# Practical Software and Systems Measurement

# Practical Software and Systems Measurement
## A foundation for objective project management

**PSM**

## Measurement Analysis Procedures
## 14 July 2011
## Bill Golaz

*PSM Users Group Conference*
*11-15 July 2011*
*Mystic, CT*

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# Measurement Analysis Procedures

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# Agenda

- **Review objectives and outputs of workshop**
- **Review concept of analysis procedures**
- **Review example analysis procedures shared by participating companies**
  - **Format of procedure**
  - **Detail or procedure**
  - **Procedures for different types of measures**
- **Identify format of set of analysis procedures**
- **Compile draft set of procedures**

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# *Intended Output*

- ### *Set of analysis procedures for various indicators*

# *Objectives of the Workshop*

- *Review analysis procedures used by various participating companies*

- *Collect a set of best practices of analysis procedures for common measures*

- *Create a starter set of analysis procedures for common measures for PSM users*

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# *Workshop Background*

- *PSM has not included analysis procedures in the past but it does require them*

- *Identified as a potential need for beginner and experienced users*

- *Provide guidance to best practices used across industry for analysis procedures*

# *Analysis Procedures Concept*

- **Format**
  - *Tables; flowcharts; step diagrams*
- **Content**
  - *General procedures, or detailed procedures*
  - *Step by step for analyzing common measures promoted by PSM*
  - *Who performs what step and when*

# *Analysis Procedure Discussions (cont.)*

- *Are they documented in your measurement specifications?*

- *In your measurement plans?*

- *Are they collected in a repository (library) of procedures?*

- *Are they organizational specific?*

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# *Analysis Procedure Discussions (cont.)*

- *What would you like to see in analysis procedures?*

- *How could we identify, or collect something that would help?*

# *Analysis Procedure Discussions*

- ## *What kind of procedures do you have?*
- ## *How do you document them?*

# *Form of Set of Procedures*

- ### *Add to guidebook?*

- ### *Separate attachment?*

- ### *Compile as a set of procedures?*

- ### *Link to example measures in ICM?*

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# *Outbrief slides*

# *Measurement Analysis Procedures*

- *July 14, 2011 (Thu afternoon)*

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# *Workshop Participants*

| Name | Name |
| --- | --- |
| Bill Golaz | Joe Dean |
| Susan Rauseo | Harpal Dahma |
| | |
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# *Analysis Procedure Examples*

- **Most analysis procedures are program specific or organizational specific**

- **Could collect examples together but would need to make them releasable first**

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# *Summary*

- *Discussed what we meant by analysis procedures and what is used for various scenarios at the companies represented*
    - *LM enterprise level measurement*
    - *Raytheon program measurement*
- *Reviewed material from Acquisition Measurement white paper*
    - *Spec tables*
- *Worked an example for ROI*

# *Example Procedure for ROI*

- **What is my ROI for producing Widget?**
    - *What is my expected ROI (Expected Revenue / Expected Investment)?*
    - *What is my projected ROI (Actual Investment / Updated Expected Revenue)?*
    - *What is my actual ROI (Actual Investment / Actual Revenue)?*
        - *May be done incrementally*
    - *Investment = Labor, facilities, raw material, overhead including travel and training, technical investment, etc*
    - *Revenue = amount of product * price*

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# Summary (cont.)

- **Reached agreement that analysis procedures should be part of spec tables**

- **Agreed completion of spec tables for measures identified in ICM table would satisfy the need**

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# *Conclusions, Recommendations, and Results*

- *Complete spec tables for measures identified in ICM table*
  - *Include analysis guidance and procedures*

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# *Next Steps/Action Items*

- *Complete Spec Tables for common measures identified in the ICM table*
    - *Include analysis procedures and questions*
    - *Use examples from participating companies as available.*
    - *Make generic when possible*
    - *Cheryl can contact those from this workshop as potential resources for completing the spec tables*