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Business Process Reengineering Assessment Guide

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PREFACE

Business process reengineering (BPR) began as a private sector technique to help organizations fundamentally rethink how they do their work in order to dramatically improve customer service, cut operational costs, and become world-class competitors. A key stimulus for reengineering has been the continuing development and deployment of sophisticated information systems and networks. Leading organizations are becoming bolder in using this technology to support innovative business processes, rather than refining current ways of doing work. Not surprisingly, BPR has captured the interest of federal agencies, which are faced with an urgent need to reduce costs and improve service to the American public.[1] This guide is designed to help auditors review business process reengineering projects in a federal setting, determine the soundness of these efforts, and identify actions needed to improve the prospects for their success.

The nine major assessment issues in this guide deal with elements considered by experts to be stepping stones to successful business process reengineering. These issues cover a wide range of activities, such as identifying customer needs and performance problems, reassessing strategic goals, defining reengineering opportunities, managing reengineering projects, controlling risks and maximizing benefits, managing organizational changes, and successfully implementing new processes. Taken together, the issues in this guide provide a general framework for assessing a reengineering project, from initial strategic planning and goal-setting to post-implementation assessments.

COMMENTS ON THIS GUIDE

This guide was developed by the Information Resources Management Policies and Issues Group, under the direction of Jack L. Brock, Jr. If you have questions or comments on it, please contact John P. Finedore, Assistant Director, at (202) 512-6248 (finedorej.aimd@gao.gov) or Deborah A. Davis, Assistant Director, at (202) 512-6261 (davisd.aimd@gao.gov). We plan to periodically revise the guide based on comments from users, private sector and government reengineering experiences, and our own assessments. Other contributors to this guide are Mark Bird, John Christian, Mike Alexander, Tom McDonald, Sharon Caudle, and Danny Latta.

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[1]See, for example, Reengineering for Results: Keys to Success From Government Experience, Center for Information Management, National Academy of Public Administration, 1994 (along with its 1995 update); Creating a Government That Works Better & Costs Less: Reengineering Through Information Technology, National Performance Review, 1993 (with annual update reports); and Reengineering Organizations: Results of a GAO Symposium (GAO/NSIAD-95-34, December 1994).

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TABLE OF CONTENTS

INTRODUCTION

Federal agencies are being challenged to reduce the cost of government while improving their performance. As noted in GAO's executive guide on strategic information management,[2] achieving major levels of cost savings and performance improvement nearly always requires that agencies redesign the business processes they use to accomplish their work. Many of the largest federal agencies find themselves encumbered with structures and processes rooted in the past, aimed at the demands of earlier times, and designed before modern information and communications technology came into being. These agencies are poorly positioned to fulfill their mission and meet their strategic goals. They need to consider replacing outmoded work processes with streamlined ones that more effectively serve the needs of the American public.

The need for agencies to reassess their business processes was recognized in the Clinger-Cohen Act of 1996. Among the provisions of this landmark information management reform, agencies are required to determine whether their administrative and mission-related business processes should be improved before investing in major information systems to support them. In addition, the Office of Management and Budget (OMB) has reenforced this by requiring that investments in major information systems proposed for funding in the President's budget should, among other things, support work processes that have been simplified or otherwise redesigned to reduce costs and improve performance.[3] This recent legislation builds on other general management reforms. The Government Performance and Results Act of 1993 provides the framework for defining and measuring how well an agency is meeting its mission goals. And the Chief Financial Officers Act of 1990 addresses the need for agencies to have accurate financial information to understand and manage their operations.

BUSINESS PROCESS REENGINEERING: ONE MEANS TO PERFORMANCE IMPROVEMENT

Business process reengineering is one approach for redesigning the way work is done to better support the organization's mission and reduce costs. Reengineering starts with a high-level assessment of the organization's mission, strategic goals, and customer needs. Basic questions are asked, such as "Does our mission need to be redefined? Are our strategic goals aligned with our mission? Who are our customers?" An organization may

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[2]Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994).

[3]OMB Memorandum of October 25, 1996, "'Funding Information Systems Investments," often referred to as the "Raines' Rules."

find that it is operating on questionable assumptions, particularly in terms of the wants and needs of its customers. Only after the organization rethinks *what* it should be doing, does it go on to decide *how* best to do it.

Within the framework of this basic assessment of mission and goals, reengineering focuses on the organization's *business processes*--the steps and procedures that govern how resources are used to create products and services that meet the needs of particular customers or markets. As a structured ordering of work steps across time and place, a business process can be decomposed into specific activities, measured, modeled, and improved. It can also be completely redesigned or eliminated altogether. Reengineering identifies, analyzes, and redesigns an organization's core business processes with the aim of achieving dramatic improvements in critical performance measures, such as cost, quality, service, and speed.

Reengineering recognizes that an organization's business processes are usually fragmented into subprocesses and tasks that are carried out by several specialized functional areas within the organization. Often, no one is responsible for the overall performance of the entire process. Reengineering maintains that optimizing the performance of subprocesses can result in some benefits, but cannot yield dramatic improvements if the process itself is fundamentally inefficient and outmoded. For that reason, reengineering focuses on redesigning the process *as a whole* in order to achieve the greatest possible benefits to the organization and their customers. This drive for realizing dramatic improvements by fundamentally rethinking how the organization's work should be done distinguishes reengineering from process improvement efforts that focus on functional or incremental improvement.

As will be emphasized in this guide, reengineering is not a panacea. There are occasions when functional or incremental improvements are the method of choice, as when a process is basically sound or when the organization is not prepared to undergo dramatic change. But given the need to achieve "order of magnitude" improvements in many areas of government, agencies should consider whether they have areas where reengineering might be appropriate. The first three assessment issues in this guide focus on this very issue.

HOW THIS GUIDE WAS DEVELOPED

Our guide is a distillation of elements typically emphasized in process redesign and reengineering methodologies. The assessment questions deal with issues and activities that reengineering practitioners have found to be critical in defining reengineering opportunities and goals, ensuring that reengineering projects are well managed, maximizing the return on resources invested in reengineering (including information systems), and managing the many changes needed to implement a redesigned work process.

To develop these assessment questions, we consulted with outside experts in the area of public and private sector process redesign and reengineering to define the key concepts and general approaches that were being taken to develop and implement new business processes. We supplemented these discussions by reviewing the growing body of literature and methodologies on process redesign and reengineering that have been published by consulting firms and individual practitioners. Within GAO, we consulted with staff having experience and expertise in areas germane to this subject, including government results and performance issues, strategic information management, performance measurement and benchmarking, and information systems design and implementation. A draft of this guide was reviewed by reengineering practitioners, listed in appendix III, from the private sector and state and federal agencies.

HOW THIS GUIDE IS ORGANIZED

The guide has nine assessment issues that are grouped into three major areas. The first area, *Part A: Assessing the Agency's Decision to Pursue Reengineering*, focuses on strategic and general management issues that need to be resolved before an agency[4] embarks on a reengineering project. It includes the following assessment issues:

Assessment Issue 1:	Has the Agency Reassessed Its Mission and Strategic Goals?
Assessment Issue 2:	Has the Agency Identified Performance Problems and Set Improvement Goals?
Assessment Issue 3:	Should the Agency Engage in Reengineering?

Part B: Assessing the New Process' Development picks up at the point where the agency has decided to begin a reengineering project. The assessment issues focus on the management of the reengineering team, the team's process redesign activities, and the business case it develops to support a decision to begin implementing the new design:

Assessment Issue 4:	Is the Reengineering Project Appropriately Managed?
Assessment Issue 5:	Has the Project Team Analyzed the Target Process and Developed Feasible Alternatives?
Assessment Issue 6:	Has the Project Team Completed a Sound Business Case for Implementing the New Process?

[4]We use the word "agency" throughout this guide to refer generically to any federal department, agency, bureau, or office.

The last section, *Part C: Assessing Project Implementation and Results*, deals with the problems involved in piloting and deploying a new business process. Both the human and technical issues surrounding implementation are touched on, along with the need to evaluate the performance and results of the new process:

Assessment Issue 7:	Is the Agency Following a Comprehensive Implementation Plan?
Assessment Issue 8:	Are Agency Executives Addressing Change Management Issues?
Assessment Issue 9:	Is the New Process Achieving the Desired Results?

Under each of the nine issues, we list several "key activities" that the agency typically should do to develop the information, manage the risks, and make the decisions needed at that point. For each of the key activities, we provide a short discussion highlighting its significance, along with a list of "key assessment questions" that evaluators can use to probe how well the organization has addressed the issue. Because reengineering is very situational, these questions are framed at a high level, delineating the general line of inquiry that evaluators should pursue. Evaluators will need to augment these high-level questions with specific subquestions of their own that are designed to explore the agency's specific circumstances.

RELATION OF THIS GUIDE TO GENERAL MANAGEMENT LEGISLATION

Many of the issues in this guide are reflected in recent management reform legislation, particularly the Government Performance and Results Act of 1993 (GPRA), the Chief Financial Officers Act of 1990 (CFO), the Paperwork Reduction Act of 1995 (PRA), and the Clinger-Cohen Act of 1996.

Reengineering starts at the same place as GPRA, by calling for a careful reassessment and (if necessary) a redefinition of an organization's mission, goals, customers, and performance outcomes. GPRA requires agencies to anchor performance improvement in sound strategic planning.[5] Federal agencies are to develop a strategic plan that includes a comprehensive mission statement, outcome-related strategic goals, and a description of how the agency intends to achieve those goals. In doing this, agencies are to consult with their customers and stakeholders, as well as the Congress, and take into account other

[5]The performance improvement approach specified by GPRA is consistent with how successful public and private sector organizations pursued management reform initiatives and became more results-oriented. See Executive Guide: Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118, June 1996).

factors in the general environment that affect their ability to accomplish their missions. As mentioned earlier, agencies need to define their strategic direction (*where* they need to go and *what* they need to accomplish) before expending time and resources on improving *how* they do their work. Only then can an agency be in a position to assess whether its activities, business processes, and resources are properly aligned to support its mission and achieve desired outcomes.

The CFO Act focuses on the need to significantly improve the government's financial management and reporting practices. Having appropriate financial systems with accurate data is critical to measuring performance and reducing the costs of agency operations.

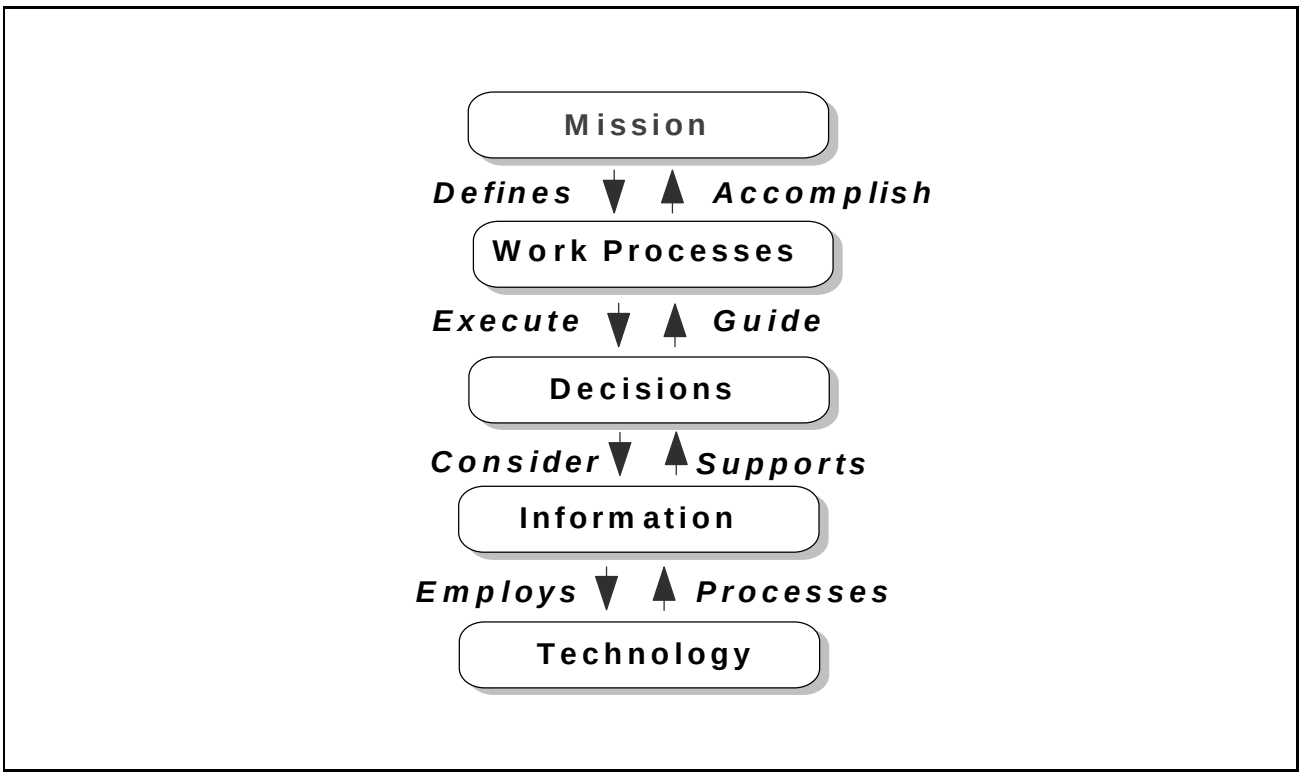
The PRA and the Clinger-Cohen Act emphasize achieving program benefits and meeting agency goals through the effective use of information technology. For example, the Clinger-Cohen Act explicitly requires agency heads to analyze the missions of their organizations, benchmark and assess the performance of their business processes and, based on this analysis, redesign their mission-related and administrative processes (as appropriate) before making significant investments in information technology to support those missions. In plain terms, agencies should maximize the potential of technology to improve performance, rather than simply automating inefficient processes.

REENGINEERING AND INFORMATION TECHNOLOGY

Given this legislation, a key assessment issue for evaluators is determining whether major agency investments in information technology will in fact support a redesigned business process. The issues in this guide provide a framework for determining whether an agency is, in fact, engaged in reengineering a process.

As indicated in figure 1, work processes, information needs, and technology are interdependent. When a reengineering project leads to new information requirements, it may be necessary to acquire new technology to support those requirements. It is important to bear in mind, however, that acquiring new information technology does not constitute reengineering. Technology is an *enabler* of process reengineering, not a substitute for it. Acquiring technology in the belief that its mere presence will somehow lead to process innovation is a root cause of bad investments in information systems. The Clinger-Cohen Act seeks to remedy this by insisting that process redesign drive the acquisition of information technology, and not the other way around.

Figure 1: Relationship of Mission and Work Processes to Information Technology

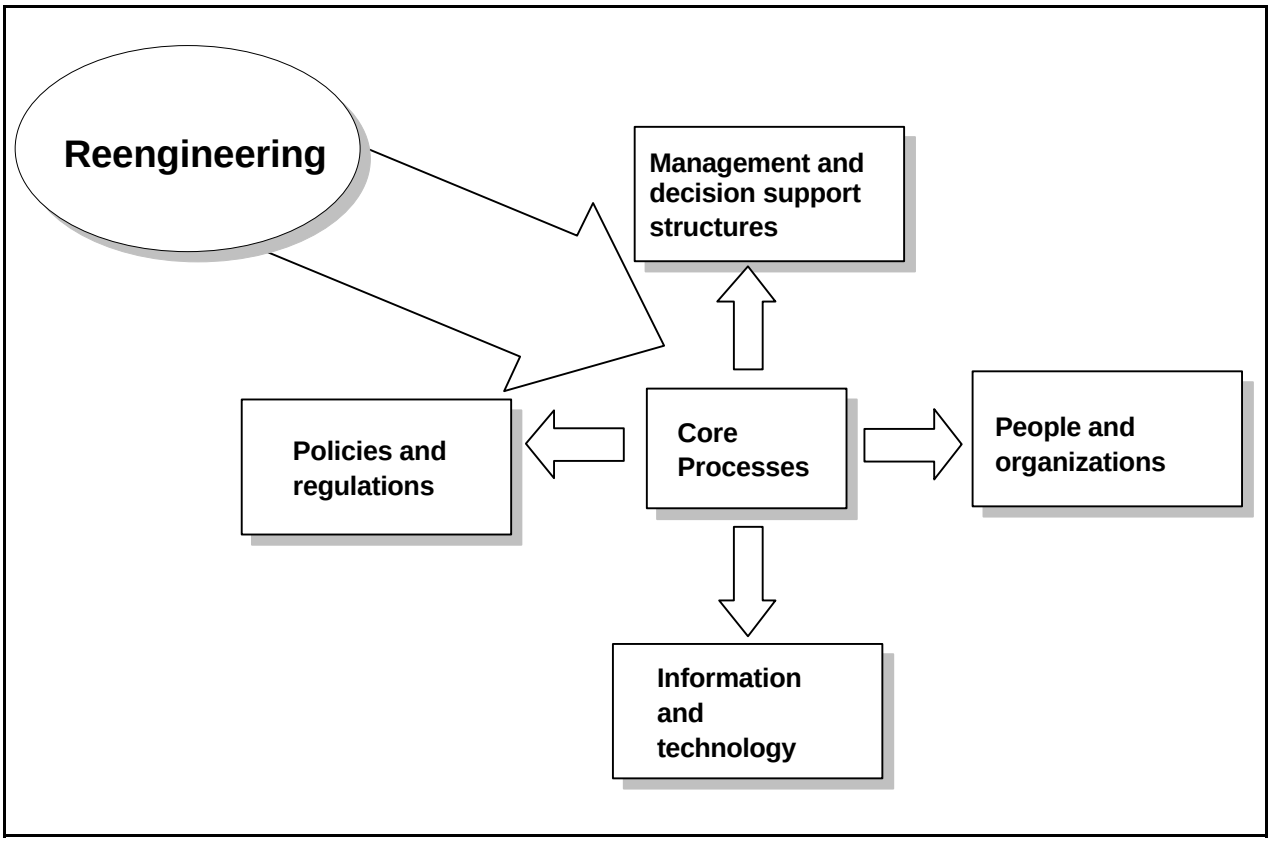


Further guidance on the relationship between process reengineering and technology investment decision-making can be found in Information Technology Investment: Agencies Can Improve Performance, Reduce Costs, and Minimize Risks (GAO/AIMD-96-64, September 30, 1996) and in Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-Making, Version 1 (GAO/AIMD-10.1.13, February 1997).

CAVEATS TO THE USER

As illustrated in figure 2, reengineering a business process drives changes in other aspects of the organization that support and control the process.

Figure 2: Reengineering Drives Many Changes



Because so many issues are interconnected in reengineering, evaluators need to scope their assessments broadly and take a holistic view of the effort. For example, an agency that is in the midst of designing a new process should have previously laid a solid foundation for change by clarifying its mission, identifying customer and stakeholder needs, assessing performance problems, setting new performance goals, and determining that reengineering is an appropriate approach to take. Even implementation issues need to be considered in the early stages of the project, so that executives can begin preparing the agency for changes in goals, values, and responsibilities.

Furthermore, although the nine issues in this guide are presented in a sequence, many of them include activities that should be occurring throughout the reengineering effort. For example, strong executive leadership in leading the effort and managing change (issue 3) should be a constant force from start to finish. Without it, even the best process design may fail to be accepted and implemented. Similarly, the business case for reengineering (issues 3 and 6) should be a dynamic document that is periodically updated to reflect changes in costs, benefits, risks, customer needs, agency priorities, and other key factors.

One final caveat. Evaluators should keep in mind that this guide provides a *general framework* for assessing key reengineering issues. It is not intended to be a compliance-oriented checklist or to prescribe a specific, rigid set of steps for conducting a reengineering project. Reengineering is far too situational for such a rigid approach. Evaluators will need to use good judgment in applying this guide to an agency's specific circumstances. The overall aim should be to help the agency understand the issues, problems, and risks that are encountered in reengineering, so that the agency can manage them effectively and bring its project to a successful conclusion.

OTHER SOURCES OF INFORMATION

The bibliography in appendix II provides sources for more information on reengineering. Detailed information on any topic in this guide can be found in many of the books and articles listed.

In addition, information on related topics, such as strategic information management, systems development, information management, and financial management is available in the following GAO guides and methodologies:

- Strategic Information Management (SIM) Self-Assessment Toolkit (Exposure draft) October 28, 1994.

- Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-making, Version 1 (GAO/AIMD-10.1.13, February 1997).

- The System Assessment Framework, Version 1.0, A Guide for Reviewing Information Management and Technology Issues in the Federal Government (GAO/AIMD-10.1.12, August 1996).

- Financial Audit Manual (GAO/AFMD-12.19.5A, June 1992).

FRAMEWORK FOR ASSESSING REENGINEERING

- **Part A: Assessing the Agency's Decision to Pursue Reengineering**
- **Part B: Assessing the New Process' Development**
- **Part C: Assessing Project Implementation and Results**

PART A

ASSESSING THE AGENCY'S DECISION TO PURSUE REENGINEERING

Assessment Issue 1:	Has the Agency Reassessed Its Mission and Strategic Goals?
Assessment Issue 2:	Has the Agency Identified Performance Problems and Set Improvement Goals?
Assessment Issue 3:	Should the Agency Engage in Reengineering?

Federal agencies are under increased pressure to perform better with fewer resources. The impetus to improve comes from (1) recognition that agency budgets cannot continue to grow like they have in the past and (2) legislation--specifically, GPRA and the Clinger-Cohen Act. These laws focus on analyzing missions, assessing agencies' performance, revising processes, and achieving results. Measuring how well the agency's core business processes perform in terms of cost, quality, and timeliness in serving customers helps the agency prioritize areas for improvement, decide whether reengineering is in order, and make a compelling argument for investing time and resources in redesigning a process to achieve better results. The issues, activities, and questions discussed in this section are intended to help evaluators assess an agency's decision to pursue reengineering as a means of bringing about major improvements in performance.

ASSESSMENT ISSUE 1

HAS THE AGENCY REASSESSED ITS MISSION AND STRATEGIC GOALS?

Key Activities for the Agency:

- Reassess the agency's mission and priorities.
- Reassess how well the agency's products, services, and delivery modes align with the needs of its customers and stakeholders.
- Identify and assess the impact of other change drivers, such as changing mission, demographic shifts, budget cuts, and downsizing.
- Define and map the business processes that are key to meeting customer and stakeholder needs.

Before a decision on whether to reengineer can ever be made, federal agencies must clearly know their mission and have established strategic goals that explain the purposes of the agency's programs and the results they are intended to achieve. Well-defined missions and strategic goals form the foundation for the key business systems and processes and thus help ensure the successful outcome of their operations. Leading organizations strive to ensure that their day-to-day activities support their organizational missions and move them closer to accomplishing their strategic goals. Such strategic planning is also required by GPRA. Under GPRA, agencies must consult with both the Congress and other stakeholders in developing missions and strategic goals. They must also identify the external factors that could affect their ability to accomplish what they set out to do.

1.1 Has the Agency Reassessed Its Mission, Outlook, and Priorities?

Unlike many private sector companies, a federal agency cannot independently make major shifts in mission, lines of business, and customer base. However, there is pressure from both executive and legislative branches--as evident in the passing of GPRA--for federal agencies to take a hard look at their roles and responsibilities. Reassessing customer and stakeholder needs and other change drivers helps the agency to reevaluate and clarify its

strategic vision and goals. It also fosters an understanding of the source, nature, and priority of demands on its resources.

This reassessment helps provide direction and focus for an agency's efforts to improve its performance. For example, the reassessment could show that over time, goals, priorities, and activities that were once key elements of its original mission are now much less important. Similarly, new issues and mandates may have arisen that have become major activities for the agency--perhaps even its main business--thereby calling for changes in mission priorities. Further, some activities may no longer need to be done, or could be better performed by other federal agencies, state and local governments, or the private sector.

Key Assessment Questions

- Has the agency identified important changes that could result in a major redefinition of roles and restructuring of the agency?
- Is the agency's strategic planning focused on highest priority customer and stakeholder needs and mission goals?
- Has the agency developed explicit mission goals that involve tailoring products and services to the needs of key customer groups?
- Has the agency revised its strategic plan, as appropriate, and formed a consensus on the goals it is trying to accomplish, for whom, and by when?

1.2 Are the Agency's Products and Services Aligned with Customer and Stakeholder Needs?

Reengineering is customer-focused and outcome-oriented. Before an agency embarks on a reengineering effort, it should have a comprehensive understanding of who its current and future customers are and what their needs and expectations are as key input for improving the type, cost, quality, and timeliness of the products and services provided. It is also important to consider the business needs of the staff working within the agency (internal customers) and third parties outside the formal boundaries of the agency who are involved in delivering the services and products, such as state and local governments which help administer a federal program.

Along with customers, stakeholders are another important source of requirements. External stakeholders include the Congress, oversight bodies, key interest groups, and others who oversee, fund, or are affected by the agency's activities. Internal stakeholders include agency staff who would be directly and personally affected by changes in a particular business process. Stakeholders have a great impact on any improvement effort

and, when ignored, can jeopardize the success of the effort. While it is impractical to satisfy the needs of all stakeholders, the agency should identify and prioritize key stakeholders' needs and identify areas of consensus, where support for improvement is naturally strong. It is also important to identify areas of fundamental disagreement that may make process improvement much more difficult to achieve.

Key Assessment Questions

- Has the agency identified the external customer base for each of its major products and services?

- Has the agency identified the external customers' current and anticipated needs, expectations, and priorities for each major product and service? What are their relative importance in the customers' eyes? What means did the agency use to identify and validate the customers' needs, values, and priorities (interviews, focus groups, surveys)?

- Has the agency identified its internal customers and third party providers and their needs and expectations insofar as they affect the key processes that provide products and services to external customers? Has the agency analyzed how projected demographic changes may affect its customer base?

- Is the agency using external and internal customer requirements to make major decisions about strategic goals, budgeting, and resource allocations? Is the agency focusing more attention on satisfying the requirements of its internal customers rather than its external customers?

- Has the agency identified stakeholders for each major product and service? Has the agency identified and documented their needs, concerns, and priorities?

- Has the agency identified the key areas of agreement and disagreement among customer and stakeholder groups regarding mission, strategic goals, products and services, and performance? How serious are the differences? How well has the agency been able to broker trade-offs in these areas of disagreement?

- Has the agency analyzed whether its products and services are aligned with customer and stakeholder needs and business goals?

- Has the agency analyzed whether its products and services are being delivered in ways that best meet these needs?

1.3 Has the Agency Identified Other Forces for Change?

Along with customer and stakeholder expectations and needs, other factors can be powerful motivators for undertaking major performance improvements, such as cabinet-level policy initiatives, budget and personnel reductions, pending reorganizations, devolution of functions to the state and local level, widespread pressure for governmental reform, and documented problems with fraud, waste, or abuse. The agency should determine which of these factors must be considered in assessing the need to change.

Key Assessment Questions

- What other factors has the agency identified that are driving it to change business processes and achieve dramatic improvements in performance?

- Has the agency considered the impact of these change drivers in its strategic planning?

1.4 Has the Agency Defined and Mapped Its Mission-Critical Business Processes?

Agencies need to develop a common understanding of the processes they use to produce their products and services before they can set about to improve them. Like large private sector organizations, agencies can have a confusing web of interconnected processes and subprocesses, many of which cut across several functional departments. It is important to define what the components of each process are, as well as the process' boundaries, dependencies, and interconnections with other processes.

As a start, the agency should map each of its core processes at a high level. High-level process mapping typically results in a graphic representation depicting the inputs, outputs, constraints, responsibilities, and interdependencies of the core processes. This high-level map provides managers and staff with a common understanding of how the processes work and how they are interconnected. This mapping should be done quickly. As discussed in assessment issue 5, more detailed mapping is done after a process has been selected for reengineering.

Key Assessment Questions

- Has the agency identified its core business processes for each major product and service? Have the processes been mapped at a high level?

- Do the agency's process maps show the connections and interrelationships between core processes?

- Do the agency's process maps show the complete chain of related activities within the agency?

1.5 Criteria

- The Clinger-Cohen Act of 1996 (P. L. 104-106, Division E; February 10, 1996).
  Sections: 40 USC 1413(b)(2)(C)
  40 USC 1423(5)

- The Government Performance and Results Act of 1993 (P. L. 103-62, August 3, 1993).
  Section: 5 USC 306

- OMB Circular A-11, "Preparation and Submission of Budget Estimates," June 13, 1996.
  Section: OMB A-11 43.2(b)

- OMB Circular A-130, "Management of Federal Information Resources," February 8, 1996
  Sections: OMB A-130 App. IV 8b(1)
  OMB A-130 8b(3)(b)

- Executive Guide: Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118, June 1996). See practices under Step 1: Define mission and desired outcomes.

- Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994). See Practice 4: Anchor strategic planning in customer needs and mission goals.

ASSESSMENT ISSUE 2

HAS THE AGENCY IDENTIFIED PERFORMANCE PROBLEMS AND SET IMPROVEMENT GOALS?

Key Activities for the Agency:

- Measure performance and identify problems in meeting mission goals and the needs of customers and stakeholders.
- Benchmark against the goals and performance of leading organizations.
- Establish ambitious performance improvement goals that are mission-oriented and meaningful to customers and stakeholders.
- Select and prioritize processes to be improved.

Leading organizations recognize that improvement goals should flow from a fact-based performance analysis and be directed at achieving organizational missions. These organizations typically assess which of their processes are in greatest need of improvement in terms of cost, quality, and timeliness. By analyzing the gap between where they are and where they need to be to achieve desired outcomes, agencies can target those processes that are in most need of improvement, set realistic improvement goals, and select an appropriate process improvement technique. One method often used is benchmarking. Benchmarking provides reference points for defining ambitious, yet achievable, performance goals and also helps the agency learn methods that others have used to improve their business processes.

2.1 Has the Agency Assessed the Gaps Between Current Performance and Customer/Stakeholder Needs?

Measuring the performance of its major processes helps an agency to determine how well it is meeting its mission goals. Processes with gaps between desired and actual performance are, by definition, candidates for improvement. Small gaps can often be bridged with a narrowly focused improvement effort. Processes with very large gaps may be so fundamentally inefficient that they need to be completely reengineered in order to meet performance goals.

Ideally, under GPRA, an agency should have measures for all its major processes to track cost, quality, and timeliness. Cost covers the resources needed to produce and deliver the products and services. Quality covers things such as reduction or elimination of errors or rejects and rework, as well as the customers' satisfaction with the products and services. Timeliness concerns not only the amount of time it takes to complete the process, but also how long it takes to deliver the output to customers.

It is important that performance measures not be focused only on internal operations. Measures also need to capture performance from the customers' point of view--cost to the customers in terms of time or expense, the quality of the product or service as delivered, and the speed with which the customers' needs are satisfied.

Key Assessment Questions

- Does the agency use performance measures consistent with the requirements of GPRA to determine how well it is meeting desired outcomes and to identify and assess any performance problems?

- What indicators (quality, cost, time, etc.) are used for each core process? Are these indicators adequate for measuring current and future performance requirements?

- Has the agency involved customers and stakeholders in developing the performance indicators?

- How well is the agency performing in relation to customer expectations?

    a. Has the agency identified any gaps between customer needs and current performance?
    b. How satisfied are customers and stakeholders with the current performance levels of the agency? How has the agency ascertained this?
    c. What, if any, performance information does the agency have for the past several years to show performance trends for each core process?
    d. What do the trends suggest as to the adequacy of the processes to meet future demands by customers and stakeholders?

2.2 Has Current Performance Been Benchmarked Against Leading Organizations?

Benchmarking is the comparison of core process performance with other components of the agency (internal benchmarking) or with leading organizations (external benchmarking). Benchmarking is a key tool for performance improvement because it provides "real world" models and reference points for setting ambitious improvement

goals. Benchmarking helps to (1) identify the gaps between the agency's process performance and that of leading organizations and (2) understand how these leaders have changed their structures, work processes, and lines of business to improve performance dramatically. When used in conjunction with performance measurement, benchmarking provides a powerful means of establishing a compelling business case for change.

Many processes that seem unique to the government actually have counterparts in the private sector, especially in generic areas such as claims processing, loan management, real property maintenance, logistics, inventory management, etc. Also, it is important to note that the benchmarking partner does not have to be a similar organization, or even do similar work. For example, Xerox used L.L. Bean to improve order fulfillment. Looking at processes in dissimilar organizations can actually lead to the most fruitful improvements because it stimulates new thinking about traditional approaches to doing work.

Key Assessment Questions

- Has the agency benchmarked the performance of its core processes against internal or external benchmark partners?
- How did the agency select its benchmarking partners? Were dissimilar organizations included? Were state and local governments known for excellence in innovation included?
- Were the customer interfaces of the processes benchmarked?
- What were the benchmarking results and how is the agency using these results in establishing performance goals?

2.3 Are Improvement Goals Focused on Outcomes Important to Customers and Stakeholders?

Using customer and stakeholder performance requirements, performance measurement data, benchmarking results, and an analysis of other change drivers, the agency should identify and assess the performance gaps between its current performance and customer/stakeholder requirements and then set improvement goals for bridging the gaps. These improvement goals should be sharply focused on outcomes linked to the agency's defined mission and what needs to be accomplished.

The goal-setting process requires careful consideration. Performance goals should be realistically achievable to avoid negative consequences if they are not met, such as employee disillusionment or customer dissatisfaction. Ambitious goals, for example, may need to be broken into increments and staged in over time. On the other hand, setting

goals that are too modest can be counterproductive. They may lead the agency to focus on optimizing current work processes that are inherently inadequate, thereby further entrenching them and making them more difficult to change. "Stretch" goals help challenge and motivate an agency to fundamentally rethink how it does its work.

Key Assessment Questions

- Has the agency developed goals based on a careful, fact-based analysis of its performance and environment and has the agency linked the goals to mission, customer needs, and current performance?

- Has the agency stated its goals in measurable terms, such as cost, quality, and timeliness?

- Do the goals drive improvements that are valued by customers and stakeholders?

- Do the goals challenge the agency to achieve performance improvements comparable to those achieved by industry leaders?

- Has the agency established a sound performance measurement system that produces measures at each organizational level that demonstrate results, are limited to the vital few, respond to multiple priorities, and link to responsible programs?

- Has the agency systematically linked its improvement goals to the agency's strategic planning and budget decisions?

2.4 Has the Agency Selected and Prioritized Processes for Improvement?

As a first step, the agency should decide which process performance gaps must be narrowed or closed, either because of current performance problems or gaps anticipated for the future. The result should be a list of processes or major subprocesses that are candidates for improvement.

The agency then should decide which processes or major subprocesses should have the highest priority for agency action, based on formal selection criteria. The selection criteria might emphasize:

- processes with the strongest link to organizational mandate and mission, and the highest impact on customers;

- processes with the biggest potential return on the resources invested in improving them (e.g., processes that cut across several functional units where opportunities to reduce hand-offs, reviews, cycle time, and costs may be greatest);

- processes where change management issues can be more easily resolved because there is strong consensus among the organization, stakeholders, and customers on the need for change;

- processes that can be redesigned with currently available resources and infrastructure;

- less complex processes where improvement goals can be achieved within a short period of time and experience can be gained in reengineering.

The selection criteria should be clearly articulated, since it will become an important element in creating a convincing business case for change.

Key Assessment Questions

- Has the agency identified any performance gaps where dramatic improvements are needed, indicating candidates for business process reengineering?

- Which core processes and subprocesses have been targeted for improvement? What performance improvement goals have been set for them?

- Given the strategic vision and goals of the agency, the performance gaps, customer and stakeholder needs, and other change drivers, has the agency targeted the most critical products and services?

- What selection criteria were used to prioritize and target processes for improvement?

- Were customers' and stakeholders' viewpoints included in making the selections?

2.5 Criteria

- The Clinger-Cohen Act of 1996 (P.L. 104-106, Division E; February 10, 1996). Section: 40 USC 1423(4)

- The Paperwork Reduction Act of 1995, as amended (P.L.104-13, May 22, 1995). Section: 44 USC 3506(b)(3)(C)

- The Government Performance and Results Act of 1993 (P. L. 103-62, August 3, 1993).
  Sections: 5 USC 306
  31 USC 1115
  31 USC 1116

- The Chief Financial Officers Act of 1990, as amended (P.L. 101-576, November 15, 1990).
  Section: 31 USC 902(a)(3)

- OMB Circular A-11, "Preparation and Submission of Budget Estimates," June 13, 1996.
  Sections: OMB A-11 15.6
  OMB A-11 34.1

- OMB Circular A-130, "Management of Federal Information Resources," February 8, 1996.
  Section: OMB A-130 App. IV 8b(1)

- Executive Guide: Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118, June 1996). See practices under Step 2, Measure Performance.

- Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology, (GAO/AIMD-94-115, May 1994). See Practice 1: Recognize and communicate the urgency to change information management practices; Practice 4: Anchor strategic planning in customer needs and mission goals; and Practice 5: Measure the performance of key mission delivery processes.

- Government Business Process Reengineering (BPR) Readiness Assessment (General Services Administration, November 1996). See section on "Develop Performance Measures."

ASSESSMENT ISSUE 3

SHOULD THE AGENCY ENGAGE IN REENGINEERING?

Key Activities for the Agency:

- Decide whether any of the processes needing improvement should be reengineered.
- Assess the agency's readiness to engage in a reengineering project.
- Develop and communicate a compelling business case for initiating a reengineering project.
- Integrate the reengineering project into the agency's overall strategy for improving mission performance.
- Develop and begin implementing a change management plan.

After completing the previous activities, the agency should know which of its core processes needs improvement in order to fulfill mission goals, satisfy customer and stakeholder needs, reduce costs, and provide high-quality products and services. If the gap between current performance and agency goals is large, business process reengineering may be an appropriate course of action. However, before engaging in a reengineering project, executives need to understand and accept their critical role in managing the fundamental organizational and cultural changes involved in reengineering. They must also determine whether the agency has the skills needed to pursue a reengineering project successfully. Training, tools, and external support may be needed.

If the agency decides to initiate a reengineering project, it should begin to develop and communicate a compelling business case to customers and stakeholders that supports this decision. The business case is a critical step in change management because it helps to build early support for reengineering both within the agency and among customers and stakeholders. Initially, the business case will be a high-level definition of the performance problem being addressed, the objective and scope of the reengineering effort, action steps, responsible parties, and time frames. It establishes the conceptual foundation for the reengineering effort. As the project team completes its process redesign work, the business case will be enlarged and updated to present a full picture of the benefits, costs, and risks involved in moving to a new process.

3.1 Should Any of the Agency's Poorly Performing Processes Be Targeted for Reengineering?

As discussed in assessment issue 2, the agency should have identified and prioritized the processes that need improvement. The agency now needs to choose appropriate improvement approaches for improving them and integrate these efforts into a comprehensive improvement program.

When should reengineering be considered? Several broad screening criteria could be used, which build upon information gathered in the first two assessment questions.

- Is the process of strategic importance to the agency's mission?
- Does the process urgently need dramatic improvement in order to meet the agency's own performance goals?
- Is there a high level of customer and/or stakeholder dissatisfaction with the process (quality, timeliness, cost)?
- Does the process have a long cycle time with many sequential activities, multiple hand offs, checkpoints, and significant waiting time between work steps (e.g., processing a benefits claim)?
- Did benchmarking show that other organizations can do the same (or analogous) process much better?
- Is the process highly dependent on information, so that information technology might be used to speed the work flow, collapse work steps, and improve realtime decision-making?

In addition to considering these generic criteria, the agency will need to define selection criteria that are specific to its particular situation and goals.

Key Assessment Questions

- Did the agency consider a full range of improvement approaches in dealing with its performance problems (e.g., continuous process improvement, outsourcing, streamlining, and privatizing, as well as reengineering)?
- Is it apparent from the selection process that the agency understands the tradeoffs involved in choosing one improvement approach over the other in terms of resources, costs, risks, return on investment, and time to complete?

- What decision criteria did the agency follow to select the process(es) targeted for a reengineering project? Did the criteria take into account the type of information that should have been developed under the first two assessment issues and the criteria listed in question 3.1 above?

3.2 Is the Agency Ready to Engage in Reengineering?

An agency can rush into reengineering without a good understanding of what it is getting into. Although reengineering may be the preferred approach, success does not come easily. Reengineering is fraught with political, organizational, process, and people issues that must be well managed for the effort to succeed. Assuming that the agency has a *candidate* process for reengineering, the agency head and top executives need to assess readiness of themselves and the agency to pursue reengineering.

The first and, by far, the most critical readiness factor to consider is the need for strong executive leadership. There is no substitute for the personal involvement and support of the agency head and top executives in the reengineering effort. Before embarking on a reengineering project, the agency's executives need to understand that the effort will demand much of their personal attention and involvement. Executives must play major roles in (1) continually communicating the purpose and goals of the reengineering effort to customers and stakeholders, (2) demonstrating personal involvement and support at all stages of the reengineering effort in order to maintain its momentum, and (3) managing the potentially extensive changes to the agency's organizational structure and values that may be needed to implement the new process. These roles cannot be delegated without significant loss of credibility regarding the seriousness of the effort.

Executives must also assess whether the agency possesses all of the skills needed to pursue reengineering. They may find that the agency needs to make a significant investment in providing the training, tools, resources, and expert advice needed to carry out a reengineering project. Also, if the agency has not engaged in reengineering before, it may need to develop experience in reengineering on smaller-scale projects before engaging in larger efforts. Consultants can help guide an agency's effort, especially by providing a methodology for structuring the project and special skills for process analysis. However, the agency should have enough of a skill base so that it can retain leadership and control over the project and carry out most of the work.

Key Assessment Questions

- Do the agency head and the top executives have a basic understanding of the principles of reengineering, through training or experience?

- Do the agency head and the top executives actively demonstrate their commitment to the reengineering effort (participation in planning, making presentations,

engaging in worksite discussions, meeting with customers and stakeholder groups, etc.)?

- Has the agency assessed what reengineering skills and tools it has available internally? Are staff skills, tools, and experience adequate for carrying out a major reengineering project?

- What plan does the agency have to develop needed reengineering skills?

- To what extent must the agency rely on help from other sources (consultants, federal agencies) to fill shortcomings in skills? Does the agency have enough of a skill base so that it can lead the reengineering project itself, rather than turning it over to an outside source?

3.3 Has the Agency Developed an Initial Business Case for Starting a Reengineering Project?

If the agency decides reengineering a process is the appropriate course of action, it should create an initial business case for going forward with a reengineering project. The initial business case should include a discussion of legislative mandates and mission goals, customer and stakeholder expectations, performance problems with target process, opportunities to improve based on benchmark organizations, and other factors for change. It also should cover the consequences of not achieving dramatic improvements in the target process and how this failure to act would impair the capability of the agency to carry out its mission. The business case should also touch on the potential political ramifications of making fundamental changes to the current process, both positive and negative.

This initial business case is essentially a high-level document aimed at convincing customers and stakeholders that reengineering the selected process is the appropriate means for achieving performance and cost-savings goals. It is a key tool for agency executives to use in communicating the rationale and objectives of the reengineering effort and for managing expectations, particularly with the agency's own staff. Updated versions of the business case should be developed as the reengineering project proceeds and as additional information is developed by the project team. After the project team has defined an alternative process design, the business case should be fully fleshed out with specific details on the proposed new process and make a rigorous, fact-based case for proceeding with implementation. This more detailed version of the business case is discussed later under assessment issue 6, "Has the Project Team Developed a Sound Business Case for Implementing the New Process?"

Key Assessment Questions

- Has the agency developed an initial business case for reengineering the target process that builds on the assessment issues discussed earlier in this guide?

- Does the initial business case present a credible outline of the potential cost savings and other benefits to be derived from reengineering the target process? How did the agency make a preliminary determination of the potential costs, benefits, and risks of reengineering the target process? Did it use benchmark data and best practices from leading organizations?

- Has the agency communicated its initial business case to customers and stakeholders? Do they understand the case and agree with it? Where are the points of disagreement?

- If the agency decides to pursue reengineering, how will it address any unresolved issues/concerns that were identified as a result of its assessment of internal and external barriers to change?

3.4 Is the Proposed Reengineering Project Integrated Into the Agency's Overall Improvement Strategy?

The reengineering project should not only support the overall strategic vision and goals of the agency, but should also be compatible with other process improvement projects that may be underway. The agency should have an overall improvement strategy that provides a means to coordinate and integrate the various improvement projects, set priorities, and make appropriate budget decisions. This is especially important if multiple improvement projects are to be pursued at the same time. The strategy should include a discussion of what improvement projects are necessary, how they are interrelated, the order in which they will be pursued, and their goals, time frames, resource requirements, and key participants.

Key Assessment Questions

- Does the agency have an overall strategy to guide its improvement efforts, prioritize them, and allocate resources to support them?

- Is the agency using the strategy as a means to coordinate and integrate all of its improvement projects?

- Has the linkage of the proposed reengineering project to this overall strategy been clearly spelled out?

3.5 Have Agency Executives Begun a Program to Manage Expectations and Facilitate Change?

Agency executives must begin early to build support for reengineering within the organization and with its external customers and stakeholders, mobilize the agency's talent and resources for a reengineering project team, and authorize the substantial actions necessary to change operations and policies. Senior executives are best positioned to explain the agency's situation and goals, and define credible standards for success. The sustained, conspicuous personal involvement of executives sends a strong signal that the agency is determined to improve performance. Since reengineering involves major changes to the way an agency does business, agency executives need to identify and manage the key internal and external barriers to change.

Within the agency, executives should start involving managers and employees in the reengineering project as early as possible. Executives need to continuously communicate to the staff that large-scale problems exist and need substantive corrective action. Executives should begin to develop and carry out a formal change management plan to bring the agency's values into line with the goals of reengineering. As with the business case, the change management plan will grow and become more specific as the requirements of the redesigned process are developed. Training and career enhancement may be needed, as well as counseling and outplacement assistance for any downsizing that may result.

Outside the agency, executives should be working hard to achieve a broad-based consensus that a major process change is needed to meet agency goals. Reaching such consensus in a political environment is often difficult to achieve, since interested parties may have conflicting opinions about what needs to be done. For this reason, executives should reach out early to the customers and stakeholders of the process being reengineered and involve them, where possible, in the effort. Ongoing communication about the goals and progress of the reengineering effort is crucial, since negative perceptions could be formed and harden at an early stage, making the implementation of the new process more difficult to achieve. Agency executives need to work with customers and stakeholders to negotiate their viewpoints and develop mutually acceptable solutions.

As discussed in assessment issue 8, this change management plan needs to be well underway by the time the new process is ready to be implemented. If change management is delayed, it will be very difficult to build support and momentum among the staff for implementing the new process, however good it might be.

Key Assessment Questions

- Are agency executives devising and implementing a formal change management plan to provide a comprehensive and coherent framework for their efforts?

- What specific actions have top agency executives taken to implement this plan and communicate to managers and staff their clear commitment to the reengineering effort and the urgency to improve agency operations? Is this communication ongoing to build and maintain momentum for change?

- Have executives identified areas within the agency that might be barriers to reengineering the target process (organizational values, entrenched interests, narrow headquarters authority over field operations, etc.)? What is the plan for dealing with them?

- Are executives realigning agency values, incentives, and reward systems to focus sharply on achieving outcomes important to customers?

- Have executives identified potential external barriers to reengineering the target process in terms of legislation, regulation, policy issues, and political interests? What is the plan for dealing with them?

- What steps have executives included in the change management plan to identify and address customers' and stakeholders' concerns about the specific process to be reengineered? How well are executives addressing these concerns?

3.6 Criteria

- The Clinger-Cohen Act of 1996 (P. L. 104-106, Division E; February 10, 1996).
  Sections: 40 USC 1413(b)(2)(C)
  40 USC 1423(5)

- The Government Performance and Results Act of 1993, (P. L. 103-62, August 3, 1993).
  Sections: 5 USC 306
  31 USC 1115

- OMB Circular A-11, "Preparation and Submission of Budget Estimates," June 13, 1996.
  Section: OMB A-11 15.2(3)

- OMB Circular A-130, "Management of Federal Information Resources," February 8, 1996.
  Sections: OMB A-130 8b(1)
  OMB A-130 7o

- Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994). See Practice 1:

Recognize and communicate the urgency to change information management practices; Practice 2: Get line management involved and create ownership; Practice 3: Take action and maintain momentum; Practice 6: Focus on process improvement on the context of an architecture; and Practice 11: Upgrade the skills and knowledge of line and information management professionals.

- Executive Guide: Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118, June 1966). See Practice 10: Create incentives; and Practice 12, Integrate management reforms.

- Government Business Process Reengineering (BPR) Readiness Assessment (General Services Administration, November 1996). See sections on "Gain Leadership Commitment," "Plan for Action and Communicate," "Anticipate Risks," and "Identify Resources and Roles."

PART B

ASSESSING THE NEW PROCESS' DEVELOPMENT

Assessment Issue 4:	Is the Reengineering Project Appropriately Managed?
Assessment Issue 5:	Has the Project Team Analyzed the Target Process and Developed Feasible Alternatives?
Assessment Issue 6:	Has the Project Team Completed a Sound Business Case for Implementing the New Process?

The previous sections focused on the agency's decision to embark on a reengineering project. The following sections highlight the activities involved in designing a new process. These focus on establishing a well-managed team to analyze the existing process, design possible alternatives, and determine the benefits, costs, and risks of each. After completing these activities, agency executives and the reengineering team should have a solid basis for selecting an alternative process and preparing a well-documented business case for implementing it.

ASSESSMENT ISSUE 4

IS THE REENGINEERING PROJECT APPROPRIATELY MANAGED?

Key Activities for the Agency

- Establish an executive steering committee and project sponsor to support the reengineering project.
- Establish an owner for the process to be reengineered.
- Form a qualified, trained, well-led team to reengineer the target process and its supporting structures.
- Establish a clear team charter that defines project goals, resources, constraints, and deliverables.
- Select and follow a reengineering methodology to guide the project.

Each reengineering effort should be structured and managed as a formally chartered project with clear objectives, tasks, and time frames. Once agency executives have selected a reengineering project, the management structure for the effort is defined, including scope and expectations, human and technical resources, and the reengineering methodology that will be followed.

4.1 Does the Reengineering Effort Have Ongoing Executive Support?

Agencies should have the equivalent of an executive steering committee, headed by the agency leader, to support and oversee the reengineering effort from start to finish. Only the top executives can build credible support among customers and stakeholders, mobilize the talent and resources for a reengineering project, and authorize the actions necessary to change agencywide operations. The executive committee defines the scope of the reengineering project, allocates resources, ensures that project goals align with the agency's strategic goals and objectives, integrates the project with other improvement efforts, monitors the project's progress, and approves the reengineering team's recommendations. In carrying out these responsibilities, the executive committee keeps stakeholders apprised of the reengineering team's efforts.

The committee should designate one of its members as the sponsor for the reengineering project. Often, the executive sponsor is from one of the functions in the process that is being reengineered. The sponsor serves as the liaison between the reengineering team and the executive steering committee, and works with the team to resolve policy issues, overcome internal roadblocks, and keep the project on track.

Key Assessment Questions

- How does the agency provide executive-level oversight and support to the reengineering effort? Does the agency have an executive steering committee (or its equivalent) to initiate, oversee, and support its reengineering projects?

- What are the steering committee's roles and responsibilities? What is its membership? Does it include executives from the process being reengineered? How often does it meet and what have been its major discussion items and decisions?

- Does the executive steering committee coordinate the work of the various agency improvement efforts (including reengineering projects) to prevent duplication or the development of solutions that work at cross-purposes?

- Have agency executives communicated frequently and consistently with customers, stakeholders, and staff about the reengineering project?

- Does the reengineering project team have a member of the executive steering committee who acts as its sponsor to help:

    a. facilitate communications with the executive steering committee?
    b. obtain and allocate the necessary resources (e.g., funds, tools, people)?
    c. remove internal barriers for the process owner and project team?
    d. manage relationships with internal and external stakeholders?
    e. provide guidance on policy issues?

- Does the sponsor have a high level of personal involvement in the reengineering project?

4.2 Has a Process Owner Been Designated?

The process owner is the person who will ultimately be responsible for managing the performance of the newly designed process. In some cases, the process owner may be someone currently associated with the existing process, but not necessarily. The process owner should be closely involved--if not actually leading--the reengineering team.

Key Assessment Questions

- Has the agency assigned a process owner for the process to be reengineered?

- Is the process owner closely involved in the reengineering project? What is his/her role on the reengineering team?

4.3 Is the Reengineering Project Being Carried Out by a Skilled Team?

Reengineering should be carried out by a formally chartered team which, under the aegis of an executive steering committee, has the responsibility for performing the day-to-day activities of the reengineering effort. The team normally maps in more detail the current process to be reengineered, creates alternatives for a new process (including the possibility of eliminating it altogether), defines process measures for the newly designed process, and develops and facilitates an implementation plan.

Team members should include people who work within the process being reengineered and represent several organizational levels. The team may also include outside suppliers, employee unions, consultants, and others who bring different skills and perspectives to the team and are able to think "out of the box." Because of the variety of skills needed at different phases of the reengineering project, the composition of the team may change over the course of the project, but a core of team members should participate throughout the entire reengineering process for continuity.

Key Assessment Questions

- Do the project team members represent all of the functional disciplines affected by the project and can they represent the viewpoints of their respective areas?

- Does the team include members who are outside the target process, even outside the agency, who can stimulate innovative thinking about how to change the current process?

- Have the team members been trained in process analysis and reengineering techniques? Do they have access to tools useful in supporting their work (groupware, process modeling software, etc.)? Does the team have access to technical/expert support both inside and outside the agency?

- Are team members primarily dedicated to working on the project (i.e., more than 50 percent of their time)?

4.4 Is There a Reengineering Team Charter and Project Plan?

The executive steering committee and/or the project sponsor generally work with the team to develop a team charter and project plan. A team charter and project plan provide objectives and direction to the project team. The charter outlines the scope and goals of the project, the team's authority and interactions with the executive committee and sponsor, and any special considerations that may put constraints on the project's potential solutions. The project plan lays out the activities, deliverables, and time frames for the effort and serves as the baseline for managing activities and measuring progress. It is important that the plan allow the team some flexibility to set direction of their work. Along the way, the team may encounter problems or new opportunities that require some adjustments or revisions to specific tasks.

Key Assessment Questions

- What is the reengineering team's charter? Does the team have the authority to negotiate with people within the agency, as well as those outside who may be affected by reengineering, such as suppliers or third-party providers?

- What has the agency defined as "sacred cows," if any, for each reengineering project? Are these constraints based on assumptions or have they been freshly reviewed and discussed with stakeholders and customers? Can they be overcome, if necessary?

- Is there a formal project plan for each reengineering effort?

    a. Are the goals and objectives clear and measurable?
    b. Have all assumptions been explicitly stated?
    c. Have all tasks, responsibilities, and deliverables been identified?
    d. Have schedules and deadlines been clearly stated?
    e. Have needed skills and resources been identified?

4.5 Is the Team Following a Reengineering Methodology?

Successful reengineering hinges on following a proven methodology for managing the project. A sound reengineering methodology provides a structured framework that defines in detail the activities that the team needs to complete and alerts the team to key issues that it must address. It provides a basis for establishing project milestones and lends discipline to the whole effort. A methodology also facilitates communication by having a common language in place with which to discuss reengineering across the agency.

Several methodologies have been published (see the bibliography in appendix II). Methodologies can also be brought in by consulting firms that have established reengineering practices, though the agency needs to be sure that the firm has a track record of reengineering successes with a field-tested methodology.

As noted in assessment issue 3, consultants can help a reengineering effort by bringing specialized knowledge, skills, and experience. For example, they can help train the reengineering team in skills such as process mapping and simulation. It is important, however, that the agency retain ownership of the reengineering effort and actually carry it out with its own reengineering team.

Key Assessment Questions

- Is the team using a reengineering methodology to guide its work? Has the methodology been tailored to the agency? Is the methodology consistent with the issues in this assessment guide?

- Is the team actually using the methodology to plan and carry out the reengineering project?

- Is the team working with an outside consultant? What is the consultant's role?

4.6 Criteria

- Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115). See Practice 1: Recognize and communicate the urgency to change information management practices; Practice 2: Get line management involved and create ownership.

- Government Business Process Reengineering (BPR) Readiness Guide, (General Services Administration, November 1996). See the section entitled "Structure Reengineering Teams."

ASSESSMENT ISSUE 5

HAS THE PROJECT TEAM ANALYZED THE TARGET PROCESS AND DEVELOPED FEASIBLE ALTERNATIVES?

Key Activities for the Agency

- Map and analyze the target process in enough detail to identify the costs and causes of performance breakdowns.
- Design alternative processes and test their effectiveness through simulations and/or limited pilots.
- Assess the impact of potential barriers to implementing the alternative processes.
- Develop a performance-based and risk-adjusted benefit-cost analysis of each alternative process.

Reengineering a process depends heavily on the expertise of the team and its ability to create innovative, yet practical, alternatives. The team must focus not only on designing a new workflow, but also on thinking through the broader changes to the agency's support structures and systems to implement the new process. Ideally, the project team should develop more than one alternative process and assess the risks, costs, and benefits of each. The team should identify internal or external barriers to implementation and what actions might be effective in overcoming them. Once the team and the executive steering committee select a preferred alternative, they should secure commitment and support from key stakeholders and customers before proceeding with implementation.

5.1 Has the Team Analyzed the Target Process?

After the reengineering project is selected and resources and responsibilities are assigned, the project team needs to develop a deeper understanding of the target process' workflow, problem areas, and improvement opportunities. This is largely done through more detailed process modeling. The current process should be modeled in enough detail to (1) provide the agency with a common understanding of the process, (2) establish a performance baseline at the process' activity level from which to measure improvements,

(3) identify problem areas and non value-added activities that need to be changed or eliminated, such as excessive hand-offs, reviews, rework, and queuing time, and (4) understand exactly what will be changed and who will be affected when moving from the current process to a new process. This last point is particularly important for successful implementation.

Normally, the team will build on any high-level process mapping done earlier (see assessment issue 1). The detailed modeling should identify all of the current process' activities and tasks, staff roles and responsibilities, and links and dependencies with other processes. Modeling tools and other analysis techniques include flowcharting, tree diagrams, fishbone diagrams, and business activity maps. Speed in completing this modeling is important; the team should not get bogged down in elaborate analysis.

Key Assessment Questions

- Has the project team developed a model of the existing process to be reengineered?

    a. Has the process workflow been mapped down to the activity or task level, so that all the key elements that drive the performance of the process have been identified and understood?
    b. Are there performance data (e.g., costs, time, throughput) for the activities within the process?
    c. Has the mapping been validated by the people who actually do the work as well as the process owner?

- Has the process' information flow been mapped? Have the supporting information systems and other key enablers been identified?

- Has the team used a disciplined process to quantitatively measure the cost and performance of activities and resources for the process?

- Have the jobs, skills, and specialized knowledge of the people performing the work been identified?

- Have the organizational components involved in the process as internal suppliers or customers been identified?

- Have all external customer and supplier interfaces been identified?

- Have the regulations, policies, laws, and assumptions underlying the process been identified?

5.2 Has the Team Developed Feasible Alternatives to the Current Process?

Based on what it learns in analyzing the existing process, the team begins its redesign effort--the creative part of reengineering. The first step is to develop candidate alternative work processes and consider the tangible and intangible costs and benefits of each. The team should explore each alternative thoroughly enough to convincingly demonstrate the potential of each option to achieve the desired performance goals and fully describe the types of technical and organizational changes necessary to support each goal, and, if possible, test key assumptions. For each alternative, the team should also consider opportunities for information technology to support the proposed process.

The team should use a cost-effective method for conducting its preliminary assessment of alternative processes. Such methods include prototyping, limited pilot testing, and modeling and/or computer simulation. These methods vary in terms of cost and effectiveness. As process reengineering alternatives evolve, the team should continue to discuss them with customers and stakeholders. This not only helps to promote buy-in, but can also provide additional insights into issues that the team may have missed. Also, the team should continually update its process models based on changes to the new process, analysis of barriers and risks, and results from pilot tests.

Key Assessment Questions

- For each proposed process alternative, did the team include a detailed workflow and a thorough description of impacts on other processes and the overall work environment?

    a. Has the team documented the new workflow, with all of the interfaces and dependencies noted?
    b. Has the team documented the new information flow?
    c. Has the team identified and documented the impact of the proposed process on the agency's information and system architectures, along with any needed changes?
    d. Has the team identified changes needed to:
        - organizational structures,
        - management systems,
        - job descriptions and skill requirements,
        - personnel compensation and reward systems,
        - human resources policies (training, hiring, incentives), and
        - facilities?
    e. Has the team identified any changes to legislation, regulations, policies, and rules that would be required to implement the alternative process?

- Has the team identified the constraints and assumptions that may affect the cost and benefits of alternative solutions? Did they estimate the impact of constraints and assumptions on the alternative process?

- Has the team conducted a preliminary feasibility test of the alternatives through simulation or other means? Have they clearly and accurately documented the results of the feasibility test?

- Has the team clearly expressed the quantitative and qualitative benefits in mission or program improvement terms (e.g., changes in quality, cost, speed, accuracy, or productivity)?

- Has the team developed performance indicators for the newly designed process? Are these measures aligned with the agency's strategic measures?

- Has the team assessed how information technology could best be used to support the alternative work processes?

    a. Did the team have access to expertise to explore information technology opportunities?
    b. Did the team develop results-oriented information technology performance measures--both quantitative and qualitative--which can form the basis for measuring the impact of the proposed information technology investment?

- Has the team aligned its new process alternatives with key stakeholders' and customers' expectations and performance requirements?

    a. For any significant deviations from key stakeholder performance requirements, did the team assess the impact of these deviations on the stakeholder and the agency's performance goals?

5.3 Has the Agency Identified and Assessed Potential Implementation Barriers?

The team should identify potential barriers to implementing alternative processes. The purpose of barrier identification is to find unusual or major obstacles that will need to be overcome in order to implement a new process. Political issues should be a key concern. Other concerns include entrenched workplace attitudes or values, an insufficient number of employees with the skills required for the redesigned roles, collective bargaining agreements, incompatible organizational or physical infrastructure, current laws and regulations, and funding constraints. The impact of these barriers and the costs of addressing them (such as staff training, hiring, and relocation) need to be factored into the benefit-cost analysis.

Barriers that arise from internal skepticism and resistance to change are to be expected and can often be overcome through the use of employee education, change management activities, and successful pilot testing of the new process. Perceived regulatory barriers may actually be within the agency's authority to change, though rule-making should be built upon consultation with stakeholders. Other barriers may require ongoing negotiation with stakeholders throughout the implementation of the new process. If the reengineering team determines that the risks and costs of implementing a preferred new process appear too great, they may need to pursue one of the less ideal, but more feasible, alternatives that they developed.

Key Assessment Questions

- Has the team identified potential barriers to implementing the process alternatives?

- Has the team obtained and analyzed the concerns of stakeholders to help identify and define potential barriers? Is there a feedback mechanism to discuss how concerns are being met?

- Has the team used "lessons learned" from its own improvement efforts, as well as other organizations' reengineering efforts, in assessing and overcoming potential barriers?

- Has the team categorized/ranked barriers based on their potential impact on implementing the alternative process?

    a. Did the team attempt to quantify the potential impact of key barriers and their relative risk (i.e., probability of the barrier being actualized)?
    b. Was the impact of key barriers considered in modeling and the risk adjusted benefit-cost analysis?

- Has the team identified ways to overcome the identified barriers?

    a. Has the team determined the level of effort and resources required to mitigate the barriers?
    b. Has the team considered the resources required to address barriers in its benefit-cost estimates?
    c. Has the team identified a contingency or risk mitigation strategy for critical barriers should they persist as a new process is being implemented?

- Has the team ensured that key cultural barriers (e.g., training and skills required for new jobs, entrenched culture, incompatible support structures, fear of downsizing) are addressed in its change management strategy?

- Has the team accurately incorporated information on key barriers (including potential impact, probability of occurrence, risk mitigation strategy, and resources estimated to address barriers) into its design of process alternatives?

5.4 Has the Team Developed a Performance-Based, Risk-Adjusted Analysis of Benefits and Costs for Each Design Alternative?

The team should develop a performance-based benefit-cost analysis for each alternative to provide (1) the foundation for comparing the baseline benefits and costs with proposed alternative processes and (2) a basis for decisionmakers to use in selecting a feasible alternative process that meets performance goals. Performing a benefit-cost analysis is consistent with the GPRA's requirement for agencies to develop annual performance plans with annual performance goals and indicators to measure performance.

The team should factor into the analysis the results from its analyses of barriers and risks in implementing the process alternatives. The analysis should also include quantitative and/or qualitative estimates of the expected benefits and costs (to the agency and others) based on established definitions and practices for the program. Both tangible and intangible benefits and costs should be identified, assessed, and reported. The team should also recognize that the benefit and cost estimates of alternative processes are often uncertain because of the imprecision in both underlying data and modeling assumptions. According to OMB Circular A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs", useful information in a report about uncertainties would include the key sources of uncertainty; expected value estimates of outcomes; the sensitivity of results to important sources of uncertainty; and, where possible, the probability distributions of benefits, costs, and net benefits.

Key Assessment Questions

- Has the team identified risk factors associated with implementing each alternative?

    a. Did the team quantify and rank risks?
    b. Did the team perform a sensitivity analysis on key process variables and assumptions?
    c. Did the team document how specific risk factors will be continually monitored to minimize exposure?

- Has a risk-adjusted benefit-cost analysis been prepared for each alternative that:

    a. Relies on systematic measures of mission performance?
    b. Is consistent with OMB Circular A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs?"
    c. Is at a level of detail appropriate to its size?

d. Considered non-monetary benefits and costs?

- Has the team assessed how well each alternative meets the goals of the project?

- Has the team established a structure for achieving benefits?

  a. What are the expected ongoing benefits and costs of the reengineering effort?
  b. How will benefits will be recovered and managed during the new process' lifecycle?
  c. How long before a "break-even" point is reached?
  d. How long before full benefits are realized?

5.5 Criteria

- Clinger-Cohen Act of 1996 (P.L. 104-106, Division E; February 10, 1996).
  Sections: 40 USC 1423(5)
  40 USC 1423(3)

- The Paperwork Reduction Act of 1995, as amended (P.L. 104-13, May 22, 1995).
  Section: 44 USC 3506(b)(3)(C)

- The Federal Acquisition Streamlining Act of 1994 (P.L. 103-355, October 13, 1994).
  Section: 41 USC 263

- OMB Circular A-130, "Management of Federal Information Resources," February 8, 1996.
  Sections: OMB A-130 7o
  OMB A-130 8b(1)
  OMB A-130 App. IV 8b(1)
  OMB A-130 8b(1)(b)
  OMB A-130 8b(1)(c)

- OMB Circular A-11, "Preparation and Submission of Budget Estimates," June 13, 1966.
  Section: OMB A-11 15.6

- OMB Circular A-94, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs," October 29, 1992.

ASSESSMENT ISSUE 6

HAS THE PROJECT TEAM COMPLETED A SOUND BUSINESS CASE FOR IMPLEMENTING THE NEW PROCESS?

Key Activities for the Agency

- Select a feasible process alternative with a high return on investment.
- Develop a formal business case for implementing the new process that describes benefits, costs, and risks.
- Use the agency's capital investment review process to evaluate the business case and decide whether to proceed with implementation.

Given several possible process design alternatives, the reengineering team and the executive steering committee need to settle on one. The new design must be feasible to implement, given the various constraints and barriers that face the agency. There must also be a high return on investment in the project, in terms of improved performance and/or reduced costs. The initial business case for the reengineering project (see assessment issue 3) should now be updated and enlarged to present detailed qualitative and quantitative analyses in support of selecting and implementing the new process in terms of benefits, costs, and risks. It should also lay out--at least at a high level--the plan for implementing the new process. The completed business case becomes a key document for agency executives to use in deciding whether or not to go ahead with implementation.

6.1 Has the Agency Selected a Feasible Process Alternative with a High Return on Investment?

As previously discussed in assessment issue 5, the reengineering team should consider and analyze alternative processes that will allow the agency to meet or exceed its performance goals. The team's analysis of alternative processes should have considered benefits, costs, and risks. The team should also have determined the performance results that each could be expected to achieve through such techniques as computerized process simulation and/or limited pilot testing. However, consideration still needs to be given to several other factors relating to general feasibility, including agency-level budgetary,

management, and political issues. Because these factors relate to agency-level considerations, the executive steering committee should be involved in comparing the alternatives in the context of these additional factors and selecting one of them. The executive steering committee and the reengineering team should work together to establish criteria for selecting the most value-added alternative to implement. This often involves setting up a selection matrix and scoring system by which alternatives are ranked against each other in various categories, such as benefits, implementation time, costs, payback time, risk, amount of change needed in various areas to support the process, etc.

Key Assessment Questions

- Did the agency establish a relative ranking of the process alternatives that took into consideration the various pluses and minuses of each one?

- Have all the major change management issues associated with the preferred alternative been identified and discussed? Do there appear to be any insurmountable barriers?

- Does the preferred alternative represent the best balance of feasibility versus return on investment for the agency?

- Did the executive steering committee make its final selection in consultation with its other executives and line managers as well as stakeholders and customers?

6.2 Has the Agency Updated Its Initial Business Case for the New Process?

Once the agency selects the process alternative that it wishes to implement, it should revise and enlarge its initial business case for the reengineering project (see assessment issue 3). The updated business case becomes a key document for justifying the funds and other resources needed to implement the new process.

The initial business case should be expanded to include up-to-date information on customer and stakeholder expectations, how current processes are failing to meet those expectations, and opportunities to improve based on benchmark agencies. The new process being proposed should be fully described, along with the performance measures that will be used to assess how well it is meeting improvement goals and achieving promised benefits. Not only the "end state" of the process should be described, but also the intermediate steps that will be taken to get to full implementation. In addition, the business case should contain information on any options for implementation that need to be considered.

Key Assessment Questions

- Does the updated business case include a performance-based and risk-adjusted benefit-cost analysis for implementation alternatives? Does it appear that reengineering the process will yield a large return on investment?

- Does the updated business case identify resources, responsibilities, and a schedule for implementing the new process?

- Have the agency's top executives communicated the business case to key congressional committees, OMB, and other stakeholder and customer groups to secure their support for full implementation?

- How does the agency intend to address any unresolved concerns expressed by these groups? Are any of their concerns serious enough to prevent the project from going forward?

6.3 Has the Agency Used Its Capital Investment Review Process to Assess the Business Case?

The agency's capital investment review process should be used to review the completed business case and decide on whether the new process should be funded and implemented. Because reengineering typically includes investment in new information technology, provisions of the PRA and the Clinger-Cohen Act calling for an information technology investment review process may apply. Specifically, agency heads are to (1) design and implement a process for maximizing the value and assessing and managing the risks of information technology acquisitions, (2) integrate budgetary, financial, and program management decisions in this process, and (3) use this process to select, control, and evaluate the results of information technology initiatives.

Key Assessment Questions

- Does the agency have a sound capital investment review process?

- Has the proposed reengineering project gone though the agency's capital investment review process?

- Has the agency used quantitative as well as qualitative decision criteria for comparing the expected benefits, costs, risks, and returns associated with implementing the reengineering project?

- Have any information technology acquisitions needed to support the new process been reviewed and approved by the agency's information technology review process?

- Has the agency established a management process for controlling and evaluating the reengineering project once implementation has begun?

- Has the agency defined performance measures--derived from annual performance targets, long-term goals, and the agency's mission--for the prospective new process, and does the agency's capital investment review process assess the prospective reengineering project in the context of meeting performance goals?

6.4 Criteria

- The Clinger-Cohen Act of 1996 (P. L. 104-106, Division E; February 10, 1996).
  Sections: 40 USC 1425(c)(2)
  40 USC 1412(c)

- The Federal Acquisition Streamlining Act of 1994 (P.L. 103-355, October 13, 1994).
  Section: 41 USC 263

- OMB A-11, "Preparation and Submission of Budget Estimates," June 13, 1996.
  Section: OMB A-11 43.2(b)

- OMB A-130, "Management of Federal Information Resources," February 8, 1996.
  Section: OMB A-130 8b(3)(b)

- Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994). See Practice 1: Recognize and communicate the urgency to change information management practices; Practice 4: Anchor strategic planning in customer needs and mission goals; Practice 6: Focus on process improvement in the context on an architecture

- Evaluating Information Technology Investments: A Practical Guide, Version 1.0, Office of Information and Regulatory Affairs, Information Policy and Technology Branch, November 1995.

- Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-making, Version 1 (GAO/AIMD-10.1.3, February 1997).

PART C

ASSESSING PROJECT IMPLEMENTATION AND RESULTS

Assessment Issue 7:	Is the Agency Following a Comprehensive Implementation Plan?
Assessment Issue 8:	Are Agency Executives Addressing Change Management Issues?
Assessment Issue 9:	Is the New Process Achieving the Desired Results?

Implementation is the most difficult phase of the reengineering project. Ideas are turned into actions, and the agency's natural resistance to change must be overcome. The following sections highlight the kinds of activities that the agency should pursue to ensure a reasonable transition to the new process; manage the human and technical issues surrounding implementation of the new process; and assess the results of its reengineering effort. This section also stresses the importance of ongoing performance measurement and feedback to continually improve the new process once it is in place.

ASSESSMENT ISSUE 7

IS THE AGENCY FOLLOWING A COMPREHENSIVE IMPLEMENTATION PLAN?

Key Activities for the Agency

- Establish a transition team and develop a comprehensive plan to manage implementation.
- Manage training and workforce redeployment issues.
- Conduct pilot tests of the new process prior to full implementation.

Having decided to implement the new process, the agency now faces the formidable challenge of turning concepts into reality. An implementation plan should be developed that spells out the work that needs to be done, with time frames, milestones, decision points, and resource allocations. Training and workforce issues are important elements of an effective implementation plan. Pilot testing provides a method for refining the process and building support for full implementation of the new process across the agency.

7.1 Has the Agency Established a Transition Team and Developed a Comprehensive Implementation Plan?

The agency needs to establish a transition team to manage the implementation process. This team should include the project sponsor, the process owner, members of the reengineering team, and key executives, managers, and staff from the areas directly affected by changeover from the old process to the new.

Agency executives and the transition team should develop a detailed implementation plan that lays out the road to the new process. Critical elements and milestones should be identified and their progress closely monitored by the executive steering committee. Timetables for all actions should be specified, and the individuals responsible for overseeing and performing tasks should be assigned. Highly visible executive-level leadership and encouragement is especially important at this stage. Agency leaders must show that they are personally committed to seeing the new process put in place.

Key Assessment Questions

- Has the agency prepared a written plan for pilot testing and agencywide implementation of the new process that:

  a. Identifies all tasks, timeframes, and needed resources for an orderly transition?
  b. Structures the roll out of the new process in a way reasonably suited to the nature of the process and the work and structure of the agency?
  c. Assigns roles and responsibilities for implementation to the individuals who will do the work of the new process?
  d. Provides a means for collecting and sharing implementation problems and solutions?
  e. Provides for close monitoring during implementation?

- Has a transition team been established to guide the reengineering effort? Is the team made up of the project sponsor, the process owner, members of the reengineering team, and key executives, managers, and staff from the areas directly affected by the implementation of the new process?

- Has the transition team made necessary arrangements with the agency's administrative offices to transition smoothly from the old process to the new (e.g,. budgeting, accounting, purchasing, maintenance, and legal counsel)?

- Are executives and managers affected by the process change actively promoting and facilitating the implementation of the new process?

7.2 Has the Transition Team Addressed Workforce Training and Redeployment Issues?

Training and redeploying the workforce is often a major challenge and generally requires substantial preparation time. When a process is redesigned and new information systems are introduced, many of the tasks workers perform are radically changed or redistributed. Some positions may be eliminated or cut back, while others are created or modified. Workers may need to handle a broader range of responsibilities, rely less on direct supervision, and develop new skills.

Key Assessment Questions

- Has the transition team identified the new tasks, roles, responsibilities, reporting relationships, and training needs required by the new process? Have position descriptions and classifications been revised to reflect the new skills and responsibilities of staff in the new process?

- Has the transition team identified how many employees, and which employees, would be affected by redeployment, retraining, or reductions-in-force? Has the agency developed training programs?

- Has the transition team met with other governmental agencies and private businesses to learn about the successful ways to plan workforce redeployment, retraining, and reductions?

- Are agency executives working closely with employee unions to minimize the potential for adverse effects of the implementation on its members, and to make use of union suggestions where feasible?

- Has the agency provided career counselors and outplacement assistance as needed to help employees plan new career paths or seek new employment?

7.3 Are Pilot Tests Being Used to Evaluate and Refine the New Process Design?

Pilot testing is an effective--and usually necessary--tool for moving the agency successfully to full implementation. Pilot testing allows the agency to (1) evaluate the soundness of the proposed process in actual practice, (2) identify and correct problems with the new design, and (3) refine performance measures. Also, successful pilot testing will help strengthen support for full-scale implementation from employees, outside stakeholders, the Congress, and the public, and help secure the funding needed for a smooth rollout.

The length and extent of pilot testing will vary depending on the complexity of the changes being driven by the new process. For example, a complex process that affects regional offices across the nation may require a series of pilot tests. Agencies should be careful, however, not to test beyond the point of diminishing returns. No matter how much testing is done, only full implementation can reveal all of the potential problems with the new process.

The transition team should develop a formal evaluation process to determine the efficiency and effectiveness of the new process, both during pilot tests and full implementation, in meeting the agency's performance goals. The process should also allow the agency to pinpoint trouble spots, so that corrective actions can be developed quickly.

Key Assessment Questions

- Has the transition team selected a pilot testing strategy that is suited to the new process and considers the concerns of stakeholders?

- Has the transition team ensured that the testing unit fully understands the pilot and that employees are sufficiently trained and understand their roles?

- Has the transition team developed performance measures and data gathering procedures to be used during the pilot? Do the measures reflect project goals?

- Has the transition team defined success criteria for the pilot test?

- Has the transition team carefully measured the performance of the pilot test and identified any corrective actions required?

- Has the agency gathered customer, stakeholder, and employee feedback about the pilot test? Were any needed corrective actions identified?

- Has the transition team made changes to the design of the new process as a result of cost or performance problems uncovered during the pilot? Has the revised process design been pilot tested with satisfactory results before proceeding to full implementation?

7.4 Criteria

- Clinger-Cohen Act of 1996 (P.L. 104-106, Division E; February 10, 1996).
  Sections: 40 USC 1423(3)
  40 USC 1412(c)
  40 USC 1426

- The Government Performance and Results Act of 1993 (P.L. 103-62, August 3, 1993).
  Section: GPRA 31 USC 1115

- The Chief Financial Officers Act of 1990, as amended (P.L. 101-576, November 15, 1990).
  Section: 13 USC 902(a)(3)

- OMB A-11, "Preparation and Submission of Budget Estimates," June 13, 1996.
  Sections: OMB A-11 34.1
  OMB A-11 15.2(3)

- The System Assessment Framework: A Guide for Reviewing Information Management and Technology Issues in the Federal Government, Version 1 (GAO/AIMD-10.1.12, August 1996).

- Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994). See Practice 11: Upgrade skills and knowledge of line and information management professionals.

ASSESSMENT ISSUE 8

ARE AGENCY EXECUTIVES ADDRESSING CHANGE MANAGEMENT ISSUES?

Key Activities for the Agency

- Prepare and follow a change management strategy.
- Encourage staff to accept new ideas and adopt the new process.
- Prepare staff, managers, and executives for changes in their roles and career expectations.

The implementation of a new process is typically the most failure-prone phase of the reengineering project because of an organization's natural resistance to change. Frequently, the greatest challenges lie not in managing the technical or operational aspects of change, but in managing the human dimensions of change. Widely shared agency perceptions, based on assumptions deeply rooted in the agency's culture, can translate into a belief that reengineering is unnecessary, unworkable, or unfair. As indicated in assessment issue 3, agency executives need to begin managing change early in the reengineering effort.

Some experts caution that unless planning and accountability for change management is given a separate focus, the effort will not be managed well. During the implementation phase especially, agency executives must be in the forefront in dealing with the social, psychological, and political resistance to changing the way work is done. Executives must also recognize that their own roles and responsibilities may need to undergo change as well.

8.1 Are Agency Executives and the Transition Team Refining and Implementing the Change Management Plan?

As noted earlier in assessment issue 3, agency executives should begin building a change management plan from the very beginning of the project. Executives and the transition team should revise this plan to (1) present the goals and objectives of the new process in concrete, "nuts-and-bolts" language and (2) link the new process to specific issues, questions, and challenges involved in implementation (e.g., work roles, relationships,

performance expectations, supervisory methods, and career path). The plan should include periodic checkpoints for assessing and responding to the opinions and attitudes of staff about the perceived consequences of the new process.

***Key Assessment Questions*:**

- Has the agency refined its plan for facilitating needed cultural changes across the agency? Does the plan:

  a. Identify specific change management tasks?
  b. Align the change management tasks with the project and implementation timetables?
  c. Assign responsibilities to specific individuals for carrying out change management tasks?
  d. Provide for periodic assessments of employee needs, concerns, and reactions?

- Did the agency use outside experts to help its executives and the transition team to:

  a. Become more aware of underlying organizational and cultural issues that can pose obstacles to reengineering?
  b. Incorporate proven techniques for managing these obstacles and achieving change objectives?

8.2 Are Senior Executives Encouraging Acceptance of the New Process?

Breaking down cultural assumptions can be uncomfortable for both staff and management. Senior executives will need to reiterate the performance problems, customer dissatisfactions, budgetary pressures facing the agency, and opportunities to achieve agency goals by finding better ways to do work. By their own example, executives should encourage staff to question current assumptions about how the agency's work should be done. This creates a more open atmosphere to admit frustrations, offer suggestions, and support something new and better. By taking these steps, executives introduce three important new ideas to the agency's culture--a process-centered view of the agency; the possibility that "things really can change around here;'" and the idea that groups and individuals can get credit for implementing solutions. The agency's culture will gradually change as staff come to share their perceptions of the new situation and collectively subscribe to new norms, expectations, and responsibilities.

Key Assessment Questions

- Have senior executives clearly identified and explained the agency's concerns regarding customer service issues and other change drivers, and emphasized that major improvements are imperative?

- Has the communications effort directly addressed the common objections to change, and explained why change is necessary, workable, and beneficial? Was the communications effort begun early in the process (once customer service issues and performance improvement goals have been identified)?

- What formal and informal opportunities have senior executives provided for employees to provide feedback about the operational and personal problems they face during implementation?

- Have senior executives made a commitment to assist employees to make the transition to the new process? How was this commitment communicated and reinforced to the employees?

- Have executives called attention to the efforts, contributions, and innovations of employees during the reengineering project, and widely shared the credit for success with everyone?

8.3 Has the Agency Assisted Staff and Managers to Take on New Roles and Responsibilities?

Staff may lack confidence in their ability to do their new jobs in the reengineered process. For example, workers may feel uncomfortable with a new role of having to deal directly with the public. Similarly, those who previously followed well-defined procedures, and were rewarded for doing so, may now have to make judgments and select procedures appropriate to a new situation: they are rated not only on compliance, but also on problem-solving abilities. The change management plan should include provisions for helping employees to overcome concerns about the new ways of doing business.

Executives and managers often speak of resistance to change from employees or outside groups. But management itself can resist the full implications of changing a work process. As a result of reengineering, staff often have a broader range of responsibilities and are empowered to make decisions and take actions with less direct supervision than before. Executives and managers must establish new working relationships with employees, placing more emphasis on their role as facilitators, teachers, or coaches, and less as directors and controllers. This transition can be difficult. Executives and managers who fail to change with their staff put the reengineering effort at great risk.

Key Assessment Questions

- Has the agency provided training to its staff, managers, and executives to prepare them for the new roles and responsibilities called for by the new process?
- Have executives and managers negotiated new, clear understandings about how authority and responsibility for the new process will be allocated?
- Have executives included managers in making any needed changes to the agency's managerial structure?
- Has the agency reoriented its performance appraisal and reward process to the implementation of the new process and the fulfillment of performance improvement goals?
- Have executives involved managers in defining the agency's policies and procedures for using agency performance indicators to assess managerial and staff performance?
- Has the agency provided career counseling or outplacement assistance to individuals at all ranks who have lost their positions, who must develop new career plans, or who chose to resign?

8.4 Criteria

- Executive Guide: Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118, June 1996). Step 1, Define mission and desired outcomes; Practice 10, Create incentives.
- Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994). See Practice 1: Recognize and communicate the urgency to change information management practices; Practice 2: Get line management involved and create ownership; Practice 3: Take action and maintain momentum; and Practice 11: Upgrade skills and knowledge of line and information management and professionals.

ASSESSMENT ISSUE 9

IS THE NEW PROCESS ACHIEVING THE DESIRED RESULTS?

Key Activities for the Agency

- Measure the performance of the new process.
- Determine if the new process is achieving the desired results.
- Use performance measurement as a feedback loop for continuously improving the new process.

An agency has no way of knowing if the new process has produced the desired results unless it has meaningful performance measures. Good performance measures generally include a mix of outcome, output, and efficiency measures. Outcome measures assess whether the process has actually achieved the intended results. Output measures examine the products and/or services produced by the process, such as the number of claims processed. Efficiency measures evaluate such things as the cost of the process and the time it takes to deliver the output of the process (a product or service) to the customer. Ongoing performance measurement provides the feedback which is so critical for continual improvement and future successes.

9.1 Does the Agency Have Performance Measures in Place for the New Process?

The agency should be gathering performance data on the new process--just as it should be doing for its other processes, as called for by GPRA. The data should be complete, accurate, and consistent enough to determine how well the process is meeting its performance goals and whether further improvements are needed.

Key Assessment Questions

- Did the transition team identify the necessary data for routinely assessing the performance of the reengineered process on a long-term basis? Do the performance measures include a mixture of outcome, output, and efficiency measures? Are the measures linked to the agency's strategic goals?

- What measures for the new process did the agency actually decide to put in place? Do they differ from the team's recommendations? If so, why?

- Are the measures integrated into the agencywide performance measurement system?

9.2 Is the New Process Achieving Its Planned Performance Goals?

As part of its business case for implementing the new process, the agency should have established specific performance goals for the reengineered process. These goals should include a mixture of intermediate goals to be met at various stages during the implementation phase, as well as ultimate performance goals for the process after it has been fully implemented and institutionalized. The intermediate goals are particularly important because the agency should be able to start showing a return on investment in the early stages of implementation.

Key Assessment Questions

- Are agency executives, managers, and staff actually using the measurement data being gathered to assess the new process' performance?

- Do the measures show that performance goals are being met and that the project is on track for achieving its expected return on investment?

- What action is the agency taking to correct any shortfalls in expected performance?

9.3 Is the Agency Using Performance Information to Continually Improve the New Process?

The gains achieved by the new process can erode unless the agency continually monitors its performance and makes further refinements. Managers should use performance information to continually improve work processes, identify performance gaps, and set additional improvement goals, as needed.

Key Assessment Questions

- Does the agency encourage managers and staff to use performance data to find ways of further improving the new process?

- Does the agency periodically assess process performance goals in order to determine the potential for achieving higher levels of performance?

9.4 Criteria

- Clinger-Cohen Act of 1996 (P.L. 104-106, Division E; February 10, 1996).
  Sections: 40 USC 1423(3)
  40 USC 1425(c)(2)
  40 USC 1426

- The Government Performance and Results Act of 1993 (P.L. 103-62, August 3, 1993).
  Sections: 31 USC 1115
  31 USC 1116

- The Chief Financial Officers Act of 1990, as amended (P.L. 101-576, November 15, 1990).
  Section: 13 USC 902(a)(3)

- OMB Circular A-130, "Management of Federal Information Resources," February 8, 1996.
  Section: OMB A-130 8b(3)(b)

- OMB Circular A-11, "Preparation and Submission of Budget Estimates," June 13, 1966.
  Sections: OMB A-11 15.6
  OMB A-11 34.1

- Executive Guide: Effectively Implementing the Government Performance and Results Act (GAO/GGD-96-118, June 1996). See Step 3: Use performance information.

- Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994). See Practice 5: Measure the performance of key mission delivery processes.

APPENDIX I

Glossary

Activity Analysis: the analysis and measurement (in terms of time, cost, and throughput) of distinct units of work (activities) that make up a process.

Activity-Based Costing: a set of accounting methods used to identify and describe costs and required resources for activities within processes.

Alignment: the degree of agreement, conformance, and consistency among organizational purpose, vision, and values; structures, systems, and processes; and individual skills and behaviors.

"**As Is**" **Process Model**: a model that portrays how a business process is currently structured. In process improvement efforts, it is used to establish a baseline for measuring subsequent business improvement actions and progress.

Baselining: obtaining data on the current process that provide the metrics against which to compare improvements and to use in benchmarking.

Benchmark: a measurement or standard that serves as a point of reference by which process performance is measured.

Benchmarking: a structured approach for identifying the best practices from industry and government, and comparing and adapting them to the organization's operations. Such an approach is aimed at identifying more efficient and effective processes for achieving intended results, and suggesting ambitious goals for program output, product/service quality, and process improvement.

Benefit-Cost Analysis: a technique to compare the various costs associated with an investment with the benefits that it proposes to return. Both tangible and intangible factors should be addressed and accounted for.

Best Practices: the processes, practices, and systems identified in public and private organizations that performed exceptionally well and are widely recognized as improving an organization's performance and efficiency in specific areas. Successfully identifying and applying best practices can reduce business expenses and improve organizational efficiency.

Business Case: a structured proposal for business improvement that functions as a decision package for organizational decisionmakers. A business case includes an analysis

of business process performance and associated needs or problems, proposed alternative solutions, assumptions, constraints, and risk-adjusted cost/benefit analysis.

Business Process Reengineering: a systematic, disciplined improvement approach that critically examines, rethinks, and redesigns mission-delivery processes in order to achieve dramatic improvements in performance in areas important to customers and stakeholders.

Change Management: activities involved in (1) defining and instilling new values, attitudes, norms, and behaviors within an organization that support new ways of doing work and overcome resistance to change; (2) building consensus among customers and stakeholders on specific changes designed to better meet their needs; and (3) planning, testing, and implementing all aspects of the transition from one organizational structure or business process to another.

Continuous Process Improvement: an ongoing effort to incrementally improve how products and services are provided and internal operations are conducted.

Core or Key Process: business processes that are vital to the organization's success and survival.

Cultural Assumptions: beliefs about the internal workings and external environment of an organization which, having worked well in the past, have gradually come to be taken for granted, and which provide the basis for group consensus about common events and circumstances. Cultural assumptions function as the unifying themes of organizational culture.

Customer: groups or individuals who have a business relationship with the organization; those who receive and use or are directly affected by the products and services of the organization. Customers include direct recipients of products and services, internal customers who produce services and products for final recipients, and other organizations and entities that interact with an organization to produce products and services.

Cycle Time: the time that elapses from the beginning to the end of a process.

Decomposition: breaking down a process into subprocesses and activities.

Executive Steering Committee: the top management team responsible for developing and sustaining the process management approach in the organization, including selecting and evaluating reengineering projects.

Fishbone Diagram: a graphic technique for identifying cause-and-effect relationships among factors in a given situation or problem. Also called Ishikawa Diagramming.

Function: a set of related activities that is part of a process, often known as a subprocess within a process. Organizations often divide themselves into functional units, such as purchasing, product development, order fulfillment, etc.

Input: the financial and nonfinancial resources the organization obtained or received to produce its outputs.

Information Engineering: an approach to planning, analyzing, designing, and developing an information system with an enterprisewide perspective and an emphasis on data and architectures.

Information Technology Investment Review Process: an analytical framework for linking information technology investment decisions to strategic objectives and business plans in organizations. The investment process consists of three phases: selection, control, and evaluation. This process requires discipline, executive management involvement, accountability, and focus on risks and returns using quantifiable measures. Guidance on the investment review process can be found in the Office of Information and Regulatory Affairs' guide, entitled Evaluating Information Technology Investments: A Practical Guide, Version 1.0 and GAO's guide, entitled Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-making, Version 1, (GAO/AIMD-10.1.3, February 1997).

Integrated Definition for Function Modeling (IDEF): modeling techniques designed to capture the processes and structure of information in an organization. IDEF0 is a process modeling technique; IDEF1X is a rule or data modeling technique.

Model: a representation of a set of components of a process, system, or subject area. A model is generally developed for understanding, analysis, improvement, and/or replacement of the process.

Modeling or Flowcharting: a graphic representation of the activities and subprocesses within a process and their interrelationships.

Outcome: the ultimate, long-term, resulting effects--both expected and unexpected--of the customer's use or application of the organization's outputs.

Performance Gap: the gap between what customers and stakeholders expect and what each process and related subprocesses produces in terms of quality, quantity, time, and cost of services and products.

Performance Measurement: the process of developing measurable indicators that can be systematically tracked to assess progress made in achieving predetermined goals and using such indicators to assess progress in achieving these goals.

Process Management Approach: approaches, such as continuous process improvement, business process redesign, and reengineering, which can be used together or separately to improve processes and subprocesses.

Process: a set of activities that produce products and services for customers.

Process Owner: an individual held accountable and responsible for the workings and improvement of one of the organization's defined processes and its related subprocesses.

Risk Analysis: a technique to identify and assess factors that may jeopardize the success of a project or achievement of a goal. This technique also helps define preventive measures to reduce the probability of these factors from occurring and identify countermeasures to successfully deal with these constraints when they develop.

Root Cause Analysis: a technique used to identify the conditions that initiate the occurrence of an undesired activity or state.

Sensitivity Analysis: analysis of how sensitive outcomes are to changes in the assumptions. The assumptions that deserve the most attention should depend largely on the dominant benefit and cost elements and the areas of greatest uncertainty of the program or process being analyzed.

Simulation Modeling: a simulation model is a computer program that replicates the operations of a business process and estimates rates at which outputs are produced and resources are consumed. Models test the consistency of the facts, logic, and assumptions used by planners to design a proposed business process, to compare alternative business processes, or to test the sensitivity of a process to changes in selected assumptions. Models help decisionmakers to assess the potential benefits, costs, and risks of alternative processes and strategies.

Stakeholder: an individual or group with an interest in the success of an organization in delivering intended results and maintaining the viability of the organization's products and services. Stakeholders influence programs, products, and services. Examples include congressional members and staff of relevant appropriations, authorizing, and oversight committees; representatives of central management and oversight entities such as OMB and GAO; and representatives of key interest groups, including those groups that represent the organization's customers and interested members of the public.

"**Stretch**" **Goal**: a goal that requires a significant change in the performance (quality, quantity, time, cost) of a process.

Subprocess: a collection of related activities and tasks within a process.

"**To Be**" **Process Model**: a process model that results from a business process redesign/reengineering action. The "to be" model shows how the business process will function after the improvement action is implemented.

Total Quality Management: an approach that motivates, supports, and enables quality management in all activities of the organization, focusing on the needs and expectations of internal and external customers.

Value-Added: those activities or steps which add to or change a product or service as it goes through a process; these are the activities or steps that customers view as important and necessary.

World Class ("Leading") Organizations: organizations that are recognized as the best for at least one critical business process and are held as models for other organizations.

Workflow: a graphic representation of the flow of work in a process and its related subprocesses; including specific activities, information dependencies, and the sequence of decisions and activities.

APPENDIX II

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APPENDIX III

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