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Will-Cost and Should-Cost Management It's Not Business As Usual

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Zachary Jasnoff

Solutions Architect, Director PRICE Systems, LLC 1501 Lee Highway, Suite 206 Arlington, VA 22209 USA 703.740.0082



Topics

- What is Should-Cost/Will-Cost?
- DOD Initiatives in Should-Cost Management
- The Business Analysis Framework for Should-Cost Management
- Examples of Should-Cost Management Execution
 - Fact Based Supplier Benchmarking
 - Technology Refresh



What is Should-Cost/Will-Cost?

- In this context, it is a DOD management initiative to achieve cost savings
- Defined by Ashton Carter memo, September 14, 2010:
 - 1 of 23 principal actions for greater efficiency and/or productivity
 - Will-Cost is forecast based on extrapolation of history
 - Business as usual
 - Basis for most budgets currently
 - Should-Cost is net of opportunity-pursuits that reduce Will-Cost
 - Identification and elimination of inefficiencies and non-productive actions
 - Additional investment opportunities excluded
- Intention is to evolve to a culture where Should-Cost will one day replace Will-Cost as budget basis



DOD Initiatives in Should-Cost Management

- Defined by Carter/Hale Memo of April 2011
- Government PMs Accountable for Development, Tracking, and Reporting against Should-Cost
- 10 Ingredients of Should-Cost Management include:
 - Benchmarking
 - Supply Chain Management
 - Alternative Technology/Material



The Business Analysis Framework for Should-Cost Management

- Need for Current and Accurate Information
- What Information?
 - Cost & Schedule
 - Product Characteristics: features, reliability, capability, performance, and more
- Framework Must be Fluid as Information Flows Continually
- Minimum Requirements:
 - Data Capture
 - Data Storage
 - Data Analysis



Framework for Data Capture & Storage

TruePlanning via MS Excel Interface

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Framework for Data Capture & Storage

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Framework for Data Capture & Storage

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Framework for Data Analysis

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Framework for Data Analysis

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Benchmarking

- What & Why?
 - Indexing goods and services for comparative purposes
 - Enables knowledge-based decisions for selection and negotiation
 - Measurement based, information intensive, objective, and actiongenerating
- Supplier Savings Possibly the Highest Impact Should-Cost Management Action
- Supplier Accountability Must be Established





Benchmarking Example – Hydraulic Pumps

- Industrial Product Manufacturer Indexing Suppliers
- Database Summary:

	Number	Examples
Records	90	Restricted to data no more than 5
		years old.
Data Fields per	120	Model, Weight, Size,
Doord		Displacement, Capacity, Flow,
Necoru		Pressure, Unit Cost; multiple
		fields for many of these; contents
		vary by pump type.
Pump Types	7	Air, Electric, Gear, Hand, PTO,
		Submersible, Synchronous
Suppliers	8	Enerpac, GKS-Perfekt, Haldex,
		John S. Barnes



Hydraulic Pumps Catalog

Data Capture & Storage

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TruePlanning® by PRICE® Systems

Hydraulic Pumps Catalog

Data Analysis



TruePlanning® by PRICE® Systems

Hydraulic Pumps Catalog Data Analysis

- Characteristic of Other Product Data Analyses
 - Large volume of information that logic suggests ought to be related in some way
 - Scatter-plots of all the data records show some trends
 - Variance around best fit trend lines large enough to be risky
 - There is a pony or two in that pile of data, but visibility requires product stratification.
- If a Common Metric (Index) is Adopted, Strata Practically Self-Identify
- Common Metric for Pumps: Cost Density (Manufacturing Complexity)



Stratified Hydraulic Pumps Picture

Index of Pumps, Suitable for Should-Cost Management





Technology Refresh

- A DOD initiative to combat obsolescence in aging systems
 - Plan for obsolescence rather than suffer it
 - Predominately electronics

Tech Refresh is a Should-Cost Management Practice

- See item 10 of April 2011 Carter memo
- Identify an alternative technology/material that can potentially reduce development or life cycle costs for a program. Ensure the prime product contract includes the development of this technology/material at the right time.





F-35 Weapons Manager Assembly Tech Refresh

Up to 4 Refreshes over Production Life



Example Data Altered from Actual Case



Tech Refresh Will-Cost & Should-Cost Structures



by PRICE® Systems

Weapons Manager Tech Refresh Payoff



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Should-Cost Management – Final Thought

- Will-Cost is Domain of the Probable
- Should-Cost is Realm of the Possible
- Neither is an Absolute
- Journey of Discovery is the Value Proposition
 - Government for Greater Cost Control
 - Industry for Improved Competitiveness





Zachary Jasnoff

- Solutions Architect, PRICE Systems, Rosslyn VA

- Over 25 years parametric and detailed estimating experience
- Past estimating experience includes:
 - Lockheed-Martin
 - Boeing
 - US GAO
 - JPMorgan (Risk and Resiliency)
- Graduate of Wharton/Penn Engineering
- Conducted extensive consulting assignments with DARPA, DHS and DoD

- Presented courses in
 - hardware estimating,
 - software estimating,
 - life cycle cost,
 - Cost Estimating Relationships,
 - Information Technology,
 - risk analysis and
 - supplier assessment
- Developed TCO/Risk model for the banking industry
- Presented papers at DoDCAS, ISPA/SCEA, ISACA, DJR and PRICE Systems Symposiums

