

Practical Software and Systems Measurement

A foundation for objective project management



Maintenance Measures and Measurement

27 July 2010

Donald J. Reifer

PSM Users Group Conference

26-30 July 2010

New Orleans, LA

Maintenance Measures and Measurement

- **Software maintenance myths**
 - Viewed as a subset of maintenance – **Wrong**
 - Can use development metrics/measures to gain needed insights – **Wrong Again**
 - Effort focused mostly on new releases – **Wrong**
 - Done by junior people – **Really Wrong**
- **Been studying maintenance for 2 years+**
 - Will summarize findings at our workshop for those interested
 - Will share initial thoughts on measures for maintenance as well

Objectives of the Workshop

- ***Confirm information needs and share a potential set of measures/metrics that we have developed for this domain***
 - *Must be keyed to the work software people do during maintenance to be useful*
 - *Data to be used to quantify measures/metrics must be available*
- ***Open dialog with those interested in sharing maintenance data and piloting measures***
 - *Form a working group for collaboration*
 - *Get people to share data and pilot project results*

Workshop Format

- ***Agenda***
 - *Introduction*
 - *Review spreadsheet ICM table distributed prior to workshop*
 - *Look for additions and modifications so we can publish table*
 - *Reach consensus on results*
- ***Techniques that will be used***
 - *Focused discussions and consensus whenever possible*

Note: you can participate, but we will assume that you have read the background materials

Workshop Background

- **PSM history in this area**
 - Workshop on topic held last year
 - ICM table developed as a product
- **Where we're heading**
 - Capture data to help manage maintenance better and get budgets needed to do the job
 - Gain insight into problem plaguing maintenance managers
- **Issues, questions, and topics**
 - Many small project, unfunded mandates, and lots of misinformation about maintenance

Intended Output

- **Spread findings about maintenance**
- **Updated ICM Table for Maintenance**
 - Will submit to PSM for incorporation into their body of knowledge
 - Will update data collection effort to try to capture maintenance data
 - Will use as basis for pilot projects some of which hopefully volunteered by group
- **More active working group on topic**
 - Engage the contractor community as well as those in government

Workshop Title

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Workshop Participants

- **Frances Anderson**
- **Jennifer Fischer**
- **William Golaz**
- **Cheryl Jones**
- **Shally Malhotra**
- **Jack McGarry**
- **Celia Modell**
- **Kyoung-a Park**
- **Jeramia Poland**
- **Donald Reifer**
- **Craig Stauffer**
- **Shelby Stone**

Summary

- ***Formed collaborators group***
- ***Discussed terminology – need definitions***
- ***Reviewed WBS v1.2 – provides a shopping list of tasks that need to be considered for maintenance***
- ***Reviewed first issue of the software maintenance ICM table***
 - ***Developed to guide on-going software maintenance data collection effort***
- ***Had some fun and interesting discussions***

Conclusions, Recommendations, and Results

- ***WBS is in relatively good shape***
- ***More work on maintenance ICM table needed***
- ***Maintenance ICM table should become part of general PSM ICM table***
- ***CMMI needs to consider adding either maintenance processes to existing process areas or incorporate one on maintenance***

Next Steps/Action Items

- ***Circulate glossary from my new book entitled “Software Maintenance Success Recipes” to collaborators group to start process of reaching consensus on definitions***
- ***Address comments on WBS and baseline it on 1 September 2010***
- ***Get comments on maintenance ICM table by 1 September 2010 and start the consensus process***
- ***Update data definitions to be used for maintenance data collection based on the actions completed above***
- ***Keep charging and beware of bear traps***