

April 2000

EXECUTIVE GUIDE

Creating Value
Through World-class
Financial Management



G A O

Accountability * Integrity * Reliability

Preface

To help promote effective implementation of federal financial management reform, we studied the financial management practices and improvement efforts of nine leading public and private sector finance organizations to identify the success factors, practices, and outcomes associated with world-class financial management. This executive guide is intended to assist federal agencies in achieving the objectives of the Chief Financial Officers (CFO) Act of 1990 and subsequent related legislation by providing case studies of 11 practices critical for establishing and maintaining sound financial operations.

The reforms laid out by the CFO Act and subsequent related legislation, when effectively implemented, will place the federal government on par with private sector corporations and state and local governments that have already made the necessary investment in financial management. While many agencies have made great strides toward generating more accurate and reliable annual financial statements, the process of preparing financial statements and subjecting them to independent audit is only the first step toward satisfying the requirements of the legislation. To reap the full benefits of financial reform, federal finance organizations must go beyond the audit opinion toward (1) establishing seamless systems and processes, (2) routinely generating reliable cost and performance information and analysis, (3) undertaking other value-added activities that support strategic decision-making and mission performance, and (4) building a finance team that supports the agency's mission and goals.

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Background

Creating a government that runs more efficiently and effectively has been a public concern for decades. In recent years, however, the push towards creating a smaller, more results oriented government has intensified the urgency to find ways to do more with less. To effectively evaluate and improve the value derived from government programs and spending, the Congress and other decisionmakers must have accurate and reliable financial information on program cost and performance. Further, they must be able to rely on federal finance organizations to provide analysis and insight about the financial implications of program decisions and the impact of those decisions on agency performance goals and objectives. Currently, financial data are not always useful, relevant, timely, and reliable enough to be used for federal decision-making, and many federal finance organizations are not yet well equipped enough to routinely provide analysis or advice related to this information.

In the private sector, the role of the finance organization historically has centered on oversight and control, focusing on its fiduciary responsibilities and paying less attention to increasing the effectiveness of operating divisions. However, over the past decade, dramatic changes in the business environment have driven finance organizations to reevaluate this role. Increased competition resulting from an emerging global market has put pressure on finance organizations to find new ways to reduce administrative costs, add value, and provide a competitive advantage. At the same time, advances in information technology have made it possible for the finance function to shift from a paper-driven, labor intensive, clerical role to a more consultative role as advisor, strategist, analyst, and business partner.

According to a 1997 study performed by a major public accounting firm,¹ most CFOs in 1989 were spending 75 to 80 percent of their time on fiduciary issues, essentially external reporting. Today, the goal of many leading finance organizations is to spend about 20 percent of their time on fiduciary issues and the remaining time performing strategic support activities, such as cost analysis or business performance analysis. Also, a 1996 report by the Institute of Management Accountants found that over the previous 5 to 10 years, management accountants were increasingly being asked to supplement their traditional accounting role with more financial analysis and management consulting.²

Dramatic changes also have occurred in federal financial management in response to the most comprehensive management reform legislation of the past 40 years. The combination of reforms ushered in by (1) the CFO Act of 1990, (2) the Government Management Reform Act (GMRA) of 1994, (3) the Federal Financial Management Improvement Act (FFMIA) of 1996, (4) the Government Performance and Results Act (GPRA) of 1993, and (5) the Clinger-Cohen Act of 1996 will, if successfully implemented, provide the necessary foundation to run an effective, results-oriented government.

¹Reinventing the CFO: Moving from Financial Management to Strategic Management (Coopers and Lybrand, New York, New York: 1997).

²The Practice Analysis of Management Accounting, Institute of Management Accountants (Montvale, New Jersey: 1996).

The CFO Act and GMRA spelled out a long overdue and ambitious agenda to help the government remedy its lack of useful, relevant, timely, and reliable financial information. For the government's major departments and agencies, this legislation (1) established chief financial officer positions, (2) required audited financial statements annually, and (3) set expectations for agencies to develop and deploy more modern financial management systems, produce sound cost and operating performance information, and design results oriented reports on the government's financial condition by integrating budget, accounting, and program information. FFMIA built on the CFO Act and GMRA by requiring financial statement auditors to report whether agencies' financial systems comply with federal financial management systems requirements, federal accounting standards, and the U.S. Government Standard General Ledger.

The Government Performance and Results Act of 1993--commonly known as GPRA or the Results Act--was enacted to hold federal agencies accountable for achieving program results. It requires that agencies (1) set multiyear strategic goals and corresponding annual goals, (2) measure performance toward the achievement of those goals, and (3) report on their progress. Effective implementation of the Results Act, however, hinges on agencies' ability to routinely produce meaningful budget, accounting, and program information needed to manage performance and measure results. The CFO Act and other related financial reform legislation, if successfully implemented, will provide the basis for producing this information.

To help insure that agencies effectively use information technology to achieve program results, the Congress passed the Clinger-Cohen Act of 1996. The Clinger-Cohen Act builds on the best practices of leading public and private sector organizations by requiring agencies to better link their information technology planning and investment decisions to program missions and goals. The Clinger-Cohen Act contains critical provisions requiring federal agencies to use investment and capital planning processes to manage their information management technology portfolios. Further, it requires that agencies modernize inefficient administrative and mission-related work processes before making significant technology investments to support them.

Implemented together, these measures provide a basis for improving accountability over government operations and routinely producing sound cost and operating performance information, thereby making it possible to better assess and improve the government's financial condition and operating performance.

Learning From Leading Organizations

To help promote effective implementation of federal financial management reform, we studied the financial management practices and improvement efforts of nine leading private and public sector finance organizations to identify the success factors, practices, and outcomes associated with world-class financial management. The six private sector and three state organizations we studied have been recognized by their peers and other independent researchers for their outstanding financial management practices and successful finance reengineering efforts. For more information on the criteria we used to select these organizations, see appendix I. As federal agencies continue to improve their management and financial accountability, they will be able to draw upon the expertise and experience of these private sector and state government organizations.

Leading Finance Organizations

Private sector

The Boeing Company
Chase Manhattan Bank
General Electric Company
Hewlett-Packard
Owens Corning
Pfizer Inc

State governments

Massachusetts
Texas
Virginia

At one time, all of these organizations found themselves in an environment similar to the one confronting federal agencies today--one in which they were called upon to improve financial management while simultaneously reducing costs. The key practices drawn from the organizations we examined can provide a useful framework for federal agencies working to improve their financial management. This guide discusses the goals, success factors, and practices associated with building a world-class finance organization. Specifically, we have identified 4 overall goals common to these leading organizations along with 11 practices that were critical to their ability to meet these goals. In addition, this guide includes examples from our case study work that best illustrate how each practice enabled the selected organization to achieve the desired outcomes.

We preceded our case study work with an extensive review of financial management literature, guides, and reports. We also consulted with leading public and private sector experts in financial management. Case study data were collected through interviews and analysis of documentation. Further, the case study organizations reviewed all case study information included in this guide for accuracy and completeness. Appendix I provides a more detailed description of our research objectives, scope, and methodology.

Characteristics of a World-class Finance Organization

A world-class finance organization can best be defined in terms of the business outcomes it produces--outcomes such as improved business analysis, innovative solutions to business problems, reduced operating costs, increased capability to perform ad-hoc analysis, and improved overall business performance. To build a world-class finance organization and help achieve better business outcomes, each of the organizations we examined set an agenda for transforming the finance organization by defining a “shared vision” —i.e., a mission, a vision for the future, core values, goals, and strategies— geared toward making the finance organization a value-creating, customer-focused partner in business results. Although the techniques used varied depending on the organization's size and culture and some efforts were more mature than others, the goals, practices, and success factors outlined in the following illustration were instrumental in the organization achieving its vision.

Vision: To be a Value-Creating, Customer-Focused Partner in Business Results				
Success factors	•Leadership •Culture	•Organization •Customer	•Technology •Process	•People
Goals	Make financial management an entitywide priority.	Redefine the role of finance.	Provide meaningful information to decision-makers.	Build a team that delivers results.
Practices	1. Build a foundation of control and accountability. 2. Provide clear strong executive leadership. 3. Use training to change the culture and engage line managers.	4. Assess the finance organization's current role in meeting mission objectives. 5. Maximize the efficiency of day-to-day accounting activities. 6. Organize finance to add value.	7. Develop systems that support the partnership between finance and operations. 8. Reengineer processes in conjunction with new technology. 9. Translate financial data into meaningful information.	10. Develop a finance team with the right mix of skills and competencies 11. Build a finance organization that attracts and retains talent.

Goals, Practices, and Strategies To Consider

This section summarizes the results of our research and case study work. Specifically, it contains the 4 overall goals and 11 practices we identified as critical for building a world-class finance organization. To facilitate the practical use of this guide, information is organized into four sections—each summarizing one of the four goals as well as those practices that have enabled leading organizations to achieve these goals. Further, for each of the 11 practices, we provided (1) a summary of key characteristics, (2) illustrative case study examples, and (3) strategies for federal agencies to consider when implementing the practice.

Make Financial Management an Entitywide Priority

The quality and image of federal financial management has suffered from decades of neglect and an organizational culture that has not fully recognized the value of good financial management--not even at its most basic level--as a means of ensuring accountability. Making financial management a priority throughout the federal government involves changing the organizational culture of federal agencies. Although the views about how an organization can change its culture vary considerably, the organizations we studied identified leadership as the most important factor in successfully making cultural changes. Top management must be totally committed in both words and actions to changing the culture, and this commitment must be sustained and demonstrated to staff.

The leading organizations we studied made financial management improvement an entitywide priority by building a foundation of control and accountability that supports external reporting and performance management, providing clear strong executive leadership, and using training to change the organizational culture and engage line management.

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Practice 1

Build a Foundation of Control and Accountability That Supports External Reporting and Performance Management

Key characteristics

- The financial reporting and audit process is a basic management and oversight tool.
- Accountability is part of the organizational culture and goes well beyond receiving an unqualified audit opinion.
- Internal controls meet both external financial reporting and performance management control objectives without significantly impacting efficiency.

A solid foundation of control and accountability requires a system of checks and balances that provides reasonable assurance that the entity's transactions are appropriately recorded and reported, its assets protected, its established policies followed, and its resources used economically and efficiently for the purposes intended. The private sector and state organizations we visited built and maintained this foundation largely through the discipline of preparing routine periodic financial statements and annually subjecting them to an independent audit. However, senior executives at leading organizations recognize that the financial information demanded by decisionmakers to measure and manage performance requires greater precision and more timely access than that required to receive an unqualified opinion on the entity's financial statements. To ensure that decisionmakers have useful, relevant, timely, and reliable information, leading finance organizations establish accountability goals that extend well beyond receiving an unqualified audit opinion. In addition, the internal controls at these organizations are designed to efficiently meet the control objectives necessary for performance measurement and management as well as external financial reporting.

Similarly, according to a 1998 survey of federal CFOs,³ federal finance organizations continue to expand their focus from audited financial statements to include performance measurement and strategic planning. For example, the CFO Council and the Office of Management and Budget (OMB) are aggressively working on eight priority initiatives outlined in the 1998 Federal Financial Management Status Report and Five-Year Plan. Although one of the eight priorities focused on obtaining an unqualified opinion on agency financial statements, the eight priorities taken as a whole aim at improving the financial and performance information needed to make and implement effective policy, management, stewardship, and program decisions.

³ CFO Survey: Preparing for Tomorrow's Way of Doing Business, Grant Thornton LLP and the Association of Government Accountants (Alexandria, Virginia: March 1998).

Case Studies

Accountability goals and an effective control structure provide the basis for a more results-oriented government

Commonwealth of Virginia

To build a foundation of control and accountability, senior government leaders in the Commonwealth of Virginia had clear goals and objectives that went beyond receiving an unqualified audit opinion. With the passage of the Single Audit Act in 1984, the Commonwealth of Virginia had to produce and have audited Comprehensive Annual Financial Reports (CAFR) for the first time. Although not required by the act, the state Comptroller had each state agency also produce audited financial statements, thereby ensuring accountability at every level of government rather than solely at those levels considered material to CAFR. The goal was to ensure that managers and lawmakers would have useful, relevant, and timely information for assessing and managing program performance.

Now that Virginia routinely receives an unqualified opinion on its CAFR, only those state agencies with a specific need (e.g., agencies' operating trust, enterprise and internal service funds) are required to produce auditable financial statements. The remaining agencies now are required to certify the accuracy of financial information that feeds CAFR. By subjecting all state agencies to the rigorous discipline of preparing financial reports and having them audited, the Comptroller increased accountability for data accuracy beyond that required to receive an unqualified audit opinion. State officials continue to raise the bar and seek new ways to increase accountability and improve the state's performance. For example, the Department of Planning and Budget currently performs trend analysis and prepares fiscal impact statements for the state's legislature, using useful, relevant, and timely financial information from the state's integrated budget and accounting systems. Also, to ensure that performance data and long-range plans drive budget decisions, the state has set goals, including implementing an activity-based accounting and budgeting system, for enhancing its performance budgeting process.

Texas

Similarly, in Texas the performance management system is an integral part of agency and statewide planning structures, evaluation and decision-making processes, and accountability systems. Creating and maintaining a performance management system required close, consistent, and coordinated attention above and beyond that required for external financial reporting purposes. In Texas, the ability to produce fairly stated external financial reports was only the first step in building a more effective, results-oriented government. An unqualified opinion on the state's CAFR provided, assurance that financial information was accurate and reliable for evaluating its overall financial position.

However, an unqualified audit opinion by itself does not ensure that the information needed to measure and manage performance is useful, relevant, timely, or reliable. The internal controls that were considered adequate for external financial reporting were not always sufficient for performance management. For example, internal controls over expenditure data met the control objectives for aggregating and reporting this information on the financial statements; however, they did not meet the objectives for calculating per-unit-cost efficiency measures required for performance management.

Therefore, state agencies, with the help of the State Auditor's Office, reevaluated and redesigned agency internal controls to meet both external financial reporting and performance management control objectives. Because the state routinely receives an unqualified opinion on its CAFR, the State Auditor's Office and agency internal auditors no longer spend the bulk of their time on control issues related to external financial reporting. Instead, their focus is on improving the reliability of performance management information.

Strategies to Consider

To build a foundation of control and accountability, senior executives could:

- Leverage audit resources and the financial statement audit process to improve data reliability and increase accountability.
- Increase accountability by establishing goals for (1) producing financial and performance reports for major programs and/or business segments and (2) moving the organization toward more frequent financial reporting (e.g., quarterly, monthly).
- As part of the agency's GPRA performance planning process, (1) establish efficiency criteria that measure the cost associated with program outcomes and (2) develop an approach for assessing and improving agency internal controls over finance-related efficiency measures.
- Use accounting and operational performance data to support budget formulation and strategic planning.

Practice 2

Provide Clear, Strong Executive Leadership

Key characteristics

- The chief executive recognizes the important role the finance organization can play in improving overall business performance and involves key business/line managers in financial management improvement initiatives.
- The CFO is a member of the top management team.
- Top executives' sustained commitment to improving financial management is reinforced through both their words and actions.

A powerful, visionary leader can change the direction, culture, and perceptions of the finance organization. The chief executive officers (CEO) of leading organizations understand the important role the CFO and the finance organization play in improving the entity's overall business performance. Consequently, the CFO is a central figure on the top management team and heavily involved in strategic planning and decision-making. In addition, the senior executives at these organizations demonstrated their sustained commitment to finance-related improvement initiatives by using key business/line managers to drive improvement efforts, attending key meetings, ensuring that the necessary resources are made available, and creating a system of rewards and incentives to recognize those who support improvement initiatives. In fact, the committed support of the CEO and line management are critical to the success of finance-related improvement initiatives.

In the same way, federal financial management reform has recently gained momentum through the committed support of top federal leaders. For example, the President has made financial management improvement a top priority and established a goal to obtain an unqualified opinion on the government's financial statements. To achieve this goal, he directed the head of each agency without an unqualified audit opinion to submit to the OMB (1) an initial plan for resolving financial reporting deficiencies and (2) quarterly progress reports for achieving the goal. Further, OMB is required to periodically report to the Vice President on the agency submissions and governmentwide progress. In addition, many federal CFOs have primary leadership responsibility for implementing the Results Act at the department or agency level. The CFO Council has played a key leadership role in establishing financial and performance improvement goals and priorities for changing the way federal agencies plan, budget, manage, evaluate, and account for federal programs.

To ensure that federal financial management improvement efforts succeed and that the President's and the CFO Council's priorities are achieved, the support and involvement of key nonfinancial executives and managers is critical. This commitment starts with the heads of agencies establishing priorities and setting expectations and continues with the active involvement of program/line managers and executives in driving financial improvement initiatives.

Case Study

Senior leadership involvement is the key to successfully implementing financial systems initiatives

The CEO of Owens Corning recognizes that good financial and operating information and strong financial leadership are key elements in improving the company's overall business performance.

In 1992, under the leadership of its new chairman and CEO, Owens Corning set its sights on becoming the global leader in home building materials. However, the chairman realized that the vision of global growth, designed to drive the company to \$5 billion in sales by the year 1999, would not be possible without first addressing some long-standing problems affecting the company's ability to analyze and use financial information for decision-making. At the time, financial analysis was difficult because accounting policies and business processes varied among business units. For example, various manufacturing plants used different costing methods, making cost comparisons difficult. In addition, closing schedules and inventory methods often varied between plants, further complicating meaningful analysis. To resolve these and other issues, a new CFO was brought in to implement a wide-reaching overhaul of the company's business and financial systems and processes. The companywide initiative would come to be known as Advantage 2000.

Reengineering can be one of the most difficult tasks an organization can take on, and Advantage 2000 was no exception. In fact, the degree of difficulty was compounded by the level of sophistication and complexity Owens Corning was trying to achieve with its technology upgrades. The key to Owens Corning's successful implementation of Advantage 2000 was senior leadership's involvement throughout the project. Initially, the new system disrupted the company's operations--to the point that it was beginning to affect production schedules and customer satisfaction. Through it all, however, senior managers never walked away. Instead, they helped middle managers work through the snags by providing resources and remaining visible at key meetings.

Replacing more than 200 outdated financial systems with state-of-the-art business software and client/server technology is not only complex but also quite costly. From 1995 through 1998, Owens Corning's cumulative investment in Advantage 2000 was \$145 million, but according to company executives the program will generate savings in ongoing expense and working capital. The bottom line--the CEO and top executives of Owens Corning recognized that investing in Advantage 2000 cost less than maintaining the status quo.

Strategies to Consider

To demonstrate and reinforce commitment to improving financial management, heads of agencies and senior executives could:

- Form an executive management team (heads of component organizations and those reporting directly to the agency head) to establish a vision and fundamental goals and provide sponsorship for each major financial management improvement project.
- Involve key program /business managers in driving financial improvement initiatives.
- Develop a plan to ensure that all key constituents visibly support financial management improvement initiatives.
- Actively market the program benefits of financial management improvement efforts to secure the necessary resources and Congressional support.
- Establish an expectation that top financial executives, as part of the top management team, provide forward looking analysis that creates a link between accounting information and budget formulation and contributes to strategic planning and decision-making.

Practice 3

Use Training to Change the Organizational Culture and Engage Line Management

Key characteristics

- Nonfinancial managers are educated about the financial implications of business decisions.
- Training and tools are provided to facilitate and accelerate the pace of change initiatives.

Improving federal financial management hinges upon leadership's ability to manage change and create an organizational culture that values good financial management. Legislation starting with the CFO Act of 1990 has been directed at enhancing the finance organization's responsibilities in supporting the management of federal activities. Although acceptance by the program offices has sometimes been slow, according to a recent survey of federal CFOs,⁴ program directors are starting to look to the finance organization for help. They attribute the change to a joint effort by program and finance offices to implement the Results Act and develop strategic plans. In addition, the CFO Council's numerous outreach efforts and GPRA-related education events have helped to win the acceptance of program managers.

The key to successfully managing change and changing organizational culture is gaining the support of line management. To change the organizational culture and enlist the support of line managers, many organizations utilize training programs. Some are generic in nature and are intended to help people anticipate and cope with change and ensure that every person in the organization understands the need for change. Others are specifically geared towards providing line managers with a greater appreciation of the financial implications of their business decisions. Through these interactions, financial managers gain a better understanding of business problems and nonfinancial managers gain an appreciation of the value of financial information. This not only produces better managers, it also helps break down functional barriers that can affect productivity and impede improvement efforts.

In addition, these organizations provide tools to facilitate and accelerate the pace of the change initiative. According to one executive we met with, change initiatives that are implemented slowly generally fail because staff have too much time to contemplate the potential negative effects that change might bring and rally opposition that ultimately undermines the effort.

⁴ CFO Survey: Preparing for Tomorrow's Way of Doing Business, Grant Thornton LLP and the Association of Government Accountants (Alexandria, Virginia: March 1998).

Case Study

Training programs teach nonfinancial managers the value of financial information and facilitate the pace of change

The Boeing Company

To ensure that nonfinancial managers at all levels understand the value of financial information, Boeing has developed an education program that teaches managers basic business competence. Using a three-step development planning process, managers assess their current capabilities, determine their specific development needs, and build and execute a development plan. (See appendix II.) Depending on individual need, Boeing offers a variety of learning experiences including self-paced, team, classroom, case study, and simulation. For example, through Boeing's Creating Value learning project, managers learn how to recognize the importance of cash flow and its influence on business decisions, understand shareholder expectations and the consequences of not meeting them, and identify the relationship between individual decisions and actions and shareholder value.

The information is presented in a "multiple media" format in order to accommodate different learning styles and to allow learning to occur in different environments and in periods best suited to the learner. Other learning experiences include course work, such as Elements of Product Cost, in which participants analyze and use cost element information to support decision-making related to improvement efforts, ensuring that resources are applied to those activities that return the greatest benefits and provide the highest value to customers. During the class, participants learn to apply unit cost principles to the products they produce as well as how process, activity, and individual cost elements, such as labor, materials, and overhead, are accumulated to become unit or product cost.

General Electric

General Electric's (GE) education and training programs have played a crucial role in changing the organizational culture and facilitating both financial and nonfinancial improvement initiatives. One of the most successful programs is the Change Acceleration Process (CAP) workshop. During the CAP workshop, GE managers and professional staff are given tools and taught strategies for removing cultural barriers to change. GE's finance

organization has used these tools and strategies to facilitate improvement initiatives, ranging from organizational restructuring to changing the role of the internal audit function.

To be successful, the project teams spearheading these initiatives had to achieve each of the following objectives: (1) lead change, (2) create a shared need, (3) shape a vision, (4) mobilize commitment, (5) make change last, (6) monitor progress, and (7) change systems and structures. To ensure that each objective would be accomplished, the team used a survey to profile the change process and measures its progress. Staff and managers were surveyed periodically and asked to score each of the five dimensions from 100 percent to 0 percent based on how well they think each is being accomplished. For change to be successful, most dimensions must be rated high.

The profile directed the team's efforts so that they could develop a strategy to address the areas that needed the most attention. For example, mobilizing commitment, especially from those outside the finance organization, was often one of the more difficult objectives to accomplish. However, the team used a method, learned in the CAP workshop, for analyzing and increasing stakeholder commitment levels. First, the team listed the names of those individuals whose support was critical for the success of the project. Then, they assessed each stakeholder's level of commitment based on their perceived level of agreement--to what degree does the individual agree that change is needed? If the team perceived a person did not agree, it developed an individual plan to get this person's support. Plans were developed by addressing questions such as: Why are they resisting this change? Do they have a vested interest in the status quo? What new opportunities will they have when the change is implemented? and Who influences this person and what is their level of acceptance?

Strategies to Consider

To engage line management and create a culture that values good financial management, heads of agencies and senior executives could:

- Identify key financial and nonfinancial managers and staff whose support is critical to the success of financial management improvement initiatives.
- Develop curriculum and provide training that teaches key nonfinancial managers and staff
 - how to use financial information to improve operational planning and decision-making and
 - how reform legislation (e.g. CFO Act, GMRA, FFMIA, GPRA) will affect operating unit roles, responsibilities, and processes within the context of specific agency operations.
- For all key managers and staff, develop curriculum and provide training that provides a framework and tools that can be used to facilitate and accelerate the pace of change initiatives.

Redefine the Role of Finance To Better Support Mission Objectives

In the private sector, the role of the finance organization historically has centered on oversight and control, focusing on its fiduciary responsibilities and external financial reporting requirements. However, over the past decade dramatic changes in the business environment have forced finance organizations to reevaluate this role. The pressure to reduce administrative costs resulting from competition in an emerging global market drove many finance organizations to find more efficient ways to deliver their services. Nonetheless, becoming more efficient is not enough to remain competitive. Today, leading finance organizations are focusing more on internal customer requirements by providing products and services that directly support strategic decision-making and ultimately improve overall business performance.

Similarly, competition has changed the environment in which federal agencies operate. Shrinking budgets have increased competition for scarce resources, requiring managers to make tough resource allocation decisions that may affect program delivery. Without the support of federal finance organizations, program managers may not be able to determine or defend the cost associated with or benefits derived from government activities. We found the leading finance organizations we visited had redefined the role of finance to better support mission objectives by assessing the finance organization's current role in meeting mission objectives, maximizing the efficiency of day-to-day accounting activities, and organizing finance to add value.

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Success factors	•Leadership •Culture	•Organization •Customer	•Technology •Process	•People
Goals	Make financial management an entitywide priority.	Redefine the role of finance.	Provide meaningful information to decision-makers.	Build a team that delivers results.
Practices	1. Build a foundation of control and accountability. 2. Provide clear strong executive leadership. 3. Use training to change the culture and engage line managers.	4. Assess the finance organization's current role in meeting mission objectives. 5. Maximize the efficiency of day-to-day accounting activities. 6. Organize finance to add value.	7. Develop systems that support the partnership between finance and operations. 8. Reengineer processes in conjunction with new technology. 9. Translate financial data into meaningful information.	10. Develop a finance team with the right mix of skills and competencies 11. Build a finance organization that attracts and retains talent.

Practice 4

Assess the Finance Organization's Current Role in Meeting Mission Objectives

Key characteristics

- The percentage of resources spent on strategic support activities is used as an indicator of how well finance is supporting mission objectives.
- Benchmarking and customer feedback is used to identify performance gaps and best practices.

Many leading finance organizations assess their current role in supporting mission objectives by comparing the percentage of staff time spent on strategic support activities, such as business performance analysis or cost analysis, with the percentage of resources spent on transaction processing and other routine accounting activities. According to a 1995 Financial Executives Research Foundation report,⁵ transaction processing and other routine accounting activities, such as accounts payable, payroll, and external reporting, consume about 69 percent of costs within finance. Other studies indicate that these activities consume as much as 80 percent of finance's resources. While transaction processing will always exist, it does not have to drain the finance organization's resources. Therefore, many leading finance organizations have calculated and compared these percentages as a general indication of how well they supported the organization's business objectives. A goal for many leading organizations is to reduce the time spent on transaction processing activities to 20 percent.

To further assess the efficiency and effectiveness of specific products and services, many of the leading finance organizations we studied relied on benchmarking⁶ and customer feedback. For example, comparisons against world-class benchmarks, such as closing the books in less than 4 days or processing payroll at \$1.39 per transaction, were used to identify activities or processes in need of improvement. (See appendix III: World-class Performance Metrics.) In addition, these organizations used feedback from their internal customers to gather specific information related to quality and customer expectations. For example, Hewlett-Packard's finance organization conducted a detailed survey of about 200 internal customers worldwide in which customers were asked to rank certain components, or services, as either high or low in terms of both importance and satisfaction. The survey results were then used to guide improvement initiatives.

⁵ Reengineering the Finance Function, Financial Executives Research Foundation, Executive Report, Vol. 2, No. 3 (June 1995).

⁶ Benchmarking is the continuous process of measuring products, services, and practices against the toughest competitors or those organizations recognized as industry leaders.

Case Study

Assessing and revising the organization’s charter, processes, products, and services enables finance to better support business objectives

The role of Pfizer's finance organization has changed significantly over the past several years, from an organization focused primarily on control and compliance, to one that is integral to making strategic business decisions. About 6 years ago, under the leadership of Pfizer's CEO and CFO, Pfizer's corporate finance organization embarked on a reengineering initiative to transform its charter, processes, products, and services. The CEO and CFO's vision was to make Pfizer “the preeminent corporate finance organization in the industry.” At the heart of this vision was the concept that the finance organization should actively support the strategic imperatives of Pfizer Inc.

Unlike many finance organizations going through this type of transformation, Pfizer's change effort was not in reaction to a crisis. In fact, given the company's long history of profitable growth, there seemed to be little reason to change. Pfizer's CFO, on the other hand, saw an opportunity to do things more effectively and efficiently and thereby re-deploy resources from transactional activities (e.g., closing the books, preparing tax returns, paying invoices) to value added activities (e.g., operations, treasury and tax planning). The finance organization, for example, was producing too much data and not enough information. To build a case for change, Pfizer's CFO initiated a benchmarking survey to determine exactly how his organization stacked up against the other leading finance organizations. The results dramatized the magnitude of the opportunity.

For example, Pfizer took 7 days to close its books versus the 3 to 4 day world-class standard. Further, it cost Pfizer twice as much as the benchmark average to pay an invoice. This sobering news served a vital purpose--it created a sense of urgency surrounding the need to change and helped the CFO rally the organizational support needed to institute a comprehensive reengineering initiative

To facilitate change within the finance organization, several cross-functional process improvement teams were established. Through comprehensive revisions to its charter, processes, organization and systems, Pfizer has reduced the cost associated with transaction processing activities by up to 50 percent in certain functions and shifted its focus to activities that directly support Pfizer's business objectives.

The shift in focus and resources has allowed Pfizer's finance organization to become a “growth enabler” on behalf of the company by:

- supplying the necessary resources (from information to capital);
- providing increased opportunities to invest (redeploy financial gains or savings on behalf of the business);
- offering business solutions (“how,” not “why not”); and
- assisting in making the right business decisions.

Strategies to Consider

To assess the finance organization's current role in meeting mission objectives, agency CFOs and senior finance executives could:

- Identify all major functions performed by the finance organization (e.g., accounts payable, payroll, performance reporting, performance analysis) and group each function into meaningful categories (e.g., transaction processing, control and compliance, mission support).
- Establish and monitor agency specific performance goals and measures that reflect the finance organization's role in meeting mission objectives (i.e., the percentage of time or resources devoted to mission support vs. transaction processing or control and compliance activities).
- Benchmark financial management practices and processes with recognized industry leaders (e.g. the cost of finance as a percentage of total outlays, unit cost per accounting transaction) in order to measure performance and identify best practices.
- To the extent that operating in a federal environment affects specific benchmarks, compare financial management practices and processes with other federal agencies to provide a context with which to interpret benchmarking results.
- Periodically survey internal customers to obtain information related to the quality and value of the products and services they receive and use this information to guide improvement initiatives.

Practice 5

Maximize the Efficiency of Day-to-day Accounting Activities

Key characteristics

- Inefficient processes are eliminated or streamlined.
- Transaction processing activities are consolidated, standardized, and reengineered at shared service centers.
- The cost and benefits of outsourcing routine accounting activities are considered.

As part of an overall strategy to reduce the cost of finance and better support business objectives, many leading organizations have reduced the number of staff required to perform routine transaction processing activities by eliminating or streamlining inefficient processes and/or consolidating these activities at shared services centers. Similarly, some federal agencies are aggressively expanding their use of Electronic Funds Transfer to include contract payments and travel payments as a means of increasing the efficiency of their routine accounting activities.

Each of the six private sector finance organizations we visited consolidated, standardized, and reengineered routine processes, such as accounts payable, fixed asset accounting, and payroll at shared service centers. The primary objective for moving to shared services is to reduce operating costs. However, other benefits included better control and standardization of processes, more cost-effective technology deployment, and an enhanced position for continual improvement and customer service.

Although their approach varied depending on the size, culture, and industry, leading organizations have realized the benefits of shared services by completing each of the following stages. The first stage is consolidation and includes changing the organizational structure and gaining control over processes. The second stage is standardization and entails changing processes, adopting a common technology platform, and continuous improvement. The final stage is reengineering and involves changing workflow and leveraging technology through the use of electronic commerce, data warehousing, and document imaging.

Similar to the findings in our previous report on outsourcing the finance function,⁷ we found that although outsourcing is considered an option for reducing costs and improving efficiency, none of the leading organizations we visited were currently outsourcing any significant aspect of their finance organizations. The primary reason for not outsourcing is due to the limited capacity of outsourcing vendors to perform larger, more complex finance and accounting operations. However, these organizations indicated that they are continually evaluating opportunities to reduce costs and improve quality; therefore, as the outsourcing market evolves and the capacity and quality of outsourcing vendors improves, outsourcing may become a more attractive alternative.

⁷Financial Management: Outsourcing of Finance and Accounting Functions (GAO/AIMD/NSIAD-98-43).

Case Study

Effectively implementing shared service centers can result in reduced operating costs and better customer support

Over the past decade, high-tech companies have seen their gross margins shrink smaller and smaller as a result of increased competition and the steady introduction of newer, faster, and more advanced technology. To remain competitive and ensure continued growth, Hewlett Packard formed a task force to find ways to reduce the cost of the finance organization. At the time, the cost of finance was 2.8 percent of company revenues and accounting transaction costs were more than two to three times that of comparable companies. The task force recommended that Hewlett Packard consolidate its transaction processing activities such as accounts payable, accounts receivable, payroll, and fixed assets accounting from over 100 decentralized centers into just 8 Financial Service Centers worldwide. As a result, the number of employees needed to process accounting transactions was reduced by more than half--from about 2,500 to only 1,200 employees worldwide.

By implementing the Financial Service Centers, Hewlett Packard reduced the costs of its finance organization from 2.8 percent of revenues in 1989 to 1.4 percent in 1994 and to less than 1.0 percent by 1998. The company's finance costs are now in the top quartile of comparable organizations.

However, creating a shared service center was much more than simply centralizing activities and cashing in on economies of scale. To achieve these cost savings and provide innovative, cost-effective shared business services, Hewlett Packard not only had to consolidate its activities, but it also had to reengineer its processes and change its organizational structure.

At one Financial Service Center, process-reengineering initiatives alone have resulted in cost savings of \$36 million since 1990. Through the use of electronic data interchange, document imaging, and common software platforms, the center has maximized its use of human resources. Each month the center's 295 employees process 165,000 invoices, 15,000 travel expense reports, 44,000 checks, 77,000 payments, and 122,000 electronic transactions, reimbursements, and deposits. In addition, the center performs general ledger and fixed asset accounting and responds to customer inquiries. As part of its overall effort to reduce infrastructure costs, the center also redesigned its organizational structure using a self-directed, team-based approach. Each of the four- to eight-person teams is responsible for a number of tasks, such as timecards, overtime, and discretionary budget management. The benefits of a team concept include ownership of customer problems, higher morale, and increased creativity/problem solving.

Strategies to Consider

To maximize the efficiency of day-to-day accounting activities, senior executives could:

Identify high-volume processes or transactions that do not directly support the agency's mission (low-value, low-risk) and evaluate opportunities for

- consolidating, standardizing, and reengineering transaction processing and other routine accounting activities at a shared service center, initially by department and then across departments;
- eliminating, streamlining, or reengineering costly, inefficient transaction processing and routine accounting activities, or
- outsourcing transaction processing and routine accounting activities.

Practice 6

Organize Finance to Add Value

Key characteristics

- The finance organization's mission supports the entity's business objectives.
- The organizational structure and human capital strategies support strategic business unit needs as well as traditional controllership and transaction processing needs.

According to a recent survey of federal CFOs,⁸ the federal finance organization of the future will have fewer people, with a greater percentage of analysts than clerks. Currently, however, most functions within finance organizations are focused primarily on (1) establishing and administering policy, (2) tracking, monitoring, and reconciling account balances, or (3) ensuring compliance with laws and regulations. While they recognize the need for change, according to the CFOs surveyed, many questions remain unanswered regarding how best to scope, define, and organize finance office responsibilities.

When it comes to organizational design, we found that leading finance organizations often had the same or similar core functions (i.e., budgeting, treasury management, general accounting, payroll). However, the way these functions were organized varied depending on individual entity needs. In practice 5 of this guide, we discussed how leading organizations reduced the number of resources required to perform financial management activities by (1) consolidating activities at a shared service center and (2) eliminating or streamlining duplicative or inefficient processes. Their goal was not only to reduce the cost of finance but also to organize finance to add value by reallocating finance resources to more productive strategic support activities.

To accomplish this, leading finance organizations have realigned their mission and organizational structure to better support the entity's business objectives. Specifically, many leading organizations have (1) organized around core business processes to simplify work and flatten hierarchies, (2) consolidated certain transaction processing activities to gain economies of scale, and (3) moved functions, such as cost accounting and financial analysis, to the business units to support business units' strategic planning and decision-making needs. In addition, these organizations have created a coherent human capital strategy--that is, a framework of human capital policies, programs, and practices specifically designed to steer the organization toward its shared vision--and integrated this strategy with the organization's overall strategic planning. (See practices 10 and 11 for information on attracting, retaining, and developing financial professionals.)

⁸ CFO Survey: Preparing for Tomorrow's Way of Doing Business, Grant Thornton LLP and the Association of Government Accountants (Alexandria, Virginia: March 1998).

Case Study

Reallocating resources allows finance to better support business unit's strategic needs

In 1997, Chase Manhattan Bank decided to examine its staff functions following the completion of two mega-mergers; Chemical and Manufacturers Hanover in 1991 and Chase and Chemical in 1996. The objective was to determine whether the inherited structures from the predecessor organizations had been combined and adapted in a way that best supported the needs of what was in effect a new organization. Chase wanted to quickly identify and act on any opportunities to simplify structures, enhance efficiencies and reduce expenses. By doing this, Chase hoped to realize its ultimate goal of making the support function as responsive as possible to the line units it served.

To achieve this objective, the chairman created the Business Effectiveness Program (BEP). It was clear from the beginning what the program would not be--it would not be months and months of study and analysis. Senior management was involved and committed to short deadlines--deadlines that were announced publicly on a regular basis. The goal was to eliminate the things that frustrated people most about their work. Typically, these are the same things that make it inefficient and costly. According to one vice chairman, "It's difficult to get people excited when the goal of process or organizational

improvement is cost savings. But, tell them that you are going to make their jobs less frustrating, and watch how motivated they become."

BEP was organized into three groups. The first group, with representatives from both finance and the bank businesses, was charged with diagnosing the problem. This group was to determine what Chase does well and what could be improved--and given only 5 weeks to complete the task. The second group was charged with determining how much Chase spent on its finance and other staff functions. The third group was responsible for identifying best practices used by other leading organizations. As part of this effort, they met a number of leading nonfinancial services companies to determine how they organized their various support functions.

After completing its work, the BEP staff proposed a solution, which involved creating Chase Business Services--a shared services center to consolidate transaction processing activities, reduce staff costs, and improve efficiency. In addition, many support functions were streamlined and brought closer to the business areas to enhance efficiency and responsiveness.

Strategies to Consider

To organize finance to add value, senior executives could:

- Define the finance organization’s mission, vision for the future, core values, goals, and strategies to support the agency’s overall mission objectives.
- Develop an explicit workforce planning strategy that is linked to the agency’s strategic and program planning efforts to ensure that financial managers and staff with skills for analyzing and interpreting financial data will support the agency’s strategic planning and decision-making needs at both the field and headquarters level. (See practices 10 & 11 for information on attracting, retaining, and developing financial professionals).

Provide Meaningful Information to Decisionmakers

Financial information is meaningful when it is useful, relevant, timely, and reliable. However, many federal agencies lack the systems and processes required to produce meaningful financial information needed for management decision-making. For example, many agency financial and management information systems do not routinely provide adequate, timely cost or performance information needed to manage cost, measure performance, make program funding decisions, and analyze outsourcing or privatization options. Similarly, many private sector and state organizations have struggled to overcome some of the same management information issues that now face federal agencies.

Over the past decade, global competition and advances in information technology have changed information requirements and users' expectations regarding the availability and usefulness of financial information. Financial information that, in the past, was considered adequate for decision-making is now considered overaggregated and too late to be useful. The leading finance organizations we visited enhanced their capabilities for providing meaningful information to decisionmakers by developing management information systems that support the partnership between finance and operations, reengineering processes in conjunction with implementing new technology, and translating financial data into meaningful information.

Vision: To be a Value-Creating, Customer-Focused Partner in Business Results				
Success factors	•Leadership •Culture	•Organization •Customer	•Technology •Process	•People
Goals	Make financial management an entitywide priority.	Redefine the role of finance.	Provide meaningful information to decisionmakers.	Build a team that delivers results.
Practices	1. Build a foundation of control and accountability. 2. Provide clear strong executive leadership. 3. Use training to change the culture and engage line managers.	4. Assess the finance organization's current role in meeting mission objectives. 5. Maximize the efficiency of day-to-day accounting activities. 6. Organize finance to add value.	7. Develop systems that support the partnership between finance and operations. 8. Reengineer processes in conjunction with new technology. 9. Translate financial data into meaningful information.	10. Develop a finance team with the right mix of skills and competencies 11. Build a finance organization that attracts and retains talent.

Practice 7

Develop Systems That Support the Partnership Between Finance and Operations

Key characteristics

- The general ledger system is integrated into business processes and is adequate for financial reporting and control.
- Automated system(s) are designed and deployed that (1) accurately measure the costs of activities, processes, products, and services and (2) provide line managers with timely, accurate financial and nonfinancial information on the quality and efficiency of business processes and performance
- An enterprisewide system integrates operating, financial, and management information and allows decisionmakers to access relevant information easily and perform ad-hoc data analysis.

As federal agencies develop plans for acquiring and installing financial systems, the Clinger-Cohen Act of 1996 and related executive branch guidance will provide a framework for designing and deploying information technology. The Clinger-Cohen Act requires agencies to better link their information technology planning and investment decisions to program missions and goals. If implemented effectively, this legislation will provide a foundation that will help federal agencies improve the interoperability of financial, operating, and management systems.

The leading finance organizations we visited have long had general ledger systems capable of generating auditable financial statements efficiently and routinely, thereby providing information on stewardship and accountability at a high level. Further, they historically have had adequate systems for measuring and managing cost and performance. However, over the last decade new technology has made it possible for these organizations to integrate these systems and provide more relevant, accessible information that meets the changing needs of decisionmakers. Many leading organizations have already implemented, or are in the process of implementing an enterprisewide system to integrate financial and operating data to support both management decision-making and external reporting requirements. Some abandoned their legacy systems all together and turned to state-of-the-art integrated architectures, while others used well-functioning legacy systems and tied them together with a data warehouse. Regardless of the approach, these systems provided financial analysts, accountants, and business unit managers access to the same cost, performance, and profitability information.

Similarly, the CFO Council, JFMIP, OMB, Treasury, and individual agencies are working to improve the integration of budget, accounting, and program information and systems. To support this process, a Program Management Office was recently established to develop financial systems requirements, address system integration issues, and generally facilitate the system selection and procurement process. This and other measures are important to ensure that federal systems provide meaningful information for managing and measuring cost and performance as well as preparing external financial reports.

Case Study

Information data warehouse provides decisionmakers with a single set of financial and performance information

In 1994, the Massachusetts Office of the State Comptroller embarked on a groundbreaking project--to build an information warehouse that would integrate fiscal, budgetary, human resource, and program data, and to make the data available to decisionmakers throughout the state. However, what made this project possible actually began 7 years earlier when the state implemented its first statewide management accounting and reporting system. Although data entry is decentralized at agencies across the state, all processing for accounting and financial reporting is done centrally using one chart of accounts on a mainframe computer.

The state's accounting system houses a wealth of data, but as with many mainframe-centered applications, data access is a problem. As fast as reports are designed and built, data needs change and users are left with only half the data they require. Trend analysis was difficult at best and state financial managers were forced to make decisions using out-of-date, estimated, or anecdotal information. To complicate matters, the state also had a long history of dueling systems--budget numbers were maintained in one system and accounting numbers in another. The business case for better information access was clear and, in 1994, funding was received to build information access improvements.

The technical and business managers had four primary goals in mind when designing the

warehouse: (1) make it useful by putting the right data into it, (2) make it usable so that decision-makers could and would use it, (3) make it expandable so that it could be adapted to future needs, and (4) make it sensible--don't buy a Cadillac when a Chevette is what you need. During the design, development, and implementation of the warehouse, many organizational and technical issues were hotly debated, but the most critical design decision related to the level of detail to be stored in the warehouse. The greater the detail, the more flexible and accurate the report will be. However, storage, processing, and maintenance costs become significantly greater. The team ultimately opted for transaction-level detail, thereby providing enormous flexibility in meeting changing users' needs.

The information warehouse project has resulted in numerous benefits to a wide range of executives, legislators, managers, financial analysts, budget analysts, accountants, and operations personnel. For example, managers can now project spending rates, based on previous experience, and determine if a department will overrun its allocations in time to take corrective measures. For the first time, the state has one set of books with one set of universal data. With the warehouse, users spend much less time explaining why numbers from one department are different from another department and more time developing solutions to business problems.

Strategies to Consider

To develop systems that support the partnership between finance and operations senior executives could:

- Acquire and install a general ledger system adequate for external financial reporting purposes.
- Develop managerially relevant cost information systems and strategic performance management systems that access data from financial transaction systems and relevant operating systems.
- Integrate the agency's financial (including budgetary), operating, and management systems and equip decisionmakers with the tools to easily access relevant information and perform ad-hoc analyses.
- Ensure that financial systems comply with federal financial management systems requirements, federal accounting standards, and the U.S. Government Standard General Ledger by
 - establishing the goal of using a single general ledger chart of accounts (the U.S. Government Standard General Ledger) and
 - developing an interim approach to convert general ledger accounts not consistent with the U.S. Government Standard General Ledger. This approach should use automated cross-walks performed by those business segments responsible for the data.

Practice 8

Reengineer Processes in Conjunction With Implementing New Technology

Key characteristics

- Commercial off-the-shelf software packages implemented with limited modification.
- Processes and controls adapted to fit commercial off-the-shelf software.
- Processes are reengineered across functional lines.

At many of the leading finance organizations we visited, the vast majority of financial applications were commercial off-the-shelf (COTS) packages that were implemented with limited modification to the basic application package itself. The advantages of using COTS software include (1) COTS software is less costly than developing in-house applications, (2) software upgrades are affordable and are regularly available, and (3) COTS software is designed to include best practices.

The key to successfully implementing COTS systems and best practice processes, according to leading finance organizations, is reengineering business processes to fit the new software applications. In fact, productivity gains typically result from more efficient processes, not from simply automating old ones. Effectively reengineering business processes, however, requires moving from a functional-based organization to a process-based organization. For example, the procurement process in a process-based federal organization would start when a solicitation is issued, continue through contract award and signature, as well as the issuance of purchase/work orders and receipt of goods, and end when the vendor properly received payment. The business processes would be designed to maximize the efficiency and accuracy of the entire process.

The Clinger-Cohen Act contains provisions requiring federal agencies to modernize inefficient administrative and mission-related work processes before making significant technology investments to support them. As a result, federal agencies are beginning to consider the merits of information technology approaches that involve reengineering business processes in conjunction with implementing COTS software without significant modification. According to a report by the Financial Systems Committee of the CFO Council, most agencies favor an approach that uses COTS software for core financial systems and other financial management applications. However, agency efforts to use COTS products have been hampered by the government's failure to communicate requirements and functionality effectively to the vendors and a proclivity on the part of agencies to modify software to meet existing business processes and to replicate previous system functionality. To encourage the use of COTS, OMB and JFMIP are working to improve (1) the testing and certification of COTS systems, (2) existing procurement schedules, and (3) processes to obtain COTS systems.

Case Study

Reengineering core business processes across functional lines is the key to successful COTS implementation

When implementing its new financial management system rather than fitting new technology to out-of-date processes, Owens Corning redesigned its business processes to fit the new technology. The objective was to improve customer service and, at the same time, cut logistical costs related to various business processes. To achieve these objectives Owens Corning formed cross-functional process improvement teams for each major business process to improve or replace long-standing and often ineffective business processes.

During this effort, the improvement teams used many common reengineering tools, such as process mapping and process modeling. However, successfully reengineering its business processes had more to do with the parameters Owens Corning placed on its process improvement teams. For example, the teams were given compressed schedules for completing “as is” modeling to prevent over-analysis and to force decisions. Documenting current processes should be accomplished in a matter of a week or two. The bulk of time should be spent on defining user requirements and designing new processes. Another important aspect of Owens Corning process improvement effort was its use of a process reengineering management council. The council was made up of key process and business unit executives that acted as arbitrators when conflicts developed.

By reengineering business processes in conjunction with implementing new technology, Owens Corning increased its ability to meet customer needs. In the past, for example, many of the company's computers were not linked, making it impossible for sales people to check on the availability of products or address problems on a customer invoice. Now, all activities that occur from the time a customer places an order to the time Owens Corning receives payment are part of the Customer Fulfillment Process. In addition, new technology has integrated functions related to the Customer Fulfillment Process, such as sales, ordering, production, shipping, billing, and accounts receivable, providing users with greater access to data. As a result, Owens Corning's salesforce not only has access to up-to-date information, but more efficient processes allow sales staff to respond immediately to customer inquiries, instead of handing the problem off to another department.

Other outcomes related to process improvement included (1) reducing the time it takes to close the books from 13 days to 5 days--with a target of 1 day, (2) reducing the chart of accounts from 2,400 to 900, and (3) standardizing reporting, which allows comparisons to be made between operating divisions.

Strategies to Consider

To reengineer processes that support new technology, senior executives could:

- Form cross-functional teams to (1) examine existing core business processes and (2) define user requirements.
- Compare COTS products against the agency's requirements and identify the COTS packages that most closely match the agency's needs.
- Reevaluate user requirements not supported by COTS software and determine, before customizing software, whether each requirement is still valid or whether alternatives exist that may be more cost-effective.
- Where software modifications are required, implement an effective configuration management system that includes (1) clearly defining and assessing the effects of modifications on future product upgrades before the modification is approved, (2) clearly documenting software products that are placed under configuration management, and (3) maintaining the integrity and traceability of the configuration throughout the system life cycle.
- Implement a quality assurance process that ensures that project activities and software products adhere to management's established plans, standards, and procedures. This includes ensuring that the configuration management process is effectively implemented and that product changes are clearly documented and tested before being placed into production.
- Implement an effective risk management strategy to ensure that project risks, such as customization and vendor's ability to deliver a given system, are adequately identified and effective mitigation strategies are implemented.

Practice 9

Translate Financial Data into Meaningful Information

Key characteristics

- Reports are designed around key drivers such as markets, products, and customers.
- Relevant financial information is presented in an understandable, simple format with suitable amounts of detail and explanation.

While new technology has made financial data more available, without the ability to translate that data into relevant, understandable information, decisionmakers are left powerless. Traditionally, finance organizations have used voluminous paper reports, based primarily on the prior month's activity, to communicate financial information. Further, management reports were often designed around current organizational structures. Consequently, as organizational structures changed over time, many management reports became irrelevant.

Today, leading finance organizations have eliminated, reduced, and/or redesigned much of their old management reporting formats to better meet the needs of the user. These organizations have designed new reporting formats around key business drivers rather than organizational structures to provide executives and managers with relevant, forward-looking information on business unit performance. During this process, one company we visited actually stopped distributing selected management reports to determine whether anyone would miss them. They used the subsequent lack of reaction as an indicator that the information in the report was no longer relevant.

Further, standardized reports are designed to present information that is analyzed to bring out pertinent and fundamental points with suitable amounts of detail and explanation. For example, Owens Corning's executives and managers access a standardized monthly financial report via the company's internal area network. The report's executive summary is 10 pages long and contains executive-level reporting, forecasting, and budgeting information. However, multiple levels of detail are available, and decisionmakers can drill down to the desired level of detail.

Similarly, efforts are currently underway across government to develop a meaningful, user-friendly accountability report on individual departments and agencies. These reports consolidate and integrate audited financial statements and reporting under the Results Act and other related laws to (1) show the degree to which an agency met its goals and at what cost and (2) aid the reader in determining whether the agency was well run.

Case Study

Redesigning management reports around key business drivers provides decisionmakers with relevant, forward-looking information

As part of an overall initiative to better address the strategic imperatives of Pfizer Inc, the CFO spearheaded an effort that radically changed the company's traditional management reporting process. At that time, the finance organization prepared a monthly report called the "Greenbook." The report was very detailed, comprised of static reports and schedules entirely based on what "had happened" and contained no external or competitive perspectives. Although intended as a senior management briefing document, the report was voluminous and very accounting oriented.

In the interest of providing a more customer-focused document, a prototype was developed based on the Pfizer CEO's management style and preferences. The new report, known as the "Executive Financial Summary", is a 30-page report that contains a wide array of financial and operational information. Instead of containing an inventory of every data set and answer to every question previously asked, the document features "exceptions" or those items specifically worthy of

focus. In addition, information is presented in the form of charts and graphs. This approach enhances the document's readability, increases the impact of the message, and is sensitive to the demands on the audience's time. Actual financial performance is supplemented with forecasts so as to provide a perspective of what has happened with a view of what is expected to happen. The report also contains "peer comparisons," or a benchmarking section that compares Pfizer's key measurements to other companies in the industry. For example, the report shows a graphic analysis of research and development cost; operating cost; sales, general and administrative cost; and product cost as a percentage of revenue compared with other major pharmaceutical firms. An external perspective is vital to putting performance in a relevant context. The same operating results can be substandard or outstanding depending on the relevant industry benchmarks. In general, the chairman's overall visions, as well as the key objectives of the business units now drive the measurement and reporting of performance.

Strategies to Consider

To improve management reporting of financial information, senior finance executives, as part of the top management team, could:

- Meet with key policymakers and managers on an ongoing basis to define key business drivers and determine what key business information is needed for management and oversight of the agency's mission and objectives.
- Determine what information is needed by program executives and managers to meet and support key business information requirements.
- Present various reporting format and content options to executives, managers, and Congressional Committees.

Build a Finance Team That Delivers Results

As the finance function has evolved over the past decade, from a paper-driven, labor intensive, clerical role to a more consultative role as advisor, analyst, and business partner, many leading finance organizations have seen a corresponding shift in the mix of skills and competencies required to perform this new role. To respond to these changing business needs, the leading organizations we visited developed finance teams with the right mix of skills and competencies and built finance organizations that attract and retain talent as part of an overall strategic approach to human capital planning.

Similarly, the CFO Act, GMRA, and GPRA have placed new demands on federal finance organizations. Accordingly, federal agencies need to reassess their human capital practices to ensure that federal financial professionals are equipped to meet these new challenges and support their agencies' mission and goals. This executive guide, along with our 1998 report on the training and qualifications of key financial management personnel and our 1999 human capital self-assessment checklist,⁹ can provide a framework to strengthen the qualifications, skills, and competencies of federal financial management personnel.¹⁰

Vision: To be a Value-Creating, Customer-Focused Partner in Business Results				
Success factors	•Leadership •Culture	•Organization •Customer	•Technology •Process	•People
Goals	Make financial management an entitywide priority.	Redefine the role of finance.	Provide meaningful information to decision-makers.	Build a team that delivers results.
Practices	1. Build a foundation of control and accountability. 2. Provide clear strong executive leadership. 3. Use training to change the culture and engage line managers.	4. Assess the finance organization's current role in meeting mission objectives. 5. Maximize the efficiency of day-to-day accounting activities. 6. Organize finance to add value.	7. Develop systems that support the partnership between finance and operations. 8. Reengineer processes in conjunction with new technology. 9. Translate financial data into meaningful information.	10. Develop a finance team with the right mix of skills and competencies 11. Build a finance organization that attracts and retains talent.

⁹ Human Capital: A Self-Assessment Checklist for Agency Leaders (GAO/GGD-99-179, September 1999).

¹⁰ Financial Management: Profile of Financial Personnel in Large Private Sector Corporations and State Governments (GAO/AIMD-98-34, January 1998).

Practice 10

Develop a Finance Team with the Right Mix of Skills and Competencies

Key characteristics

- A defined set of technical, management, and leadership skills and competencies is developed as part of the entity's overall approach to strategic human-capital planning and is used as a foundation for all human-capital management activities and decisions.
- Training and career development programs use both classroom instruction and rotational assignments.
- Opportunities to "learn the business" are provided.

At leading finance organizations, developing a finance team with the right mix of skills and competencies starts by defining a set of skills and competencies that will enable the finance team to meet the current and future technical, management, and leadership needs of the business. The resulting competency profile is used to assess gaps in individual or group competency levels and develop human capital strategies to address current or expected future deficiencies. In this practice we discuss the training, career development, and succession-planning strategies leading finance organizations use to develop a team with the right mix of skills and competencies.

The training and career development programs of the leading finance organizations we visited provided intensive 2- to 3-year entry level programs as well as midcareer and executive-level programs that used both classroom instruction and rotational assignments to develop technical, management, and leadership skills and competencies. The programs' course work focuses initially on the tools and techniques of advanced accounting and finance as well as general business skills. Then, the focus shifts to the strategic application of these tools within business-specific environments. However, the key to implementing a successful career development program is to complement course work with real-life business experience through the use of planned rotational assignments. The leading finance organizations we visited provided opportunities for staff to rotate through various positions throughout the finance organization as well as the operating divisions. Such opportunities are critical not only in developing employees that understand the whole business and, in turn, provide greater value to their customers in the operating divisions but also as a way of ensuring that an adequate supply of well-prepared financial professionals is available to fill key positions.

Similarly, federal finance organizations are recognizing the need to provide a broad range of experience to its financial professionals. For example, as a way to develop a cadre of experienced and diverse leaders, the CFO Council Fellows Program was initiated in April of 1998 with the selection of nine fellows to serve 1-year appointments at host organizations.

Case Study

Defining finance skills and competencies as part of an entitywide approach to human-capital planning enables finance to better support business objectives

As part of Pfizer's strategy to become the preeminent finance organization in the industry, Corporate Finance formed a leadership and career development team to redesign and enhance the finance organization's employee development practices. The team was charged with identifying and developing competencies that would be the foundation for all human resource management activities and decisions, including recruitment, succession planning, training, rewards and recognition, and staff reductions. The team defined the knowledge, skills, abilities, and behaviors for success and grouped the competencies into three main areas: leadership, management, and functional/ technical. Within each group they identified specific competency categories, as shown below.

LEADERSHIP

- Strategy
- Negotiation/influence
- Team building
- Innovation

MANAGEMENT

- Planning/priority setting
- Analytical
- Manage/develop people
- Communication

FUNCTIONAL/TECHNICAL

- Business policies and procedures
- Financial reporting
- Accounting principles
- Business alliances
- Operational/financial analysis
- Financial instruments
- Macro-economics
- Information technology
- Tax environment

Specific competency requirements and the level of expertise required varies depending on the position held

within finance. For example, leadership and management skills were emphasized at all levels, not just within the ranks of managers and executives. Financial professionals at all levels are expected to be innovative and proactive in providing solutions to business problems. However, the scope and importance of this competency increases as you rise in the organization. To illustrate: Innovation refers to the ability to improve performance by doing new things and coming up with creative ideas. The corporate controller demonstrates this ability by creating a climate that proactively approaches change and emphasizes the need for continual skill enhancement and learning. A staff accountant, on the other hand, might demonstrate this ability by challenging the status quo as it relates to consolidation processing, procedures, and other routine responsibilities.

At Pfizer, management and staff are jointly responsible for an individual's career development. This means providing and seeking appropriate training and experience to ensure that competency requirements are achieved. While classroom training can often address technical and functional requirements, experience is generally required to attain many of the leadership and management competencies needed. Therefore, to accommodate employee development and business needs, an integral part of Pfizer's staff planning and development processes involves planned movement of people. Rotations, including short-term assignments within and outside of Corporate Finance are a part of Pfizer's culture. To aid this process, the leadership and career development team produced the Career Track Chart that illustrates possible career moves within Corporate Finance. The chart includes positions and developmental assignments that move individuals both vertically and horizontally to develop both breadth and depth in their careers.

Strategies to Consider

To develop a team with the right mix of skills and competencies, senior executives could:

- As a part of an agencywide strategic approach to human capital planning (1) determine the leadership, management, and functional/technical competencies required for the finance organization to support agency missions, goals, and objectives, (2) evaluate the finance organization's current and future human capital capabilities, (3) identify skill gaps, (4) develop human capital policies and practices that will allow agencies to fill the identified skill gaps, and (5) evaluate these efforts and use performance data to continually update human capital strategies.
 - As a first step, assess the finance organization's human capital policies, programs and practices to determine whether they support the organization's mission and vision for the future. (See GAO's human capital self-assessment checklist.¹¹)
- Using both classroom training, planned staff rotations, and interagency assignments, design a career development program geared toward
 - improving leadership, management, and traditional financial management competencies, including the analytical skills needed to support program decisionmaking;
 - understanding how reform legislation (e.g., CFO Act, GMRA, FFMIA, GPRA) will affect the finance organization's roles, responsibilities, and processes within the context of specific agency operations; and
 - understanding overall agency operations, including program implications of financial decisions.
- Establish continuing professional education requirements for financial managers similar to those required for auditors.

¹¹ [Human Capital: A Self Assessment Checklist for Agency Leaders](#) (GAO/GGD-99-179, September 1999).

Practice 11

Build a Finance Organization that Attracts and Retains Talent

Key characteristics

- Top financial leadership participates in the recruitment of new talent.
- A variety of clear career path opportunities are offered and staff development programs are used as a means of exposing staff to different career opportunities.
- Competitive compensation and benefits packages are available.

As discussed in practice 10, sound training and career development strategies are needed for the finance organization to meet the current and future human capital needs of the business. Equally important, however, are recruitment, retention, and reward strategies that enable the finance organization to attract and retain talented financial professionals at all levels. Although their styles and strategies varied, the leading organizations we visited agreed that several key factors were important in attracting and retaining talent.

First, recruiting a talented workforce requires the commitment of top leadership. The CFOs at these organizations are often heavily involved talent assessment and senior executive leaders are actively involved in on-campus recruiting. This sends a powerful message to potential new recruits that the position is important enough to the organization that it warrants senior executive attention.

Second, attracting and ultimately keeping a highly qualified and motivated workforce involves providing meaningful career opportunities, such as the opportunity to (1) participate in exciting ground-breaking projects, (2) build a portfolio of new skills, and (3) choose a variety of career paths. These organizations often used their staff development programs to provide these opportunities. For example, as discussed in practice 10, career development programs often include rotational assignments and not only provide excellent growth opportunities but also expose staff to a variety of career path opportunities.

Third, compensation is a key factor in any career decision. While, according to employee compensation surveys, compensation is fairly comparable between the private and public sectors for entry level and middle management positions, executive compensation in the private sector far exceeds that of federal executives, thereby limiting federal agencies' ability to attract and retain federal executives. (See appendix IV for compensation survey results.) However, other factors such as the desire to effect change and make a difference may attract senior executives to public service. In addition, opportunities may exist that will enhance agencies' ability to attract and retain talent at all levels. For example, the revolutionary changes that are taking place as a result of the CFO and Results Acts provide an ideal occasion to revamp the opportunities available to federal financial professionals and to market the possibilities offered by a career in federal financial management.

Case Study

Providing a variety of challenging career opportunities and experiences helps to attract and retain talented professionals

The primary entry point into the General Electric (GE) financial community is its Financial Management Program (FMP). FMP is an intensive 2 to 2-1/2 year program for professional staff that consists of on-the-job experience combined with formal classroom training. It is designed to teach a combination of technical, financial, and business skills that prepare staff for financial leadership positions. While FMP was designed to be a training and development program for financial managers, it has also served as a valuable tool for attracting and retaining talented financial professionals. By providing staff with valuable and exciting opportunities and experiences, the program sells itself--a financial career, kicked off with an entry via FMP, can take staff anywhere--not just in terms of geography, but in terms of achievement.

Typically, during the 2-1/2 year program, staff rotate approximately every 6 months into a new assignment, gaining experience in diverse aspects of GE's business. Staff will rotate through general accounting, manufacturing accounting, financial planning and analysis, auditing, and one business process project. Staff are placed in challenging positions where they gain exposure to a number of different elements of finance. Experienced managers and FMP administrators will act as mentors, supporting staff, connecting them with resources, and helping them grow.

Six months prior to completion of the program staff begin to plan their off-program placement with the assistance of local financial managers and the program administrator. One of the most sought after assignments is with GE's corporate audit staff.

GE has broadened the scope of its internal audit function and used it as a training ground for new staff. The auditor's role extends beyond financial reviews to risk management, due diligence, and business integration. Auditors also play a key role in best practice sharing across business lines. The Experience Financial Leadership Program (EFLP) is another path available to select FMP graduates and midcareer hires with 5 or more years of business experience. EFLP is a structured program comprising advanced financial classes and business projects designed to supplement on-the-job development and provide cross business exposure and interaction with senior management. EFLP also plays an important role in accelerating the development and exposure of more experienced staff who are hired from the outside.

GE recognizes the value of providing staff with diverse opportunities and experiences throughout their careers across business, finance organizations, and outside the finance function. Therefore, GE's CFO insists that the brightest people within finance spend time outside the finance function--in manufacturing or marketing. When they come back they are immeasurably more valuable to finance because they know something about the businesses. About one-half of the employees coming out of the FMP and EFLP programs take management assignments in the operating areas--with the CFO's blessing. This is a huge change from the days when managers had one objective for their best people, which was to hoard them. Now, finance trains a resource that is available for the leadership of the entire company, not just finance.

Strategies to Consider

To build an organization that attracts and retains talent, the CFO and senior executives could:

- Actively work with colleges and universities to (1) market the opportunities available for financial professionals and (2) include a federal accounting and financial management curriculum that will not only prepare students for careers in federal accounting but will also help promote federal career possibilities.
- Continue to work with the Office of Personnel Management to provide more flexible career paths that provide opportunities for movement throughout the finance organization and agency program offices.
- Utilize staff development programs and planned staff rotations to expose financial managers and staff to a variety of career paths.

Appendix I

Research Objectives, Scope, and Methodology

The objectives of our research were to (1) define and describe the characteristics of a world-class finance organization, (2) identify the factors that are essential for finance organizations to improve their financial management and move towards world-class standards, and (3) provide case studies which illustrate the efforts of leading finance organizations from private sector companies and state governments to improve their financial management and the overall performance of their organizations.

We formed an advisory group to assist with job design, our overall scope and methodology, and case study selection as well as to critique our research findings and comment on our draft report. The group consisted of private sector executives, state and local comptrollers, academicians, and other experts and consultants outside the federal government. (Key contacts and project advisors are listed in appendix VII.) We also consulted with members of various CFO Council committees and representatives from OMB and Treasury.

To meet our research objectives, we performed an extensive literature search on the subject of financial management best practices using commercial best practice databases, the Internet, prior GAO reports, trade journals and magazines, federal guidelines, private sector studies, and other resources. We synthesized and analyzed the numerous documents acquired from our literature search and case study organizations to determine the objectives essential for organizations to improve their financial management. Based on consultations with our advisory group and our case study entities, we consolidated and refined the factors to those presented in this guide.

We selected six private sector companies and three state governments to serve as our case studies. We selected the private sector companies based on (1) recognition for outstanding financial management practices and/or successful financial reengineering efforts, (2) size and complexity comparable to federal government agencies, and (3) discussions with members of our advisory group. We selected the state governments based on (1) the 1995 "The State of the States" report issued by Financial World magazine and (2) discussions with members of our advisory group and the CFO Council. We interviewed various officials, including chief financial officers, chief information officers, business unit executives, state executive and legislative branch officials, treasurers, controllers, internal auditors, agency administrators, and human resource specialists. We also reviewed various company documents, including vision statements, strategic plans, core competencies for finance personnel, training and development guides, key financial reports, performance metrics, and other documents related to reengineering efforts of the finance organization.

We asked officials at the private sector companies and state governments profiled in the case studies to verify the accuracy of the information presented on their respective organizations and incorporated their comments as appropriate; however, we did not independently verify the accuracy of that information. In addition, we provided a draft of this entire guide to OMB, members of the CFO Council, and our advisory group for their review and comment.

Appendix II

Supplemental Case Study Information

The Boeing Company's Personal Planning Guide for Developing Business Competence (excerpt)

Performance Expectation: Include business process and financial information in decision-making

Key elements	Supporting actions	Rating	
		Importance	Personal*
Use appropriate facts and data from company information systems to support accomplishment of business plans	• Locate sources of company information	□	□
	• Operate selected information systems	□	□
	• Select appropriate data and information	□	□
	• Make decisions based on analysis of data	□	□
	• Manage information resources to ensure ready access to information	□	□
Make informed decisions	• Apply company integrity, values, and ethics	□	□
	• Identify key components of decisions	□	□
	• Collect pertinent data	□	□
	• Analyze alternatives	□	□
	• Use selection criteria	□	□
	• Apply wisdom, judgement, and experience	□	□
Create business forecasts	• Lead the estimating and budgeting process	□	□
	• Develop schedules	□	□
	• Apply target costing (should cost)	□	□
Apply total cost management principles	• Monitor budgets, costs, and schedules	□	□
	• Apply variance analysis	□	□
	• Reallocate resources to meet objectives	□	□
	• Predict management estimate at completion	□	□
	• Use earned value	□	□
Recognize cost structure (elements of product cost)	• Apply unit cost practices	□	□
	• Apply process cost practices	□	□
	• Identify cost elements	□	□
	• Use life cycle costing to identify present and future costs	□	□
	• Identify components of rates	□	□
Apply economic and financial principles	• Analyze cash flow needs	□	□
	• Explain cost of capital	□	□
	• Use discounted cashflow, present value analysis, and internal rate of return	□	□
	• Explain investment management	□	□
	• Explain importance of economic decisions on shareholder value	□	□
	• Use financial analysis tools	□	□
	• Use Boeing financial reports and statements	□	□
	• Perform make/buy analysis	□	□
	• Explain impact of taxes	□	□
• Explain billings and collections	□	□	

Note 1: Importance Rating of the supporting action to your specific assignment (H = high, M = medium, L = low.)

Note 2: Personal Rating of your level of competence for the supporting action. Use a scale of 1 to 5 (1 = weak, 5 = strong.)

Appendix III

World-class Finance Performance Metrics

Table 1: Comparison of Performance Metrics--Average vs. World-class Companies

Performance metric	Average	World-class
Cost as % of revenue	1.4%	0.97%
A/P productivity per FTE	12,500	15,900
Processing locations	>3	1
Systems per process	2-3	1
Budget cycle	95 days	60 days
Closing cycle	5-8 days	<4 days

Source: The Hackett Group.

Table 2: Comparison of Labor Costs per Transaction--Average vs. World-class Companies

Process	Measure	Average	World-class
Payables	Invoice	\$3.55	\$1.98
Receivables	Remittance	\$0.36	\$0.14
Travel & expense	Expense report	\$6.05	\$3.96
Payroll	Paycheck	\$1.91	\$1.39

Source: The Hackett Group.

Appendix IV

Comparison of Selected Federal Agencies & Case Study Entities

Table 1: Total Revenues/Outlays at Case Study Entities and Federal Agencies for 1998	
Agency/company	Total revenues/outlays (in millions)
Social Security Administration	\$393,311
Department of the Treasury	379,345
Department of Health and Human Services	339,535
Department of Defense	288,604
General Electric Company	100,469
Boeing Company	56,154
Department of Agriculture	52,547
Hewlett Packard Company	47,061
Office of Personnel Management	45,404
State of Texas	43,816
Department of Transportation	39,832
Department of Veteran Affairs	39,280
Commonwealth of Massachusetts	31,249
Department of Labor	30,458
Department of Education	30,009
Department of Housing and Urban Development	27,527
Commonwealth of Virginia	19,245
Chase Manhattan Corporation	18,656
Department of Energy	14,467
Pfizer Inc	13,544
Owens Corning	5,009
Department of Commerce	3,783
Federal Emergency Management Agency	3,326
National Science Foundation	3,130

Source: 1998 company annual reports, 1998 state comprehensive annual financial reports, Budget of the United States Government, Fiscal Year 1999.

Table 2: Total Employees at Case Study Entities and Federal Agencies

Agency/company	Total employees
Department of Defense	742,437
General Electric Company	276,000
Department of Veteran Affairs	242,685
Boeing Company	238,000
State of Texas	231,335
Department of the Treasury	139,794
Hewlett Packard Company	121,900
Department of Justice	117,699
Department of Agriculture	104,095
Commonwealth of Massachusetts	100,000
Commonwealth of Virginia	94,253
Chase Manhattan Corporation	69,033
Department of the Interior	68,815
Social Security Administration	66,489
Department of Transportation	64,163
Department of Health and Human Services	59,111
Pfizer Inc	49,000
Department of Commerce	34,738
Department of State	24,283
Owens Corning	22,000
National Aeronautics and Space Administration	19,816
Environmental Protection Agency	17,901
Department of Energy	16,917
Department of Labor	15,820
General Services Administration	14,323
Department of Housing and Urban Development	10,311
Federal Emergency Management Agency	4,839

Source: 1997 company annual reports, 1997 state comprehensive annual financial reports, 1997 U.S. Office of Personnel Management.

Table 3: Comparison of Revenues/Outlays In Millions with CFO Compensation (Salary and Bonus) at Selected Case Study Entities for 1997

Company	Revenues/outlays	CFO salary	Bonus	Total
General Electric Company	\$100,469,000	\$1,100,000	\$2,000,000	\$3,100,000
Federal Agency	\$72,568,000 (average)	\$151,800 (max.)		\$151,800 (max.)
Boeing Company	\$56,154,000	\$392,261	\$137,700	\$529,961
Hewlett Packard Company	\$47,061,000	\$997,625	\$147,804	\$1,145,429
Chase Manhattan Corporation	\$18,656,000	\$628,846	\$1,168,750	\$1,797,596
Pfizer Inc	\$13,544,000	Not available	--	--
Owens Corning	\$5,009,000	\$371,875	\$795,000	\$1,166,875

Source: 1998 company annual reports; Budget of the United States Government, Fiscal Year 1999; 1999 company proxy statements; 1998 Senior Executive Service pay schedule.

Appendix V

Related Resources, Information Links, and Tools

Information Management	Financial and Performance Management
Information Security Risk Assessment: Practices of Leading Organizations (Exposure Draft) (GAO/AIMD-99-139)	Executive Guide: Leading Practices in Capital Decision-Making (GAO/AIMD-99-32)
Executive Guide: Measuring Performance and Demonstrating Results of Information Technology (GAO/AIMD-98-89)	Standards for Internal Control in the Federal Government (GAO/AIMD-00-21.3.1)
Executive Guide: Information Security Management--Learning From Leading (GAO/AIMD-98-68)	The Accounting Profession: Major Issues: Progress and Concerns (GAO/AIMD-96-98)
Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115)	Executive Guide: Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118)
Information Technology Investment Evaluation Guide: Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-Making (GAO/AIMD-10.1.13)	The Results Act: An Evaluator's Guide to Assessing Agency Annual Performance Plans (GAO/GGD 10.1.20)
Information Technology Investment: Agencies Can Improve Performance, Reduce Costs, and Minimize Risks (GAO/AIMD-96-64)	Agencies' Strategic Plans Under GPRA: Key Questions to Facilitate Congressional Review (GAO/GGD-10.1.16)
Framework for Federal Financial Management System Checklist: Systems Reviewed Under the Federal Financial Management Improvement Act of 1996 (GAO/AIMD-98-21.2.1)	Agencies' Annual Performance Plans Under the Results Act: An Assessment Guide to Facilitate Congressional Decision-making (GAO/GGD/AIMD-10.1.18)
Core Financial System Checklist: Systems Reviewed Under the Federal Financial Management Improvement Act of 1996 (GAO/AIMD-21.2.2)	Program Measurement and Evaluation: Definitions and Relationships (GAO/GGD-98-26)
	Financial Management: Outsourcing of Finance and Accounting Functions (GAO/AIMD/NSIAD-98-43)

Human Capital Management	Process Improvement
Human Capital: Key Principles From Nine Private Sector Organizations (GAO/GGD-00-28)	Reengineering Organizations: Results of a GAO Symposium (GAO/NSIAD-95-34)
Human Capital: A Self Assessment Checklist for Agency Leaders (GAO/GGD-99-179)	Framework for Implementation: Job Process Reengineering (GAO/OIMC-95-8)
Transforming the Civil Service: Building the Workforce of the Future: Results of a GAO-Sponsored Symposium (GAO/GGD-96-35)	Privatization: Lessons Learned by State and Local Governments (GAO/GGD-97-48)
Federal Quality Management: Strategies for Involving Employees (GAO/GGD-95-79)	Workforce Reductions: Downsizing Strategies Used in Selected Organizations (GAO/GGD-95-54)
Video Teletraining: A Guide to Design, Development, and Use (GAO/TI-95-1)	Business Process Reengineering Assessment Guide (GAO/AIMD-10.1.15)
Organizational Culture: Techniques Companies Use to Perpetuate or Change Beliefs and Values (GAO/NSIAD-92-105)	Best Practices Methodology: A New Approach for Improving Government Operations (GAO/NSIAD-95-154)
	Terms Related to Privatization Activities and Processes (GAO/GGD-97-121)
	Privatization: Questions State and Local Decisionmakers Used When Considering Privatization Options (GAO/GGD-98-87)

Accounting and Financial Management

International Federation of Accountants—www.ifac.org

IFAC is an organization of national professional accountancy organizations that represent accountants employed in public practice, business and industry, the public sector, and education as well as some specialized groups that interface frequently with the profession. This site provides access to publications and technical guidance related to accounting, auditing, financial management, and information technology.

American Institute of Certified Public Accountants—www.aicpa.org

This site provides online access to accounting publications like the Journal of Accountancy and the CPA Newsletter. In addition, “CPA Links” provides a gateway for online users who wish to visit other accounting-related sites on the Internet.

Association of Government Accountants—www.agacgfm.org

AGA is an educational organization dedicated to the enhancement of public financial management. AGA serves the professional interests of financial managers from local, state, and federal governments as well as public accounting firms.

Business Finance Magazine—www.businessfinancemag.com

This site maintains links to academic resources, accounting organizations, accounting and auditing resources, accounting software, business and management resources, government resources, and other noncommercial web sites.

FinanceNet—www.financenet.gov

FinanceNet serves as a vehicle and catalyst for continual improvement and innovation, at all levels of government, by impacting financial management resources, practices, policies, and professional standards through the electronic sharing of best practices and dissemination of electronic information. This site provides links to other federal financial management related sites such as the Federal Accounting Standards Advisory Board, Joint Financial Management Improvement Program, CFO Council, and federal finance offices.

Financial Accounting Standards Board—www.fasb.org

The mission of the Financial Accounting Standards Board is to establish and improve standards of financial accounting and reporting for the guidance and education of the public, including issuers, auditors, and users of financial information.

Governmental Accounting Standards Board—www.gasb.org

GASB’s mission is to establish and improve standards of state and local governmental accounting and financial reporting that will result in useful information for users of financial reports and guide and educate the public, issuers, auditors and users of reports.

Institute of Management Accountants—www.imanet.org

The IMA is a professional organization devoted to management accounting and financial management. This site provides for its members access to research databases, custom bibliographies, and full-text articles related to accounting and financial management.

Rutgers Accounting Web—www.rutgers.edu/Accounting/

This site includes a database of accounting research and publications. Other accounting organizations on this site include: Association of Government Accountants, American Accounting Association, Institute of Internal Auditors, Inc., Institute of Management Accountants, Financial Accounting Standards Board--FASB, and Governmental Accounting Standards Board--GASB.

Treasury Board of Canada Secretariat— www.tbs-sct.gc.ca

This site highlights the reports and assessment guides associated with Canada’s initiative to modernize its comptrollership function.

Auditing

AuditNet— www.auditnet.org

This site provides information links, tools, and resources developed for the benefit of the audit profession, including audit programs, best practices, and research services.

The Institute of Internal Auditors— www.theiia.org

For IIA members who are internal auditing practitioners, executive management, boards of directors, or audit committees, this site provides standards, guidance, and information on internal auditing best practices.

Internal Auditing World Wide Web— www.bitwise.net/iawww/index.html

This site promotes the sharing information and knowledge pertaining to the internal auditing profession across associations, industries, and countries.

Performance Management

The Balance Scorecard Institute— www.balancedscorecard.org

The Balanced Scorecard Institute is a web clearinghouse for managers to exchange information, ideas, and lessons learned in building strategic management systems using the balanced scorecard approach. This site provides guidance, information and tools to government and nonprofit managers as they attempt to design and implement measurement-based management in state, local, and federal government environments.

Hackett Benchmarking & Research— www.answerthink.com/hackett/

Hackett Benchmarking & Research maintains comprehensive, ongoing benchmarks of finance, human resources, information technology, planning/performance measurement, procurement, customer contact centers, and shared services centers.

Information Technology

The International Institute of Business Technologies, Inc.— www.iibt.org

IIBT is a nonprofit educational and research institution for advancing the management of business technologies in the public and private sectors in order to improve performance.

IT Governance Institute— www.itgovernance.org/itgi/

This web site is designed enhance the vital link between IT and enterprise governance by offering information and resources for efficiently and effectively deploying secure, reliable information and applied technology, and providing best practice guidance on the management of IT-related risks.

Carnegie Mellon Software Engineering Institute— www.sei.cmu.edu

The purpose of the Software Engineering Institute (SEI) is to improve the practice of software engineering.

Appendix VI

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Appendix VII

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Appendix VIII

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