

GAO

United States General Accounting Office
Comptroller General of the
United States

Executive Guide

Improving Mission
Performance
Through Strategic
Information
Management and
Technology

The Information Management and Technology Challenge

Making government more effective and efficient is a national issue. But getting it to work better and cost less will be difficult if federal agencies do not adopt the modern management practices the information age demands. Today's information systems offer the government unprecedented opportunities to provide higher quality services tailored to the public's changing needs, delivered more effectively, faster, and at lower cost. Moreover, better systems can enhance the quality and accessibility of important knowledge and information, both for the public and for federal managers.

Federal agencies have not kept pace with evolving management practices and skills necessary to (1) precisely define critical information needs and (2) select, apply, and control changing information technologies. The result, in many cases, has been wasted resources, a public unable to get quality service, and a government not well prepared to measure and manage its affairs in a businesslike manner. Despite spending more than \$200 billion on information management and systems in the last 12 years, the government has too little evidence of substantive improvements. The consequences are poor service quality, high costs, low productivity, unnecessary risks, and unexploited opportunities for improvement.

While solutions to complex information management problems are not simple, they do exist. GAO's report *Improving Mission Performance Through Strategic Information Management and Technology—Learning From Leading Organizations* focuses on what agencies can do now to improve performance by using 11 fundamental practices that led to performance improvements, both short- and long-term, in leading private and public organizations. Our case studies of these organizations provide evidence that these practices make it possible to do far more with less—including significant service quality improvements, cost savings, and productivity gains. The challenge before federal executives and policymakers, then, is not whether to change federal information management practices, but exactly what to change and how to do it.



Charles A. Bowsler
Comptroller General of the United States

Decide to Change

Initiate, mandate, and facilitate major changes in information management to improve performance

Practice 1: Recognize and communicate the urgency to change information management practices

Senior management focuses on what they are getting for the money being spent on information technology and what information they need to run the organization. Without executives recognizing the need to improve information management, meaningful change is slow, and sometimes impossible. To significantly increase the rate of change requires new technologies, new processes, and new ways of doing business.

Practice 2: Get line management involved and create ownership

Line ownership and accountability start with the chief executive, who sets clear expectations and places responsibility for information management decisions and results with line executives who deal directly with the customer. Without such accountability, it is too easy to improperly delegate decision-making, accept project delays, or fail to discern the loss of projected benefits.

Practice 3: Take action and maintain momentum

A willingness to take action and maintain momentum is the difference between lip service and real improvement. Because of existing barriers to improving information management, leading organizations give considerable attention to initiating the change process and ensuring that it maintains momentum.

Direct Change

Establish an outcome-oriented, integrated strategic information management process

Practice 4: Anchor strategic planning in customer needs and mission goals

Almost every organization has mission and information planning processes and plans. But the most effective

strategic business and information management planning processes are both tightly linked and anchored, not to bureaucratic requirements, but to explicit goals that meet external customer needs. Successful information systems are defined not only as the ones delivered on time and within budget, but also as those that produce meaningful improvements in cost, quality, and timeliness of service.

Practice 5: Measure the performance of key mission delivery processes

Successful organizations rely heavily on performance measures to define mission goals and objectives, quantify problems, evaluate alternatives, allocate resources, track progress, and learn from mistakes. Good performance measures define the information needed to perform a mission well and allow organizations to learn objectively and consistently over time. They also measure whether information technology projects really make an impact on mission outcomes.

Practice 6: Focus on process improvement in the context of an architecture

Information technology projects that do not consider process redesign typically fail or reach only a fraction of their potential, while process improvement efforts that ignore technology usually leave significant opportunities on the table. Further, when many independent process improvements are pursued in an uncoordinated and unorganized fashion, chaos, incompatibility, and fragmentation can result. To reduce risks and maximize the benefits of process improvements across an entire enterprise, an architecture (i.e., shared standards and rules for processes, data, and technology) is vital.

Practice 7: Manage information systems projects as investments

Leading organizations manage proposed information systems projects as investments, rather than expenses. Moreover, senior management teams use a disciplined process to select, control, and evaluate all major information systems projects. This disciplined process ensures that dollars are put to work where the needs are greatest and the returns on investment are highest.

Practice 8: Integrate the planning, budgeting, and evaluation processes

Successful organizations pay close attention to integrating the planning, budgeting, and performance measurement processes. This helps force the linkage of information systems efforts to the mission, provides tight controls during implementation, and allows regular assessments to ensure that benefits accrue. Without links to planning, budgeting becomes a reaction to immediate priorities of the moment that are not weighed adequately against future needs. Without links to performance measurement, planning mistakes are either not discovered or are repeated. And without links to budgeting, plans become mere paper exercises in rationalization.

Support Change

Build organizationwide information management capabilities to address mission needs

Practice 9: Establish customer/supplier relationships between line and information management professionals

The best-designed management processes in the world cannot work without defining roles and responsibilities (i.e., knowing who is going to do what). In successful organizations, line executives typically behave as the customers of information management support professionals by asserting control over information systems project funding and direction. Information management professionals then act as suppliers, working to support the line unit's effort to achieve a management objective, make a critical decision, or solve a problem.

Practice 10: Position a Chief Information Officer as a senior management partner

Establishing a Chief Information Officer as a senior management partner is critical to building an organizationwide information management capability. In successful organizations, the Chief Information Officer typically serves as a bridge between top management, information management units, and line management.

Although the Chief Information Officer is no substitute for institutionalized information management processes, this person—working closely as a peer—helps line executives change how they manage information resources and technology assets.

Practice 11: Upgrade skills and knowledge of line and information management professionals

Lasting improvements in information management are impossible without upgrading the knowledge and skills of executives, managers, and information management professionals. In the rapidly evolving world of information technology, remaining current is vital. Organizations that fail to improve themselves continuously become literally trapped in antiquated skill bases, which then become an anchor inhibiting the organization's ability to change.

Ordering Information

Copies of GAO's report, Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology—Learning From Leading Organizations, (GAO/AIMD-94-115, May 1994) can be ordered by mail:

U.S. General Accounting Office
P.O. Box 6015
Washington, DC 20548

or visit:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC 20548

Orders may also be placed by calling (202) 512-6000 or by using fax number (301) 258-4066.

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