

PSM Measurement and Analytical Techniques Workshop

Meeting Time: 1:30 Meeting Date: 16 July 2008

Chaired by: Dennis Goldenson and Joe Dean

Participants:

Participant
Michael Aberg
Alejandro Bianchi
Irene Chan
Tom Conrad
Joe Dean
Bob Floyd
John Gaffney
Dennis Goldenson
Cheryl Jones
Joe Lindley
Shally Malhotra
Lindsay Migala
Sam Padgett
Lori Saleski
Joseph Seppy
Rosalind Singh
Mimi Trinh

Workshop Purpose:

Facilitators introduced to the workshop attendees the purpose of this workshop as coordinating discussion on lessons learned, what works, and what does not work. Will facilitate discussion on what kinds of issues need to be addressed and how do you have confidence in the models that you build.

Discussion:

Reviewed the following items attributed to 'Analytics: A Starter Set':

- Descriptive Statistics
- Design of Experiments
- Hypothesis Testing (new in the field)
- Measurement Analysis
- Process Capability Analysis
- Regression (most widely used, although not necessarily appropriate for a lot of the data)

- Reliability Analysis
- Sampling
- Simulation
- SPC Charts
- Statistical Tolerancing
- Time Series analysis

All of the above analytic techniques have been provided from the guidance in ISO 10017.

Dennis Goldenson reviewed with all workshop participants a [2008 SEI measurement questionnaire](#). This questionnaire was initially completed by organizations which were appraised for CMMI Level 4 and Level 5 status. Facilitators will provide an electronic copy of this survey to the workshop participants, and recommended sampling such a survey to their organization. LMCO in Sunnyvale is currently doing this.

Cheryl Jones documented in an Excel workbook, various Issues and Problem Areas, Analytic Techniques, and how to communicate these techniques/practices. Refer to the completed spreadsheet for details.

After completing the workshop exercise the team discussed the next steps / where do we go from here as the following:

- Proceed with the workshop efforts for next year and submit workbook to the workshop participants for additional feedback
- Solicit and generate measurement specifications for the statistical techniques and post examples on the PSM Site
- Integrate workshop efforts with SEI work
- See the [outbrief slides](#) for further detail on next steps and action items