality. Governments are finding that a typical hierarchical bureaucracy is not necessarily the best form of organization to meet citizen and other demands. Rather, governments are finding that a network form of organization where new groupings of persons and organizations must learn to work together and share information, exchange knowledge, and respond to demands in new ways is more appropriate. Interoperability is key to the success of these government networks. The framework focuses first on understanding the capabilities needed to develop and manage (i.e., plan, select, control, and evaluate) initiatives to improve interoperability among government agencies and their network partners, and second on determining the right mix of capabilities

needed to share information across a network of organizations. The complete framework is provided for immediate use by government managers to assess existing and needed capabilities for improving government interoperability.

Assessing Mobile Technologies in Child Protective Services: A Demonstration Project in 23 New York State Local Departments of Social Services
Mar 2008

NYS's Office of Children and Family Services (OCFS) and the Center for Technology in Government (CTG) partnered to learn more about the impact of mobile technology use in child protective services (CPS) in New York State. In the Demonstration Project in 23 Local Social Service Districts, 450 laptops and tablets were deployed to CPS caseworkers in 23 NYS Local Social Services Districts. CTG conducted the independent assessment where the evaluation focused on mobility, productivity, and satisfaction as well as addressed environmental factors in statewide IT deployment. The summary report looks at high level impacts across all districts and the profiles detail findings from each individual district.

Assessing Mobile Technologies in Child Protective Services: An Extended Pilot in New York City's Administration for Children's Services
Jan 2008

This assessment report was done under contract with the NYS Office of Children and Family Services (OCFS) and in conjunction with the NYC Administration for Children Services (ACS). This project involved a large scale deployment of wireless laptops to CPS workers in New York City's ACS. The pilot ran from August – October 2007 and involved approximately 135 child protective services workers and supervisors in the Staten Island and Williams Street (Manhattan) offices. The report shows the complexity of deploying technology into a well established profession. The study focused on mobility, productivity, and satisfaction, and includes a set of recommendations and future considerations.

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.

Setting the Stage for an Electronic Health Record: A Business Analysis for the New York State Department of Correctional Services
Dec 2006

This document reports on a project conducted by CTG on behalf of the New York State Department of Correctional Services (NYS DOCS) to explore the likely benefits and associated costs of an Electronic Health Record (EHR) for NYS DOCS. The project, moving towards an electronic health record for NYS DOCS, was initiated in the summer of 2005 by the former New York State Department of Correctional Services Commissioner, Glenn Goord.

Setting the Stage for an Electronic Health Record: A Business Analysis for the New York State Department of Correctional Services
Dec 2006

This document reports on a project conducted by CTG on behalf of the New York State Department of Correctional Services (NYS DOCS) to explore the likely benefits and associated costs of an Electronic Health Record (EHR) for NYS DOCS. The project, moving towards an electronic health record for NYS DOCS, was initiated in the summer of 2005 by the former New York State Department of Correctional Services Commissioner, Glenn Goord.

2007 Center Review: Self Evaluation Report
Mar 2008

This report was produced for the University at Albany's Vice President for Research, in response to a policy requirement calling for periodic reviews of research centers and institutes. The report, prepared by Center staff, covers the period from the Center's founding in 1993 to the present. It includes an overview of the Center's history, where we stand today, and our vision for the future. Although the audience for this report was originally external to the Center, preparing the report gave us a valuable opportunity to reflect on our fifteen years of research and project efforts to improve government through IT innovation. As a result we have a new appreciation and pride in the contribution our work has made to the practice of government in New York State and beyond, as well as to the study of digital government world wide. Through this report we are sharing our vision and our progress with our University colleagues, the broader academic community, and our government and private sector partners and friends.

Using XML for Web Site Management: Lessons Learned Report
Jan 2008

This report is based on the lessons learned from CTG's XML Testbed. The success of the Testbed rested on the enthusiastic participation of five New York State (NYS) agencies who committed to extensive hours of workshops, training, and prototype development. CTG extends its thanks to the NYS Department of Civil Service, NYS Division of Housing and Community Renewal, NYS Higher Education Services Corporation, NYS Office for the Prevention of Domestic Violence, and the NYS Office of Cultural Education, State Education Department. The Testbed was undertaken in partnership with the Governor's Office of Employee Relations (GOER), the Office of the Chief Information Officer (OCIO), and the Office for Technology (OFT).

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.

New York State Information Technology Workforce Skills Assessment Statewide Survey Results
Dec 2006

Information technology (IT) workforce issues have been a concern in New York State since the 1980s and were designated high priority areas in the 2004 and 2005 New York State Enterprise Information Technology Strategic Plans. As a result, in early 2005, the CIO Council HR Committee organized a partnership of state agencies, labor unions, and the Center for Technology in Government (CTG) to help design and administer two surveys. This report provides the key findings of the IT workforce skills assessment surveys administered during March and April 2006; involving nearly 5,000 IT professionals employed in state agencies, authorities, and boards.

Advancing Return on Investment Analysis for Government IT: A Public Value Framework
Oct 2006

This white paper provides an analysis process that starts with a high level view of the IT investment and then drills down through successive steps to identify the specific measures and methods that will reveal and document public value. The assessment can be tailored to the size and nature of a particular investment decision. The framework is broad in scope so that it can be applied to virtually any government IT investment – from simple Web sites to government-wide information systems and architectures.

Service New Brunswick (Case Study)
Sep 2006

Service New Brunswick was launched in a time of high pressure from citizens in New Brunswick, Canada for improved service delivery. Today it serves the province through its award winning service delivery model, and also and maybe more importantly in the long run, through its innovations in economic development.

The Austrian Federal Budgeting and Bookkeeping System (Case Study)
Sep 2006

The goal of the Austrian Federal Budgeting and Bookkeeping System project was to redesign and integrate the electronic workflow of the federal government's budget and bookkeeping processes. The strategy they chose was to implement a single Enterprise Resource Planning (ERP) software standard throughout the federal government, along with the adoption of necessary legal authority.

The Commonwealth of Pennsylvania's Integrated Enterprise System (Case Study)
Sep 2006

The Commonwealth of Pennsylvania's Integrated Enterprise System Enterprise Resource Planning (ERP) software implementation put in place the technical infrastructure and enterprise standards for core government administrative functions with improved public value.

The Government of Israel's Merkava Project (Case Study)
Sep 2006

The Government of Israel's Merkava Project is an effort to restructure the financial, logistics, and human resource components of government-wide administration into an integrated Enterprise Resource Planning (ERP) system.

Merkava is also part of a comprehensive eGovernment initiative that includes five layers of new technologies and operational systems for enhanced internal operations and improved benefits and services to citizens.

The Washington State Digital Archives (Case Study)
Sep 2006

Washington State's investment in digital archiving for government records provides a highly focused and successful example of pursuing public value through information technology.

Preserving State Government Digital Information: A Baseline Report
06

This report provides a baseline for state government digital information preservation capabilities and activities. It includes an analysis of the results across states and territories and presents several observations on the current digital preservation environment based on CTG's 2006 State Government Digital Information Preservation Survey.

State Government Digital Preservation Profiles
06

This Web-based resource provides profiles of state government digital information preservation efforts within the United States based on the information collected from the 2006 State Government Digital Information Preservation Survey. The profiles are organized by state or territory and the library, archives, and records management units that were represented in the survey response.

Constructing the New York State-Local Internet Gateway Prototype: A Technical View
Apr 2005

This report summarizes the technical development of the New York State-Local Internet Gateway Prototype. Each phase is highlighted including, prototype design, development, testing, and support. Also shared are lessons learned and considerations for future development.

New Models of Collaboration: An Overview
Oct 2004

Governments around the world are experimenting with public service delivery systems that rely on cross-boundary collaboration among government agencies or between government and the private and non-profit sectors. This Overview summarizes a more complete guide that presents the success factors and case studies for 12 collaborations from around the globe.

Learning from Crisis: Lessons from the World Trade Center Response. A Research Symposium Panel Transcript Summary
Aug 2004

The experience of September 11th was not an experience that government sustained by itself. Rather, it was an experience that crossed the public, private and nonprofit sectors and holds lessons for organizations of all kinds and sizes. In June 2004, the Center for Technology in Government (CTG) at the University at Albany, SUNY, put together a panel that represented these different perspectives.

Effective Strategies in Justice Information Integration: A Brief Current Practices Review
Jul 2004

This current practices study contributes to a community-wide knowledge building effort by examining the factors

that influenced the success of selected justice information integration initiatives.

Exemplary Practices in Electronic Records and Information Access Programs
Jul 2004

This current practices research report identifies and describes exemplary practices in providing electronic access to information.

Highlights: Exploring the Feasibility of A Digital Government Journal
Jul 2004

This project administered an online survey exploring the opinions and preferences of the digital government (DG) research community with respect to the need for, feasibility, and sustainability of a dedicated digital government journal.

The New York State-Local Internet Gateway Prototype Project: Current Practice Research
Jul 2004

In the fall of 2002, the Center for Technology in Government (CTG) at the University at Albany conducted current practice research to identify and examine existing government to government (G2G) portal projects.

Information, Technology, and Coordination: Lessons from the World Trade Center Response
Jun 2004

Research into what organizations did in the midst of the World Trade Center crises and response provides valuable lessons for improving crisis response and emergency management and planning. Equally important, the lessons reveal that interdependencies of human, organizational, and technological resources may benefit overall government operations in normal times.

Bridging the Enterprise: Lessons from the New York State-Local Internet Gateway Prototype
May 2004

This project report details the Gateway Prototype project from conceptualization and development to findings and recommendations. The Prototype was developed to create a single point of contact among state and local governments to test and evaluate mechanisms for government-to-government (G2G) business relationships.

New York State-Local Internet Gateway Prototype Demonstration
Apr 2004

This online demonstration shows the features and functions of the New York State-Local Internet Gateway Prototype. The Prototype was built to identify, demonstrate, and evaluate key factors associated with the design, development, and deployment of a single point of contact for G2G work among state and local governments in New York State.

Creating and Maintaining Proper Systems for Electronic Record Keeping
Dec 2002

E-Government is changing the way government conducts business and captures records created during that business. This paper provides a framework for developing new e-government systems that foster electronic records management.

XML: A New Web Site Architecture
Sep 2002

As Web sites have grown in size, complexity, and prominence, site management has become a growing concern for Webmasters, system administrators, and organizations as a whole. This paper discusses how XML technology simplifies the entire site management process.

Finding Our Future: A Research Agenda for the Research Enterprise
Jul 2002

The research enterprise has grown into a $112-billion endeavor involving thousands of organizations representing every scientific discipline and field of knowledge. This report discusses the challenges facing that research enterprise, offers a vision of the ideal research enterprise, and lays out a supporting research and action agenda to help achieve it.

The Future of E-Government
Jun 2002

This paper is based on testimony presented to the New York City Council on a sustainable definition and model of electronic government.

Information Access in an Electronic World: A policy panel summary transcript
Mar 2002

Policies about online government information were a focus of attention following September 11th. This document provides a thought-provoking examination of how information policy issues were reassessed in response to those events.

Insider's Guide to Using Information in Government Executive Briefing
Feb 2001

This executive briefing draws from real agency experience to provide a practical resource for the use of information by government professionals.

What Citizens Want from E-Government
Oct 2000

Governments in the US are using a variety of methods to find out what citizens want from electronic government services. This report presents those methods, and weighs the pros and cons of each of them.

New York State Central Accounting System Stakeholder Needs Analysis
Jul 2000

The Office of the New York State Comptroller decided to conduct an extensive stakeholder needs analysis before making any decisions about how to design and develop a next generation Central Accounting System (CAS). CTG worked with the agency on this project, and developed a set of recommendations for next steps in devising a plan for the CAS.

Reassessing New York: A Collaborative Process
Jun 2000

In order to implement the state's new annual reassessment program, the New York State Office of Real Property Services set out to identify the needs of the local assessment community. CTG worked with this agency on the project, and produced a report that presents a collaboratively developed set of recommendations for moving the Annual Reassessment Program forward.

New Models of Collaboration for Public Service delivery
Apr 2000

Collaborative partnerships in the public sector are helping to pave the way for new innovations in information and service delivery. This white paper summarizes the findings of a preliminary review of collaborative public sector service delivery methods.

Putting Information Together
Feb 2000

Organizations spend millions of dollars putting information together in data warehouses, but as many as 50 to 80 percent of those projects fail. This report, which summarizes the fourth seminar in the UIG Seminar Series, highlights the lessons learned from the creation of the prototype Homeless Information Management System.

What Rules Govern the Use of Information?
Oct 1999

Every government function depends on information, and each function has a set of policies behind it. This report, which summarizes the third seminar in the Using Information in Government Seminar Series, addresses the use of government information and the policies that govern that use.

Reconnaissance Study: Developing a Business Case for the Integration of Criminal Justice Information
Sep 1999

This study provides a complex but optimistic picture for improving the integration of justice information. It provides an analysis of the current integration realities and discusses enablers and barriers to criminal justice information integration.

Building Integrated Data Repositories
May 1999

Having the right skills, competencies, and technical tools can help government managers use information more effectively in their work. This report, which summarizes the second seminar in the UIG Seminar Series, focuses on ways to get the most from government information.

Research and Practical Experiences in the Use of Multiple Data Sources for Enterprise Level Planning and Decision Making: A Literature Review
1999

Public and private sector organizations recognize the importance of information sharing as a way to improve planning and increase productivity. Because of this trend, the use of multiple data sources for enterprise level planning and decision making has become even more important. This paper identifies current research and practical experiences in the use of multiple data sources to support performance measurement, strategic planning, and interorganizational business processes.

Web-based Applications and/or Networked Legacy Systems
1999

A multitude of private and public institutions are now using e-commerce to deliver products and services to customers and clients. For many of these organizations, jumping into the world of e-commerce means they must link legacy systems and their attached databases to new Web-based applications and distributed databases. The ramifications of this process are examined in this report.

Some Assembly Required: Building a Digital Government for the 21st Century
Mar 1999

Information technology plays a crucial role in the public sector, and has the potential to transform the way government works. This report provides a set of recommendations for the National Science Foundation to design its Digital Government Research Program to help support that transformation.

Dealing with Data
Feb 1999

Proper data management is instrumental for successful information systems. This report, which summarizes the first seminar in the UIG Seminar Series, focuses on data quality management, data tools and techniques, long term maintenance and preservation, and real life experiences with data issues.

Data Quality Tools for Data Warehousing - A Small Sample Survey
Oct 1998

The quality of data in data warehouses is crucial to the effective use of the warehouse. This paper examines the issues associated with data quality and maps the issues to features available in data quality software tools. Examples of the tools are also included.

New Models of Collaboration: GIS Coordination in New York State
Oct 1998

Bringing an array of geographic information into a central system provides increased value to users, but coordinating that presents considerable challenges. This report describes how the New York State GIS Coordination Program was initiated and developed. It looks at the problems encountered and solutions tried, and focuses on data sharing and public-private sector partnerships.

Models for Action: Practical Approaches to Electronic Records Management & Preservation
Jul 1998

In an environment where business is increasingly conducted electronically, the management of electronic records is crucial. This report describes tools that help incorporate electronic records requirements into the design of new information systems.

Functional Requirements to Ensure the Creation, Maintenance, and Preservation of Electronic Records
Apr 1998

The functional requirements of records include the reliability of the system in which the records reside, how the records are captured, and how they are maintained. This paper discusses the background, development, and usage of the functional requirements in CTG's Models for Action project.

A Survey of System Development Process Models
Feb 1998

There are many different methods and techniques used to direct the life cycle of a software development project. This document provides an overview of common models that are used to guide the analysis, design, development, and maintenance of information systems.

An Introduction to Workflow Management Systems
Nov 1997

With many different workflow management software solutions on the market, a variety of approaches to workflow management exist. This paper provides an introduction to Workflow Management Systems through a two-tiered approach: a functional review and a technical overview.

A Step Beyond Research: Fostering IT Innovations in Government
Oct 1997

This report is a summary of the discussions that took place during the workshop *A Step Beyond Research: Fostering IT Innovations in Government*. The workshop involved 32 scholars from Europe and North American in an exploration of the issues and opportunities for applied research to support IT innovation in government.

IT Innovation in Government: Toward an Applied Research Agenda, Part One: The practitioner perspective
Oct 1997

This paper provides the practical perspective of studying government information technology issues. It is one of two papers that served as the background for discussions at an applied research workshop hosted by CTG in October 1997.

IT Innovation in Government: Toward an Applied Research Agenda, Part Two: The researcher perspective
Oct 1997

This paper provides the research perspective of studying government information technology issues. It is one of two papers that served as the background for discussions at an applied research workshop hosted by CTG in October 1997.

Partners in State-Local Information Systems: Lessons from the Field
Oct 1997

A state-local information system is one that links state and local agencies together in a coherent service delivery or administrative environment. This report discusses the findings of a research project that examined eleven state-local projects in New York State.

A Survey of Key Concepts and Issues for Electronic Recordkeeping
Aug 1997

Knowing the key concepts of electronic recordkeeping is essential as agencies move from a largely paper-based business process to an electronic system. The report covers those key concepts.

Delivering on the Web: The NYS Internet Services Testbed
Dec 1996

Government is all about information and service delivery. The Web seems perfectly suited for that work. This report presents a set of practical tools to help government agencies refine and narrow the objectives of the Web services they are developing.

The World Wide Web as a Universal Interface to Government Services
Dec 1996

This report describes the results of research that tested the feasibility of using the Web to deliver services to citizens and conduct business among government agencies.

A Brief Survey of Internet Policies

Apr 1996

As more government agencies use the Web, policies that guide Internet use are in their infancy. This paper presents the results of a survey conducted to collect and review government Internet policies between April and July 1996.

Internet Security Seminar
Apr 1996

A day-long seminar on Internet Security was presented on April 2, 1996 by the Center for Technology in Government in conjunction with our corporate and public sector partners. It was the first of a series of annual Internet security days held in New York State. This summary highlights the seminar sessions and results.

A Framework for Evaluating Public Sector Geographic Information Systems
Dec 1995

Substantial opportunity exists to share spatial data, knowledge, and other resources across programs in the public and private sectors. This report discusses the mechanisms for evaluating public sector geographic information systems (GIS).

Balancing Environmental Quality and Economic Vitality in the Adirondack Park
Dec 1995

The information needed to review a building permit application in New York's Adirondack Park comes from a range of sources. This report describes the work undertaken to develop and evaluate a prototype system to combine document records and geographic data into a unified "electronic reference desk".

Compelling Reasons for GIS Coordination in New York State
Dec 1995

Coordinating geographic information collected by different agencies and local governments can help promote three program areas of vital importance in New York State: economic development, environmental conservation, and public health and safety.

Sharing the Costs, Sharing the Benefits: The NYS GIS Cooperative
Dec 1995

The New York State Geographic Information System (GIS) Clearinghouse Cooperative project was undertaken to show the extent to which spatial data needs overlap among key policy and applications areas. This report demonstrates how data sharing strategies can reduce the cost and increase the value of GIS.

The New York State Spatial Data Clearinghouse Technical Report
Dec 1995

Developing the New York State (NYS) Geographic Information System (GIS) Clearinghouse prototype required the adoption of standards and an effective search mechanism. This report presents how these were implemented in the NYS GIS Clearinghouse project.

Evaluating the APA Prototype: Prospects for Providing Cheaper, Faster, and Better Services to the APA's Customers
Oct 1995

This report covers the findings from an evaluation of a prototype map retrieval system developed for the Adirondack Park Agency. Recommendations for a future system development strategy are included.

Using Technology to Change Work: Technical Results from the APA Prototype

Oct 1995

Building an electronic reference desk that integrated government records and geographic information relied on a number of technical components. This report presents the technical results responsible for the development of that system.

Supporting Psychiatric Assessments in Emergency Rooms
Sep 1995

With the assistance of an expert panel representing both practitioners and consumers of mental health services, a computer-assisted decision model was developed to support psychiatric assessments in emergency rooms.

Report of the Field Test to Evaluate a Decision Support Tool for Psychiatric Assessments in Emergency Rooms
Aug 1995

Field testing a prototype is critical to gauge its value for users. This report describes the results of the field test of a prototype decision support tool developed to help emergency physicians conduct psychiatric assessments.

Voice Information Response System
May 1995

The telephone is the means by which most people deal with the government. This report presents the results of a project that developed a prototype voice response system for the NYS Office of Regulatory and Management Assistance.

Reviewing the Performance of ORMA's Voice Response System for Automated Business Permit Information: Integrating Technical, Cost-Based, and Customer-Oriented Evaluations of System Performance
Mar 1995

A prototype voice response system was designed to improve the way business permit inquiries were handled by the New York State Office of Regulatory and Management Assistance. This report presents the results of testing that prototype system.

Groupware Technology Testbed
Nov 1994

Information technology tools and applications are supporting all types of government work. This report presents the results of a series of prototyping experiments conducted by CTG and state agencies on custom workflow, project management, document management, and meeting support systems using groupware tools.

Title Imaging Project with NYS Department of Motor Vehicles
Nov 1994

Paperwork. Few words evoke such a negative picture of government operations. This report presents the results of a prototyping project that demonstrated document imaging and work flow solutions in the vehicle title operation at the New York State Department of Motor Vehicles (DMV).

Use of Parcel Data in New York State: A Reconnaissance Study
05

This report presents the findings of a reconnaissance study on the use of parcel data in New York State. It documents the current and potential uses of parcel data, its value to many different kinds of organizations, and the typical flow of data across government and non-governmental boundaries.

Journal Articles and Conference Papers (60)

Exploring the Influence of Contextual Distances on Transnational Public Sector Knowledge Networks: A Comparative Study of AIRNow-I Shanghai and the Hajj-MDSS Initiatives

Proceedings of the 46th Hawaii International Conference on System Sciences - 2013, 9, 2013

Transnational public sector knowledge networks (TPSKNs) are becoming crucial for addressing global problems in the environment, public health and other areas that require knowledge and information sharing among nations. This paper explores and compares a set of contextual distances that separate network participants and discusses their influence on network success. Based on previous research, we introduce nine contextual distances and compare and discuss their influence on two cases. We conclude with a discussion of the findings and suggestions for future research on knowledge and information sharing across national and cultural boundaries. **[Winner Best Paper Award in eGovernment Track, HICSS46]**

Identifying Success Factors and Challenges of 311-Driven Service Integration: A Comparative Case Study of NYC311 and Philly311

Proceedings of the 46th Hawaii International Conference on System Sciences - 2013, 9, 2013

A 311 system provides quick and easy access to non-emergency municipal services and information through a consolidated channel. This study explores the operation of 311 contact centers in New York and Philadelphia and identifies critical success factors and challenges of 311-driven service integration. Analyzing the qualitative data from semi-structured interviews with 311 center staff and city government officials, the study presents some key findings. Having the right technology in the right time is identified as a critical technological factor. While the lack of interoperability between a 311 system and departmental legacy systems remains a major technical barrier to connecting a variety of systems, human agents fill the middle ground so that training for qualified agents is crucial for their role. Inter-agency coordination and collaboration is pivotal to creating and updating service level agreements and knowledgebase. However, turf protection raises cross-organizational concerns. The mayor's strong leadership, political champions, and the executive support help resolve interdepartmental conflicts.

Creating Open Government Ecosystems: A Research and Development Agenda

Future Internet, Vol. 4, No. 4, 23, 2012

In this paper, we propose to view the concept of open government from the perspective of an ecosystem, a metaphor often used by policy makers, scholars, and technology gurus to convey a sense of the interdependent social systems of actors, organizations, material infrastructures, and symbolic resources that can be created in technology-enabled, information-intensive social systems. We use the concept of an ecosystem to provide a framework for considering the outcomes of a workshop organized to generate a research and development agenda for open government. The agenda was produced in discussions among participants from the government (at the federal, state, and local levels), academic and civil sector communities at the Center for Technology in Government (CTG) at the University at Albany, SUNY in April 2011. The paper begins by discussing concepts central to understanding what is meant by an ecosystem and some principles that characterize its functioning. We then apply this metaphor more directly to government, proposing that policymakers engage in strategic ecosystems thinking, which means being guided by the goal of explicitly and purposefully constructing open government ecosystems. From there, we present the research agenda questions essential to the development of this new view of government's interaction with users and organizations. Our goal is to call attention to some of the fundamental ways in which government must change in order to evolve from outdated industrial bureaucratic forms to information age networked and interdependent systems.

Beyond Open Government: Ontologies and Data Architectures to Support Ethical Consumption

6th International Conference on Theory and Practice of Electronic Governance (ICEGOV2012) , 22-25, 2012

Two important trends on openness are promoting improved accountability from government and private organizations. The case of private transparency finds its roots in consumer and other stakeholder movements. The open government movementin the US is looking for alternatives to "smart disclosure," which implies providing consumers with better information to makebetter buying choices. We explore current knowledge on ethical consumption, as well as two influential technological tools to support consumer decisions. Our initial discussion suggests that the use of ontologies and data architectures, together with the appropriate policy environment and governance system, may solve some of the current problems identified.

Information Sharing and Financial Market Regulation: Understanding the Capability Gap

6th International Conference on Theory and Practice of Electronic Governance (ICEGOV2012) , 22-25, 2012

In testimony on April of 2012 before the House Financial Services Committee, U.S. Securities and Exchange Commission (SEC) Chairman, Mary Schapiro, stated that effective information sharing between financial market actors and their regulatory bodies is critical to fulfilling the regulatory obligations of the SEC. The 2008 financial crisis is recognized as a show case for the risks to the stability of the markets that ineffective information sharing among supervisory authorities represents. This paper constitutes a preliminary exploration of the challenges facing financial regulators building on prior research in the computing and information science community (CIS). Current literature as well as data from a recent study of financial market regulation is used to identify key actors in financial market regulation information sharing relationships and to begin to outline the challenges faced in this unique context and the resulting risk if those challenges go unaddressed. A recently developed theoretical framework for cross-boundary information sharing (Garcia et al 2007) is used to present insights about challenges and risks from the literature and the field.

Transforming City Government: A Case Study of Philly311

6th International Conference on Theory and Practice of Electronic Governance (ICEGOV2012) , 22-25, 2012

This paper describes the transformation of a city government led by a 311 program, which provides a consolidated channel for non-emergency services and information. The paper first discusses the concept of "smart city" as a foundation for the examination of the 311 program as a practice of government innovation. The paper then presents the details of the 311 program as it is being instantiated in the City of Philadelphia. In-depth interviews with city government officials and managers responsible for operating the city's 311 system (Philly311) offer insights into the contributions the system is making to a more efficient, effective, transparent, accountable, and collaborative city government. Performance data provided by Philly311 enables more efficient resource allocation and informed decision making. Philly311 is credited with making the process of service delivery more transparent to the public, and providing traceability of requested services imbues service departments with a sense of accountability. Service level agreements are providing measurable standards of municipal services and are used to support accountability in terms of service status. Regular reviews of service level agreements and content of the system promote interdepartmental collaboration. 311 systems are broadly recognized as powerful tools to engage residents in improving their neighborhoods. Interviews also revealed challenges Philly311 is facing including limited funding impeding further improvements in software, systems, and staffing, and provided some insights into innovative strategies for addressing resource constraints. Institutionalizing interdepartmental collaborations also emerged from the interviews as a critical new capability required for advancing from the initiation stage of Philly311 to the operational, expansive, and sustainable stages.**[Winner of Best Innovations in Practice Paper Award, ICEGOV2012]**

A Stakeholder Analysis of Interoperable Data Architecture: The case of I-Choose

Proceedings of the 13th Annual International Conference on Digital Government Research (dg.o2012) , 7, 2012

This paper presents the challenges associated with developing a data architecture supporting information interoperability in the supply-chain for sustainable food products. We analyze information elicited from experts in the supply-chain for organic and fair trade coffee to identify relevant stakeholders and the issues and challenges connected with developing an interoperable data architecture. This study assesses the salience of individual

stakeholder groups and the challenges based on the stakeholders' attributes in terms of power, legitimacy and urgency. The following five issues/challenges werefound to be the most salient, requiring primary focus in developing interoperable data architecture: trust in data, cost to maintain the system, political resistance, oversight and governance,and the cost to consumers in terms of time and effort. In the conclusion we discuss potential future research and practical implications for designing an interoperable data architecture.

Full Information Product Pricing Regimes: Policy Implications for U.S.-Mexico Sustainable Commerce
The Puentes Consortium, 8, 2012

Current trends in making supply chains more transparent and bringing information usually not available to the consumer and other players into the market are changing the ways in which consumers make decisions about the goods and services they buy. One example of these changes is the networks of consumers, producers, and other players in the supply chain sharing value-adding information packages about the social and environmental impacts of the products they exchange, or Full Information Product Pricing (FIPP) Networks. Our current research suggests that these FIPP Networks have the potential to promote market-driven approaches to international trade systems, which may work as a complement to more traditional state-led trade systems, such as the North American Free Trade Agreement (NAFTA), in promoting sustainable trade. We envision that such an approach should involve collaboration among government, supply chain and sustainability experts, industry associations, and consumer organizations sustained by a technological architecture to support interoperability and information sharing. We discuss important trade-offs related to costs and sustainability, privacy, and access to information. The paper finishes with a set of recommendations involving the creation of a governance system to promote this market-driven approach to sustainable international trade.

Exploring the Motive for Data Publication in Open Data Initiative: Linking Intention to Action
Proceedings of the 45th Hawaii International Conference on System Sciences - 2012, 5, 2012

This research study was designed to broaden understanding of the publishing of research datasets by distinguishing between the intention to share and the action of sharing. The data was generated from preliminary survey results conducted by DataONE work groups. The final data used in this paper is based on 587 observations. The analysis results show support for all of the path coefficients of the theoretical model except for the path of perceived self-efficacy, and legal context and policy variables. The intention to share a dataset was found to be a significant determinant in the action of sharing data. Acknowledging the key determinants of intention to publish datasets arguably entails significant policy implications on data sharing.

Understanding Smart Cities: An Integrative Framework
Proceedings of the 45th Hawaii International Conference on System Sciences - 2012, 5, 2012

Making a city "smart" is emerging as a strategy to mitigate the problems generated by the urban population growth and rapid urbanization. Yet little academic research has sparingly discussed the phenomenon. To close the gap in the literature about smart cities and in response to the increasing use of the concept, this paper proposes a framework to understand the concept of smart cities. Based on the exploration of a wide and extensive array of literature from various disciplinary areas we identify eight critical factors of smart city initiatives: management and organization, technology, governance, policy context, people and communities, economy, built infrastructure, and natural environment. These factors form the basis of an integrative framework that can be used to examine how local governments are envisioning smart city initiatives. The framework suggests directions and agendas for smart city research and outlines practical implications for government professionals.

Transnational Public Sector Knowledge Networks: Knowledge and Information Sharing in a Multi-Dimensional Context
Government Information Quarterly, Volume 29, Issue 1, Pages 112-120, (special issue) 2012

Sharing of knowledge, information, and practices across cultural and national boundaries has become a means to address critical global problems. As government agencies increasingly collaborate with international counterparts on these issues, transnational knowledge and information sharing networks grow in importance as mechanisms for collaboration. This paper explores the nature of Transnational Public Sector Knowledge Networks (TPSKNs)

and identifies critical contextual factors that shape their performance. In these networks, each participating organization operates within complex national, organizational, and information contexts. The contextual differences between participants produce distances in culture, politics, intentions, organizational factors, relationships, knowledge, resources, geography, and technology. These distances influence their ability to engage in the processes and interactions that are essential to network performance. The paper concludes with a conceptual dynamic model that accounts for the relationships among these factors which can guide further research in understanding knowledge and information sharing across national and cultural boundaries.

I-Choose: Consumer Choice, Digital Government, and Sustainability in North America
Presented at APPAM Fall Conference 2011, r 3, 2011

In this paper, we address the challenges and opportunities that the new development in ICT poses for governments, and begin to outline some potential solutions. Governments in North America have set explicit goals to increase the environmental sustainability of their infrastructure, promote sustainable local economic development, protect consumer health, promote nutrition, or establish greener, more efficient supply chains. These commitments are real, and substantial, but the information problems found in real markets have, until now, made many of those goals more elusive. This paper presents observations from research sponsored by the National Science Foundation (through its Community-based Interoperable Data Networks Program), the Consejo Nacional de Ciencia y Tecnología (CONACYT-Mexico), and the Canadian and COMEXUS Fulbright Commissions. Our interdisciplinary and multinational research team blends approaches from digital government research, public policy analysis, and system science to investigate new ways of combining traditional regulatory tools with crowd-sourced information from stakeholder networks.

Cultivating the Next Generation of International Digital Government Researchers: A Community-Building Experiment
5th International Conference on Theory and Practice of Electronic Governance (ICEGOV2011), er 26, 2011

Over the last two decades universities and post-secondary education policies have addressed globalization trends by internationalizing curricula and articulating global concern in their missions. This paper presents an evaluation of an international training program for early-career digital government researchers, designed to develop their interest and skill in cross-cultural, multidisciplinary, and practice-oriented research. The program overall appears to stimulate participants' individual creativity, scholarly productivity, and professional networks, while broadening their appreciation for work that investigates internationally important topics and involves not only multidisciplinary but multicultural teams. The survey results also suggest that a short-term (one-week), intensive, immersive, and relatively inexpensive program can have strong and lasting effects on early-career scholars.

Smart City as Urban Innovation: Focusing on Management, Policy, and Context
5th International Conference on Theory and Practice of Electronic Governance (ICEGOV2011) , er 26-28, 2011,

This paper sees a smart city not as a status of how smart a city is but as a city's effort to make itself smart. The connotation of a smart city represents city innovation in management and policy as well as technology. Since the unique context of each city shapes the technological, organizational and policy aspects of that city, a smart city can be considered a contextualized interplay among technological innovation, managerial and organizational innovation, and policy innovation. However, only little research discusses innovation in management and policy while the literature of technology innovation is abundant. This paper aims to fill the research gap by building a comprehensive framework to view the smart city movement as innovation comprised of technology, management and policy. We also discuss inevitable risks from innovation, strategies to innovate while avoiding risks, and contexts underlying innovation and risks.

Computing and Information Technology Challenges for 21st Century Financial Market Regulators
Proceedings of IFIP International Federation for Information Processing 2011 , er 12-16, 2011

This paper reports on a research effort designed to begin to systematically identify the most critical computing and information technology-related challenges facing financial market regulation activities. Computing and infor-mation technology adaptation in financial markets create a paradox. Information technology is needed for

effective governing of financial markets, yet advances in information technology and the increasingly complex adaptations of that technology make it more difficult for regulators to have a clear picture of what is actually happening. Drawing on in-depth interviews with professionals from the financial market community, this paper outlines three primary challenges facing regulation efforts: 1) information sharing and integration, 2) mediating interrelationship among financial market constituents, 3) data-driven decision making. The paper concludes with recommendations for future research about the challenges.

Conceptualizing Smart City with Dimensions of Technology, People, and Institutions

Proceedings of the 12th Annual International Conference on Digital Government Research (dg.o 2011), , 2011

This conceptual paper discusses how we can consider a particular city as a smart one, drawing on recent practices to make cities smart. A set of the common multidimensional components underlying the smart city concept and the core factors for a successful smart city initiative is identified by exploring current working definitions of smart city and a diversity of various conceptual relatives similar to smart city. The paper offers strategic principles aligning to the three main dimensions (technology, people, and institutions) of smart city: integration of infrastructures and technology-mediated services, social learning for strengthening human infrastructure, and governance for institutional improvement and citizen engagement.

Open Government and E-Government: Democratic Challenges from a Public Value Perspective

Proceedings of the 12th Annual International Conference on Digital Government Research (dg.o 2011), , 2011

This paper considers open government (OG) within the context of e-government and its broader implications for the future of public administration. It argues that the current US Administration's Open Government Initiative blurs traditional distinctions between e-democracy and e-government by incorporating historically democratic practices, now enabled by emerging technology, within administrative agencies. The paper considers how transparency, participation, and collaboration function as democratic practices in administrative agencies, suggesting that these processes are instrumental attributes of administrative action and decision making, rather than the objective of administrative action, as they appear to be currently treated. It proposes alternatively that planning and assessing OG be addressed within a "public value" framework.

Promoting International Digital Government Research Collaboration: An Experiment in Community Building

Proceedings of the 12th Annual International Conference on Digital Government Research (dg.o 2011), , 2011

Global issues present many opportunities for digital government (DG) researchers to form long-lasting relationships that lead to shared research agendas focused on questions of international importance. The practical feasibility of international DG research partnerships is of interest for both investigators and funders. This paper reports the evaluation of an experiment to create sustainable international digital government research collaborations by providing legitimacy and modest funding within a minimal set of structural and management requirements. Participants rated the experience as highly positive, contributing substantially to their research productivity, community building, international awareness, and professional growth. While the working group strategy is not a substitute for direct research support, it is a readily replicable method to build international research communities, and to stimulate and enhance their scholarly work.

Knowledge and Information Sharing in Transnational Knowledge Networks: A Contextual Perspective

Proceedings of the 44th Hawaii International Conference on System Sciences - 2011, y 15, 2011

As government agencies increasingly collaborate with international counterparts on critical global issues, transnational knowledge and information sharing grow in importance. This paper explores the nature of Transnational Knowledge Networks (TKNs) and identifies critical contextual factors that hinder or enhance their performance. We explore a set of contextual distances that separate the participating organizations and discuss their potential influence on the success of TKNs. The paper concludes with a conceptual framework and a set of testable hypotheses to guide the next phase of our research in understanding knowledge and information sharing

across national and cultural boundaries.

Conceptualizing Knowledge and Information Sharing in Transnational Knowledge Networks

ICEGOV2010, 25-28, 2010,

In the era of globalization, sharing of knowledge, information, and practices across cultural and national boundaries has been recognized as a key for handling the most critical problems. Consequently, the number of Transnational Knowledge Networks (TKNs) that aim to address critical global issues and problems continue to increase. As exchanging knowledge and information represent core components of these networks, this paper provides the foundations to study knowledge and information sharing in these emerging organizations. The paper starts by describing the structures, goals, and objectives of TKNs and presents a simplified conceptual model to demonstrate the main characteristics of these networks. Then, we review the pertinent egovernment literature and argue the need to include findings from two additional research areas, cross-boundary information sharing and knowledge transfer. The paper discusses the ways in which contributions from these areas can enhance our understanding of the complexity surrounding the exchange process in these networks. The paper concludes with a summary of the elements of complexity and an overview of future research to empirically test these concepts.

Stewardship and Usefulness: Policy Principles for Information-based Transparency

Government Information Quarterly, Volume 27, Issue 4, Pages 377-383., 2010

This paper is a conceptual and empirical exploration of the tensions inherent in the drive to increase openness and transparency in government by means of information access and dissemination. The idea that democratic governments should be open, accessible, and transparent to the governed is receiving renewed emphasis through the combination of government reform efforts and the emergence of advanced technology tools for information access. Although these initiatives are young, they already exhibit daunting complexity, with significant management, technology, and policy challenges. A variety of traditional and emerging information policy frameworks offer guidance, while diverse research perspectives highlight both challenges to and opportunities for promoting information-based transparency. Early experience with Data.gov, a central component of the U.S. Open Government Initiative, suggests that two fundamental information policy principles, stewardship and usefulness, can help guide and evaluate efforts to achieve information-based transparency.

Information Strategies for Open Government: Challenges and Prospects for Deriving Public Value from Government Transparency

Electronic Government: Lecture Notes in Computer Science, M.A. Wimmer et al. (Eds.): , EGOV 2010, LNCS 6228, pp. 50–60,

Information-based strategies to promote open government offer many opportunities to generate social and economic value through public use of government information. Public and political expectations for the success of these strategies are high but they confront the challenges of making government data "fit for use" by a variety of users outside the government. Research findings from a study of public use of land records demonstrates the inherent complexity of public use of government information, while research from information science, management information systems, and e-government offer perspectives on key factors associated with effective information use. The paper concludes with practical recommendations for information-based open government strategies as well as areas for future research.

Information and Transparency: Learning from Recovery Act Reporting Experiences.

(Forthcoming) Proceedings of the Eleventh Annual International Conference on Digital Government Research: (dg.o 2010), May 2010, pp.1-10

The American Recovery and Reinvestment Act (2009) promised strict accounting of all funds spent and the publication of that information to the public in relative real-time. The federal requirements for reporting Recovery Act funds relied heavily on the ability of recipients, primarily state governments, to capture, manage, and deliver the data required. This paper presents the experience of one state agency, in particular how they leveraged the

reporting mandate to improve real-time informational capability for transparency and openness. The case, together with insights from a Recovery Act Knowledge Network, provides five recommendations to guide decision makers who seek to increase the capability of government to use information to further transparency agendas.

Issues and Strategies for Conducting Cross-National E- Government Comparative Research

3rd International Conference on Theory and Practice of Electronic Governance (ICEGOV2009), Bogotá, Colombia, r 10-13, 2009

This paper addresses and discusses the central issues that researchers have to deal with when conducting cross-national comparative research within the area of e-government. The issues are classified into two main categories. The first category represents the issues and challenges that may affect the reliability and the quality of data being collected for comparative studies. The second category represents the remaining issues related to the research objective, the selection process of countries and the analytical strategy. The paper discusses the major alternatives of these issues and provides a rationale for the selection process among them. The paper concludes by discussing the interrelations between the identified issues and clarifying the main decisions that researchers have to take when conducting cross-national comparative research.

Clarity of Roles and Responsibilities in Government Cross-Boundary Information Sharing Initiatives: Identifying the Determinants

Proceedings of 5th International Conference on e-Government, Oct 2009, pp.148-155

Research has shown that clarity of roles and responsibilities (CRR) influences the effectiveness and performance of individual organizations as well as cross-boundary or interorganizational group efforts. Role clarity increases job satisfaction, commitment, and involvement and reduces tension and anxiety among organizational members, which results in lower staff turnover rates in organizations. In addition, CRR has been found to enable other important determinants of success in cross-boundary information sharing (CBI), such as building trust among members of CBI initiatives. However, few studies attempt to understand the determinants of CRR in a CBI initiative. Using data from semi-structured interviews from eight U.S. state and local government public health and criminal justice information sharing cases, this paper seeks to fill this gap by examining these determinants.

From "Need to Know" to "Need to Share": Tangled Problems, Information Boundaries, and the Building of Public Sector Knowledge Networks

This is an electronic version of an Article published in Public Administration Review, Volume 69, Issue 3 (p 392-402), © 2009 the American Society for Public Administration, May 2009

Public managers confront tangled problems every day across all policy domains and levels of government, and they need to be ready to deal with them through networked forms of engagement and action. Knowledge networking—the ability to create public sector knowledge networks (PSKNs) suitable for addressing these problems—requires a certain set of skills and attitudes, as well as interpersonal and other kinds of trust. Network development processes that emphasize early, open dialogue and examination of assumptions and expectations do better than those that rush forward with a fixed IT solution in mind. Those that adapt and learn from experience are more likely to succeed in achieving their substantive project and networking goals. Finally, to be sustainable as organizational forms, knowledge networks need some legal foundation, access to resources, supportive policies, and innovative forms of leadership.

Information Sharing at National Borders: Extending the Utility of Border Theory

Proceedings of the 42nd Hawaii International Conference on System Sciences - 2009, y 15, 2009

Research has identified the potential and challenges of information sharing in government settings mostly within the context of a single country. The challenges facing inter-governmental information exchanges that take place across national border governments, however, are thought to be different. To date, research has failed to provide theoretical guidance in understanding the complexities that the cross border environment brings to information sharing initiatives. This paper brings together Brunet- Jailly's theory of borders [10] and definitions of crossboundary information sharing from Gil-Garcia et al. [39] to develop a framework that incorporates the information sharing and technology dimension with the economic, political and cultural contextual factors impacting border regions. This study is an initial step toward understanding the challenges that the border

environment brings to information sharing initiatives. Future research is necessary to empirically test the utility of the proposed theory as a tool for understanding this new area of both practical and theoretical importance.

Collaborative Governance and Cross-Boundary Information Sharing: Envisioning a Networked and IT-Enabled Public Administration

Paper prepared for presentation at the Minnowbrook III Conference, Lake Placid, New York, September 5-7, 2008, er 5-7, 2008

Governments around the world are moving toward a more global perspective in their efforts to address complex social, political, and economic issues. New requirements for international cross-boundary collaboration, driven by this global view, demand a new understanding about how individual nations respond to public problems and how nations work together in response to transnational problems. In addition, new forms of government enabled by information technologies and made possible through new models of collaboration are emerging. The future of public administration is clearly linked to the development and management of new forms of collaborative governance and the use of information technologies. Globalization is also contributing to the internationalization of the public sector, in which cross-boundary collaboration and information sharing will happen not only within a country, but between nations. This paper contributes to the exchange of knowledge about the future of public administration by presenting a view that considers important trends in public management and public service around the world. As a backdrop we first present a discussion about the emergence in public administration toward post-bureaucratic organizations and interorganizational networks. E-government and cross boundary information sharing are then introduced as part of the new context of public administration. We then draw the focus back to the importance of collaboration and information sharing in transnational public problems and international cooperation and characterize the need for new capability in working across the boundaries of organizations, governments, regions, and nations. Finally, drawing on this discussion we outline four topics of critical importance for inclusion in the public administration classroom to fully prepare students to work in the government of the 21st Century; Post-Bureaucracy and Organizational Networks, Information Technologies and Inter-organizational Information Integration, Collaborative Governance and Interoperability: Creating policy, management, and technology capability, and Transnational Problems and the Internationalization of Public Administration. The new generation of public administrators must understand the importance of collaborative governance, information technologies, and the internationalization of complex social problems for the public administration of the twenty first century.

Governance structures in cross-boundary information sharing: Lessons from state and local criminal justice initiatives

Proceedings of the Forty-First Annual Hawaii International Conference on System Sciences (HICSS 2008), Jan 2008, p.211

Governments are increasingly using collaborative, cross-boundary strategies to face complex social problems. Many of these cross-boundary initiatives have at their core the use, and in many cases, the sharing of information and communication technologies. In fact, government managers and researchers alike are now recognizing the value and great opportunities offered by cross-boundary information sharing, in particular. Current research has identified important factors that affect these cross-boundary information sharing initiatives Governance structures are among those factors found to be important in cross-boundary information sharing. However, there is little research about the determinants of an effective governance structure in these multi-organizational settings. Based on semistructured interviews with participants in four state and local government criminal justice initiatives, this paper systematically identifies the determinants of governance structures for cross-boundary information sharing initiatives. By doing so, this study contributes to theory, but also supports the development of more specific guidelines for public managers and other individuals involved in crossboundary information sharing.

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 to 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, 007, 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. Finding s 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.

Challenges And Strategies for Conducting International Public Management Research

Administration & Society, Vol. 38, No. 5, Nov 2006, pp 596-622

Cross-cultural management research is a valuable but complex and error-prone endeavor. The main challenges the authors encountered in conducting a multinational research project included nonequivalence of key concepts, cultural stereotypes, assumptions of universality, and difficulties in comparative analysis. The authors identified crucial questions that need to be asked at each stage of the research for it to be both reliable and valid. These questions address such pitfalls as the importance of focusing on culture as an independent variable, the cultural dynamics of the research team, and the importance of translation and of finding culturally equivalent definitions of key concepts.

Measuring Return on Government IT Investments

Proceedings of the 13th European Conference on Information Technology Evaluation, Genoa Italy, 28-29 September 2006, Oct 2006, Thirteen pages

Based on findings from CTG's Advancing Return on Investment Analysis for Government IT project this paper discusses the similarities and differences of approaches, models, and methodologies developed and utilized for measuring ROI in IT investment, particularly in the public sector. The paper also provides a descriptive data analysis of trends in IT investments in the United States.

Multi-method approaches to understanding the complexity of e-government

International Journal on Computers, Systems and Signals, Volume 7, Number 2, Oct 2006, pp. 3-17

Electronic government is a complex phenomenon which involves technical, organizational, institutional and environmental aspects. Researchers from different disciplines are increasingly finding that using multiple methods can help to deal with complexity and obtain more comprehensive explanations. This paper argues that

multi-method approaches can be useful for egovernment research. A set of advantages and challenges to multi-method approaches are introduced and then used to frame a case analysis. Two case studies involving multi-method approaches to e-government research are presented to illustrate strategies for responding to implementation challenges in both large-scale and small-scale projects. This case analysis contributes to the discussion about multi-method research designs and their role in digital government research. Insights into management strategies specifically designed to respond to the digital government context and the adoption of relevant methodologies drawn from the experiences of the authors are provided.

Building response capacity through cross-boundary information sharing: The critical role of trust

Paper presented at the eChallenges e-2006 Conference, Barcelona, Spain, Oct 2006

Governments around the world are increasingly turning to information sharing and integration to help solve problems in a wide range of programs and policy areas. These complex interorganizational efforts face not only the technical challenges of many information technology initiatives, but also the difficulties derived from interacting among multiple and diverse organizations. Trust has been identified as one the most important organizational factors for cross-boundary information sharing and integration. However, more research is needed regarding the determinants of trust building in this multi-organizational contexts. This paper highlights the relevant role of trust in cross-boundary information sharing initiatives and provides evidence about three of its most important determinants.

The Effect of Organizational/ Technological Factors and the Nature of Knowledge on Knowledge Sharing

Proceedings of the Thirty-Ninth Annual Hawaii International Conference on System Sciences (CD/ROM), January 4-7,2006, Computer Society Press, Feb 2006, Ten pages

This study investigates the dynamics of a knowledge sharing effort in New York State government that involved multiple organizations, divisions, and geographically separated offices in the development of the Multi-Purpose Access for Customer Relations & Operational Support System.

Can Government be a Good eBayer? The Use of Online Auctions in the Sale of Surplus Property

Proceedings of the Thirty-Ninth Annual Hawaii International Conference on System Sciences (CD/ROM), January 4-7,2006, Computer Society Press, Jan 2006, Eight pages

E-commerce, and online auctions in particular, represent important examples of how information and communication technologies have been employed by public organizations to gain benefits in both efficiency and effectiveness. In this article, we discuss the three-year experience gained by New York State in the use of online auctions for the sale of surplus inventory and property.

Enacting State Websites: A Mixed Method Study Exploring E-Government Success in Multi-Organizational Settings

Proceedings of the Thirty-Ninth Annual Hawaii International Conference on System Sciences (CD/ROM), January 4-7,2006, Computer Society Press, Jan 2006, Ten pages

E-government is increasingly been used for government administrative reform. In fact, spending in e-government initiatives continues to rise and, among these projects, Internet-based applications are increasingly important. Using a nested research design, this study explores the complex relationships among the relative success of state websites and certain organizational, institutional, and contextual factors.

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

Proceedings of the Thirty-Ninth Annual Hawaii International Conference on System Sciences (CD/ROM), January 4-7,2006, Computer Society Press, Jan 2006, Ten pages

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.

Multi-Method Approaches to Digital Government Research: Value Lessons and Implementation Challenges

Proceedings of the Thirty-Ninth Annual Hawaii International Conference on System Sciences (CD/ROM), January 4-7,2006, Computer Society Press, Jan 2006, p.67a

Digital government is a complex organizational and social phenomenon. It involves technical, organizational, and policy elements, as well as their complex and recursive interactions. Multi-method approaches have been shown as capable of presenting more comprehensive explanations of complex situations. This paper argues that multi-method approaches are valuable alternatives for e- government research.

Understanding the Complexity of E-Government: Multi-method Approaches to Social Phenomena

Paper presented at the 66th Annual Conference of the American Society for Public Administration, Milwaukee, WI, Oct 2005, Eleven pages

This paper contributes to the ongoing debate about multi-method approaches to studying social phenomena; in this contribution e-government is the social phenomenon of interest. A set of advantages and challenges to multi-method approaches are introduced and then used to frame a case analysis. Two case studies involving multi-method approaches to e-government research are presented to illustrate strategies for responding to implementation challenges in both large-scale and small-scale projects. The case discussion provides new insight into how the challenges to multi-method approaches can be managed.

Interorganizational Information Integration in the Criminal Justice Enterprise: Preliminary Lessons from State and County Initiatives

Proceedings of the Thirty-Eighth Annual Hawaii International Conference on System Sciences (HICSS 2005), Jan 2005

Traditional governmental structures have organized the capture, use, and management of information along agency lines. These "information silos" are not very useful in a dynamic environment. Information integration is considered one of the most significant ways to change the structure and function of public organizations. It has the potential to support the transformation of organizational structures and communication channels between and among multiple agencies working in different locations. This article contributes to this knowledge-building effort by examining the factors that influenced the success of selected criminal justice integration initiatives. Useful integration strategies are also identified.

Criminal Justice culture in the United States: A context for understanding aspects of organizational change

Paper presented at the National Conference of Hungarian Psychological Association (PSZICHOLOGIA 2004), Debrecen, Hungary, Oct 2004

As statistics show, violent crime is more prevalent in the US than in Hungary. Consequently, U.S. law enforcement, and a wide range of criminal justice agencies, are seen as an important part of government. These agencies embody characteristics that make them similar to and different from their counterparts in other areas of government. The research reported on here unveils some of these characteristics as it looks at interactions among criminal justice agencies in their efforts to develop structures within which to share and integrate information across organizational boundaries in order to reduce crimes.

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

Proceedings of the Twenty-Second International Conference of the System Dynamics Society, Oct 2004, pp.82-83

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 fulfill the goal of giving users of criminal justice data and information systems "one-stop shopping" access to the information needed to accomplish their mission. The research team of the Center for Technology in Government (CTG) collaborated with the CJIT group for an eight-month period during 2003 to accomplish this task. The CJIT-CTG team went through a series of conversations to specify the business problem and its context, and to identify feasible solutions and alternatives. This paper reports on a system dynamics model for understanding the dynamics of the socio-technical processes that took place during this project. This model building effort is looking for the development of a theory of interorganizational collaboration. The model is being developed in facilitated group model building (GMB) sessions with the team at CTG. Although the model presented in this paper is still preliminary, the model is capable to generated interesting scenarios with reasonable changes in the initial values of some parameters. Moreover, the model illustrates a powerful way to luse group model building and simulation as theory-building tools.

Scripts for interrupted group model building: Lessons from modeling the emergence of governance structures for information integration across governmental agencies
Proceedings of the Twenty-Second International Conference of the System Dynamics Society, Oct 2004, pp.83-84

The system dynamics group at Albany has been developing approaches to decision conferencing using a combination of group facilitation techniques linked to projected computer models in the room for more than 20 years. Over the years, the group has developed a series of pieces of small group processes to build system dynamics models with groups, i.e. scripts. The Group Model Building (GMB) process reported here has several characteristics that make it different from most other experiences in the group. While the common setting involves managers interested in tackling a specific problem, this work involves a research team interested in building theory about the complexity of intergovernmental information integration. Additionally, the reported GMB process took place in small sessions of two to three hours, while the common practice at Albany involves intensive one or two-day meetings. In this way, the paper will include general thoughts about the implications of these differences for the GMB process.

Modeling the social and technical processes of interorganizational information integration
Proceedings of the Thirty-Seventh Annual Hawaii International Conference on System Sciences (HICSS 2004), Jan 2004, p. 50120.1

Government leaders and IT executives increasingly recognize that interorganizational information integration (III) is a critical and complex process. Due to the need for integrated information at all levels of government, interorganizational information integration can no longer be pursued through ad hoc approaches that primarily rely on intuitive understandings of the way government operates. This paper presents an effort currently underway to model the social and technical processes of interorganizational information integration to improve our understanding of information system development and of interorganizational collaboration. This research seeks to enhance both the conceptual and practical models of III by building new understanding of the interaction among the social and technical processes in interorganizational information integration.

Designing electronic government information access programs: a holistic approach
Government Information Quarterly, r 13, 2003

That electronic government information repositories are growing in number, use, and diversity is one manifestation of the emergence of e-government. These information-centered programs both shape and respond to user demand for electronic government information as computer-mediated user access has displaced traditional staff-mediated access. These programs are no longer concentrated in statistical agencies but increasingly are offered by a wide array of mission-driven operating agencies to complement their other services. This study identified the design dimensions of electronic information access programs by examining mature existing programs. These dimensions address users, uses, organizational capabilities, data characteristics, and

technology. The study then explored the application and interdependence of these dimensions in three efforts to design and develop new access programs. The study produced an empirically based, testable model of observable dimensions that shape the cost, complexity, and potential performance of these programs. In addition, the article offers government managers some insight into the practical implications they will face in designing and operating electronic information access programs.

Understanding New Models of Collaboration for Delivering Government Services
Communications of the ACM, Volume 46, Number 1, 2003, pp 40-42

More and more government agencies are creating collaborative relationships to improve services they provide. This article presents a summary of an international research project that is studying eleven collaborative partnerships developed to deliver government information.

Electronic Government: A Vision of the Future that is Already Here
Syracuse Law Review, Volume 52, Number 4, , 1243-1251

Though they may be going unnoticed, e-government initiatives are changing the way that the public sector works. This article introduces a four-faceted vision of e-government and describes some of the ways that it is already changing government.

Implications of Legal and Organizational Issues for Urban Digital Government Development
Government Information Quarterly, Volume 18, , 269-278

Legal and organizational issues converge when developing digital government in large urban settings. This paper contends that this convergence is a powerful determinant of how these projects develop and how likely they are to succeed.

Realizing the Promise of Digital Government
IMP Magazine, 2000

Many of us have already experienced the potential of the Web to change our relationships with other individuals, businesses, and now government. This article discusses the transformation needed before we can realize the promises of electronic government.

The Internet, the State Library, and the Implementation of Statewide Information Policy
Journal of Global Information Management, Volume 7, Number 4, -December 1999, pp 27-33

Geographic Information Systems (GIS) are used by government, researchers, and businesses to support a wide range of activities. This article documents the implementation of an Internet-based GIS Clearinghouse in New York State, and highlights the role of the State Library as a critical implementer and value-added facilitator.

Four Realities of IT Innovation in Government
The Public Manager, Volume 28, Number 1, 1999

Throughout CTG's partnership projects, there are four realities that stand out as success factors for IT innovation. This article presents the four recurring factors that we have encountered working on dozens of projects with hundreds of government individuals and organizations.

Models for Action: Developing Practical Approaches to Electronic Records Management and Preservation
Bulletin of the American Society for Information Science and Technology, Volume 23, Number 5, ly 1997

Organizations often lack adequate tools to manage the growing number and variety of electronic records. This

article presents a set of practical tools that can help government agencies manage the records that are electronically created, maintained, and accessed.

Building a state government digital preservation community: Lessons on interorganizational collaboration.

Proceedings of the 7th Annual International Conference on Digital Government Research, USA, 277-284, , Eight pages

Based on the findings of 2005 Library of Congress workshops and previous efforts on digital preservation, this paper discusses the challenges and opportunities regarding interorganizational collaboration and community building for digital preservation of state government information.

Challenges of Treating Information as a Public Resource: The Case of Parcel Data

Proceedings of the Thirty-Ninth Annual Hawaii International Conference on System Sciences (CD/ROM), January 4-7,2006, Computer Society Press, , Ten pages

Land parcels are the foundation for many aspects of public and community life. This report presents the findings of a study of information about land parcels in New York State. It identifies stakeholders and their interests as well as the needs and issues associated with the uses of parcel data in the public, private, and nonprofit sectors.

Book Chapters (8)
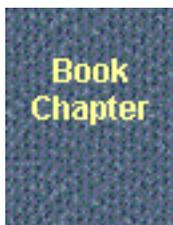
Assessing the Value of Investments in Government Interoperability

In Pallab Saha (Ed.)*Enterprise Architecture for Connected E-Government: Practices and Innovations.* IGI Global.

Government investments in enhancing the interoperability of ICT systems have the potential to improve services and help governments respond to the diverse and often incompatible needs and interests of individual citizens, organizations, and society at large. These diverse needs and interests encompass a broad range of value propositions and demands that can seldom be met by single programs or assessed by simple metrics. The diversity of stakeholder needs and the complexity inherent in interoperable systems for connected government require an architecture that is up to the task. Such an architecture must include the reference models and components that can accommodate and integrate large portfoliosof applications and support multiple kinds of performance assessments. The value propositions that underlie the architecture's performance assessment or reference model are fundamental. The propositions must be broad enough to span the full scope of the government program's goals, asubstantial challenge. In recognition of that challenge, this chapter puts forward two perspectives for assessing the value of interoperable ICT investments, incorporating outcomes beyond financial metrics. The first is the network value approach to assessment of investments in interoperable ICT systems for government. The second is the public value framework developed by the Center for Technology in Government, which expands on the network value approach to include a broader range of public value outcomes. These approaches are illustrated in two case studies: the I-Choose project designed to produce interoperable government and private sector data about a specific agricultural market and the government of Colombia's interoperability efforts with expanded metrics based on the expansion of interoperability networks.

Information Sharing and Public Health: A Case-based Look at the ICT Expectations-Reality Gap

In Albert Meijer, Kees Boersma, Pieter Wagenaar (Eds.)*ICTs, Citizens & Governance: After the Hype! .*

pp.180-197. Amsterdam: IOS Press.

Sharing information across organizational boundaries is central to efforts to improve government operations and services. However, creating the capability necessary to enable information sharing across the boundaries of organizations is among the most difficult types of information technology projects. New knowledge about information sharing is required; in particular, new understanding about how government, non-governmental and private sector organizations come together to share information is necessary. This chapter draws on the experiences of key actors in three states in the United States as they organized to create new capability to share information as part of their responses to the West Nile virus outbreaks. The cases highlight the gap between expectations and reality, providing opportunity to more fully understand the gaps between expectations (the hype) about ICTs and the reality facing government practitioners who seek to use ICTs to share information. Examining the cases in terms of four contexts of information integration and sharing provides a more specific understanding about the gaps between these expectations and the reality (after the hype). The lessons learned in the context of public health include the central role of information sharing and the implications of resource constraints on data capture and use capability in the context of an outbreak management and surveillance effort. Insight into the interdependence of system design and process support and improvement in the context of public health surveillance was also found to be critical to future planning of public health surveillance systems. This chapter serves to reemphasize to both researchers and practitioners the need to close the gap between expectations and reality; the point is made again through the cases that closing the gap depends on strategies that draw on technology, process, interorganizational, and political perspectives and resources.

Sustainable cross-boundary information sharing

In H. Chen, L. Brandt, V. Gregg, R. Traunmüller, S. Dawes, E. Hovy, A. Macintosh, & C. A. Larson (Eds.)*Digital government: Advanced research and case studies, and Implementation.* pp.421-438. New York: Springer.

Information is one of the most valuable resources in government. Government managers are finding however, that information needed to plan, make decisions, and act is often held outside their own organizations, maintained in disparate formats, and used for widely different purposes. Efforts to bring this data together across boundaries have provided new understanding into just how difficult cross-boundary information sharing is. Finding ways to bring together information and integrate it for use in solving pressing public problems is fast becoming a focus of attention for digital government practitioners and researchers alike. This chapter reports on one such study1 of cross-boundary information integration that revealed three important lessons for creating and sustaining cross-boundary information sharing: 1) interoperability is key, 2) a shift in agency culture is necessary, and 3) the role of policymakers is central to this type of project. Four recommendations for action derived from the case studies are presented as well. Government executives and policy-makers need to ensure the creation of enterprise-wide mechanisms and capabilities such as (1) governance structures, (2) resource allocation models, (3) scalable strategies, and (4) non-crisis capacity.

Building Collaborative Digital Government Systems: Systemic Constraints and Effective Practices

in W. McIver and A.K. Elmagarmid (Eds.)*Advances in Digital Government: Technology, Human Factors, and Policy .* NewYork: Kluwer.

MACROS: A Case Study of Knowledge Sharing System Development within New York State Government Agencies

In M. Khosrow-Pour (Ed.)*Annals of Cases on Information Technology, Vol 7 .* Hershey PA: Idea Publishing Group.

Participants' Expectations and the Success of Knowledge Networking in the Public Sector

In W. Huang & K. Siau & K. K. Wei (Eds.)*Electronic Government Strategies and Implementations.* Hershey PA: Idea Publishing Group.

Pool the Risks, Share the Benefits: Partnerships in IT Innovation

In Keyes, J., (ed.) *Technology Trendlines* . New York: VanNostrand Reinhold.

The Challenge of Integrating Data for E-Government
Global ICT Agenda 2002, #1. 40-41. London: Quasar International Communications.

Working Papers (8)

A Multi-Dimensional Approach to Digital Government Capability Assessment
Mar 2008

The issue of organizational capability is central to virtually all efforts to improve government performance, particularly in the area of information technology innovation. Capability assessment can play an important role in the digital government domain in at least two ways: one is to provide a basis for judging whether agencies are ready to initiate some digital government innovation, and the other is to judge the impact of a digital government initiative in terms of improved capabilities. Data on capabilities targeted by digital government initiatives can provide both baseline measurements and evidence of subsequent improvements. As part of its research and development on several digital government projects, the Center for Technology in Government (CTG) has developed an approach to capability assessment, resulting in specific assessment toolkits for use in different types of digital government initiatives. This paper describes the approach used in developing these toolkits generally, with an example from one version intended for use in justice information integration projects. The paper includes the theoretical rationale for the design of the toolkits, methods for their use, and implications for use in practice.

Building a State Government Digital Preservation Community:Lessons on Interorganizational Collaboration
Mar 2008

As a part of the National Digital Information Infrastructure and Preservation Program (NDIIPP), the Library of Congress sponsored a series of collaborative workshops between April and May 2005 to help state governments identify their needs and priorities for digital preservation. During these workshops, state and territory representatives showed strong interest in fostering partnership efforts and collaborative strategies toward preserving state government digital information. Based on the findings of the workshops and previous efforts on digital preservation, this paper discusses the challenges and opportunities regarding interorganizational collaboration and community building for digital preservation of state government information.

Building Response Capacity through Cross-boundary Information Sharing: The Critical Role of Trust
Mar 2008

Governments around the world are increasingly turning to information sharing and integration to help solve problems in a wide range of programs and policy areas. These complex interorganizational efforts face not only the technical challenges of many information technology initiatives, but also the difficulties derived from interacting among multiple and diverse organizations. Trust has been identified as one the most important organizational factors for cross-boundary information sharing and integration. However, more research is needed regarding the determinants of trust building in this multi-organizational contexts. This paper highlights the relevant role of trust in cross-boundary information sharing initiatives and provides evidence about three of its most important determinants.

Critical Issues and Practical Challenges of IT Tools for Policy Analysis and Program Evaluation
Mar 2008

Policy makers and public managers want and need to know how well government programs perform, but few have the information to accurately and continuously evaluate them. The dynamic nature of public programs, and the traditional methods used to assess them, compound this problem. Performance measurement and performance-based decisions can be improved by more sophisticated information systems designed for to support analysis and decision making. However, such systems demand close and continuing involvement of program staff, attention to programmatic context, and much better understanding of business processes and the data they generate. Through the use of a case example, the prototype Homeless Information Management System, this paper highlights how attention to these issues can lead to useful and usable performance analysis and evaluation systems.

Examining Digital Government Publication Trends
Mar 2008

The purpose of this study was to assess the publishing patterns of digital government (DG) research in top scholarly journals in the fields of public administration (PA), public policy (PP), and management information systems (MIS) within the last five years (See Table 1). DG research was published in nine of the twelve top journals in these fields since 1999. A total of 114 DG articles were identified, representing approximately 4.9 percent of the total number of articles published in these journals between 1999 and 2003. It seems that the top journals have published DG research in limited ways given public and media attention and increased funding opportunities to conduct e-government research.

Fostering Innovation in Electronic Government:Benefits and Challenges of XML for Web Site Management
Mar 2008

As government Web sites have grown in size, complexity, and prominence, Web site management, content management, maintenance costs, and accessibility have become growing concerns for federal, state and local governments. Government agencies are losing the ability to be responsive and flexible in providing new information and services and the costs of maintaining these Web sites have become prohibitive. Government webmasters and system administrators have come to realize that the technologies and strategies used in the past to build most Web sites are designed to produce individual Web pages. They do not provide a structure to easily maintain entire Web sites, keep them responsive to changing needs, or manage the workflow involved in Web content production and maintenance; nor do they facilitate the sharing and reuse of Web site content. This paper examines the potential of XML for Web site content management in government settings. Five state government agency teams were selected, looking for a mixture of several aspects such as technological expertise, organizational capabilities, agency size, and institutional environment. The study uses multiple research methods such as semi-structured interviews, surveys, and analysis of relevant documents to explore the benefits and challenges of using XML for Web site content management in government agencies. Overall, participants identified information consistency, reduction of data and content duplication, and compatibility with new devices and formats as the main benefits. Organizational and individual resistance to change, multiple and different priorities, and unrealistic goals were identified as the most important barriers. The paper also reports some differences in perceptions between technical and program staff.

Measures and Conditions of Success in Public Sector Knowledge Networks
Mar 2008

Interorganizational networks are increasingly the subject of both theoretical and empirical research in sociology, economics, organizational behavior, and public and business management. While the most common network concepts and studies have focused on multi-organizational forms of production, "network" has also emerged as a way to describe how organizations share and integrate knowledge and information. This paper focuses on a type of network that is increasingly important in public affairs, but largely unaccounted for in the extant literature – the public sector knowledge network. The paper synthesizes and augments the exiting literature to include public sector knowledge networks. It then identifies performance measures that can be used to evaluate them at the

network, organizational, and individual levels of analysis and identifies critical success factors that pertain to each level.

New models of collaboration for delivering e-government services: A dynamic model drawn from multi-national research
Mar 2008

This paper presents a conceptual model of how organizations collaborate to deliver electronic public services. The model is derived from a comparative study of 12 e-government collaborations in Canada, the US, and Europe that involved various combinations of public, private, and nonprofit organizations pursuing a variety of service objectives. The study draws on the literature of interorganizational relations, as well as management information systems, public management, and organizational behavior to devise a preliminary model of how such collaborations form and operate. The case study data are then compared to the preliminary model and a revised, more dynamic model is presented. The revised model more closely fits the case experiences across various service types, project structures, and national settings.

Issue Briefs (21)

The opportunity and challenge of collecting street-level information
September 2012

With the hope of changing the lives of youth in foster care, in 1999 the U.S. Congress enacted the Foster Care Independence Act, also known as the Chaffee Independent Living Act (Act). The Act provided $140 million in block grants to states to support youths' transitions to independent living and required the Federal Administration for Children and Families (ACF) to develop a national data collection and reporting system. The system, known as the National Youth in Transition Database (NYTD), seeks to track outcomes of youth receiving independent living services and to trace certain youth outcomes over time, even as they age out of the foster care system.

Collaborative Data Sharing Networks
Sept 2012

Research and even business is becoming a collaborative enterprise that brings together multiple institutions, sectors and, increasingly, different countries. No where is this more apparent than in the natural sciences where the phenomenon being examined and questions being asked are not contained in the borders of one discipline, institution, country, or continent. Both a reason for and often the purpose of collaboration in the sciences is the need to amass, maintain, and share large and diverse structured data resources that no one research team or institution has the resources or expertise to collect, make available, and maintain.

Open Data and Fitness for Use: A Realistic Look
September 2012

The basic assumption of the open data movement is that more intensive and creative use of information and technology can improve policy-making and generate new forms of public and economic value. Open data initiatives are focusing on education, public health, transportation, environmental stewardship, economic development, and many other areas. Ironically, this information is often treated as a black box in the open data movement. Stakeholders, analytical techniques, and technology tools all receive considerable attention, but the information itself is often seen as a given, used uncritically and trusted without examination. However, the very kind of data that is now being released as "open data" was actually collected or created for other purposes. It has

undeniable potential value, but it also contains substantial risks for validity, relevance, and trust.

3-1-1 for Smarter Governments
September 2012

Cities across the U.S. are joining in a global movement to improve the quality of their decision making and planning through increased access to data and by integrating collaborative approaches to making that data more accessible to government officials as well as the public. In many larger cities, 311 service centers are becoming a core driver to building capabilities for service integration. Since the first 311 hotline launched in 1996 in the City of Baltimore, 311 service centers have rapidly spread across the country. 311 systems are providing quick and easy access to non-emergency municipal services and information through a single, consolidated channel that extends from the three-digit toll-free dial number (3-1-1) to any possible means that people can use to communicate with their municipal government; email, text messaging, social media, and more recently smart phone applications.

Building Transnational Knowledge Networks to Tackle Global Problems
August 2011

Sharing knowledge, information, technology and practices across cultural and national boundaries has become a means to address critical global problems. As governments strive to improve public health and safety, protect the environment, respond to disasters, or promote international commerce, they are engaging in new kinds of knowledge sharing networks as mechanisms for regional and global collaboration.

Delivering Public Value Through Open Government
August 2011

The Obama Administration's Open Government Directive raised to prominence the principles of transparency, participation, and collaboration as "the cornerstone of an open government." What lies at the heart of the open government vision is broader access to government data and creating new opportunity for citizens to contribute expertise and perspectives to government decision making. What is not yet clear is what types of value can be delivered and to whom through transparency, participation, and collaboration focused initiatives. While these three open government principles resonate in familiar and positive ways, it is not obvious how government agencies can best create new systems and services organized around them and ultimately deliver desired and measurable benefits to government and non-government stakeholders.

Government Accountability Through Spending Transparency
August 2011

Governments of the world are facing both national and global demands for greater levels of transparency that allow not only citizens but other nations to hold them accountable for their actions. These internal and external pressures and government responses have been fueled in part by innovations in information and communication technologies (ICTs) and the expanding capabilities of governments to use technology effectively.

Government in a Mobile World
August 2011

Government services, staff, and development efforts will be increasingly mobile in coming years as devices and applications continue to proliferate at an astounding rate. Industry experts stress how quickly the change is coming. The usual concerns that come with any technology innovation also accompany the mobile world: security, accessibility, privacy, development, deployment. As with any technology, mobile brings its own unique characteristics to these concerns. While critical for government, the single most important fact is that developments in the mobile world will directly impact nearly every aspect of government operations including delivery of services, citizen engagement, allocation of IT resources, staff support, and training.

Exploring Value in Social Media
May 2010

In President Barack Obama's first day in office he issued a memorandum to federal agencies calling for the

development of an Open Government Directive that focused on increasing transparency, collaboration, and participation. The directive requires agencies to take actions to expand access to government information, improve the quality of government information, create a culture of open government, and evolve policy in this direction. The directive points to "the use of new technologies," many of which are based on social media platforms, "to promote greater openness in government." Most recently, the administration issued a memorandum further encouraging the use of social media by clarifying that the Paper Reduction Act of 1995 "does not apply to many uses of such media and technologies."

Governance: The Value of a Custom Fit
August 2009

Reduce costs, increase transparency and improve service quality: these goals are on the minds of chief information officers (CIOs) everywhere. Consolidation, centralization, and integration are recognized as strategies for achieving these goals, but these strategies require new information technology (IT) governance capability for making state-wide coordinated information technology decisions.

No Loss in Translation: Using XML Databases to Simplify and Streamline Processes
August 2009

For over a decade, the simplicity, portability, and flexibility of XML have made it the accepted standard for formatting and sharing data via web services and service-oriented architecture (SOA). However, XML data that is easily transferred across machines and applications is not as easily stored and processed within those same machines and applications. As a result, the XML data is typically transformed into non-XML formats better suited for use within databases and applications. This transformation step adds a layer of complexity to the process.

Opening Government with Information
June 2009

Open government is grounded in the belief that access to government information is essential to the functioning of democracy. In the United States, information-based strategies to promote open government began with the Constitutional rights to free speech and a free press, and later extended to public meetings laws that require government to conduct its business in open venues. In the 1960s, information-based strategies such as freedom of information laws further established the public's right to know and set the rules for gaining access to most government records. Efforts to broadly open government information began in the 1990s with the introduction of electronic government initiatives that turned the focus toward creating electronic access programs, electronic records programs, and thousands of government Web sites.

Mobile Technology in the Public Sector: It's more than just the laptop
May 2008

One of the most difficult problems facing government managers who want to implement new technology is anticipating how it will affect work. Of course, the primary goal is to improve performance. However, it is nearly impossible to take into account all the human, organizational, and external influences that may impact how well that goal is achieved. Until the technology is put to work, planning is often little more than speculation. This is particularly true with mobile technology, which may have substantial potential, when combined with wireless networks, to expand the time, locations, and effectiveness of many types of government work. Fully exploiting this potential, however, presents a complex problem for government managers.

Regional Coordination: Exploring new response capability
May 2008

A crisis rarely occurs in one jurisdiction or community; they tend to cross multiple geographic and organizational boundaries. The effects of the World Trade Center attacks, for example, extended far beyond New York City and the effects of Hurricane Katrina were felt far beyond the city of New Orleans. Events such as these continue to generate new insights into the coordination across boundaries necessary to ensure effective response to incidents—both natural and man-made.

The Performance Measurement Puzzle
May 2008

There is a simple and persuasive proposition that is quite common in government policy and practice: better measurements of performance will lead to overall improvements in government. That proposition is fundamental to any notion of governing as rational decision making, from at least as far back as the Program Planning and Budgeting Systems (PPBS) and government accountability movements in the 1960's, up to the emergence of ComStat-style programs currently operating in many agencies. Performance measurement is central as well to the President's Management Agenda for improving U.S. federal agency operations, and many similar initiatives that can be found in state agencies. In spite of this long history of concern with performance measurement, however, it remains a puzzling problem for governments at all levels.

A Capability-based View of Government IT Innovation
May 2008

The obvious difficulty and high failure rate of information technology (IT) innovations in government and elsewhere have been central concerns in much of CTG's work over the past 15 years. Our first-hand experiences, coupled with reviews of the current research, highlight the importance of organizational capability as a critical success factor in IT innovation. It is clear that successful IT innovations, and the transformation they seek to support, depend at least as much on how well the organizations and individuals perform as on the chips, networks, and software. This finding led us, in turn, to further explore the concept of organizational capability and to work with government agencies to develop tools to enhance capability for IT innovation.

Collaboration and Information Sharing: Two Critical Capabilities for Government
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
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
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

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.

Managing and Preserving State Government Digital Information
September 2006

All signs point to continued growth in the volume and complexity of "born digital" government information. However, most states are hampered in their efforts to respond to this growth by a combination of technology, policy, political, and management issues, complicated by fragmented organizational roles and responsibilities for managing and preserving digital information. While traditional information and records custodians agree that not all digital information produced by government is worth saving, all agree that a small portion of this material is of permanent legal, legislative, or cultural value. In addition, a much larger portion has short and medium term value to CIOs, state and local agencies, the private sector, and citizens for purposes of e-government, e-commerce, and day-to-day government administration. To address these challenges, traditional information and records custodians and other key stakeholders, such as chief information officers (CIOs), need to reorient strategies toward sharing information and assets and understanding common- alities rather than emphasizing differences. It is time to move beyond debates over terminology and start treating digital information as a "public asset" with multiple values to both government and society.