

SA-CMM[®] and the CMMIsm A Comparison

John Marciniak

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Outline

- Introduction
- Comparison Method Used
- Comparison
- Summary Remarks

Introduction

Why the Comparison

Comparison Methods

- Goals - Too Mushy
- Levels - 2 versus 2?
- Activities/Common Features versus Practices/Generics
- Quantification of Comparison

Goal Oriented Comparison

KPA – SA-CMM	Percent Correlation in CMMI at level 2 Staged	Comment
Software Acquisition Planning	5%	
Solicitation	10%	Higher if a small, component based procurement
Requirements Development and Management	10%	Perspective is different especially at level 2 of the SA-CMM
Project Management	90%	Good, albeit project oriented
Contract Tracking and Oversight	5%	Poor
Evaluation	10%	
Transition to Support	10%	Poor except for small component baed procurements

Assumptions

- Level 2 SA-CMM used as a basis
 - did not include non-acquisition oriented process areas
- Generics a wash - Did not include generics in comparison except.....
- Comparison necessarily was qualitative

Comparison - Level 2 PA's

SA-CMM	CMMI
Software Acquisition Planning (SAP)	Project Planning (PP)
Solicitation (SOL)	Supplier Agreement Management (SAM)
Requirements Development and Management (RDM)	Requirements Management (REQM), Project Planning (PP), Project Management and Control (PMC)
Project Management (PM)	Project Planning (PP), Project Management and Control (PMC)
Contract Tracking and Management (CTO)	Supplier Agreement Management (SAM)
Evaluation (EVAL)	Supplier Agreement Management (SAM)
Transition to Support (TTS)	Supplier Agreement Management (SAM)

Comparison - Level 3 PA's

SA-CMM	CMMI
User Requirements (UR)	Requirements Development (RD)
Project Performance Management (PPM)	Project Planning (PP), Integrated Project Management (IPM), Project Management and Control (PMC), Requirements Management (REQM)
Contract Performance Management (CPM)	Integrated Supplier Management (ISM)
Acquisition Risk Management (ARM)	Risk Management (RSKM)
Training Program Management (TPM)	Organizational Training (OT)

Planning

SA-CMM	CMMI	Practice/Activity
Ac1	PP2.7-1, PP 2.4-1	A project plan for the project or functional activity exists.
Ab2	PP 2.5-1	When planning a project consideration of knowledge and skills (experience) required by project personnel is considered.
	PP 2.1-1	Budget and schedule estimates are included in planning activities.
Ac2	PP GP 2.4	The roles, responsibilities and authority for project functions are documented.
Ac2		The roles, responsibilities and authority for project functions are communicated to affected groups.
Ac3	PP 3.3-1, PMC 1,2-1	Project team commitments and changes to commitments are communicated to affected groups.
Ac4	PMC 1.3-1	Risks associated with the project are tracked.
Ac5	PMC 1.1-1, PMC 2.1-1	Project planning parameters such as funding, execution, and schedule are tracked against plans.
Ac6	PMC 2.1-1	A corrective action system used for tracking project or functional component issues.
	PMC 2.2-1, 2.3-1	Corrective actions are routinely managed.
Ac7		Project plans are kept current throughout the project life cycle as changes occur in the project,

SA-CMM/CMMI Comparison (Percent of Coverage - Level 2 PA's)

SA-CMM	CMMI
Software Acquisition Planning (SAP)	20%
Solicitation (SOL)	28%
Requirements Development and Management (RDM)	45%
Project Management (PM)	85%
Contract Tracking and Management (CTO)	100%
Evaluation (EVAL)	10%
Transition to Support (TTS)	25%

SA-CMM/CMMI Comparison (Percent of Coverage - Level 3 PA's)

SA-CMM	CMMI
User Requirements (UR)	50%
Project Performance Management (PPM)	60%
Contract Performance Management (CPM)	28%
Acquisition Risk Management (ARM)	78%
Training Program Management (TPM)	67%

Subjective Differences

1. Perspective - organization of each model is attuned to those relative areas for which it is intended
2. Focus
 - Acquisition organization; it is a management focus
 - the CMMI focus is on the project; it is a software engineering or systems engineering focus
3. Detail -
 - SA-CMM provides principles for “acquisition”
 - the CMMI provides more prescriptive engineering practice.

SEI Position

“The SA-CMM has been and is focused on software acquisition and management of the acquisition rather than development. Once the CMMI fully embraces the concepts and principles of the SA-CMM, it would be expected that the SA-CMM would be retired three years after. For now, the SA-CMM provides the comprehensive software acquisition focus.”

Fisher, Goethert, and Jones, “*Applying the Software Acquisition Capability Maturity Model*”, CrossTalk, Aug. 2002, Vol. 15 No. 8, pp. 4-7

Closing Remarks

- Both models are sound reference models
- If acquisition is your principle focus the SA-CMM is the model of choice - particularly if you are just starting with process improvement