Bullet Proofing CMM Appraisals (Part 2)

Recommended Best Practices for use on CBAIPI, People CMM Assessment and SCAMPI Appraisals

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Abstract

Best practices resulting from the use of the family of different CMM Appraisal Framework (CAF) compliant methods such as CMM Based Appraisal for Internal Process Improvement (CBAIPI), People CMM Assessment and Standard CMMI Appraisal Method for Process Improvement (SCAMPI) is presented in what follows.

The recommendations made in this paper are based on experience and have been found to be of immense use on assessments or appraisals conducted by SITARA. Twelve bullet proof techniques including a couple of checklists and an appraisal plan template are being shared and reported in this paper.

[CONTINUED FROM SITARA SA/JUNE 2002]

5. Exploration of alternative practices

On assessments, if a practice directly does not hurt a goal, then it should be supported by either an alternative practice or a system that is resilient to "changes to process owners" for a fulfillment of a level.

6. How to know if a practice is an effective alternative practice

Alternative practices are those which may not fulfill the CMM practices *in toto*. Normally, such practices can be rated either as, strength or as weakness. If a certain sense of rigidity is associated with alternative practices, then such practices are ideal candidates to be categorized into the 'Points to Ponder' and it would be in the best interests of the assessed entity that such rigid postures of the process become highlighted as a qualitative judgement of the assessment team.

Or, there could be a limited context within which they may become applicable and therefore the alternative practice can indeed be treated effectively as strength. If the site does not even understand the reasons surrounding the rigidity of practices, and the site cannot relate them as strengths from experiences with such institutionalization, they should be categorized as a weakness.

For illustration of this idea, we will use an example from the People CMM: practice 2 of Training and Development reads as – 'Training needed in critical skills is identified for each individual'.

Since this practice calls for having a plan for each individual to develop his/her critical skills based on individual assessments of critical skills, it can definitely overwhelm the implementation. Many times, it can be both a daunting and an impossible task.

An effective alternative practice could be that the site ensures a policy which states and supports only those individuals who have served the organizational well and have enough team responsibilities to be the affected stakeholders on this People CMM practice. This also means that, the policy can make explicit mention that those who are on probation or temporary staff or contactors are exempt from this practice. Under such circumstances it is more than reasonable to conclude that the alternative practice is effectively, a strength.

This example proves that considerable tailoring of the People CMM practices is to be exercised in order to make them applicable and effective.

7. How to rule process areas as not applicable

Rating of practices can be considered as not applicable if and only if, there is very clear evidence that supports their not being applicable within the site's context. If all of the practices within a process area are to be treated as not applicable along with supporting justifications which the team and assessment team leader can accept, then the process area itself is ruled as not applicable.

In larger organizations (excess of 300 people), there is yet another possibility when a Class A assessment is supported by evidence resulting from a structured Class B assessment. The process area might itself be applicable within a limited context of the organization. And, within this limited context all of the practices may be supported adequately and followed to the tee. In which case, it might be useful to examine reasons for their not being applicable within the rest of the organizational context and use the CMM assessment principles to award the maturity rating.

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8. What is the best way to rate practices to confirm goal accomplishment on the process area

One of the available techniques is, to examine practice-by-practice and check if the findings considered holistically ensure that the goal is satisfied. And this is normally done using a thumbs up or thumbs down approach where the assessment team establishes consensus based on their recall of the assessment. This technique works only if we have an experienced assessment team which has a powerful ability to recall the discussions and bring the right context. Not a bullet proof technique! And, even with an experienced assessment team, this is a long and a dreary process.

A better way is to tag every observation from the People CMM assessment which will be used to develop the findings after establishing corroboration from at least two independent sources, to indicate whether it is a strength or a weakness.

After these findings are identified as a strength or a weakness, it is now important to tag these practices to the People CMM framework. Tagging involves identifying the practices of the particular process area of the People CMM that will be impacted either as strength or as weakness.

The assessment team can now take each finding which is a weakness only and examine the degree to which the goals of the process area are hurt. If the practices have a significant negative impact on the goal fulfillment, then the process area itself can be rated as 'not satisfied'. Many times, such a focused assessment of the weaknesses reveal an interesting observation that permits an exploration of the 'alternative practices' since the weakness may have a limited negative consequence.

Once consensus is achieved on evaluation of all of the weaknesses, then it is easy to establish the same on the strengths.

The above technique is a quick and easy method that establishes team consensus without losing time-one of the most important commodities which is often in short supply during assessments!

9. Have a detailed checklist and a guideline for chartering the necessary infrastructure

Presentation for all participants on first day during opening meeting or assessment participants briefing session:

- ❑ This room should be large enough to comfortably seat everyone who will be interviewed
- ❑ A few additional chairs in the front for assessment team use
- ❑ All necessary projection mechanisms to present the assessment participants briefing presentation
- ❑ Everyone attending this meeting, needs to be informed about both the time and the location and the logistics coordinator must ensure that everyone is seated at least 10 minutes prior to the start of the presentation
- ❑ Access to a spare projector should a situation warrant quick replacement of the projector
- ❑ Reserve the same room used for this meeting, for the FAR feedback and the final findings report sessions

Draft findings feedback to process owners, project leaders and middle managers:

- ❑ Reserve the same room we used for the interviews or the larger conference room used for Assessment Participants Briefing session.
- ❑ Assessment Team will sit at the front of the room facing the participants and must have chairs that enable note-taking.
- ❑ All necessary projection mechanisms to present the draft findings presentation

Draft findings feedback to all Functional Area Representatives (FARs):

- ❑ Reserve the same room we used for presentation to everyone on the first day or for the assessment participant briefings.
- ❑ Assessment Team will sit at the front of the room facing the participants and must have chairs that enable note-taking.
- ❑ All necessary projection mechanisms to present the draft findings presentation

Final Findings Presentation:

- ❑ Reserve the same room we used for presentation to everyone on the first day or for the assessment participant briefings.
- ❑ All necessary projection mechanisms to present the final findings presentation
- ❑ Assessment Team will sit at the front of the room facing the interviewees

Executing Briefing:

- ❑ Usually this is done in either the interview room or the senior manager's conference room. This room needs to be sufficiently large enough to accommodate the team and all of the people senior management invites.
- ❑ All necessary projection mechanisms to present the draft findings presentation

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Table 2: Infrastructure Checklist

10. Interleaving draft findings finalization and follow up interview schedule

Having a draft findings finalization step in the assessment or appraisal is a SITARA innovation to the assessment process.

This is by far the most useful technique found to ensure that follow up interviews are actually based on ensuring the assessment or appraisal actually clarifies the assessment team's understanding of the assessment or appraisal. Interleaving draft findings finalization step before any follow up data collection sessions ensures that the site is given adequate opportunity to actually arrive at consensus beyond reasonable doubt as to what the merits and demerits of the practices.

The draft findings finalization step requires a new set of site specific scripts to be generated by the assessment team that will focus only on process discontinuities which have been observed by the assessment team. This new best practice being reported in this paper from SITARA has tremendous advantages at actually ensuring a truly collaborative approach to the CMM appraisal.

If there are no significant process discontinuities requiring a follow up, then the outcome of the draft findings finalization step can actually lead very effectively into the actual preparation of the draft findings in the draft findings consolidation step of the appraisal or the assessment.

11. Have a solid plan for the assessment week – failing to plan is planning to fail!

	Monday, DDMMYY	**Tuesday, DDMMYY**	**Wednesday, DDMMYY**	**Thursday, DDMMYY**	**Friday, DDMMYY**
9:30	Interview - 1 9:30 - 11:00	Interview 5 9:30 - 11:00	Interview 9 9:30 - 11:00	Draft Findings Presentation for Process Owners, Middle managers 9:30 - 11:00	Debriefing of the Assessment Team 9:30 - 11:00
9:45					
10:00					
10:15					
10:30					
10:45					
11:00					
11:15					
11:30	Interview 2 11:15 - 12:45	Interview 6 11:15 - 12:45	**Draft findings finalization** **[SITARA's new best practice]**	Draft Findings Presentation to FAR Group Participants 11:15 - 12:45	FINAL FINDINGS PRESENTATION Executive Session
11:45					
12:00					
12:15					
12:30					
12:45					
1:00					
1:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
1:45	Interview 3 13:30 - 15:00	Interview 7 13:30 - 15:00	**Draft findings finalization** **[SITARA's new best practice]**	Draft Findings Presentation to Practice Heads & SEPG 13:30 - 15:00	Wrap-up Appraisal
2:00					
2:15					
2:30					
2:45					
3:00					
3:15					
3:30	Interview 4 15:15 - 17:00	Interview 8 15:15 - 17:00	FOLLOW UP	Final Findings Consolidation & Rating	
3:45			FOLLOW UP		
4:00			FOLLOW UP		
4:15			FOLLOW UP		
4:30			FOLLOW UP		
4:45			FOLLOW UP		
5:00			FOLLOW UP		
UNTIL WORK IS COMPLETE	Day 1 Information Consolidation	Day 2 Information Consolidation	Day 3 Draft Findings Consolidation		

Reference

[1] SITARA Process JewelboxTM 2000

[2] R.S. Nandyal, "Interpreting the People CMM-Guide for improving people related and workforce practices", Tata McGraw-Hill [To be published shortly]

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Raghav S. Nandyal is the Founder and CEO of SITARA Technologies, a professional services Company with core competencies in strategic management consulting, process assessment and web-based product development. He is among the very few authorized lead assessors by the Software Engineering Institute, Carnegie Mellon University, on the CMMI-SE/SW/IPPD (SCAMPI Method), the Software CMM and the People CMM. He is authorized by the Software Engineering Institute to teach the Introduction to CMMI course. He has been a prime consultant, coach and an assessor on Software and People CMM based process improvement initiatives in leading multinationals, worldwide. He is on the international review panel for IEEE Software. His book on 'Interpreting the People CMM' is being published by McGraw-Hill and is due for release in April 2003.

He held several software and management positions ranging from software engineer to Chief Process and Quality Officer with leading multinationals worldwide before going into business for himself.

His current research interests in software management are in mitigating software risks and building self-sustaining software process improvement programs in development environments working on emerging technologies. He has published a number of technical papers in international conferences. He has a Master's degree in Electrical and Computer Engineering from Illinois Institute of Technology, Chicago. He is a donor alumnus of Indian Institute of Science, Bangalore.