

I. Introduction:

While great emphasis is often placed on meeting the budget, scope, and schedule for the acquisition of a capital asset, these are only a fraction of the asset's total life-cycle costs. Costs such as operations and maintenance, including service contracts, can easily consume as much as 80 percent of the total life-cycle costs. Operations is a critical area where improved effectiveness and productivity can have the greatest net measurable benefit in cost, performance, and mission accomplishment.

OMB Circular A-123, Management's Responsibility for Internal Control emphasizes effectiveness and efficiency of operations as one of its three core objectives. Agencies should ensure that the appropriate controls are in place for effective asset management. For capital investments, the greatest level of operational efficiency occurs at the asset or project level. To improve the accuracy and efficiency of operational data collection an agency should employ an efficient way of collecting and analyzing operating cost and performance data. OMB's requirement for managing IT investments in steady state (or operations and maintenance) is called 'Operational Analysis'.

II. Definition:

Operational Analysis is a method of examining the current and historical performance of the operations and maintenance (steady state) investments and measuring that performance against an established set of cost, schedule, and performance parameters. An Operational Analysis is, by nature, less structured than performance reporting methods (Earned Value Management) applied to developmental projects. Operational Analysis is more subjective in nature, and should trigger considerations of how to better meet objectives, save costs, provide alternative methods of achieving the same results, and determine whether the organization should even perform a particular function.

III. Requirement:

Steady State investments complete an Operational Analysis annually in the place of an Alternatives Analysis and monthly Earned Value Management (EVM) processing. Mixed life-cycle investments may complete an Operational Analysis annually, in addition to an Alternatives Analysis and monthly EVM, if a significant portion of the investment is Steady State.

IV. Operational Analysis Objectives:

In addition to the developmental performance measures of "Are we on schedule?" and "Are we within budget?" an Operational Analysis answers more subjective questions in the specific areas of:

- Customer Satisfaction
- Strategic and Business Results
- Financial Performance
- Innovation

In addressing customer satisfaction, the analysis should focus on whether the investment is fully meeting the customer's needs and whether the cost is as low as it could be for the results delivered. The focus here is simply on whether the investment is delivering the goods or services that it is intended to deliver.

Strategic and business results measure the effect of the investment on the performing organization itself, and should provide a measure of how well the investment is meeting business needs, whether it is contributing to the achievement of the organization's strategic goals, and

whether it continues to be aligned with the organization's strategic direction. The Operational Analysis should address questions such as:

- "Does the investment help us get our job done?"
- "What strategic goal does it address, and how does it help us achieve that goal?"
- "Is there another organization that could be doing this work better, more efficiently or at lower cost?"

In measuring the financial performance, the Steady State Operational Analysis should compare current performance with a pre-established cost baseline. It should also discuss the current performance of the investment. Is performance within acceptable limits of variance for cost and schedule? If not, what corrective actions are you taking to get back on track? Has executive management concurred in the planned corrective actions?

Addressing innovation in the Operational Analysis is an opportunity to conduct a qualitative analysis of the investment's performance in terms of the three previous factors. Demonstrate that you have revisited alternative methods of achieving the same customer results and strategic goals. Operational Analysis may identify the need to redesign or modify an asset by identifying previously undetected faults in design, construction, or installation/integration, highlighting whether actual operation and maintenance costs vary significantly from budgeted costs, or documenting that the asset is failing to meet program requirements. This aspect of the Operational Analysis should address questions such as:

- "How could we better meet the customer needs?"
- "Could we meet these same customer needs at lower cost?"
- "How could this investment be combined with others to better meet our organization's strategic goals?"
- "How could we make better use of technology to provide a better level of service at lower cost?"

While the exact format and detailed content of an Operational Analysis are the choice of the organization doing the analysis, the essential success factor is that an in-depth, critical analysis is performed.

Operational Analysis will lose much of its value-added benefits to the capital programming process if an opportunity to make a course correction is missed due to inattention to early warning indicators. Analysis of such indicators may show a need to apply an improvement methodology, such as value management, to identify if there are better ways for the asset to meet its life- cycle cost and performance goals. Operational indicators for a given asset may include any of the following: effectiveness, energy usage, efficiency, reliability, productivity, maintainability, availability, and security.

V. Operational Analysis at SSA:

OMB has agreed that the controlled processes and data required for an effective Operational Analysis already exist at SSA. SITAR, SEI process, RAS, APRS, Prism, Quarterly Health Reporting, Risk Management Plan/RIMS, Post Implementation Review (PIR), etc. are examples.

As mentioned, Operational Analysis is less rigorous than EVM. Operational analysis does not have BCWP (quantified performance measures), or such rigid baseline and scheduling requirements. The data for Operational Analysis comes from various sources, such as:

- planned hours = SITAR
- planned dollars = SEI process
- actual hours = Quarterly Health Report / RAS

- actual dollars = APRS
- customer satisfaction = Quarterly Health report / Prism
- risk assessment = RMP, RIMS, Prism

The list above is not all-inclusive. The intent is to demonstrate that the data required for Operational Analysis is currently available at SSA.

VI. Operational Analysis Template:

The following template may be used as a guide (as applicable) in preparing and documenting Operational Analysis. Remember that OMB examiners are entitled to request documentation and artifacts to verify and support data submitted in the Major IT Business Cases.

Operational Analysis Review Form (Steady State Investments)

(Steady Sta	te investments)							
1. Administrative Information								
Program/Investment Title								
Program Manager								
Agency Sponsor								
Date of Operational Analysis								
2. Program/Investment Description Provide a brief summary of the investment and a description of the business processes it supports. Include information on the overlap of the investment with other investments.								
3. Customer Satisfaction								
3a. Identify the end-users of the investment.								
Sa. Identify the end daers of the investment.								
3b. Briefly describe the process used to assess end-user/customer satisfaction (i.e., surveys, user group meetings, customer focus groups, reviews of help desk logs, etc.)								
3c. How is the existing system providing end-users/customers with the needed functionality and performance?								
3d. Identify the need for additional functionality and/or performance enhancements. Examine gaps in Supporting the Agency's strategic goals, technical performance limitations, and/or results from the user/customer survey.								
4. Strategic and Business Results								
4a. How is the Program/Investment continuing to meet	the Agency's strategic goals?							
D. How could this investment be combined with others to better meet the Agency's strategic goals?								

4c. Risk (A complete list of Risks can be found in the Investment's Risk Management Plan/Risk Register.)
4c.1. Discuss any changes in operational risks for this investment. (Note: List changes, if any, in risks that were submitted in the most recent version of the Investment's Risk Management Plan.)
4c.2. List the top three risks and discuss their potential impact. (Note: Has the financial
impact of these risks in relation to the project been assessed?)
5. Financial Performance
5a. Discuss any budgetary constraints/issues and how they are being managed.
5b. What are the unexpected costs, savings, or cost avoidance? To what degree are the originally estimated benefits, internal rate of return and return on investment being realized?
5c. Provide an assessment of current costs against life-cycle cost and identify if the investment has a cost or schedule variance. Please refer to the Office of Management and Budget's (OMBs) Exhibit 300A, Section C, Life Cycle Costs for funding information for specific fiscal years.
6. Technological Innovation
6a . Identify if the Agency revisited alternative methods for achieving the same mission needs and strategic goals. If not, please explain why.
6b. Briefly describe and provide a date for the last system upgrade (which is modifying a software application to improve functions or procedures) or system re-engineering effort (which is modifying a software application to incorporate new functions or procedures) for each piece of this investment.
6c. Identify and briefly describe any planning that has already begun related to system upgrade or system re-engineering . Also provide the estimated number of years before each system in this investment will receive an upgrade.

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7. Investm	ent Healt	th								
	the compo		regard to ef	fectivene	ss, efficie	ncy, producti	vity, availat	oility,		
•		rmance Mea ble list the p		e measure	es that are	e associated	with the inv	estment.		
Metric Description	Unit of Measure	Measureme nt Area	FEA Performan ce Measurem ent Category Mapping [PRM Category]	Target for [PY] [Numeric]	Target for [CY] [Numeric]	Measuremen t Condition [Over target, Under target]	Reporting Frequency [Monthly, Quarterly, Semi- Annual, Annual]	Actual Result [Numeric]	Date of Actual Result [Numeric]	Comments
		-term (i.e., 1 near term, si				nent. If these	e plans incl	ude enhar	cements	or
Program Manager Signature:					Date:					