

**United States General Accounting Office** 

Accounting and Information Management Division

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## Improving Federal Performance in the Information Age

# Issues and Opportunities Fiscal Years 1996-98



#### Foreword

As the investigative arm of Congress and the nation's auditor, the General Accounting Office is charged with following the federal dollar wherever it goes. Reflecting stringent standards of objectivity and independence, GAO's audits, evaluations, and investigations promote a more efficient and cost-effective government; expose fraud, waste, abuse, and mismanagement in federal programs; help Congress target budget reductions; assess financial and information management; and alert Congress to developing trends that may have significant fiscal or budgetary consequences. In fulfilling its responsibilities, GAO performs original research and uses hundreds of databases or creates its own when information is unavailable elsewhere.

To ensure that GAO's resources are directed toward the most important issues facing Congress, each of GAO's 35 issue areas develops a strategic plan that describes the significance of the issues it addresses, its objectives, and the focus of its work. Each issue area relies heavily on input from congressional committees, agency officials, and subject-matter experts in developing its strategic plan.

The Information Resources Management (IRM) - Policies and Issues group focuses on how the federal government can better manage information and information technology (IT). The rapid changes in information technology and management techniques have greatly increased the potential to streamline operations and deliver higher quality services more effectively, quickly, and inexpensively. However, the federal government is handicapped by aging and inadequate systems. As a result, it is struggling to achieve mission objectives and provide basic financial and performance data to support management and congressional decisionmaking and respond to public requests.

Federal agencies are relying on major system modernization efforts to dramatically improve their performance, and in recent years, they have obligated about \$25 billion annually for IT initiatives. However, these investments often experience costly delays, do not provide expected benefits, and sometimes result in outright failure. As a result, the government has not been able to take full advantage of the opportunities that key information technologies offer and often cannot ensure the integrity and confidentiality of data critical to its operations.

If federal performance does not improve, the costs associated with managing and providing government services will increase while the quality declines. More importantly, public confidence in the government's ability to manage programs, control costs, and measure effectiveness will continue to erode.

Our vision is to increase the control and risk-adjusted return on federal IT investments and increase the quality, value, and security of federal information. To achieve these goals, our plan is designed to support two broad strategies. Our first strategy is to provide leadership in identifying and promoting practices that will improve the return on federal IT investments and management of IT resources. Our second strategy is to build the capability to efficiently assess agency practices and identify needed changes. In this regard, we plan to deliver a broad range of products and services, including widely applicable standard methodologies.

Over the last 2 years, our unique governmentwide perspective has allowed the IRM Policies and Issues group to play a critical role in helping change how federal agencies manage their IT resources. Our work to date has focused primarily on establishing criteria and transferring knowledge in the areas of strategic information management (SIM), business process analysis (BPA), and IT investment. These efforts directly address two areas of major congressional interest: how to ensure that the government is getting its money's worth for its IT investments and how federal agencies can dramatically improve operations while cutting costs.

Our plans for future work focus on (1) assisting agencies in implementing "best practices" and reinforcing accountability for results in these areas and (2) beginning to more thoroughly address issues related to data and network management, especially regarding information security. The following pages describe key aspects of our plans.

Because events may significantly affect our plan, GAO's planning process allows for updating the plan and responding to emerging issues. If you have any questions or comments about this plan, please call me at (202) 512-6208. I can also be contacted at hoenigc.AIMD@GAO.gov.

June Hornig

Christopher Hoenig, Director AIMD-IRM/Policies and Issues

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### Table I: Key Issues

Issue	Significance
<b>Strategic information management:</b> How can federal agencies improve their ability to use practices that result in effective long-term management of their information resources?	To meet increasing demands, federal managers must keep pace with evolving management practices and skills needed to (1) define critical information needs and (2) select, apply, and control changing information technologies. However, while leaders have emerged in the private sector and the states, few federal agencies have learned how to strategically manage information and information technology to achieve effective results.
IT investment and procurement: How can agencies improve their ability to make cost-effective IT investment decisions that support their mission-related goals?	In recent years, the federal government has obligated about \$25 billion annually for IT-related expenses. However, these investments often suffer from high failure rates and limited benefits. As a result, the government has not been able to take full advantage of the opportunities that key information technologies offer, such as interagency information sharing and electronic delivery of benefits.
<b>Business process analysis:</b> How can the government effectively use information and information technology to reduce costs and increase service levels to the public?	The Clinton administration's National Performance Review and recent congressional initiatives, coupled with rising taxpayer expectations for service delivery and severe resource limitations, have produced an environment in which the effectiveness of the government's decisionmaking and service delivery depends directly on its ability to take advantage of IT. To obtain the greatest value from IT investments, agencies must analyze and modernize the business processes that support their mission-related objectives before acquiring technology.

Objectives	Focus of work
-Identify opportunities to enhance the capability of agency management teams to manage information and technology.	—Initiate three to five SIM assessment pilots annually using a GAO assessment guide.
-Communicate new criteria directly to key federal decisionmakers.	—Continue developing and refining GAO SIM assessment methodologies used by agencies, GAO auditors, and Inspector General staff.
—Build consensus and criteria in the federal community on the value of using a defined set of strategic information management	
practices in government agencies.	—Assist in developing improved approaches to executive branch IRM regulation and guidance.
—Assist Congress by providing input on new/revised governmentwide IRM legislation, regulation, and guidance.	—Pursue additional case study research to maintain IRM leadership, enhance GAO knowledge and understanding, and stay abreast of new emerging practices.
	—Provide legislative assistance for the development of new or revised legislation (e.g., Chief Information Officer Act) and key oversight hearings of governmentwide IRM issues.
-Identify ways to improve agency control and accountability for the billions annually spent on information technology investments.	—Develop, with the Office of Management and Budget, an IT portfolio investment guide for federal agency use to improve IT selection, control, and evaluation.
<ul> <li>Identify ways to maximize return and minimize risks in governmentwide IT expenditure and investment.</li> </ul>	—Assess whether agencies have the criteria and processes to reduce the risk to their IT investments.
—Help agencies take early corrective action to reduce the risks that their IT acquisitions will (1) cost substantially more than estimated, (2) take much longer than planned, or (3) be unsuccessful in lowering costs, improving productivity, or enhancing program service delivery.	—Assess accuracy and usefulness of obligated, actual, and performance data for IT spending essential for making investment decisions.
—Identify ways to streamline the procurement process to reduce both time and costs and better meet users' needs.	—Identify the best industry and government procurement practices that can be applied across the government.
—Increase the government's understanding of reengineering and its benefits, costs, and risks.	—Develop a body of knowledge and research, including case study examples, that define reengineering, describe costs and benefits, provide process modeling tools and simulation techniques, and identify best practices in applying reengineering to improve performance.
—Help improve the government's ability to effectively and efficiently reengineer its business processes to take advantage of information	
technology. —Help ensure that the modernization of every federal informatio system supports effective and efficient processes.	—Build and support IRM Core Group and program division capacity to identify reengineering opportunities and evaluate reengineering g efforts.
—Contribute to reducing cost and increasin service levels across the government through the effective use of IT.	—Work with federal agencies and Congress to identify and address opportunities where reengineering can help achieve the goals of major government improvement initiatives (e.g. the National Performance Review) and reduce the risk of misdirected efforts.

Issue	Significance
<b>Data and network management:</b> Are federal agencies effectively and efficiently ensuring the availability, integrity, and confidentiality of information resources critical to their operations?	The government is increasingly relying on information technology to store, process, and transmit information that is critical to its operations. Securing this information to ensure appropriate levels of integrity, confidentiality, and availability is essential. In addition, agencies must learn to efficiently manage growing volumes of data and the increasingly complex support systems used to process and access this data. However, most agencies are in the early stages of learning to efficiently manage these information resources and identify, evaluate, and address the associated risks.

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Objectives	Focus of work
—Identify governmentwide information security issues and ensure that they are being adequately addressed by the central policy-setting and oversight entities.	—Survey federal agencies to determine if they are performing required security reviews and to identify data security management issues.
<ul> <li>Identify specific central policy-structure and oversight deficiencies.</li> </ul>	<ul> <li>Assess the federal security-related policy-setting and oversight structure.</li> </ul>
<ul> <li>Identify common problems, root causes, and recommend solutions.</li> </ul>	-Coordinate security-related work among IRM Core Groups.
Solutions.	—Monitor the results of computer-related control assessments done as part of Chief Financial Officer financial audits
	<ul> <li>Develop strategy for assessing data and network management issues.</li> </ul>

## Table II: Planned Major Work

Issue	Planned major job starts
Strategic information management	<ul> <li>Initiate two additional SIM agency self-assessments.</li> <li>Produce version 2 of the SIM Assessment Guide</li> <li>Initiate research and case study evaluation of IT performance measurements.</li> <li>Produce version 1 of IT Performance Measurement Guide.</li> </ul>
IT investment and procurement	<ul> <li>Assess federal controls over IT investments.</li> <li>Assess whether agencies are appropriately organized and managed to reduce the risk to their IT investments.</li> <li>Review IT investment and procurement oversight.</li> <li>Produce IT Investment Guide (joint effort with Office of Management and Budget).</li> </ul>
Business process analysis	<ul> <li>Identify best practices of leading organizations in applying reengineering to improve performance.</li> <li>Provide support to AIMD IRM core group and program division assignments that require assessing agency process reengineering efforts.</li> <li>Pilot test the Reengineering Assessment Guide at the Social Security Administration and the Internal Revenue Service.</li> </ul>
Data and network management	<ul> <li>Survey federal agencies' data security management.</li> <li>Review central policy-setting and oversight structure for security.</li> <li>Identify leading practices in data and network management.</li> <li>Produce version 1 of computer-based controls assessment guide.</li> </ul>

## Table III: GAO Contacts

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