

Toward Best Practices for Strategic Information Technology Management

Lisa K. Westerback*

Federal agencies are under pressure to do more with less—to improve the services they provide to the public, with greater accountability for achieving results, more quickly and at lower cost. In a 1994 study of leading organizations, the General Accounting Office (GAO) identified 11 strategic information management (SIM) practices, which became the foundation of the Clinger-Cohen Act of 1996. In 1997, the Federal Chief Information Officers (CIO) Council and the Industry Advisory Council prepared 20 case studies demonstrating the use of information technology to achieve a positive return on investment within the federal government. Focusing on these 20 case studies, this research first looked for evidence that supported or refuted each of GAO's SIM practices. Second, the research looked for best practices that may be unique to a federal environment. Third, the study identified other best practices.

This article presents findings on research conducted to assess the applicability and utility of the set of practices for strategic information technology management that underlie the Clinger-Cohen Act of 1996. It also identifies additional information technology management practices that have demonstrated positive results in the federal government. Key practices identified by the research include the following:

- Use performance measures as a proxy for return on investment;
- Take advantage of leading (but not bleeding) edge technology; and
- Make use of proven project management techniques.

The General Accounting Office (GAO) identified strategic information management (SIM) practices in a document entitled *Executive Guide: Improving Mission Performance*

*Direct all correspondence to: Lisa K. Westerback, University of Southern California, U.S. Department of Commerce, 2217 Loch Lomond Drive, Vienna, Virginia 22181 (LWesterback@doc.gov).

Government Information Quarterly, Volume 17, Number 1, pages 27–41.
All rights of reproduction in any form reserved. ISSN: 0740-624X

through *Strategic Information Management and Technology: Learning from Leading Organizations*.¹ The SIM practices are contained in a number of statutes. Collectively, these legislative provisions are designed to make significant changes in how federal agencies plan, manage, and acquire information technology as part of their overall information resources management responsibilities. The Clinger-Cohen Act (P.L. 104–106) has the most direct impact on the management and use of information technology and is the legislation that draws directly from the principles embodied in the SIM practices.

Through the Clinger-Cohen Act, the SIM practices became law and are intended to have a profound effect on the way that the federal government manages its information technology resources. The effectiveness of federal programs, the achievement of national goals, and billions of taxpayer dollars are at stake. The GAO study that led to the definition of strategic information management practices was professionally conducted with the best of intentions and with the best interests of the government at heart. At the same time, these practices, which are now the foundation of the Clinger-Cohen Act, were derived from qualitative analysis of a limited number of case studies of private sector and state government organizations. Significant questions regarding the SIM practices and the Clinger-Cohen Act are at issue such as:

- Are the practices uniformly applicable in the federal sector?
- Are there factors inherent in the federal arena that invalidate these practices or require that they be modified to have the intended effect?
- Are there additional practices that facilitate the application of information technology, particularly in the unique federal sector?
- Given the rapidly changing technology, is it wise to write practices into law when they may quickly become obsolete?
- In general, is the GAO research as comprehensive as it needed to be to form the foundation of legislation with national impact?

This research found that the GAO was generally on target with its study, as discussed further in this article. This analysis, based on the 20 case studies published in *Best IT Practices in the Federal Government*,² showed strong support for three and support for seven of the 11 strategic information management practices identified by GAO. Table 1 documents these practices; the three that received strong support are:

- Anchor strategic planning in customer needs and mission goals;
- Measure the performance of key mission delivery processes; and
- Manage information systems as investments.

This is a solid indicator of external validity; the practices derived from state government and private experiences are applicable, and used successfully, in a federal setting. The research showed only modest support for the chief information officer, which is a central provision of the Clinger-Cohen legislation. This is the most interesting, and controversial, finding regarding an individual practice. What is also surprising, and at variance with the questions addressed by this research, is that only one special federal practice was identified, and this one was supported only weakly. It was not necessary to tailor a state or private sector practice to fit the federal environment.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات