

WHITE PAPER
IT PORTFOLIO MANAGEMENT IN THE
FEDERAL GOVERNMENT

A Planview White Paper
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BACKGROUND

Most agencies in the federal government have some initiative related to portfolio management, and several federal laws and regulations are effectively requiring portfolio management processes to be implemented. However, despite the efforts across the federal government and guidance from OMB, numerous challenges and obstacles remain to implementing portfolio management.

This paper will explore these challenges and illustrate some of the portfolio management best practices currently being adopted across the federal government. The white paper also highlights the benefits of portfolio management, including compliance with relevant federal regulations and guidelines as well as financial and other qualitative benefits.



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Michael has been recognized for exceptional ability to guide teams to success on large-scale results-oriented Federal projects. As a Principal with leading consulting firms, Michael has led the portfolio management process development and implementation for diverse federal agencies including Defense Finance and Accounting Service (DFAS) and Department of Homeland Security. Michael has a BS in Accounting from Georgetown University. He also has an MBA in Information Technology and Marketing from University of Maryland, College Park.

Table of Contents

INTRODUCTION	3
COMPLIANCE REQUIREMENTS	3
CHALLENGES/OBSTACLES	5
PORTFOLIO MANAGEMENT BEST PRACTICES FOR THE FEDERAL GOVERNMENT	6
VALUE OF PORTFOLIO MANAGEMENT IN FEDERAL AGENCIES	6
QUANTITATIVE BENEFITS	6
QUALITATIVE BENEFITS	7
IMPLEMENTING A PORTFOLIO MANAGEMENT SOLUTION WITH PLANVIEW ENTERPRISE	7

“If agencies are ever to achieve advance levels in OMB EA assessments, knee-jerk compliance behavior must give way to real process changes, and agencies must provide hard data that show how they have become more effective.”

-Forrester Research

INTRODUCTION

The federal government spends about \$65B a year on information technology (IT). Federal IT employees from project managers to CIO's endeavor daily to be good stewards of taxpayer money and ensure IT projects and investments support internal needs and agency objectives. CIO's, by definition as Chief Information Officers, must track and report information about IT projects, systems, applications, and all IT investments. A primary tool in their arsenal to achieve these goals is the methodology and processes of portfolio management. Portfolio management incorporates IT investment decision making, project and program management, and the sharing of information across an organization. Portfolio management ensures the alignment of IT with agency mission and goals, reduces low value projects, eliminates redundant investments, and selects the combination of IT investments that provide the highest value to an agency.

Federal IT organizations face numerous challenges as well as external pressures that make it difficult to support agency missions and satisfy expanding stakeholder and constituent demands. These internal challenges include:

- Stove-piped data and data residing externally with contractors
- Disparate decision bodies impacting technology investments across the agency
- Non-integrated systems and lack of coordination of processes across the agency
- A shrinking budget

The external pressures include Federal regulations such as the compliance requirements of Clinger-Cohen Act and the Government Performance and Results Act (GPRA), as well as the reporting and management requirements of Federal mandates including the President's Management Agenda (PMA), President's Budget, OMB Circular A-11, and American National Standards Institute/Electronic Industry Alliance (ANSI/EIA) 748 EVMS standard.

COMPLIANCE REQUIREMENTS

Congress and the Executive Office have established several laws, compliance regulations, and management reporting requirements related to IT governance. An integrated portfolio management process is a major component of IT governance. It provides a tool for compliance and relief from the external pressures of the following key compliance requirements.

CLINGER COHEN ACT OF 1996

Clinger-Cohen (also known as “Information Technology Management Reform Act of 1996”) mandated IT enterprise architecture for federal agencies, determined interoperability standards, and incorporated Capital Planning and Investment Control (CPIC) in Budget Formulation and Execution.

While CIO's across the federal government are aware of these requirements, developing and implementing a program to manage IT investments remains a major undertaking. Agencies are experiencing difficulties in tracking all their IT applications and systems, as well as ensuring interoperability and a consistent enterprise architecture. The challenges include:

- Lack of management support and commitment
- Overcoming management silos
- Constrained resources

Portfolio management can aid agencies in overcoming these challenges. By providing greater management insight into IT investments, portfolio management frees up resources from redundant or low value initiatives. Portfolio management also gives an agency management

team a common understanding of the value of enterprise architecture. Furthermore, data elements collected through portfolio management can be used to promote interoperability.

CAPITAL PLANNING AND INVESTMENT CONTROL (CPIC)

CPIC is a circular investment management process by which an agency follows these sequential phases, which map to the key steps of a portfolio management process:

- **Select:** IT investments are assessed, prioritized, and chosen.
- **Control:** The agency employs executive oversight, performance measurement, and quality control to ensure IT investments are managed, implemented, and developed in a disciplined approach and projects are progressing as planned.
- **Evaluate:** The results of the implemented projects and IT initiatives are evaluated to determine how well the portfolio is supporting agency mission and program objectives.

Agencies struggle with establishing criteria for each of these phases. CIO's, program managers, and project managers also are tasked with burdensome data calls to support these phases. There is also a need by agencies to be able to leverage this work beyond compliance.

Portfolio management provides parameters and guidelines for each of these phases. Application of the methodology ensures that selected investments are aligned with an agency's strategic goals and best support agency mission. Portfolio management provides information on project progress, funds spent to date, and highlights variances providing executives and managers the tools for "Control." Portfolio management enables an element of "Select" in the "Control" phase, as the portfolio can be adapted to emergent requirements outside the annual select process in response to internal and external conditions. Portfolio management also provides the tools for the "Evaluate" phase, enabling an overall view of the portfolio and the results from IT investments.

GOVERNMENT PERFORMANCE RESULTS ACT (GPRA)

GPRA was designed to shift government focus away from activities performed by an agency – such as tax returns processed or inspections made – to a focus on actual results of those activities such as improvements in responsiveness and program quality. GPRA requires agencies to prepare strategic plans and yearly performance plans and performance reports. Federal CIO's are required to contribute the IT component of these plans and reports. This is difficult for many agencies due to:

- Lack of a clear view of IT across the agency
- Limited metrics for tracking performance
- Projects started or implemented without the necessary data captured at beginning to track performance

Portfolio management provides the visibility into IT investments to clearly demonstrate the link between IT initiatives funded and the strategic goals and objectives included in the agency strategic plan. In addition, portfolio management enables agencies to develop metrics and share best practices in tracking projects, and provides the necessary executive oversight of IT investments to accurately and efficiently develop performance targets and plans.

OMB CIRCULAR A-11

Section 300 of this circular establishes the OMB policy for the planning, budgeting, acquisition, and management of Federal capital assets. It also mandates submission to OMB the annual Exhibit 300 business cases. Section 53 mandates annual submission to OMB of the Exhibit 53, which includes summary information for all the IT investments in an agency portfolio. These are major data calls requiring significant man-hours.

With a dynamic portfolio management process in place, time-consuming data calls are a thing of the past. The data calls for the annual exhibit 300 data calls are easier because portfolio management provides the structure that updates the necessary fields for submission. Portfolio management also provides the framework for agencies to obtain business value beyond checking the "compliance box" from the work that goes into creating the OMB reporting documents. By applying the principles of portfolio management, agencies can better



Figure 1: The three sequential phases of CPIC

understand the value of individual IT investments and develop improved business cases.

PRESIDENT'S MANAGEMENT AGENDA (PMA)

The PMA is a starting point for management reform and was designed to make government more accountable. The PMA contains five government-wide goals/initiatives to improve federal management. These five initiatives are:

1. Improved financial performance
2. Budget and performance integration
3. Strategic management of human capital
4. Competitive sourcing
5. Expanded electronic government

Portfolio management enables the efficient capture and tracking of the information required by the PMA. By applying a dynamic portfolio management process and approach, an agency can ensure the highest value IT investments are selected. Portfolio management also enables the elimination of redundant investments, reduction of wasteful projects, the tracking of performance results from budgeting decisions, and the integration of performance measures with budget decisions and submissions. In addition, portfolio management delivers insights into staff and management capabilities across IT enabling agencies to best support the agency strategic plan, obtains performance data on procurements and acquisitions to improve sourcing, and incorporate electronic government as a criteria component in the "Select" phase as well as a metric in the "Control" phase.

EARNED VALUE MANAGEMENT (EVM)/ANSI 748

The Office of Management and Budget handed out the mid-year report card last month and grades were mixed. Most agencies still earned yellow grades in most categories and the number of green scores dropped to 33 from 41 over the three-month period ending June 30.

-Government Leader, August 2005

New OMB guidelines are requiring agencies to be even more disciplined about how they run major IT projects. OMB requires a management methodology, EVM, to be employed by all federal agencies as well as their contractors in running major IT projects. Agencies are required to report estimated total cost and completion date. OMB wants to know if projects are being completed on dates later than planned and whether costs are significantly exceeding planned costs. The federal government has issued a policy framework to guide federal agencies in developing EVM policies.

However, despite these EVM guidelines, agencies continue to struggle with project and program success. Analyst studies indicate that 2 out of 3 IT projects fail to meet their objectives. The major pitfalls include:

- Poor planning
- Unclear goals and objectives
- Objectives changing during the project
- Unrealistic time or resource estimates
- Lack of executive support and user involvement
- Failure to communicate and act as a team
- Inappropriate skills

Project portfolio management provides a new facet to EVM. By enabling CIO's and IT decision makers to see a project's EVM results in the context of the overall IT portfolio of projects, IT boards and review councils can make better decisions about resource allocation and significantly improve their ability to achieve their missions.

CHALLENGES/OBSTACLES

There are challenges and obstacles in implementing portfolio management in the federal government, and a solid understanding of these will help agencies avoid common pitfalls.

DATA CAPTURE, CATEGORIZATION, AND MANAGEMENT

Data capture and management for IT portfolio management has presented a challenge across the federal government, primarily due to the following reasons:

- Data is stove-piped and not integrated across the agency
- Varying terminology is used, resulting in no common lexicon to discuss and measure IT results
- Project data frequently exists outside of the agency as contractors perform and manage many federal IT projects

The initial data collection is difficult, as the data components required tend to reside in multiple, non-integrated areas within and outside the agency. Once the initial data collection is performed, however, it becomes easy to update with the support of a portfolio management tool and process.

ORGANIZATIONAL ADOPTION

For portfolio management to be successfully implemented, decisions have to be made based on the results of the process. Agencies have a real concern that their funding will be cut or employee positions will be lost if they demonstrate cost savings from eliminating redundant or low value projects and applications. Therefore, there is limited precedent for killing projects or shutting down applications. For agencies to realize improved program success, they must allocate funds based on organizational goals and objectives and move funding to high value projects.

As with any new management approach, there will be resistance by staff and managers as well as some executives. As federal agencies implement components of portfolio management, employees may resist due to various concerns, including reduced funding, risk of negative performance reviews, and speculations of additional work required when already operating at capacity. Through execution of appropriate organizational adoption activities such as training, executive sponsorship, and regular communications of the portfolio management value proposition, these concerns can be alleviated.

PORTFOLIO MANAGEMENT BEST PRACTICES FOR THE FEDERAL GOVERNMENT

There are a number of industry best practices that can help federal agencies obtain the greatest value from their portfolio management solutions. A few techniques that have proved successful include:

- 1. Start small:** Take a deliberate, phased approach to implementation by starting small and rolling out more functionality and coverage over time. Leverage the value of the functionality you've implemented before adding new functionality.
- 2. Elect champions:** Promote success by having the rollout overseen and championed by an executive sponsor with sufficient cross-organizational influence to obtain participation from the business side of the agency. Every implementation needs its champions; the more influential they are, the greater success you will experience.
- 3. Track time and labor directly with your Earned Value Management (EVM) system:** Earned value management has been a difficult discipline to understand and implement. The best successes have occurred when contractors and employees input labor costs and other direct costs into the EVM system. While contractors tend to be opposed to this additional burden, federal contracts are beginning to be written to require this.

VALUE OF PORTFOLIO MANAGEMENT IN FEDERAL AGENCIES

Portfolio management enables Federal agencies to achieve numerous benefits such as the ability to spend IT dollars on higher value projects, applications, and systems. Compliance is easier as well since portfolio management enables demonstration of clear performance results and incorporates effective project tracking and reporting. The primary benefits of IT portfolio management are as follows:

QUANTITATIVE BENEFITS

MORE EFFICIENT COMPLIANCE

Portfolio management puts timely data regarding project progress, health, and funding status readily available at compliance managers and CIO's fingertips. This eliminates the burdensome data calls that occur annually for the Exhibit 300 business cases and quarterly for PMA reporting. Portfolio management also enables agencies to write better Exhibit 300 business cases due to clearer visibility into IT and a better understanding of projects and their value to the organization.

BETTER SCORES ON PMA

Agencies have realized improved financial and performance management from portfolio management leading to better scores and "getting to green" on the PMA. Portfolio management has provided better insight into the performance of IT and improved the agency's ability to integrate performance management and reporting in IT budgeting decisions.

SPENDING ON HIGHER VALUE PROJECTS

By using prioritization and scoring processes to identify redundant applications or projects as well as low value IT investments in the portfolio, agencies can move funds to IT projects that have higher value in terms of supporting agency mission and program success. This will reduce wasteful spending on failing or misaligned projects.

IMPROVED RESULTS FOR IT PORTFOLIO OF INVESTMENTS

Portfolio management provides the management approach and processes to efficiently identify duplicate projects or applications, overlapping functionality for consolidation, and poor performing projects so that cost savings or cost avoidance can be generated through allocating resources based on this information. Portfolio management also includes components of controlling risks across the portfolio such as scenario planning that deliver a higher percentage of successful projects and applications.

QUALITATIVE BENEFITS

REALIZATION OF AGENCY MISSION AND GOALS

Portfolio management aligns IT assets and investments with the strategic goals and mission of an agency. Agencies implementing portfolio management frequently discover a portfolio that is misaligned and not balanced across strategic goals. Through performance of portfolio management analysis, funds can be systematically allocated to balance IT investments across strategic goals according to management priorities and new initiatives. Projects can then be selected based on criteria linked to agency mission.

BETTER MANAGEMENT OF TAXPAYER FUNDS

Agencies make more effective use of IT resources through employing a portfolio management approach. An agency's IT portfolio can be balanced and criteria for selecting IT investments implemented such that those IT initiatives that create the best value for customer service rise to the top. Through improved project management, agencies can reduce waste from failed projects and redundant applications and projects.

IMPROVED COMPLIANCE WITH REGULATIONS

Portfolio management provides the management framework required to support external performance reporting to ensure compliance with Government Performance Results Act (GPRA), the PMA, OMB requirements including the OMB Program Assessment Rating Tool (PART) and Circular A-11, and the Clinger-Cohen Act. By applying a portfolio management methodology, agencies have a tool to demonstrate project progress and performance and measure IT initiatives based on results

IMPLEMENTING A PORTFOLIO MANAGEMENT SOLUTION WITH PLANVIEW ENTERPRISE

Planview Enterprise combines software and proven best practices to give agencies the visibility they need to improve performance and meet regulatory challenges by demonstrating how initiatives tie to overall objectives. The government sector continues to leverage Planview's portfolio management solutions to better manage assets and ensure that disciplined IT management is implemented to

manage these investments. Planview government customers include the US Air Force, the US Department of Transportation, and US Customs.

With Planview Enterprise, your agency can measure alignment to agency missions and objectives, improve financial decisions, maximize performance, and enable regulatory compliance with proven best practices. To learn more, visit www.Planview.com/gov.

“As we continue to realize the value of good project management, room for improvement remains in the execution of our IT projects. With the right tools and qualifications, managers will be better equipped to make decisions and carry out their missions.”

-Administrator, Office of E-Government and Information Technology



For more than 20 years, Planview has been advancing the discipline of portfolio management, helping our customers change the way they manage people and money to make better business decisions. With a singular focus on portfolio management, Planview is the only company that combines customer-driven software, unmatched domain expertise, and proven best practices to solve each customer's unique business problems. For more information, visit www.planview.com.

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