

Practical Software Measurement

Practical Software Measurement

A foundation for objective project management



PSM Workshop

*Office of the Under Secretary of Defense
Acquisition and Technology*

*Joint Logistics Commanders
Joint Group on Systems Engineering*

PSM 1

22 Jul 98

Practical Software Measurement

Workshop: PSM Future Directions and Guidance

PSM 2

22 Jul 98

Practical Software Measurement

Objectives of the Workshop

- ***Identify Strengths and Weaknesses of Current Guidance***
- ***Define Future PSM Guidance Updates***
 - ***Multi-level measurement extensions***
 - ***Open systems engineering measures***
 - ***Implementation guidance for small projects and commercial applications***
 - ***Measuring COTS software***

PSM 3

22 Jul 98

Practical Software Measurement

Objectives of the Workshop (Cont.)

- ***Revise PSM Product Formats***
 - ***Usability and understandability***
- ***Identify Needs for Additional PSM Products and Services***
 - ***Training - distance learning, computer based training, executive level course***

PSM 4

22 Jul 98

Practical Software Measurement

Participants

- ***Joe Caravello***
- ***Dave Card***
- ***Annie Cavanaugh-Boger***
- ***Tom Conrad***
- ***Joe Cullen***
- ***Charles Gold***
- ***Cheryl Jones***
- ***Beth Layman***
- ***Jim Oblinger***
- ***Bill Peresta***
- ***Joyce Statz***
- ***Rick Stuller***
- ***David Syzmanski***
- ***Bill Trebilcock***

PSM 5

22 Jul 98

Practical Software Measurement

Summary

- ***Changes to Current Guidance and Additional Enhancements Were Described, Categorized, and Prioritized (Other Workshop Topics Were Excluded)***
- ***Potential PSM Product Formats Were Identified***
- ***Additional PSM Products and Services Were Discussed***

PSM 6

22 Jul 98

Practical Software Measurement

Summary

- ***High Priority Categories and High Priority New Guidance Areas Were Detailed***

PSM 7

22 Jul 98

Practical Software Measurement

Changes and Enhancements

- ***New Guidance***
- ***PSM ROI/Value Proposition***
- ***Commercial Applications***
- ***PSMs Relationship to Other Initiatives (CMM, ISO)***
- ***Editorial/Formatting***
- ***Risk***
- ***Organizational Measurement (PI)***
- ***High-Level Enterprise Measurement***

PSM 8

22 Jul 98

Practical Software Measurement

New Guidance (Priority 1-8)

- ***COTS***
- ***Action Plan Template***
- ***Non-Traditional Development Models***
- ***How to Define a New Issue/Measure***
- ***Architecture***
- ***Open Systems***
- ***Customer Satisfaction***
- ***Small Projects***

PSM 9

22 Jul 98

Practical Software Measurement

New Guidance (Priority 9-15)

- ***Justification for Projects***
- ***Thresholds***
- ***Outsourcing***
- ***Depth in one issue/measure area***
- ***Benchmarking - Project Issues***
- ***Rework***
- ***Prototyping***

PSM 10

22 Jul 98

Practical Software Measurement

Product Formats

- ***Rework Guidebook Format***
 - ***Separate Generic PSM Process***
 - ***Software as a separate section with guidance, I-C-M structure, measures, indicators, case studies***
 - ***Systems engineering as another section***
 - ***Tailoring guidance for using the different components***
- ***Book Format - With Separate Sections for Various Domains***

PSM 11

22 Jul 98

Practical Software Measurement

Product Formats (Cont.)

- ***Web Based Approach Later***
- ***Navigation - Annotations - Mapping***
- ***Pocket PSM - Card(s)***
- ***Executive Summary (Address ROI)***
- ***10-12 Page PSM Presentation***

PSM 12

22 Jul 98

Practical Software Measurement

Related PSM Products and Services

- ***Insight Tool Training***
- ***PSM Customer Feedback / Lessons Learned / Advice / Experiences***
- ***PSM Module to Insert Into Other Courses***
- ***Comparative Information Service (ISBSG, SEIR)***
- ***Video Training***
- ***Library of Templates for Insight (Other Tools, Repository, etc.)***
- ***Repository of Data Collection Spreadsheets***

PSM 13

22 Jul 98

Practical Software Measurement

Conclusions, Recommendations, and Results

- ***Survey Conference Attendees for Rankings***
- ***Need to Expand Guidance Into New Areas In Accordance With Other Initiatives***
- ***Need to Make Guidance More Useable***

PSM 14

22 Jul 98

Practical Software Measurement

Next Steps/Action Items

- ***Re-Prioritize Changes / Enhancements Based on Conference Rankings***
- ***Develop Detailed Recommendations of Highest Priority Items***
- ***Make Recommendations to PSM Technical Steering Group***
- ***Submit Funding Request Based on Recommendations***