



# Effective Appraisals for Improvement – How Simple Tools Can Help

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Munich, Germany



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**Process Advantage Technology, Inc.**

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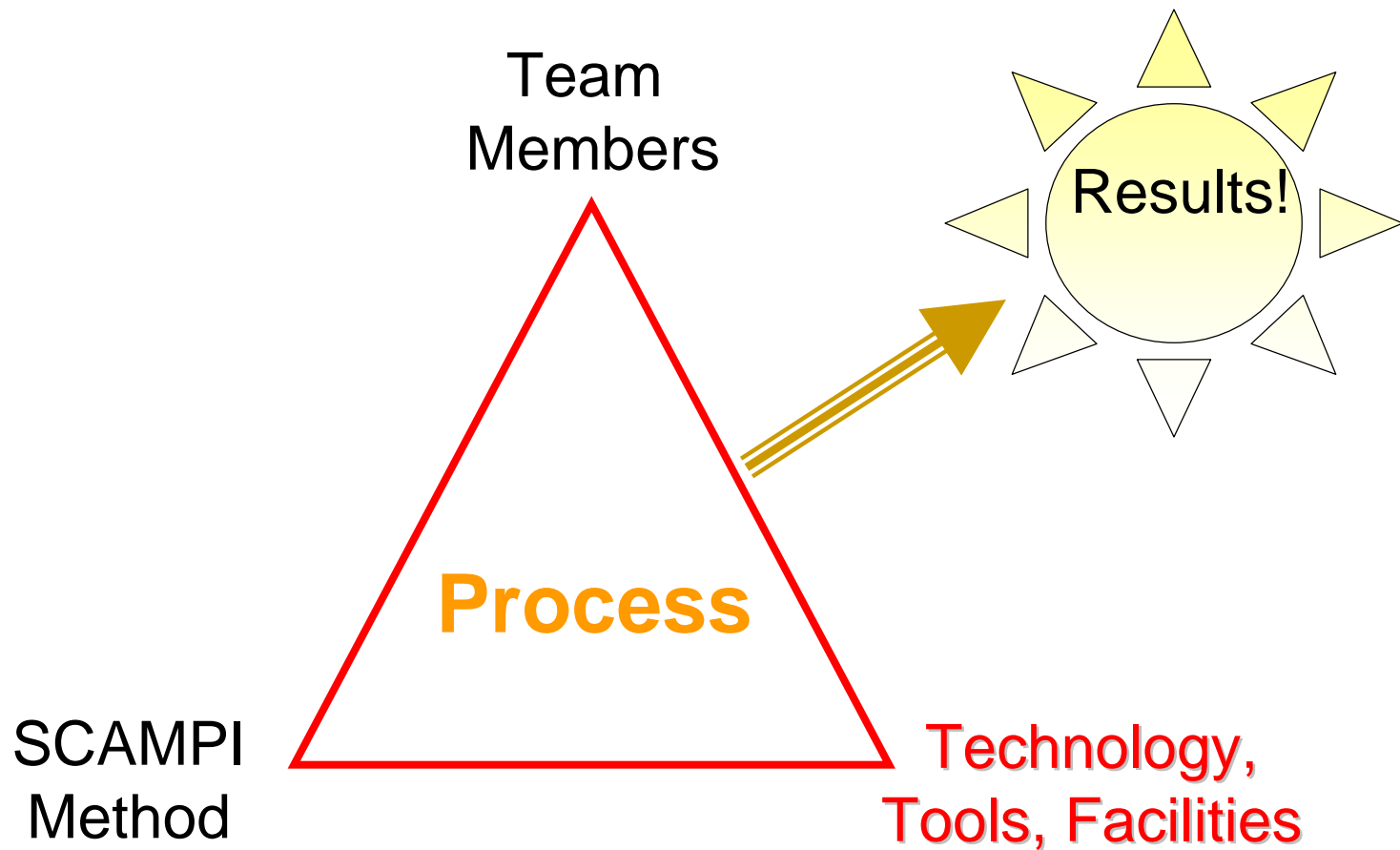
# Introductions

- Process Advantage Technology, Inc. (PATech) was founded in 1991, supporting customers' organizational change and improvement. An SEI Partner for CMMI and for P-CMM, PATech supports customers in the US as well as internationally.
- Process Improvement Asia (PIA) combines advanced management models (CMMI, P-CMM, etc.) together with appropriate, tailored consulting services to help customers develop the skills and capability they need to compete at an international level. Based in China, PIA has offices in Hong Kong and Shanghai since 2001
- Improving Organization and Team Capability –PIA, with PATech's support, has helped more than 50 organizations in Shanghai and China set their goals and get the results they need. In a world of constantly changing challenges, PIA's team provides solutions and support that helps customers get the right results
- Mac Patrick, President of PATech and PIA's Managing Director – Services, led his first CMM based appraisal in 1990; was a CBA-IPI LA, is a SCAMPI LA for High Maturity appraisals and for P-CMM. He has worked for SEI as a Qualified Observing Lead Appraiser.

[www.piachina.com](http://www.piachina.com)



# Appraisal performance



# Kinds of appraisal tools...

- Planning
  - Effort and workload estimation
  - Collecting examples
    - Process Implementation Indicators (PIID's)
  - Evaluating PIID's to see if they are usable
- On-site
  - Progress tracking
  - Collecting observations and ratings



# Appraisal tools-

- SEI's "Kit"
  - PIID
  - Workbook
- Commercial
  - Appraisal Wizard
- Build your own
- Download freeware



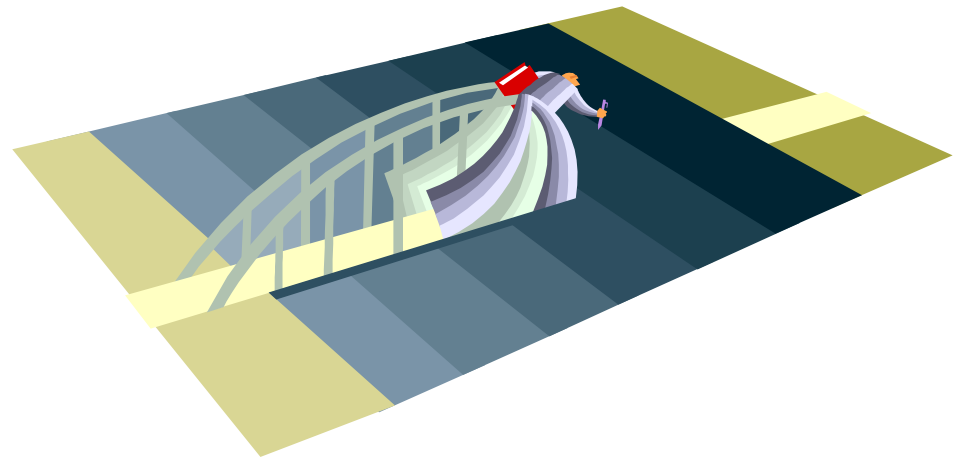
# SCAMPI tools should...

- ↑ Help the organization tell its “process” story in the PIID’s
- ↑ Help the appraisers verify the organization’s story
- ↑ Separate preparing and telling the organization’s process story, from appraising the organization’s processes
  - Reduce conflicts of interest, “pride of ownership” problems, when appraising

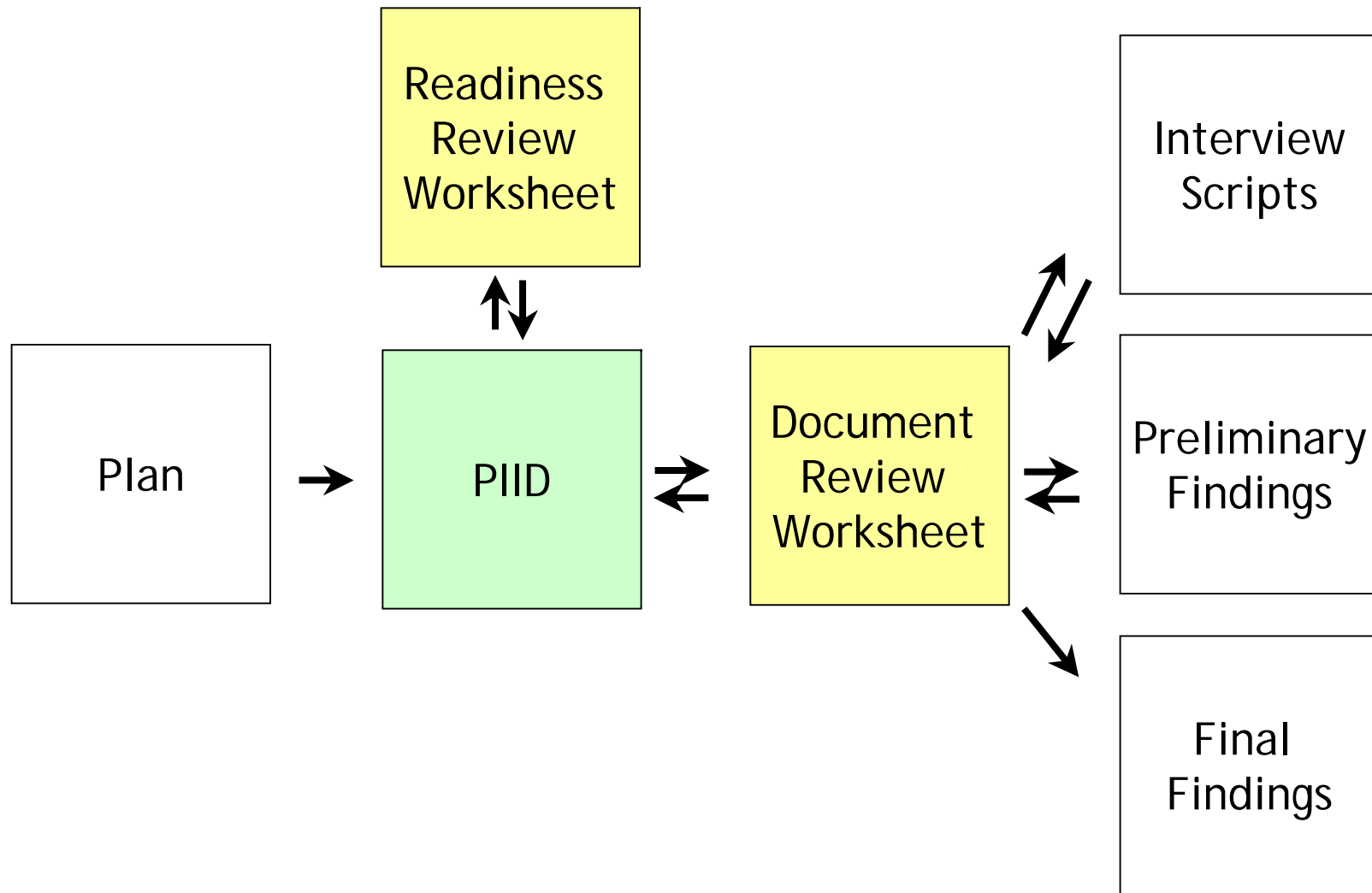
*Call attention to or eliminate “Scotoma’s”: An area of diminished vision within the visual field*

# SCAMPI tools should...

- ↑ Be easy to understand, update, adapt, or improve to suit different situations
- ↑ Be based on standard platforms (e.g. MS Office) to minimize costs of use
- ↑ [others?]



# SCAMPI data flow...



# Requirements for good tools...(1)

- Plan-
  - Must support SCAMPI/SAS requirements for collecting, organizing, and inputting data to SAS
- **PIID-**
  - Must link to each instantiation's process artifacts- direct and indirect
  - Encourages making notes about instantiations particular situation



# Requirements for good tools...(2)

- **Readiness Review Workbook**
  - Support rapid evaluation of PIID and links
    - Accessible, type is reasonable
  - Show progress in readiness evaluation for each process area
- **Document Review Workbook**
  - Shows progress in evaluating instantiations, practices, and interview coverage
  - Collects notes about what is found, so that reasoning about findings can be explained, later



# Requirements for good tools...(3)

- Interview scripts
  - Encourages questions based on direct artifacts in a format that can be easily used in interviews
- Preliminary Findings
  - Shows findings and improvements in a format that helps gain information about their validity from people in the organization
- Final Findings Presentation
  - Meets SEI/SCAMPI requirements for content



# Download

<http://www.patech.com/tools>

1. PIID (MS Word)
2. Readiness Review Worksheet (MS Excel)\*
3. Document Review Worksheet (MS Excel)\*

*\* With VBA-generated summary, or without VBA or Summary*

# Webpage

The screenshot shows a Windows Internet Explorer browser window with the following details:

- Title Bar:** scampi appraisal tools - Windows Internet Explorer
- Address Bar:** http://www.patech.com/tools.htm
- Search Bar:** Google
- Menu Bar:** File, Edit, View, Favorites, Tools, Help
- Links Bar:** Links, SF Gate, SFGate News, Google, WeatherU, CNN U.S, CNN Internati, Shanghai Daily, Techmeme, shanghaiist.com, yahoo cmmi, Learn Chinese - ChinesePod
- Taskbar:** scampi appraisal tools, LiveStats@
- Page Content:**
  - A list of links: [SCAMPI® appraisal tools \(download\)](#), [Process capability - due diligence](#), [Work with us](#), [Evaluating appraisal results](#), [About PATech](#), [Contact](#).
  - A blue arrow icon pointing up and right.
  - Section Header:** **SCAMPI Appraisal Tools for Download**
  - Text:** The Software Engineering Institute's (SEI) appraisal method, Standard CMMI Assessment Method for Process Improvement® (SCAMPI®) is used to assess organizational process capability compared to process standards including CMMI and P-CMM.
  - Text:** SEI authorized Lead Appraisers lead a team of people applying the SCAMPI method to assess processes. The method requires data gathering, analysis, and storage.
  - Text:** Lead Appraisers develop their own tools to perform this process, based on the example tools that SEI provides. Some Lead Appraisers will use tools provided by tool vendors.
  - Text:** We at PATech have decided to make our appraisal tools available to you to use. These are "open source" and we invite cooperative improvement and evolution. At this time they are provided "as is", with no support.
- Taskbar (Bottom):** Start, Control Panel, SEPG 2008, Deleted Items..., Wiredhosting..., Microsoft Power..., scampi apprai..., Internet, 100%, 8:36 AM



# Download PIID

**Download ~**

**PIID: MS Word 2000 doc file:**

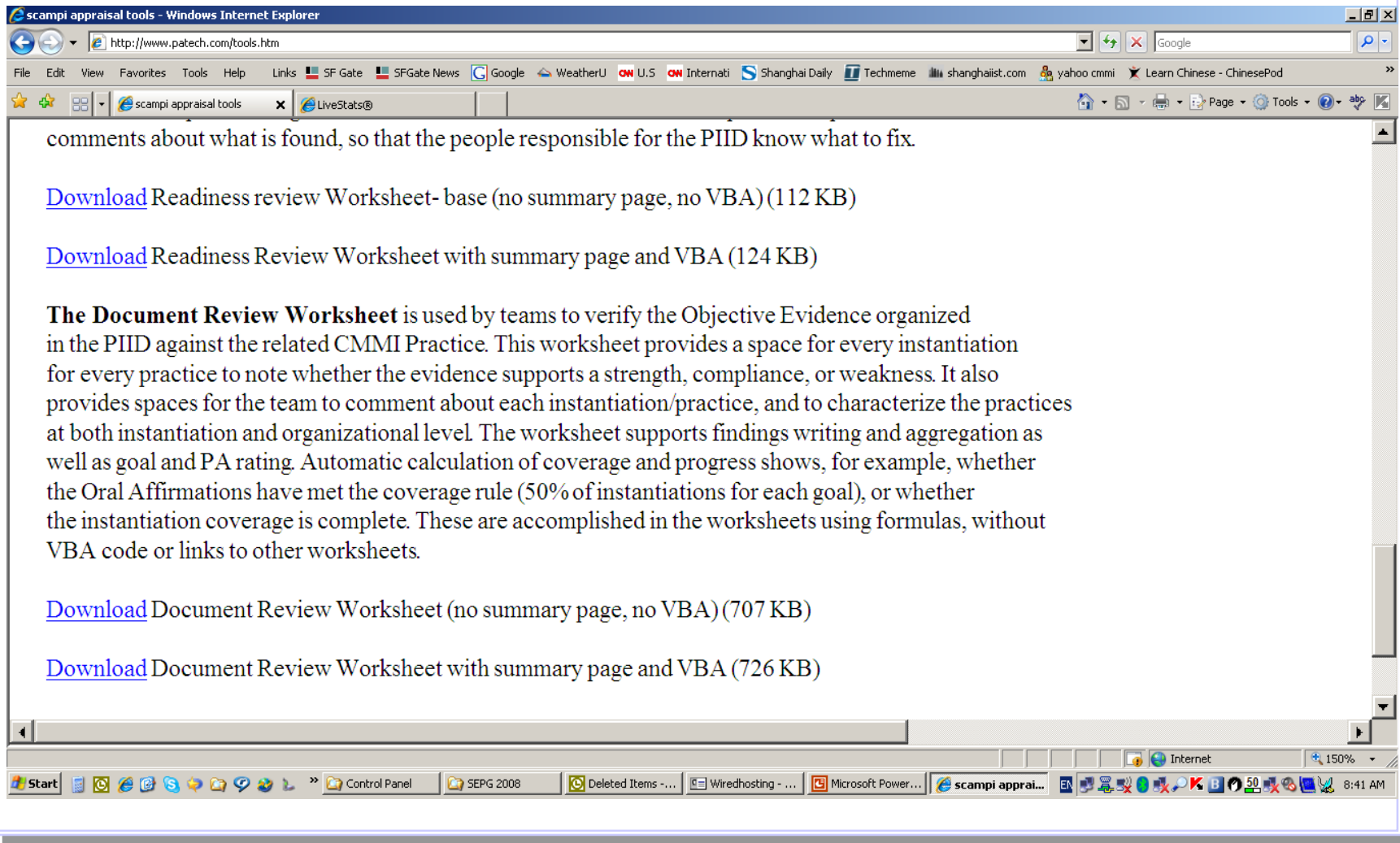
**PIID - Process Implementation Indicator Descriptions** - are word files, one for each CMMI Process Area, that provide descriptions of examples for each practice and a place to link examples for each instantiation for each practice, for the team to use to verify practice implementation. These matrices are flexible MS Word documents and can be used to record notes during informal reviews of an organization's process implementation examples as well as for organizing the evidence for a SCAMPI Class A, B, or C appraisal. MS Word is used instead of MS Excel because of its comparatively user-friendly note taking capability and its ability to host as many links in a table cell as you care to create (MS Excel stops at one link per cell).

[Download PIID \(445 KB\)](#)

**Objective Evidence Verification tools: MS Excel 2000 xls files:**

There are two versions of each worksheet- one with a Summary page that uses VBA to summarize the findings in each Process Area; one without the Summary page. Newer versions of MS Excel (2003, 2007), depending on the computer's security settings, won't load the summary

# Download Worksheets



scampi appraisal tools - Windows Internet Explorer

http://www.patech.com/tools.htm

File Edit View Favorites Tools Help Links SF Gate SFGate News Google WeatherU U.S. Internati Shanghai Daily Techmeme shanghaiist.com yahoo cmmi Learn Chinese - ChinesePod

scampi appraisal tools LiveStats@

comments about what is found, so that the people responsible for the PIID know what to fix.

[Download](#) Readiness review Worksheet- base (no summary page, no VBA) (112 KB)

[Download](#) Readiness Review Worksheet with summary page and VBA (124 KB)

**The Document Review Worksheet** is used by teams to verify the Objective Evidence organized in the PIID against the related CMMI Practice. This worksheet provides a space for every instantiation for every practice to note whether the evidence supports a strength, compliance, or weakness. It also provides spaces for the team to comment about each instantiation/practice, and to characterize the practices at both instantiation and organizational level. The worksheet supports findings writing and aggregation as well as goal and PA rating. Automatic calculation of coverage and progress shows, for example, whether the Oral Affirmations have met the coverage rule (50% of instantiations for each goal), or whether the instantiation coverage is complete. These are accomplished in the worksheets using formulas, without VBA code or links to other worksheets.

[Download](#) Document Review Worksheet (no summary page, no VBA) (707 KB)

[Download](#) Document Review Worksheet with summary page and VBA (726 KB)

Start Control Panel SEPG 2008 Deleted Items - ... Wiredhosting - ... Microsoft Power... scampi apprai... Internet 150% 8:41 AM

# Terms of use

- Not useful to those who don't understand appraisals
- No support from PATech or PIA
- “As is”
- Use of SEI's CMMI text and our added materials requires users to keep a declaration page in these tools whenever they are used
- Otherwise, they are “open” and can be adapted as needed



# Quick look



- SEI's "kit" tools
  - PIID
  - Workbook
- PATech/PIA's tools
  - PIID (WPIID)
  - Readiness Review Workbook (RRW)
  - Document Review Workbook (DRW)

# SEI's PIID

Microsoft Excel - SEI CMMI PIID v1.2a.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

Arial 12 B I U ABC

C53 Identify inconsistencies between the project plans and work products and the requirements.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1			<b>Requirements Management</b>																
2																			
3	<b>Status</b>		<b>Key Practice / Notes</b>	<b>Source of OE</b>	<b>Document (s)</b>	<b>Comments</b>													
43			<b>Direct Artifact Example:</b> - Requirements traceability matrix - Reports or database indicating traceability of requirements to/from project plans and work products, at each applicable level of system decomposition.																
			<b>Indirect Artifact Example:</b> - Requirements tracking system - Criteria and completed checklists and minutes for review of requirements traceability - Requirements tracking logs - Revision and maintenance of requirements traceability across the lifecycle - Listings of allocated requirements included in reviews of project plans and work products across the lifecycle. - Requirements mappings used to support impact assessments																
44																			
45		1																	
46		2																	
47		3																	
48		4																	
49		5																	
50		6																	
51		7																	
52		PF																	
53		<b>SP1.5</b>	<b>Identify inconsistencies between the project plans and work products and the requirements.</b>  <b>Appraisal Considerations:</b> - The scope of the REQMPA is simply to identify, but not correct, requirements issues that must be resolved.																
54			<b>Direct Artifact Example:</b> - Documentation of identified requirements inconsistencies including sources, conditions, rationales.																
55			<b>Indirect Artifact Example:</b> - Corrective action requirements - Corrective action requests initiated as a result of inconsistencies between requirements and plans / work products - Completed checklists, forms, logs, action items, or minutes substantiation																
56																			

Ready

Instructions \ REQMP \ PP \ PMC \ SAM \ MA \ PPQA \ CM \ RD \ TS \ PI \ VER \ VAL \ OPF \ OPD \ OT \ IPM \ RSKM \ DAR \ OPP \ QPM \ OI

Start PIA server's ... example tools 09 Wednesd... Microsoft Po... SEI Process ... SEI CMMI P... Microsoft Word 4:29 AM



# SEI's Worksheet

Microsoft Excel - SEI Process Area Workbook.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

Arial 10 B I U ABC

C5 = P2

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	RM												
2													
3	Goal	Practice	Project	Type	Inst Char	Weakness (Description of gap in implementation) Strengths are Optional	Information Needed	OU Char	OU Preliminary Finding (gaps in implementation)	Goal Rating	Goal Level Findings	Supporting Evidence	
4	SG 1	SP 1.1	P1										
5			P2										
6			P3										
7		SP 1.2	P1										
8			P2										
9			P3										
10		SP 1.3	P1										
11			P2										
12			P3										
13		SP 1.4	P1										
14			P2										
15			P3										
16		SP 1.5	P1										
17			P2										
18			P3										
19	GG 1	GP 1.1	P1										
20			P2										
21			P3										
22	GG 2	GP 2.1	P1										
23			P2										
24			P3										
25		GP 2.2	P1										

Ready

Start PIA server's Calenda... 2 Windows Explorer Microsoft PowerPoint ... SEI Process Area ... Microsoft Word 4:31 AM

# PA Tech's PIID

L2-1 WPIID-REQM-1.2-E 1.0.doc - Microsoft Word

File Edit View Insert Format Tools Table Window Help Adobe PDF

Normal Times New Roman 10 B I U ABC

Req ID	Req Description	Example Direct Artifacts	[Direct Artifact] P1: P2: P3: O:	[Indirect Artifact] P1: P2: P3: O:	Implementation Tracking: Defined Elaborated Deployed Released in OSP Confirmed	Localized Direct Artifact Names & Descriptions	Strengths	Weaknesses	Project Type 1 Links & descriptions
REQM1	Manage the requirements of the project's products and product components and to identify inconsistencies between these requirements and the project's plans and work products								
REQM1	Requirements are managed and inconsistencies with project plans and work products are identified.				Expected-Seen				
REQM1	Develop an understanding with the requirements providers on the meaning of the requirements	<p>1. An agreed-to set of requirements (e.g., requirements documents or database)</p> <p>2. Customer comments and final agreement on the requirements</p>	<p>[Direct Artifact] P1: <a href="#">Q&amp;A List</a> -&gt; Q&amp;A 答复表(FAQ) -&gt; row 46 - 65 (describes questions and tracks answers; column G is the PGM ID, column H is the question, column L is the answer, column N is the status);</p> <p><a href="#">Development procedure, templates and standards</a> (all the documents in this folder are provided by clients, as the nontechnical requirement);</p> <p>P2: <a href="#">Q&amp;A List</a> -&gt; (describes questions and tracks answers; column D is the PGM ID, column N is the question, column O is the answer, column C is the status);</p> <p><a href="#">Development procedure, templates and standards</a> (all the documents in this folder are provided by clients, as the nontechnical requirement);</p> <p>P3: <a href="#">Q&amp;A List</a> (describes questions and tracks answers);</p>	<p>[Indirect Artifact] P1: <a href="#">Mail</a> (discuss questions with clients, which is also recorded in Q&amp;A List);</p> <p><a href="#">Mail</a> (after PM discuss the nontechnical requirement with clients, she summarize the additional standards);</p> <p>P2: <a href="#">Mail</a> (exchange Q&amp;A List with clients);</p> <p>P3: <a href="#">Mail</a> (exchange Q&amp;A List with</p>					[Direct Artifact] P1: P2: P3: O:

Page 2 Sec 1 2/21 At Ln Col 1 REC TRK EXT OVR English (U.S)

Start PIA server's Cal... demo 2 09 Wednesday ... Microsoft Power... CMMI-PIID-REQ... L2-1 WPIID-RE... 4:53 AM



# PA Tech's Readiness Review Worksheet

Microsoft Excel - cmmi rr v1.2-E 1.2 base 1.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

Arial 9 B I U ABC [font settings icons]

F12 [CUT]

	A	B	C	D	E	F	G	H	I	J	K	L	
1	REQM	f = found, n = not found, w = found the wrong thing, x = not applicable											
3		Direct		Indirect									
4		Checked	Good	Checked	Good								
5		99%	99%	73%	72%								
7	Goal	Practice	Project	Direct	Indirect	Comment							
8	SG1	SP11	P1	f	f								
9			P2	f	f								
10			P3	f	f								
11			P4	f	f								
12			P5	f	f								
13			P6	f	f								
14			ORG	x	x								
15			SP12	P1	f	f							
16		P2		f	f								
17		P3		f	f								
18		P4		f	f								
19		P5		f	f								
20		P6		f	f								
21		ORG	x	x									
22		SP13	P1	f	f								
23	P2		f	f									
24	P3			f									
25	P4		f										
26	P5		f	f									
27	P6		f	n									

Version & Notice REQM / PP / PMC / SAM / MA / PPQA / CM / RD / TS / PI / VER / VAL / OFF / OPD / OT / IPM / RSKM / DAR / OPP / QPM

Ready

Start [taskbar icons] PIA server's Calenda... 2 Windows Explorer Microsoft PowerPoint... cmmi rr v1.2-E 1.2... Microsoft Word 4:46 AM



# PA Tech's Document Review Worksheet

Microsoft Excel - cmmi dr v1.2-E 1.2 with summary d1.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

宋体 12 B I U ABC

G9 = e

1 REOM e= exactly, d= okay different\*, w= not okay different, x= not applicable\* \*=describe in column I

Direct	Indirect	F2F	Direct	is tangible outputs of implementing the practice		
Prj Char	OU Char	Goal	Indirect	is associated with the direct, and is the consequence of implementing the practice		
100%			F2F	is associated with the direct		

Goal	Practice	Project	Direct	Indirect	F2F	Findings	Weakness (Description of gap in implementation) Strengths are Optional	Information Needed	OU Char	OU Preliminary Finding (gaps in implementation)	Goal Rating	Goal Level Findings	Supporting Evidence
SG1 79%	SP11	P1	e	e	e	FI			FI				
		P2	e	e	e	FI							
		P3	e	e	e	FI							
		P4	e	e	e	FI							
		P5	x	x	x	x							
		P6	x	x	x	x							
	ORG	x	x	x	x								
	SP12	P1	e	e	e	FI			FI				
		P2	e	e	e	FI							
		P3	e	e	e	FI							
		P4	e	e	e	FI							
		P5	x	x	x	x							
		P6	x	x	x	x							
	ORG	x	x	x	x								
	SP13	P1	e	e	e	FI			FI				
P2		e	e	e	FI								
P3		x	x	x	x								
P4		e	e	e	FI								
P5		x	x	x	x								
P6		x	x	x	x								
ORG	x	x	x	x									

Version & Notice Summary REQM / PP / PMC / SAM / MA / PPQA / CM / RD / TS / PI / VER / VAL / OPF / OPD / OT / RSKM / IPM / DAR

Ready

Start PIA server's Cal... demo 2 worksheets Microsoft Power... 2 Microsoft E... Microsoft Word 4:24 AM





Thank you!  
Any questions?

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