

### Summary

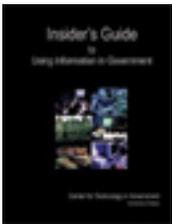
Many people working in state and local government organizations face challenges in using information to do their jobs. They seek to use government information for program planning, monitoring, and evaluation, but struggle with a general lack of understanding of the nature and level of financial, technical, and human investments necessary to use information well.

The Center for Technology in Government led an investigation into policies, data standards, costs, skills, strategies, and technical tools associated with effective information use in the public sector. Working with seven state and local agencies on projects with varying information use issues, CTG led each project team through the project definition phase while researching the factors that influence effective information use.

The culmination of the findings are reflected in the Web-based practical resource *The Insider's Guide to Using Information in Government*. It presents, along with case studies from the seven projects, the management, technology, and policy issues that affected the agencies' efforts to effectively use and share information to fulfill their goals.

### Publications & Results

#### Online Resources (1)



#### Insider's Guide to Using Information in Government

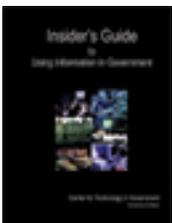
Wed, 01 Nov 2000

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.

Every day, the people inside government use information to develop policies, make decisions, evaluate programs, and deliver services. The *Insider's Guide to Using Information in Government* draws from real agency experiences to provide a practical resource for government professionals. It covers six related topics (strategy, policy, data, costs, skills, and technology) and illustrates them with stories of state and local agency projects ranging in focus from internal knowledge sharing to statewide program evaluation.

[Link to Insider's Guide](#)

#### Reports and Working Papers (10)



#### Insider's Guide to Using Information in Government Executive Briefing

Mon, 01 Feb 2001

This executive briefing draws from real agency experience to provide a practical resource for the use of

information by government professionals.

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### New York State Central Accounting System Stakeholder Needs Analysis

Fri, 01 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.

The Office of the New York State Comptroller recognized the need to design and develop a next generation Central Accounting System (CAS), but first decided to define its stakeholders and conduct a stakeholder needs analysis before making any decisions. This project was conducted by CTG in partnership with a team from the Comptroller's Office as part of the Using Information in Government (UIG) program. The report summarizes the information gathered from system users in 42 state agencies, and presents a set of recommendations for next steps in developing a plan for the CAS.

### Reassessing New York: A Collaborative Process

Thu, 01 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.

In order to implement the state's new annual reassessment program, the New York State Office of Real Property Services (ORPS) set out to identify the needs of the local assessment community. This project was conducted by CTG in partnership with a team from ORPS as part of the Using Information in Government (UIG) program. This report presents a set of recommendations that were collaboratively developed by ORPS and members of the assessment community.

### Putting Information Together

Tue, 01 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.

The Center for Technology in Government (CTG), through the Using Information in Government (UIG) program, has worked with New York State agency project teams and partners from the public, private, and academic sectors to identify benefits and strategies for integrating and using information for program planning, evaluation, and decision making. The policy, management, and technology issues identified through our work with agency teams were shared with the public in a series of seminars focused on increasing the value of information to government programs. This report summarizes the presentations given at the fourth session of the Using Information in Government Seminar Series, "Putting Information Together: Building Integrated Data Repositories," which was held on February 9, 2000 at the University at Albany/SUNY.

### What Rules Govern the Use of Information?

Fri, 01 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.

The Center for Technology in Government (CTG), through the Using Information in Government (UIG) Program,

has worked for more than a year with New York State agency project teams and partners from the public, private, and academic sectors to identify benefits and strategies for integrating and using information for program planning, evaluation, and decision making. The policy, management, and technology issues identified through our work with the agency teams were shared with the public in a series of seminars focused on increasing the value of existing information to government programs. This report summarizes the presentations given at the third session of the Using Information in Government Seminar Series, "**What Rules Govern the Use of Information?**" which was held on October 5, 1999 at the University at Albany.

### Building Integrated Data Repositories

Mon, 01 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.

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

Spring 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.

Information sharing has become a priority among organizations looking to increase productivity and improve planning. Along with this emerging reliance on information sharing comes more interest in the use of multiple data sources for enterprise level planning and decision making. This paper identifies current research and outlines practical experiences in the use of multiple data sources to support performance measurement, strategic planning, and interorganizational business processes. In addition, a series of cases are examined to illustrate the benefits, issues, methods, and results of data source integration efforts in the same organization and across multiple organizations. The objective of this research is to set the stage for the development of a methodology for integrating multiple data sources.

### Web-based Applications and/or Networked Legacy Systems

Spring 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.

E-commerce, which involves linking legacy systems and their attached databases to new Web-based applications and distributed databases, is emerging as a key way for private and public sector organizations to deliver products and services to their customers and constituents. This research paper examines the technical and business ramifications of linking legacy systems, which traditionally have a low degree of connectivity, to the Web. It concludes that the high demand for e-commerce requires a more organized and structured method for developing Web-based applications.

### Dealing with Data

Wed, 01 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.

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Dealing with Data, the first seminar in the series, was held in February 1999. It covered a variety of data issues. The report summarizes the presentations and panel discussions 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

Sun, 01 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.

It is estimated that as much as 75% of the effort spent on building a data warehouse can be attributed to back-end issues, such as readying the data and transporting it into the data warehouse (Atre, 1998). Data quality tools are used in data warehousing to ready the data and ensure that clean data populates the warehouse, thus enhancing its usability.

This research paper focuses on the data problems that are addressed by data quality tools. Specific questions of the data can elicit information that will determine which features of data quality tools are appropriate in which circumstances. The primary objective of the effort is to develop a tool to support the identification of data quality issues and the selection of tools for addressing those issues. A secondary objective is to provide information on specific tools regarding price, platform, and unique features of the tool.

## Public Events (4)

### Using Information in Government Seminar Series

February 1999 - February 2000

Dealing with Data

February 1999

[http://www.ctg.albany.edu/publications/reports/dealing\\_with\\_data](http://www.ctg.albany.edu/publications/reports/dealing_with_data)

Building Integrated Data Repositories

May 1999

<http://www.ctg.albany.edu/publications/reports/building>

What Rules Govern the Use of Information

October 1999

[http://www.ctg.albany.edu/publications/reports/what\\_rules\\_govern](http://www.ctg.albany.edu/publications/reports/what_rules_govern)

Putting Information Together

February 2000

[http://www.ctg.albany.edu/publications/reports/putting\\_info](http://www.ctg.albany.edu/publications/reports/putting_info)

## **Press Releases & News Stories**

### **Press Releases**

Meet the New York State Office of Temporary and Disability Assistance (OTDA)  
Thu, 05 Jul 2001

Center for Technology in Government Wraps Up Two-year Project: Using Information in Government Program Involved Seven State and Local Agencies  
Mon, 26 Jun 2000

Improving the Information Resources that Hold Government Together  
Mon, 06 Dec 1999

Center for Technology in Government Announces Four New Projects: Using Information in Government Focus of Work with State/Local Agencies  
Fri, 11 Jun 1999

Center for Technology in Government Hosts Seminar on How to Use Information: Session Features Tools, Skills, and Cases Designed to Help Public Managers  
Mon, 19 Apr 1999

Center for Technology in Government Hosts Seminar on "Dealing with Data:" Half-Day Session Highlights Tools for Information Resource Managers  
Mon, 19 Jan 1999

### **News Stories**

Center for Technology in Government Begins Second Round of UIG Program With Four Projects in New York

FCW.com

July 23, 1999

### **Using Information Issue**

Innovations Newsletter

May 1998

### **Center Stage in Research Issue**

Innovations Newsletter

February 1998

## **Prototype**

The Homeless Information Management System (HIMS) prototype demonstrated that integrating related data from multiple sources into one repository presents many challenges. Many of the lessons learned from building this prototype are included in the Putting Information Together seminar summary. The summary highlights the management, policy, and technology challenges faced by the NYS Bureau of Housing Services and their local partners in the collaborative effort to develop an integrated data repository to support the assessment of services to the homeless population. The prototype HIMS data repository was showcased at the seminar.

## Partners

### Government Partners

- Central New York Psychiatric Center
- New York State Archives and Records Administration
- New York State Department of Transportation
- New York State Office of Real Property Services
- New York State Office of the State Comptroller, Central Accounting System,
- New York State Office of the Comptroller, Division of Municipal Affairs,
- New York City Department of Information Technology and Telecommunications

### Academic Partners

- David Andersen, Distinguished Service Professor, Department of Public Administration and Policy, Rockefeller College of Public Affairs and Policy, University at Albany, SUNY
- Lakshmi Mohan, Associate Professor, Management Science and Information Systems Program, School of Business, University at Albany, SUNY
- Giri Tayi, Professor, Department of Management Science and Information Systems, School of Business, University at Albany, SUNY

### Center for Technology in Government

- Darshana Apte, Graduate Assistance
- Donna Berlin, Internet Coordinator
- Peter A. Bloniarz, Director of Program Development
- Donna Canestraro, Project Support Manager
- David Connelly, Public Administration
- Meghan Cook, Project Associate
- Tony Cresswell, Research Director
- Sharon Dawes, Director
- Ophelia Eglene, Graduate Assistant
- Winsome Foderingham-Williams, Education Coordinator
- Sally Goodall, Publications Manager
- Linda Keane, Secretary
- Kristine Kelly, Manager, Project Research
- Jane Krumm-Schwan, Administration & Outreach Director
- Mark LaVigne, Project Associate
- C.N. Le, Research Associate
- Carol Murray, Secretary
- Shrilata Nath, Manager, Project Associate
- Pam Neely, Graduate Assistant
- Theresa Pardo, Project Director
- Carrie Schneider, Graduate Assistant
- Jochen Scholl, Project Support Manager
- Stephanie Simon, Information Coordinator
- Fiona Thompson, Research Associate
- Derek Werthmuller, Director of Technology Services
- Jihong Zeng, Graduate Assistant
- Jing Zhang, Graduate Assistant

### Original Scope of Work

Every day people inside government use information to develop policies, make decisions, evaluate programs and deliver services. But many face challenges in carrying out these tasks.

### Issues Government Managers Face in Using Information

The **Using Information in Government Program** was launched when state and local program and IRM managers came together to discuss the challenges they face in using government information for planning, operations, evaluation, and decision making. The workshop established a set of goals and framework for the two-year investigation that reflected their needs and ideas for effective information use within government.

The participants identified dozens of issues they have faced in using information to do their jobs. They expressed concern in several areas including:

- a lack of understanding of the nature and level of financial, technical, and human investments necessary to use information;
- data ownership, stewardship, and related organizational issues;
- inadequate, inappropriate, and stand alone technologies and systems; and
- workforce issues including the increasing difficulty of attracting and retaining Information Technology (IT) managers and professionals to government service.

### Using Information in Government Program Goals

Participants enumerated some goals and practical results they would like the **Using Information in Government Program** to produce. The following six program goals do not focus on a particular program area, but were considered among the top ranking concerns across all program areas.

1. **Recommend policies or policy templates to guide public officials in their use of government information.** Comprehensive information use policies covered such topics as data collection, ownership, stewardship, intra- and inter-agency sharing and external release. Also, incorporating existing legal requirements. Data content and use policies should also be coordinated with related technology policies.
2. **Develop and assess data standards, inventories, and quality assurance tools.** Participants noted the importance of the current data standards effort sponsored by the NYS Office for Technology, and suggested that the program develop data standards, definitions and inventories, and assess methods, costs, and benefits for creating and maintaining them.
3. **Develop and assess cost-benefit models and other measures of information value.** Many participants were concerned that policy makers undervalue information as an organizational resource and a governmental asset. Specifically, they would like to identify mechanisms to measure and convey the value of information.
4. **Specify the information use skills necessary for government professionals and recommend ways to acquire them.** Participants were concerned about the lack of skills necessary to effectively use government information, including ability to search, assess, analyze, and present information. They suggested a program goal of defining information-related competencies for program staff and research and IT professionals, as well as recommending education and hiring strategies.
5. **Assess the cost-effectiveness of various technical tools and techniques.** Many information management tools are in use, or are under development in government and business. The program should explore the feasibility, cost-effectiveness, and appropriateness of various tools, such as databases, query tools, data warehouses, data marts, and data mining, for diverse business objectives.
6. **Develop collaborative and collective resources for data users.** Participants identified several techniques to assist in achieving this goal, including a Web site which provides tools, tips, techniques, and contacts for those engaging in many kinds of data projects. In addition, a set of recommended practices based on real public sector experiences that address the policy, management, and technology issues to consider.

### A Using Information in Government Program Framework

## Using Information in Government Program

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Most government program managers think of information services as tools to support both internal functions and a wide array of services to the public. These functions and services can be usefully divided into four areas: public management processes, policy analysis and evaluation, complex public service programs, and direct public contact. Each of these has different decision-making requirements, and therefore different information content and service requirements. We characterize them as follows:

**Public management processes** include internal controls, procurement, personnel management, rule-making, records management, auditing, and financial management.

**Policy analysis and evaluation** covers such functions as research, planning, program development, evaluation, and reporting.

**Complex public service programs** involves professional staff from one or more agencies in extensive service delivery, regulatory, or enforcement activities.

**Direct public contact** includes publicly accessible information, referral services and directories; direct public access to reports and information; public participation processes; freedom of information requests; and simple transactions such as license and registration renewals or payment of fees and fines.

The conceptual framework for the **Using Information in Government Program**, shown below, reflects both this array of governmental functions and the list of program goals described earlier. The **Program** addresses not only one or a few cells in this framework but represents experiences and lessons across the full range of possibilities.

Using Information in Government: A Program Framework				
	Government Functions			
Using Information Program Goals	Public Management Processes	Policy Analysis & Evaluation	Complex Public Service Programs	Direct Public Contact
Information use policies or templates				
Data standards, inventory, quality assurance				
Cost-benefit model, value measures				
Assessment of technical tools				
Information-related skills				
Collaborative & collective resources				

## Contact Information

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