

Summary

The context of the public sector is full of technology challenges such as network interoperability, information integration, and the preservation of government records in electronic form. New knowledge is necessary to understand the practices of government and governance in contemporary society. New attention must also be given to questions about how communities can talk to one another more effectively, taking lessons learned from research and bringing them to bear in public sector environments, and conversely, using knowledge and expertise about practice held by these practitioners to guide research agendas.

The National Science Foundation sponsored a workshop to bring together leaders from social and information science research and government to explore these grand challenge questions and to develop a next generation research agenda.

Three publications resulted from this effort:

- White Paper: Information and Technology: Improving Public Sector Capability to Address Societal Challenges
- Workshop Activity Report: Information, Technology, and Governance: A Grand Challenges Research Agenda Workshop Summary Activity Report
- Pre-workshop paper: Information, Technology, and Governance: A Grand Challenges Research Agenda was prepared as a starting basis for discussion.

Publications & Results

Reports and Working Papers (3)

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

Tue, 10 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.

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.

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

Tue, 15 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.

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

Wed, 17 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.

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 begin discussion on the issues.

Press Releases & News Stories

Press Releases

The Center for Technology in Government and the National Association of State Chief Information Officers Collaborate on Agenda-Setting Workshop

Thu, 25 Feb 2010

News Stories

Agencies advised to take a more tailored approach to IT

NextGov (National Journal Group, Inc.)

February 26, 2010

Workshop Participants

* Member of the Organizing and Implementation Team

Nabil Adam

US Department of Homeland Security

Yigal Arens

USC Information Sciences Institute

John Bertot

University of Maryland

Lawrence Brandt

National Coordination Office of The Networking and Information Technology Research and Development

Jonathan Breul

IBM Center for the Business of Government

Noshir Contractor

Northwestern University

***Meghan Cook**

Center for Technology in Government, University at Albany

***Anthony Cresswell**

Center for Technology in Government, University at Albany

Sharon Dawes

Center for Technology in Government, University at Albany

Steve Fletcher

State of Utah

José Fortes

University of Florida

Yolanda Gil

USC Information Sciences Institute

John Goggin

Cisco Systems, Incorporated

***Senem Güney**

Center for Technology in Government, University at Albany

Norman Jacknis

Cisco Systems, Incorporated

Andrea Kavanaugh

Virginia Tech

Jay Kesan

University of Illinois at Urbana-Champaign

Gopal Khanna

State of Minnesota

John L. King

University of Michigan

Kincho Law

Stanford University

Mike Locatis

State of Colorado

Lorenzo Madrid

Microsoft Corporation

***Theresa Pardo**

Center for Technology in Government, University at Albany

Anand Paul

IBM Research

***Anna Raup-Kounovsky**

Center for Technology in Government, University at Albany

Priscilla Regan

George Mason University

Karl Rethemeyer

University at Albany

***Douglas Robinson**

National Association of State Chief Information Officers (NASCIO)

Steve Sawyer

Syracuse University

***H. Jochen Scholl**

University of Washington

Bill Schrier

City of Seattle

***Evgeny Styrin**

Center for Technology in Government, University at Albany

Costis Toregas

George Washington University

John Vergo

IBM Research

***Jing Zhang**

Clark University

Funding Sources

The project is funded through a supplemental grant from the National Science Foundation, grant number ITR-0205152.

Additional support has been provided by the National Association of State Chief Information Officers (NASCIO).

Original Scope of Work

The two key events in this NSF sponsored project are a workshop and subsequent report that details a next generation research agenda.

The workshop discussions emphasized:

- Understanding the multiple contexts in which government and governance operate and how those contexts matter in technology adoption, use, and impact.
- Assessing lessons learned from previous research that provide insight into the technology-related behaviors of various actors and their consequences for government and governance.
- Leveraging the knowledge and expertise of the workshop participants about how value, risk, and complexity are understood and addressed by government decision-makers and managers.
- Understanding the interplay of complexity, value, and risk inherent in the emergence of new information technologies and their adoption by individuals, organizations, and governments.
- Relevant research themes, designs, and funding criteria for future work that will have both scholarly and practical value.

Three publications resulted from this effort:

- White Paper: Information and Technology: Improving Public Sector Capability to Address Societal Challenges
- Workshop Activity Report: Information, Technology, and Governance: A Grand Challenges Research Agenda Workshop Summary Activity Report
- Pre-workshop paper: Information, Technology, and Governance: A Grand Challenges Research Agenda was prepared as a starting basis for discussion.

Contact Information

Center for Technology in Government
University at Albany, SUNY
187 Wolf Road, Suite 301
Albany, NY 12205
(518) 442-3892 (phone)
(518) 442-3886 (fax)

Meghan Cook

Program Manager

518-442-4443