What’s New with the CMMI®
(CMMI® Changes from Version 1.1 to Version 1.2)

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LEAD: Convert top management into disciples of the process and make proselytizing part of their job. Nonbelievers can head for the exits.

Reasons for Changes [1]

1. Reduce complexity and size
   - Eliminated advanced practices and common features to simplify
   - Eliminated the Supplier Sourcing (SS) addition
   - Incorporated Integrated Supplier Management (ISM) into Supplier Agreement Management (SAM) to eliminate Supplier Sourcing Discipline
   - Consolidated the IPPD material to simplify
   - Added, modified, and consolidated definitions in the glossary (e.g., bidirectional traceability) for improved readability and understanding
2. Expand model coverage
   – Adopted a single book approach (i.e., both representations are published in one document) for ease of use
   – Added hardware amplifications
   – Added two work environment specific practices [in OPD & IPM]
   – Updated the model name to CMMI® for Development (CMMI®-DEV) to reflect the new CMMI® architecture
Major Changes [1]

- Name changed to “CMMI® for Development”
- Both representations in one document
- Amplifications improved; added hardware amplifications
- Common features and advanced practices eliminated
- Supplier Sourcing addition eliminated
- Integrated Supplier Management brought into Supplier Agreement Management
Major Changes [2]

- Guidelines for “not applicable” process areas clarified
- Overview and glossary improved
- Work environment material added to Organization Process Definition and Integrated Project Management
- Integrated Process and Product Development material simplified and consolidated
- Process deployment strengthened in Integrated Project Management and Organization Process Focus
• ANALYZE: Rigorously study the root cause of every defect and complaint. Then, even if it means stopping production, fix the problem once and for all.

For CMMI® v1.2 the SEI-led team clarified material based on 1000+ Change Requests

Specific Changes [1]

- Advanced practices eliminated [No more SP1.2-3]
- Common features eliminated [Commitment to perform, Ability to perform, etc.]
- Supplier Sourcing addition eliminated
  - Added to SAM Goal 2:
    - SP 2.2 - Monitor Selected Supplier Processes
    - SP 2.3 - Evaluate Selected Supplier Work Products
Specific Changes [2]

- IPPD simplified
  - Removed OEI and moved material to OPD
  - Removed IT and moved material to IPM
- Single document
  - Users can choose to use:
    - Representation-specific content (i.e., continuous, staged)
    - Addition-specific content (i.e., IPPD)
    - Amplifications (i.e., hardware engineering, software engineering, systems engineering)
Specific Changes [3]

• Added hardware amplifications and examples
• Work Environment
  – Organization level in OPD SP 1.6
  – Project level in IPM SP 1.3
• Only SAM process area can be declared not applicable with supporting rationale
• Glossary updated
Integrated Project Management + IPPD

- SP 1.3 – Establish the Project’s Work Environment
- SP 3.1 – Establish the Project’s Shared Vision
- SP 3.2 – Establish the Integrated Team Structure
- SP 3.3 – Allocate Requirements to Integrated Teams
  NOTE: SP 3.1, 2, 3 Former IPM SG3&4

- SP 3.4 – Establish Integrated Teams
- SP 3.5 – Ensure Collaboration among interfacing Teams
  NOTE: SP 3.4, 5 Former IT process area
Organizational Process Definition +IPPD

• SP 1.6 – Establish Work Environment Standards

• SP 2.1 – Establish Empowerment Mechanisms
• SP 2.2 – Establish Rules and Guidelines for Integrated Teams
• SP 2.3 – Balance Team and Home Organization Responsibilities

NOTE: SP 2.x Former OEI process area
Organizational Process Focus

• SP 1.2 – Appraise the Organization’s process
• SP 3.2 – Deploy Standard Processes
• SP 3.3 – Monitor Implementation
Requirements Management

• SP 1.4 – Maintain Bidirectional Traceability of Requirements

Requirements Development

• SP 1.1 – Elicit Needs
• SP 3.1 – Establish Operational Concepts and Scenarios
• SP 3.5 – Validate Requirements
Supplier Agreement

Management

• SP 2.2 – Monitor Selected Supplier Processes
• SP 2.3 – Evaluate Selected Supplier Work Products

Technical Solution

• SP 1.1 – Develop Alternative Solutions and Selection Criteria
• SP 2.3 – Design Interfaces Using Criteria
Verification

• SP 3.2 – Analyze Verification Results

Validation

• SP 2.2 – Analyze Validation Results
Constellations

- Development – DEV
- Acquisition – ACQ
- Services – SVC
Scampi$^{SM}$ Changes

- Appraisal results expire after 3 years
- Organizational Unit sampling
- If SAM is declared NA, then must be justified
- Appraisal Disclosure Statement (ADS) improvements
  - reduce redundancy with other appraisal documents
  - improve usability for sponsor and government
  - require sponsor’s signature on the ADS
- SEI needs to “close” appraisal prior to an organization claiming a level
TRACK: Map out every process, make people own it, and reward constant improvements. For every action, ask why and how it could be done better.

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