Practical Software and Systems Measurement

A foundation for objective project management

Acquisition Measurement—Workshop #1

Wed July 28, Afternoon
Thurs July 29, Morning

PSM 8th Annual Users' Group Conference

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Objective of the Workshop

Develop and review draft guidance, based on program office experience, in three areas:

- **Part a: Acquisition Cost Model**
  - Review and refine cost model parameters
- **Part b: Acquisition Measurement Guidance**
  - Discuss lessons learned and success factors in implementing measurement on the Acquisition Organization
- **Part c: Acquisition ICM Table and Measures**
  - Identify Information Needs, Measurable Concepts and candidate Measures related to the acquisition organization's role and tasking

Solicit volunteers to

- participate in validating the Acquisition Cost Model
- provide additional comments on and material for the Acquisition Measurement Guidance Strawman
- develop specifications for one or more selected measures from the Acquisition ICM Table

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Workshop Background

- ***Part a: Acquisition Cost Model Background***
  - ***Originally developed by Air Force Materiel Command to estimate AF acquisition resource needs (now in use primarily for Electronic Systems Center programs); being adapted to other environments***
  - ***PSM work began at the July 2003 UG Conference, and continued at the February TWG, with a review of draft cost model input parameters and the related Work Breakdown Structure (WBS).***
  - ***This workshop segment will review and refine the model and WBS.***

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Workshop Background Cont.

- *Part b: Acquisition Measurement*
  - *Initiated to provide guidance in measuring acquisition process performance*
    - *Public law 107-314, Section 804 of the Bob Stump National Defense Authorization Act for FY03, requires all military departments and defense agencies that manage Major Defense Acquisition Programs (MDAPs) with a substantial software component to implement a software acquisition process improvement program.*
    - *Measurement is needed to benchmark current process performance, identify issues, and justify and track the impacts of process improvements.*
  - *Similar initiatives are underway for systems acquisition, beginning with Systems Engineering Revitalization programs across the DoD and at other gov't agencies.*
  - *Work in this area is just beginning*

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Workshop Background Cont.

- *Part c: Acquisition ICM Table and Measures*
  - *Purpose is to identify and begin to specify some of the measures that can be used to assess acquisition organization products, processes and resources.*
  - *Work began in July 2003, and was continued at the February 2004 TWG.*
  - *This workshop segment will review and continue the work done thus far.*

Workshop Format

- Agenda
  - Workshop Background / Introduction
  - Three-part Workshop
    - Part a: Acquisition Cost Model (Wed 1:45-3:15)
    - Part b: Acquisition Measurement Guidance (Wed 3:45-5:30 and Thurs, 8:30-9:00)
    - Part c: Acquisition ICM Table and Measures (Thurs 9:00-12:00)
  - Workshop Wrap-up
- Techniques That Will Be Used
  - Review and refinement of work completed to date
  - Round-table discussions
  - Documentation of results and updates to products

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Intended Output - 1

- ***Users' Group Conference Products*** *(by 30 July)*
  - ***Workshop outbrief, meeting minutes, and action items***
    - ***Key topics from lessons learned & information needs discussions***
    - ***Priority-grouped list of Acquisition Organization Measures and suggested measurement practices***
    - ***Recommendations for improvements to strawman, cost model, and ICM table***
    - ***Tentative volunteer list & assignments***
- ***Interim Products to be Placed on PSM Website***
  - ***September 2004***
    - ***Acquisition Cost Model & Work Breakdown Structure (WBS), v 1.0***
    - ***Strawman Acquisition Measurement Guidance***
    - ***Acquisition ICM Table & Measures, draft v 0.1***
  - ***March 2005***
    - ***Acquisition Measurement Guidance, draft v 0.1***
    - ***Acquisition ICM Table & Measures, v 1.0***

Intended Output - 2

- Final / Updated Products to be Placed on PSM Website
  - March or August 2005, depending on timeliness and nature of feedback
    - Acquisition Cost Model & WBS, v 1.1
    - ICM Table & Measures, v 1.1
  - August 2005
    - Acquisition Measurement Guidance, v 1.0

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Workshop Inputs / Read-Aheads

- Workshop Description
- From Users' Group Conference Website:
  - Draft Acquisition Cost Model
  - Draft Acquisition Services WBS
  - Draft Strawman Acquisition Measurement Guidance
  - Draft Acquisition ICM Table and Measures
- From PSM Textbook/Guidebook:
  - Overview of the PSM process
  - Material on planning (called "tailoring" in the Guidebook) measurement
  - Material on establishing (called "implementing" in the Guidebook) a measurement process