

Practical Software and Systems Measurement

Raytheon Deployment Experiences

- ***Added 12 Data Points from Multiple Business Units to USC/CSSE***
 - ***15 - 20 more in work for future submittals***
- ***Company Wide Funding provided to support COSYSMO deployment***
 - ***Enhanced our System Engineering Cost Estimation Tool (SECOST)***
 - ***Monte Carlo Simulation, Pricing Interface, BOE Generator, Local Calibration/Data Collection, etc.***
 - ***Created full complement of training material***
 - ***Conducted multiple training sessions***
 - ***Full operational Raytheon wide Change Control Board (CCB) support Tool and related artifacts updates***

PSM 1

July 2006

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Raytheon Deployment Experiences

- ***Primarily used as Second Opinion***
 - ***Readiness Criteria Scorecard***
 - ***Evaluate business readiness to support COSYSMO based estimations***
 - ***Number of Data Points, Training, Site Specialist support capabilities, Local DCAA Briefings***
- ***Investigating ways to use COSYSMO at the Mission Systems Integrator level***
 - ***“Should Cost” Estimations***

PSM 2

July 2006

Raytheon Observed Deficiencies

- **Related to “Schedule Compression”**
 - *Might need multiple anchor points around Development bathtub*
- **No Exponent Calibration Process**
- **“Requirements Understanding” Application Factor needs Multiple Viewpoints**
- **Lack of clear definition for the Complexity Factors (Easy, Medium, Hard) on all sized drivers**
 - *Lead to discrepancies in Data Collection*
- **The ability to estimate a partial Lifecycle**

Raytheon Lessons Learned

- **Related to “Schedule Compression”**
 - *Updated MyCOSYSMO and SECOST to add Schedule Compression based on COCOMOII algorithms*
 - *Used as Risk Indicator only – No Penalty*
- **Use of a Readiness Criteria Scorecard helps support upper management buy-in**
- **Implementation Reuse Factors**
 - *Based on experience with SW Models*