Major Changes in CMMI v1.3

Configuration Management Working Group April 12, 2011



CMMI v1.3

CMMI for Development

CMMI for Acquisitions

CMMI for Services



Introduction

The SEI released Version 1.3 of the CMMI in November of 2010

- Version 1.2 will be "sunset" on November 30, 2011
- CMMI Version 1.3 is a release of CMMI models, appraisal method, and training for three areas of interest:
 - Product and Service Development (CMMI for Development)
 - Service Establishment, Management, and Delivery (CMMI for Services)
 - Product and Service Acquisition (CMMI for Acquisition)
- With the release of the new version CMMI Version 1.3, the CMMI Model document for two (out of three) constellations was reduced.
 - CMMI Team was able to reduce the overall size of the CMMI for Development (CMMI-DEV) Model by 100 pages by clarifying and consolidating the practices.

History

- Version 1.2 of the CMMI models was released in recent years
 - CMMI for Development was released in August 2006
 - CMMI for Acquisition was released in November 2007
 - CMMI for Services was released in February 2009
- Due to the time in between these releases, they have become inconsistent
- The work done by Version 1.3 ensures the consistency of these models.



Summary of Changes

- Changes in the CMMI Version 1.3 can be categorized into the following types:
 - More clarifications on high maturity concepts
 - "High Maturity" topics were revised based on experience with Statistical Process Control (SPC)
 - Differences of the "constellations" was reduced in order to improve their interoperability
 - CMMI for Development (CMMI-DEV)
 - CMMI for Acquisition (CMMI-ACQ)
 - CMMI for Services (CMMI-SVC)
 - There are 16 core process areas that are common to all three

Summary of Changes

- Changes in the CMMI Version 1.3 can be categorized in to the following types:
 - New topics and methods were incorporated in the models (AGILE)
 - Adjustments were made for better understanding



Changes to High Maturity Process Areas

- With the use of statistical methods in recent years, the "High Maturity" topics are now written more clearly
- The description of "High Maturity" maturity levels was simplified
- Generic goals (GG) and generic practices (GP) of capability Level 4 and 5 were removed
- The Process area, Organizational Innovation and Deployment (OID) was rewritten and renamed to "Organizational Performance Management"
- A new goal requiring clear linkage between business objectives and process performance goals has been added to the OPM process area

Changes to Better Improve Interoperability of the Constellations

- The core process areas (Core Process Areas) were placed in the same category in all Constellations:
 - Project Management
 - Support
 - Process Management
 - As a result, the CMMI-DEV process area "Requirements
 Management" was moved to the category "Project Management"
- The inconsistencies in the glossary were removed. Now the glossary terms are the same in all Constellations.
- The Generic Practices (GP) were consolidated into one place in CMMI. GPs are now all grouped under the respective generic practice
- Similar to the CMMI-ACQ and CMMI-SVC, the Integrated Project Management (IPPD) SG was removed in CMMI-DEV (Page 15)
- Two new practices were added to Integrated Project Management.

Incorporation of New Topics and Methods

- Practices in the Engineering process areas have been refined to reflect industry best practices
- Added guidance for organizations that use AGILE methods
- AGILE methods were added as examples in CMMI for Development



Changes to "Adjustments for Better Understanding"

- In addition to these major changes, many minor changes were made to simplify the models and to improve clarity. Examples of these changes are:
 - The description of the generic practice (GP) 3.2 was improved to better describe the aspect of continuous improvement (Page 4)
 - The term "typical work product" was replaced by "Example Work Product" to make clear that these are examples
 - In the process area "Measurement and Analysis" (MA), a table with examples was added
 - In the CMMI for Services, the term "project" was replaced with the word "work". So, CMMI-SVC no longer talks of "Project Planning", but of "Work Planning."
 - This was done to make the work planning practices more understandable for service teams

Changes to "Adjustments for Better Understanding"

- Examples of these changes are:
 - A subpractice was added to Integrated Project Management (IPM)
 - SP 2.3 Perform Root Cause Analysis
 - "Perform root cause analysis of selected issues to address deficiencies in achieving the project's quality and process performance objectives."
 - Purpose is to show that a root cause analysis is useful even without statistical methods (Page 31)
 - SP 1.6 Establish Teams
 - "Establish and maintain teams."



Changes to Training

- Revision of Related Trainings Offered by the SEI
- In the coming months, training for appraisers, team members and other training courses will be upgraded
- This will also include Version 1.3 of the SCAMPI appraisal method
- Upgrade trainings for CMMI Version 1.3 is available and required for Appraisal Team Members (ATMs)



References

http://www.sei.cmu.edu/cmmi/index.cfm

http://www.sei.cmu.edu/cmmi/tools/dev/index.cfm

