Experiences with Indicator-Based Appraisals

Panel

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next level solutions

Government Communications
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Agenda

- Introduction
- Panel Participants
  - Gene Miluk (Software Engineering Institute)
  - Rick Hefner (TRW)
  - Jane Moon (Raytheon)
  - Marvin Carr (Lockheed Martin)
- Open Discussion

SCAMPI^sm v1.1 Concepts

- **Based on Practice Implementation Indicators (PIIs)**
  - Reflecting implementation of CMMI^sm model practices
  - Artifacts produced as an outcome of process deployment
  - Corroborated by face-to-face affirmations
- **Contrasting with traditional observation-based appraisal methods**
- **Verification-based appraisals**
  - Leverage existing organizational assets describing mapping and implementation of CMMI model practices
  - PII Database
  - Efficiencies from reduced appraisal team "discovery" of objective evidence on-site

^SM - CMMI and SCAMPI are service marks of Carnegie Mellon University.

PII Types

- **Direct Artifacts**
  - Tangible outputs resulting directly from implementation of a practice

    (e.g., documents, deliverables, Typical Work Products)

- **Indirect Artifacts**
  - Artifacts that are a side-effect or indicative of performing a practice

    (e.g., meeting minutes, reviews, logs, reports, Typical Work Products)

- **Affirmations**
  - Oral or written statements confirming or supporting implementation of the practice

    (e.g, interviews, questionnaires)

Reference: SCAMPI Method Description, v1.1, CMU/SEI-2001-HB-001

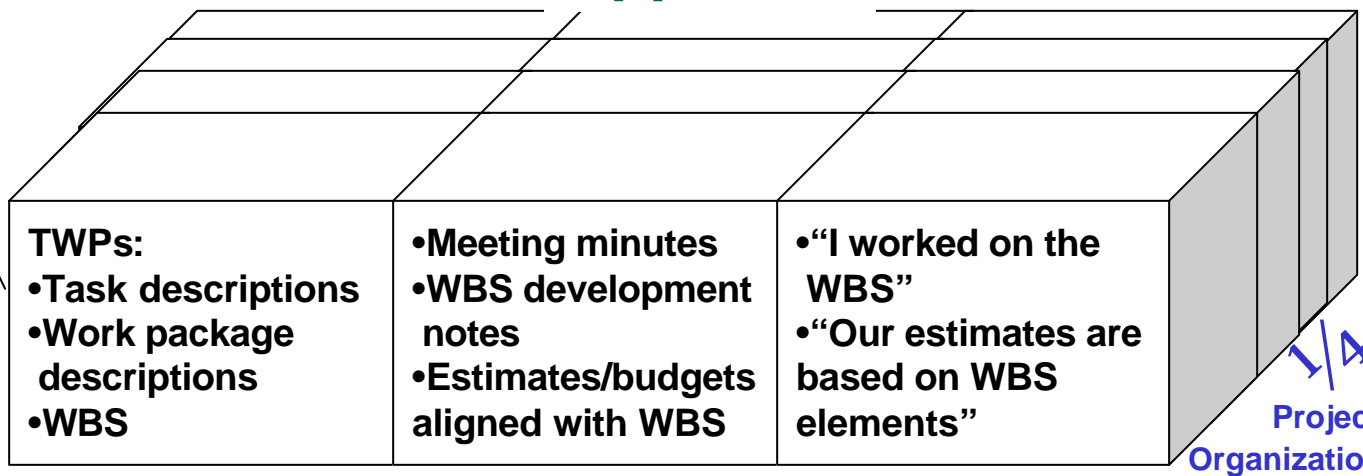# Example – PII-Based Implementation and Appraisal

HARRIS

PP SP1.1: Establish a top-level work breakdown structure (WBS) to estimate the scope of the project.

- Presentations
- Instruments
- Interviews
- Documents

Appraisal

Process Instances / Evidence

CMMI SPs, GPs

Direct Artifacts	Indirect Artifacts	Affirmations
TWPs: • Task descriptions • Work package descriptions • WBS	• Meeting minutes • WBS development notes • Estimates/budgets aligned with WBS	• "I worked on the WBS" • "Our estimates are based on WBS elements"

Project $_N$

Project $_1$

Organization

Practice Implementation Indicator (PII) Types

Deployment

Model