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# FEDERAL GOVERNMENT MANAGERIAL COST ACCOUNTING



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# **Executive Overview**

Public Sector organizations are constantly challenged to improve their performance in a resource constrained environment. One key to achieving this goal is a detailed understanding of the activities performed in support of the organization's outputs, programs and mission, and the resources consumed by these activities. To gain this detailed insight and to be able to trace unit cost per output back to the original source costs, a robust Managerial Cost Accounting system (MCA) is required. Oracle's cost management solution is an ideal tool to support the MCA requirements of a Public Sector organization.

# Introduction

Government Agencies are constantly challenged to efficiently and effectively utilize resources, to increase transparency, to expand constituent services and to improve performance. At the core of addressing these challenges is a requirement for a detailed understanding of the resources needed and consumed related to goals, mission and outputs of the organization. This information is needed for management and employees to make decisions that will effectively utilize resources and improve programmatic performance while at the same time increasing transparency.

It has proven difficult for many organizations to accumulate and analyze timely, accurate and auditable cost information that is tied to programmatic outputs and delivered services. This is usually due to a combination of system limitations (including multiple silos of data, and multiple reporting and analytic platforms), people concerns (including resistance to or fear of change) and process issues (including the challenge of fully defining an organization's outputs and supporting activities, and encouraging employees to track their resource consumption by activity/output).

Many organizations have initiated a comprehensive cost management program (including policy, practice and system improvements in the accounting, budgeting and management areas) to improve their ability to gather and analyze cost and performance data. Implementing an integrated managerial cost accounting system can provide the 'system improvements' component of the cost management program.

This document provides a guide for what to expect from the successful execution of a comprehensive cost management program. The first section describes some of the benefits derived from improved managerial cost accounting information, including adherence to statutory and regulatory guidelines, improved management information and potential increased funding. The second section defines managerial cost accounting from a governmental perspective. The third section discusses some of the challenges of improving managerial cost accounting, including both system and cultural change issues. The final section describes Oracle software that has been designed and built to address the specific need for access to timely, accurate and auditable cost information and to improved decision making.

# The Benefits of Improved Managerial Cost Accounting Information

Federal Government organizations should expect three main benefits from improved cost information:

1) statutory / regulatory compliance, 2) improved management information and decisions and 3) continued funding. The benefits of statutory and regulatory compliance include decreased regulatory oversight and political pressure. Improved management information enables better decisions on the use of scarce resources, which in turn improve delivery of the organization's mission. Funding requests that contain detailed cost justifications tied to performance goals are more likely to be approved.

# Statutory / Regulatory Compliance

There are a variety of statutory and regulatory requirements that are driving Federal Government organizations towards improved managerial cost accounting. These include:

- The Chief Financial Officers Act of 1990, which includes requirements to support "integration and modernization of the government's financial systems and provides for the development of, and reporting of, cost information."
- The Government Performance and Results Act of 1993, which "requires agencies to develop strategic plans and performance goals, and to measure and report on performance compared to goals. Unit costs and other types of cost information are indicators of performance. Managerial cost systems will be needed to enable comparisons of actual costs with cost goals and to compare costs with outputs and outcomes."<sup>2</sup>
- The Statement of Federal Financial Accounting Standards 4: Managerial Cost Accounting Standards and Concepts, which states: "In managing federal government programs, cost information is essential in the following five areas: (1) budgeting and cost control, (2) performance measurement,
   (3) determining reimbursements and setting fees and prices, (4) program evaluations, and (5) making economic choice decisions."

Each of these documents states explicitly or implicitly that the use of government resources must be properly tracked and tied to an organization's performance goals. Managerial cost accounting is a recommended method of achieving this goal.

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<sup>&</sup>lt;sup>1</sup> CFO Act of 1990

<sup>&</sup>lt;sup>2</sup> Government Performance and Results Act of 1993

<sup>&</sup>lt;sup>3</sup> Statements of Federal Financial Accounting Concepts and Standards, as of June 30, 2010: The Statement of Federal Financial Accounting Standards 4: Managerial Cost Accounting Standards and Concepts

# Improved Management Information and Decisions

While adherence to statutory and regulatory requirements is certainly an important goal for any Federal organization, the most immediate benefit of managerial cost accounting involves the ability to make better decisions from better information. Access to timely, accurate, auditable information has been a problem for many Federal managers. One major cause of this problem is having non-integrated business systems with the corresponding dual data entry and reconciliation issues. Another cause involves changing business requirements in the form of new reporting and informational needs. Whatever the cause, a typical Federal manager does not have access to all the information needed to make 'optimal' decisions regarding resource usage.

By improving their managerial accounting systems, an organization should be able to answer questions like:

- 1) What is the cost of delivering a specific product/service, by region, by organization, by constituent, by time/season?
- 2) What will be the impact on service levels of a 10% budget cut?
- 3) How much would it cost to improve service levels 15%?
- 4) Based upon current spending levels, when will a program run out of funds?
- 5) How much will it cost to move an organization's strategic goal from yellow to green status in the enterprise performance management system?
- 6) In response to a congressional inquiry, how much money is being spent in support of a new grouping of programs and activities?

Successful implementation of a managerial cost accounting system provides answers to these types of questions and the flexibility to answer new questions as they arise.

### Use Case - Shared Services

Governmental organizations, like many private companies, can attain efficiency and service improvements and achieve ongoing cost reductions by focusing on a shared services strategy to reduce overlap and redundancy of functions, processes and infrastructure. When done effectively, Human Capital Management (HCM), Finance, Information Technology (IT), procurement and other support services can all benefit from a shared services strategy.

Oracle's cost management solution provides the insight needed to thoroughly understand the true costs of shared services. Using appropriate and representative cost drivers, Oracle's cost management solution determines how to justifiably assign fixed and variable expenses to shared services, resulting in a better understanding of the cost per service, cost per activity and cost consumption of resources. This new knowledge allows departments to confidently accept internal fees that they are being charged.

But a well-implemented shared services strategy also permits managers to answer questions such as:

- What are the true costs of my service offerings?
- · Are my fee rates set appropriately?
- Do I have enough resources to perform these services?
- If the requirement for this service increases by 30%, do I have the resources to handle it?
- How can I best use my people to most effectively provide these services?

User-defined shared services models in Oracle's cost management solution help answer these questions, and many more. Scenario playing capabilities allow cost analysts to evaluate the impact on cost and resources of performance improvements, service volumes changes, and/or rates changes.

New knowledge of activity and resource costs can also be used in the budget process to justify funding requirements for future periods.

# **Funding**

Due to statutory/regulatory requirements, future funding requests are evaluated based upon an organization's ability to achieve performance goals and clearly establish the associated costs. Organizations that can clearly monitor performance and the associated resource costs are much more likely to receive the funding requested than organizations without this information. This is true for both appropriated and reimbursable type funding.

Organizations that rely on reimbursable funding are constantly challenged by their customers to detail and justify their costs. This issue can translate to a potential loss of funding, as customers are sometimes reluctant to reimburse costs without the auditable backup data.

Organizations requesting appropriated funds are also challenged to justify their funding requests with detailed cost information, including cost per output and cost per performance (e.g., Earned Value Management EVM). The OMB Exhibit 300<sup>4</sup> (capital assets) and Exhibit 53<sup>4</sup> (information technology)

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<sup>&</sup>lt;sup>4</sup> CIRCULAR NO. A–11 PREPARATION, SUBMISSION, AND EXECUTION OF THE BUDGET Executive Office of the President Office of Management and Budget July 2010

are two examples of documents that support funding requests which require complete and accurate cost data.

# What is Managerial Cost Accounting

With the need for improved managerial cost accounting information established, it is important to define cost accounting, including its evolution over time.

# Managerial Cost Accounting Definition

In the CFO Council/JFMIP Cost Accounting Implementation Guide, the following definition for managerial cost accounting is provided:

"Managerial cost accounting is the process of accumulating, measuring, analyzing, interpreting, and reporting cost information useful to both internal and external groups concerned with the way in which the organization uses, accounts for, safeguards, and controls its resources to meet its objectives. Managerial cost accounting is therefore the servant of budgeting, financial accounting, and reporting because it assists those functions in providing information. In addition, managerial cost accounting provides useful information directly to management."

In the AGA CPAG Research Series on Managerial Cost Accounting, the following description for managerial cost accounting (MCA) is provided:

"MCA involves the accumulation and analysis of financial and nonfinancial data, resulting in the allocation of costs to organizational pursuits such as performance goals, programs, activities and outputs."

To summarize, managerial cost accounting is the process of assigning costs to cost objects (outputs) to support an organization's management information requirements.

### Managerial Cost Accounting Methods

Guidance has been provided regarding cost assignments and costing methods. From SFFAS 4, "The cost assignments should be performed using the following methods listed in the order of preference: (a) directly tracing costs wherever feasible and economically practicable, (b) assigning costs on a cause-and effect basis, or (c) allocating costs on a reasonable and consistent basis." The costing

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<sup>&</sup>lt;sup>5</sup> JFMIP Managerial Cost Accounting Implementation Guide – February 1998

<sup>&</sup>lt;sup>6</sup> AGA CPAG Research Series: Report No. 22, September 2009: Managerial Cost Accounting in the Federal Government: Providing Useful Information for Decision Making

<sup>7</sup> Statements of Federal Financial Accounting Concepts and Standards, as of June 30, 2010: The Statement of Federal Financial Accounting Standards 4: Managerial Cost Accounting Standards and Concepts

methodology used should be appropriate for management's needs and the operating environment.<sup>8</sup> There are a variety of acceptable costing methods, including:

- Standard Costing, where standard cost rates are established based upon historical data (or some other reasonable source). This costing methodology is most appropriate for repetitive type outputs (e.g., widgets delivered) and relies on on-going comparisons with actual costs to identify any material variances (which would lead to rate adjustments).
- Job Order Costing, where discrete units of work are identified and used to accumulate the
  appropriate direct costs (via direct assignment) and indirect costs (based upon a causal beneficial
  relationship). This costing methodology is most appropriate for organizations that produce nonrepetitive outputs (e.g., case management, engineering and construction, research and development).
- Process Costing, where products are created by flowing through a series of organizations/steps, accumulating a unit cost as they flow from one step to the next. This methodology is most appropriate for the production of homogeneous goods or services, where the same process is used in the production of each output (e.g., Medicare claims processed).
- Activity Based Costing (ABC), where the cost of an output is determined by the activities required to
  produce the output and the resources consumed by these activities. This methodology is most
  appropriate for organizations that can clearly define their outputs, activities and cost drivers (used to
  assign resource costs to activities). The major benefits of ABC are: 1) improved accuracy of cost
  assignments (by more accurately assigning both indirect and direct costs) and 2) identification of
  non-value added activities (those activities that do not directly or indirectly support an organization's
  outputs).

Each organization must determine the optimal methodology to be used, based upon their specific situation. It is important to note that the methodologies are not mutually exclusive. It is appropriate to utilize more than one methodology in some circumstances.

For organizations that want an even greater understanding of outputs, it is necessary to bring new insights to inputs assigned to programs. It is important to analyze the input costs or resources assigned to each activity pool, and define and articulate the logic used to create and model cost assignment drivers. Successful management accounting systems are able to utilize these models to show the flow of costs from resources to activities to outputs, or from outputs back to activities and resources. This ability to provide the management accounting information in a simple to follow, graphical way, addresses many of the adoption and implementation challenges that can cripple a cost management initiative. The managerial cost accounting system should also be able to support scenario based

<sup>&</sup>lt;sup>8</sup> Statements of Federal Financial Accounting Concepts and Standards, as of June 30, 2010: The Statement of Federal Financial Accounting Standards 4: Managerial Cost Accounting Standards and Concepts

analysis, which enables managers to choose from a variety of approaches, the approach that is best for the organization.

# Use Case - Working Capital Fund

Working Capital Funds (WCF) are revolving funds that rely on cost recovery to finance operations. The revolving funds are designed to be zero-profit/loss activities. In other words, the full costs (and only the full costs) of the products and services delivered is to be reimbursed through the associated sales. Many WCF organizations use stabilized rates to bill customers for the associated products and services. These stabilized rates enable customers to accurately plan for the costs associated with the products and services they intend to procure, during a given budget cycle. The ability to accurately plan expenditures is critical for any government organization.

Since WCF organizations intend to fully recover their costs while utilizing stabilized rates, it is critical that these rates be as accurate as possible. If the rates are set too high or too low, the organizations will over recover or under recover. To accurately set rates, they need to have a comprehensive understanding of the products/services they deliver, the activities and tasks required for production/delivery and the resources consumed by those activities.

Oracle's cost management solution is an ideal solution to support the needs of a WCF organization. It enables the modeling of products and services and establishes the relationship back to the corresponding activities and resources. With this information, organizations not only understand the true costs of their outputs, they can also analyze the related activities so that they can make informed decisions related to controlling costs, and can establish and compare benchmarks for certain industry standard activities.

# Cost Management Implementation Challenges and Suggested Approach

# Implementation Challenges

Implementing a managerial cost accounting system (including software and business process improvements) can significantly improve the management information available to a Federal organization Due to the nature of the work, the most significant challenge is likely to involve the ability to address the cultural/organizational issues that will arise during implementation and deployment. These issues include:

- 1) Standards agreement upon outputs, cost objects, business process and other implementation related items.
- 2) Time keeping individuals may be asked for the first time to document what they are doing and how much time they spend doing it.
- 3) Access to information revealing detailed cost/schedule/performance problems hidden by current system limitations.
- 4) Domain expertise individuals feel that their value to the organization is tied to their unique knowledge of and ability to work the current systems.
- 5) Comfort level individuals feel (correctly) that the new system will initially have an adverse effect on performance and productivity and that the new system will require them to change how they currently do their job.

6) Survival - the new system will make jobs/roles unnecessary and therefore expendable.

The most common cause of failure for a system implementation is the cultural and organizational issues that arise. It is imperative that a plan be established to identify and address these issues before, during and after the deployment.

# Suggested Approaches

One of the difficulties in improving an organization's understanding of their costs is defining where to begin. You 'don't know what you don't know'. Another challenge is the time and resources it takes to execute a major cost management initiative, especially given the organizational and cultural challenges mentioned above.

For this reason, it is often valuable to start small and adopt a phased approach to improved managerial cost accounting. Some potential good first phases include:

- 1. Enterprise repository of current cost data (this would involve pulling together disparate cost data, in its current format, into a central repository for analysis)
- 2. A shared service center
- 3. A working capital fund organization
- 4. A major program office
- 5. A specific department that is interested in taking a leadership role in the managerial cost accounting efforts.

Starting with any of the five areas mentioned above can jump start the cost management process by:

- a) Highlighting areas where there appear to be significant source data accuracy issues (which can be researched and fixed at their source).
- b) Identifying areas where the costs are highest (i.e., focus on the most material areas).
- c) Minimizing the organizational and cultural issues that bog down larger implementations.
- d) Providing the organization with the near term value of having improved managerial cost accounting information in the selected business area.

Future phases can then target those areas deemed most critical to the organization. With this incremental approach, the organization can derive near term value and then produce incremental improvements, focusing on the high value targets first.

# Oracle's Solution for Cost Accounting and Cost Management

### Overview

Oracle's newest cost management solution, Oracle Hyperion Profitability and Cost Management (HPCM) is designed to enable Federal agencies to easily extend their cost accounting capabilities by

enabling them to discover the drivers of cost, empowering their program and department managers with increased visibility into cost flows and enabling them to improve resource alignment with agency objectives and outcomes.

The models developed within HPCM reflect the agency and its operational structure. The models can include a wide range of flexible assignment methods and easy to build allocation rules.

Validations, including balancing reports and process checks are built in. Transparency and visibility ensure quick model development and enable easily sharing of the concepts and logic with a wide audience. This is very important in explaining the relationships between outcomes, outputs and inputs, and fills an existing knowledge gap.

Supporting these features are robust analysis and reporting capabilities, including traceability maps within the models showing exactly what is going on at every point of the model.

# Stages and Dimensions

Some programs, departments, functions and processes within a given Federal agency are easy to model due to the direct relationship between the inputs, activities and outputs. This happens where there are dedicated or specialized people, processes or tasks. But there will also be many areas where more complex, multi-stage modeling assignment logic is needed.

A flexible solution that can provide both approaches is needed. With HPCM the number and simplicity or complexity of the model stages and how to assign the inputs across the dimension and stages are fully user definable.

There is no need to follow a prescribed, rigid, single modeling path. For example, if most inputs costs go from the second to the third stage, but some need to go from the first directly to the third in the model, the solution is open and flexible so as to accommodate this. It will support the way an agency structures its operations. Being forced into a one-size fits all model is a big implementation challenge, and HPCM avoids this pitfall.

# **Use Case - Performance-Based Budgeting and Cost Management**

Performance-Based Budgeting seeks to improve the efficiency and effectiveness of public expenditures by linking the funding of public sector organizations to the results they deliver. With this method of budgeting, it is possible to shorten the planning and reporting cycles, to tie agency performance to budget, and to deliver continuous performance improvement across an entire government agency. Aligning departmental objectives with organizational goals and measuring agency performance against targets results in an enhanced strategic planning process and improved accountability for results.

To produce a practical budget for maintaining acceptable service levels, it is important to understand the real costs associated with the activities performed, and with the services and programs provided. Using allocation methods determined by the agency, Oracle's cost management solution assigns costs of direct and shared resources to the activities, services and programs that actually consume them. Its traceability illustrates graphically how the resulting per-activity or per-service costs have been built up and provides a means to justify these cost assignments to internal and external stakeholders.

Activity cost results in Oracle's cost management solution provide valuable input to the planning process to help develop or adjust budgets and forecasts on an on-going basis. The availability of justified unit costs typically reduces the number of iterations required in the planning process and the time required to evaluate multiple scenarios. Plus results distributed through dashboard or scorecard visualizations highlight variances – positive variances indicating the attainment of better efficiencies, or negative variances exposing a challenge to be dealt with.

Performance-Based Budgeting aims to evaluate programs by measuring the relationship between resources consumed and results provided. Oracle's cost management solution provides agencies with the realistic cost information to defensibly make these comparisons.

# Easy to Develop Models

Functional business users can do the modeling with technical business users providing financial and driver data sets. The way an organization does things can be reflected in the model because it defines all the elements – it is not a black box modeling environment. Allocation rules are both easy to build and maintain. There are also multiple rules types and built-in validation reporting.

Embedded validation enables rapid prototyping and fast development of alternative scenarios. Modeling progress is validated through the validation processes and report screens.

Many cost accounting and cost management initiatives get bogged down in overly technical project and implementation challenges that alienate the business and technical teams. The simple, business user focus of HPCM modeling makes for a straight forward modeling experience.

# Trace Assignment Flows

Trace Allocation reports built into HPCM provide visualizations of the cost assignments, so a modeler can see the interrelationships and confirm the logic. More importantly, they allow the modeling team to easily show and explain the approach, the methodology, the financial numbers and the impact of the solution results to a wide audience

One of the hardest challenges to address with new performance management initiatives is to get the new solution and the information it provides understood and adopted by the organization. It's one of the key implementation challenges. The visualizations are incredibly valuable in addressing this huge challenge to success.

There is a potentially wide audience for the new management information provided by HPCM that goes beyond getting the information out and developing buy-in within the agency. The new information has to go further to realize the full potential of the new solution.

Regulators, auditors, watchdog and consumer group leaders can also benefit immensely from this clear visualization of the relationships between outputs supporting outcomes, and resources being allocated to and consumed by the activities performed. This also supports statutory reporting requirements, as well as being invaluable information for funding discussions.

# Integrated part of a Performance Management System

Federal Agencies require a system that delivers accurate, timely reporting of financial and operational results. Management, partners, and regulators need to review and understand these reports. Federal Agencies must accurately predict future outcomes, make confident decisions, and efficiently allocate resources. To meet all their requirements, they need the transparency and visibility that only a fully integrated system can deliver.

HPCM is part of Oracle's Hyperion Performance Management Applications suite, which is a modular suite of packaged enterprise performance management (EPM) applications that unite goal-setting, modeling, planning, monitoring, analysis, and reporting into a single, integrated system. The suite supports closed-loop EPM by delivering an accurate representation of past results and enabling swift, confident planning and execution for the future. Oracle's Hyperion Performance Management Applications provide a unified view of financial and operational performance, so organizations can quickly and accurately model, plan for, and overcome new challenges.

# Conclusion

Government Agencies are constantly challenged to efficiently and effectively utilize resources, to increase transparency, to expand constituent services and to improve performance of programmatic goals. For many, it is difficult to accumulate and analyze timely, accurate and auditable cost information that is tied to programmatic outputs and delivered services. To address the need for improved cost information, many organizations have initiated a comprehensive cost management program (including policy, practice and system improvements in the accounting, budgeting and management areas) to improve their organization's ability to gather and analyze cost and performance data. Oracle's cost management solution, HPCM, an integrated managerial cost accounting system, provides the 'system improvements' component of the cost management program and, along with the other elements of Oracle Enterprise Performance Management System, delivers an integrated solution to performance improvement.



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Hardware and Software, Engineered to Work Together