PSM Vision

Put measurement into practice to support decisions that improve performance

PSM Scope Characteristics

- **PSM Tasks**
  - Project Management
  - Technology Development and Integration
  - Development of guidance, product set
  - Transition

- **Application Scope**
  - Project, Organization
  - Government, DoD, Industry

- **Focus Areas**
  - Project Management
  - Process Improvement
  - Performance Analysis
  - Governance

- **End User**
  - Decision makers – project level, executive (including CIO, CEO)

- **Technical Domains**
  - Primary: Software-Intensive Systems
  - Secondary: flexible (with tailoring) – focused guidance

- **Sophistication**
  - Novice
  - Experienced users (black belts, CMMI level 4/5)

- **Technical Currency**
  - E.g. SLOC versus current approach

PSM Operational Plan
July 2008

Note: All elements need to be updated for current technology and expanded/revised scope.

Elements	Priority
• Principles	
- need to be revisited – revisions, additions	
• Foundational Models	
- Process model	
- Information model	
▪ more focus on back end – decision making	
- Analysis model	
▪ More analysis guidance – organization, other focus areas	
▪ information product emphasis (what goes into this)	
- Behavioral model	
▪ add	
• Key Constructs	
- ICM	
▪ Revisit basic ICM table	
▪ Consider other ways of presenting the info for various scopes	
▪ Consider other specializations – organization, agile, burndown charts	
- Measurement specifications	
▪ Review/update template for specs	
▪ Samples of simplified measurement specs	
▪ Samples of sophisticated measurement specs	
- Information products	
▪ How to present information	
- Impact – Value Added	
▪ How to evaluate value of a PSM measurement implementation	
• Key Products	
- Guidance	
▪ Guidance on where to start – where to go first	
▪ Standard WBS for PSM implementation (where/when do you use book, specs, guide, etc.) – quick start guide	
▪ Patterns of measures – ones that go together nicely – if you have this set of information needs – here is what you can do	
▪ Update guidance (4.0) – chapter 1	
▪ Update guidance	
• Update book? (fix typos, ensure 15939 consistency, systems, etc.)	

▪ Additional case studies	
• In training, book	
▪ Additional on-line materials – web published	
• Hyperlinked guidance	
▪ "Video-game"	
- Training	
▪ Technology refresh of existing training	
▪ Training update for expanded scope	
▪ On-line training	
▪ Training modules for each of major white papers	
▪ Modular training	
▪ Executive training - What does measurement buy you – why should you care?	
▪ Address different learning styles	
▪ Update train-the-trainer materials	
▪ Professional certification (people can say they are certified – they don't want to be trainers)	
- Measurement Tools	
▪ Excel – specifications, tailorable, graphing ability	
- PSM Insight	
▪ Update – program doesn't match terminology, update current technology, user interface	
- Implementation aids	
▪ Explaining how to build an ICM et al for a different domain – how to go about that	
▪ Tailoring guidance for specification	
▪ Information product structure – e.g. Jeff Allen template for Analysis & Action	
▪ Measurement process procedure (Jeff Allen has LM procedure for getting from goals to info needs to measures)	
▪ Templates, process descriptions, etc. – open share	
• Transition Strategy (marketing?)	
- Marketing	
▪ Consciousness raising	
- presentations at workshops	
▪ articles in magazines	
▪ talk to leadership in various organizations (industry, government, DOD)	
▪ industry organizations (e.g. benchmarking consortium)	
- Web site – update?	
▪ Links to/from other sites	▪
• Project Management	
- Sponsorship	
▪ Need to identify new sponsors	
▪ How do we tap into those successfully using PSM to do	

required updates (time and/or money)	
- Qualifications	
▪ Will need to update trainers as new technology is developed	
▪ Need to ensure collaboration / inputs from trainers	
▪ Train-the-trainer	
- Quality	
▪ Transition Quality: Relook at how we maintain quality with expanded set of trainers (know activity – what people are doing with materials, impact of those activities)	
▪ Product Quality: Maintain quality through updates	
- Impact – Value Added	
▪ How to evaluate value of PSM (the project)	

PSM Principles

- Use Information Needs and Objectives to Drive the Measurement Requirements
- Define and Collect Measures Based on the Technical and Management Processes
- Collect and Analyze Data at a Level of Detail Sufficient to Identify and Isolate Problems
- Implement an Independent Analysis Capability
- Use a Systematic Analysis Process to Trace the Measures to the Decisions
- Interpret the Measurement Results in the Context of Other Project Information
- Integrate Measurement into the Project Management Process Throughout the Life Cycle
- Use the Measurement Process as a Basis for Objective Communications
- Focus Initially on Project-Level Analysis