I’m Preparing My Organization for an Appraisal, but I’m Not Really Sure I Understand this PIID Thing.

Should I worry?”

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YES!!!!!!!
Agenda

• Why?
• What?
• How?
Why?
Appraisal Checklist

☐ Secure Lead Appraiser
☐ Confirm Other Team Members
☐ Reserve Rooms
☐ ...
☐ Arrange for Snacks
☐ Create PIID
☐ Get Flip Chart and Markers
Misconceptions

• “Creating a PIID looks straightforward, I’ll have our summer intern do it the week before the Readiness Review.”

• “This is just a guide anyway. Even if it is wrong, it is the appraisal team’s duty to find the right stuff.”

• “If 2 pieces of evidence per practice is good, 10 pieces should be 5 times as good.”
Appraisal Models

1. Push

2. Pull
   (Discovery)

Discovery requires that the team do a search for evidence for each practice

SCAMPI pilots took more than a month

Process needed to be streamlined
Models (2)

Accuracy

Time (Cost)

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Verification has the organization provide a map that indicates what evidence is appropriate for each practice.

The appraisal team reviews the evidence and only needs to search when the data provided is not clear or convincing.
What?
What Does a PIID Look Like?

- Paper
  - Physical

- Electronic*
  - Virtual

*Strongly recommended when not prevented by security/access issues
# Project Planning

<table>
<thead>
<tr>
<th>Status</th>
<th>Key Practice / Notes</th>
<th>Source of OE</th>
<th>Document(s)</th>
<th>Comments</th>
<th>Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG1</td>
<td>Establish a top-level work breakdown structure (WBS) to estimate the scope of the project.</td>
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**Appraisal Considerations:**
- Determination of WBS usage for this practice must be based on top-level WBS only, not fully elaborated and expanded from subsequent practices.
- Top-level work breakdown structure should be driven by and linked to specified product requirements.
- Supplier Agreement Management process areas for more information about acquiring work products from other sources.
- Level of supporting documentation varies based on project size/criticality. Larger projects may have minutes from estimation meetings, estimation teams, and tools, etc.
- Smaller may have none. Appraisal team will need to assess the WBS elements that will be expected.

**Direct Artifact Example:**
- Work Breakdown Structure
- Top-level WBS: revision history

**Indirect Artifact Example:**
- Task descriptions
- Work product descriptions
- Product requirements, product roadmaps
- Organizational standard WBS template
- Identification of work products (or components of work products) that will be externally acquired.

| Project 1 | Project 2 | Project 3 | Project 4 | Project 5 | Project 6 | Project 7 | Project 8 | Project 9 | Project 10 | Project 11 | Project 12 | Project 13 | Project 14 | Project 15 | Project 16 | Project 17 | Project 18 | Project 19 | Project 20 | Project 21 | Project 22 | Project 23 | Project 24 | Project 25 | Project 26 | Project 27 | Project 28 | Project 29 | Project 30 | Project 31 | Project 32 | Project 33 | Project 34 | Project 35 | Project 36 | Project 37 | Project 38 | Project 39 | Project 40 | Project 41 | Project 42 | Project 43 | Project 44 | Project 45 | Project 46 | Project 47 | Project 48 | Project 49 | Project 50 | Project 51 | Project 52 | Project 53 | Project 54 | Project 55 | Project 56 | Project 57 | Project 58 | Project 59 | Project 60 | Project 61 | Project 62 | Project 63 | Project 64 | Project 65 | Project 66 | Project 67 | Project 68 | Project 69 | Project 70 | Project 71 | Project 72 | Project 73 | Project 74 | Project 75 | Project 76 | Project 77 | Project 78 | Project 79 | Project 80 | Project 81 | Project 82 | Project 83 | Project 84 | Project 85 | Project 86 | Project 87 | Project 88 | Project 89 | Project 90 | Project 91 | Project 92 | Project 93 | Project 94 | Project 95 | Project 96 | Project 97 | Project 98 | Project 99 | Project 100 |
Data Types

- Direct Evidence – needed for every practice

- Indirect Evidence – not necessarily for EVERY practice*

- Quiz 1: What type of evidence is a set of meeting minutes? It Depends

- Quiz 2: How many do you need of each type? It Depends

*Talk to your Lead Appraiser

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An appropriate set of artifacts?

- Enough to convince the team that a practice has been fully implemented*

- But NOT everything you can think of

*Talk to your lead appraiser
How?
Who should build your PIID?

What kind of knowledge is needed?

- Understanding of the CMMI practices
- Understanding of the SCAMPI method
- Understanding of how the project’s data is organized

Do you have one person with all 3?

If not, then you need a team
Tool Questions

• Does your Lead Appraiser have a tool that they recommend?

• Will you use the data for internal purposes?

• How easy is it to put data in and get it out?

• How easy is it to correct/update the data?
Quality Tips

• Involve team members in quality checks

• Don’t wait for Readiness Review to check the quality of the PIID

• Evolve PIID over a series of appraisals

• Effort devoted to PIID (including quality checks) should be proportional to the importance of achieving the ratings

Remember: having an inaccurate PIID does not just make it harder to find the correct data, it may convince the team that appropriate data does NOT exist
Time & Cost

- PIID development can be the major driver of total appraisal cost

- Data collected over a set of appraisals where the organization tracked internal effort, showed PIID preparation to be ~60%

- Total PIID effort (development, quality, rework, quality, ...) can run to ~40 hours per PA per project
  - Level 2, 3 projects => 5 person months
  - Level 3, 3 projects => almost a person year
Potential Work Saver

Is standard process detailed enough so that it will be fairly consistent from project to project where a specific type of data will be found?

Provide the projects with a PIID that already tells them where to find the evidence.

e.g.
PP SP 2.2 Identify Project Risks
see section 3.4 of the project Risk Management Plan

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PIID Preparation

If done poorly
- Can consume vast resources to prepare
- Will reflect a poor understanding of what is needed
- Will cause appraisal to proceed very slowly
- Can confuse the true state of the practice

If done well
- Will require limited restarts or rework
- Accurately reflects the work done in the organization
- Provides an efficient means for an appraisal team to find appropriate evidence
- Identifies appraisal risks by uncovering holes in implementation
Contact Info

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