CMMI-DEV® v1.3: What you need to know!

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CMMI Instructor
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ScrumMaster

Visit me at “AskTheCMMIAppraiser.com
Now Playing!

Welcome back my friends . . . to the show that never ends!

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Lead Appraiser
CMMI Instructor
Co-Chair of the SEI Partner Board
Author of AgileCMMI Methodology

http://www.askTheCMMIAppraiser.com

“You cut through the noise and get us to the solution”
- Client who named our company “Broadsword.”
Participate! Ask questions! Make comments!

Actually, your phone is *muted*, because 100 people talking at once is annoying.

You can ask questions on my blog [http://asktheCMMIAppraiser.com](http://asktheCMMIAppraiser.com) and I’ll answer within 24 hours.
CMMI v1.3 Upgrade Timeline

November 2010
CMMI v1.3 is Released

You can conduct either a CMMI v1.2 OR v1.3 Appraisal using SCAMPI v1.2

March 2011
SCAMPI v1.3 Is Released

You can conduct either a CMMI v1.2 OR v1.3 Appraisal using SCAMPI v1.2 OR SCAMPI v1.3

November 2011
CMMI v1.2 is toast!

You can conduct ONLY a CMMI v1.3 Appraisal using EITHER SCAMPI v1.2 OR SCAMPI v1.3

March 2012
SCAMPI v1.3 Follows

Finally! Everything is in Harmony!

CMMI and SCAMPI = v1.3
There are hundreds of changes to CMMI v1.3

Quite a few of these are “Inside Baseball”

Changes in wording, phrases, category of Process Areas, and changes in numbering schemes are all very interesting to us pointy-headed process geeks...

But you don’t NEED to know it all.

Me and Mike Konrad arguing about the wording of OPD SP1.3 Sub-practice 3 . . . Revision 42 . . or was it 43?
We’re going to focus on what you “Need to Know”

We’ll be talking about what you’ll need to hit a home-run.

We’ll quickly share some of the big changes, like new Process Areas, new (and changed) Goals and Practices, and new rules for conducting SCAMPI Appraisals.
So, c’mon Jeff, what’s really different about CMMI v1.3?

I’m busy here!
Some Changes are “Architectural”

The first victim?

**Amplifications**
Amplifications gave us some excellent context for the differences in how we interpreted the model for Software, Systems, and Hardware Engineering. In the CMMI-DEV v1.2 book they appeared in italics(formatted just like this!) in about 20 places in the model.

They’re gone.

The problem seems to be they didn’t get much love.
Other “Architectural” Changes

• CMMI “Model Foundation” (CMF) was introduced to DEV
  • It already existed in ACQ and SVC. It’s the “common elements” between constellations. There are 16 PA’s and the CMF and one “shared” PA (SAM)*

• “Typical Work Products” are now called “Example Work Products.”
  • This is an EXCELLENT change!
  • This puts all you so-called “consultants” on notice . . . They’re NOT required!

• There are now AGILE Examples! See Chapter 5.
  • Agile was always there . . . but not obvious.
  • The failure was one of imagination, not the model . . . but here it is.

* I was going to draw you a nice venn diagram . . but you know . . . busy.
Other “Architectural” Changes

- Language in the goals, practices, informative material and glossary was harmonized across the constellations (DEV, SVC, ACQ).
  - DEV didn’t evolve to match SVC and ACQ as they were released.

- Requirements Management (REQM) was moved to the “Project Management Category”
  - OK, a bit of a snoozer, but it makes sense!

- Integrated Process and Product Development (IPPD)
  - GONE!*

* Not so fast.
CMMI v1.3 has upgraded training also

There is a new “Introduction to CMMI-DEV v1.3” class with all-new slides! Whoo hoooo!

There is also a CMMI v1.3 Upgrade Class available online for $200.

You DON’T need the upgrade class to be on a CMMI v1.3 Appraisal Team if you’ve taken the CMMI v1.2 class already. . . . unless it’s a so-called “high-maturity” appraisal.

But I highly recommend you take it . . .
Some changes were clarifications

For instance, in Causal Analysis and Resolution (CAR)

SP 1.1 Select Outcomes Defect Data for Analysis
Select outcomes the defects and other problems for analysis.

. . . or in Requirements Development (RD)

SG 3 Analyze and Validate Requirements
The requirements are analyzed and validated, and a definition of required functionality is developed.

Many of these were changed to match the interpretation we ALREADY had!
Some changes added or cut Practices

For instance in Integrated Project Management (IPM)

IPM SP 1.6 introduces the concept of teams

SP 1.6 Establish Teams
   Establish and maintain teams.

... Or a deletion from Organizational Performance Management (OID now OPM)

SP 1.2 Identify and Analyze Innovations
   Identify and analyze innovative improvements that could increase the organization’s quality and process performance.
There are still Five Maturity Levels . . . but . . .

5. Focus on process improvement

4. Process measured and controlled

3. Process characterized for the organization and is proactive

2. Process characterized for projects and is often reactive

1. Process unpredictable, poorly controlled and reactive

Optimizing
Quantitatively Managed
Defined
Managed
Performed

SEI Partner
CMMI

Broadsword
There are only THREE Capability Levels!

Take THAT Level-Seekers!
Process Area Changes

There are numerous clarifications and a few changes in the Process Areas. Here are the ones you NEED to know.

**IPM:** Removed SG3 (IPPD)
**IPM:** Added SP1.6 to replace IPPD Teaming
Yes, this makes IPPD now “Expected”

**OPD:** Removed SG2 (IPPD)
**OPD:** Added SP1.7 to support IPPD Teaming Concepts

**PI:** SP1.1 now focuses on “Integration Strategy” not “Integration Sequence”

**SAM:** Demoted SP 2.2, Monitor Selected Supplier Processes to a SubPractice
There are numerous clarifications in the Generic Practices. Here are the ones you NEED to know.

**GP2.6 “Manage Configurations”** was confusing. Now it says “Control Work Products.”

**GP2.8 “Monitor and Control the Process”** has now been clarified with the word “Evaluate” in place of the word “Measure.” Those of you creating big metrics books for this . . .STOP IT!

**GP3.2 “Collect Improvement Information”** is now “Collect Process Related Experiences.” A similar change was made in IPM and OPF where the same concept appears.
So-Called “High Maturity” Changes

There are numerous changes to the High Maturity Process Areas. Here are the ones you NEED to know.

**QPM**: SG1 now focuses on preparing for QPM, SG2 focuses on managing the project.

**OPP**: Practices re-ordered to provide better emphasis and clarity

**CAR**: Scope of CAR has been expanded beyond “defects” to include “outcomes.”

**OPM**: New Process Area “Organizational Process Performance” replaces “OID – Organizational Innovation and Deployment.”

Specific goal 1, Manage Business Performance, was added.

- SP 1.1 Maintain Business Objectives
- SP 1.2 Analyze “Process Performance Data
- SP 1.3 Identify Potential Areas for Improvement
How about SCAMPI v1.3?

**S**tandard

**C**MMI

**A**ppraisal

**M**ethod for

**P**rocess

**I**mprovement

CMMI + MDD

Appraisal Requirements

Appraisal Team

Organizational Process Suite

The Process

Lessons Learned/Improvements

Process Deployment

Organization/Projects

Actual Practice

Recommendations, Findings

SEIPartner

CMMI

Broadsword
What is this thing . . . called SCAMPI*?

Unlike CMMI, SCAMPI is a Process, not a Process Model.

So, it is a “HOW-TO” and a “WHAT-TO”

But it is not a “WHY-TO”

Mature, Agile organization’s strive to understand the “WHY!”
But what is it really? Is it an Audit?

One time I followed a Lead Appraiser that insisted on seeing a work product for each Practice . . .

Each **SUB** Practice!
Ahhhhhh!

ATM’s worked 12-14 hour days all week!

It drove all the wrong behaviors, wasted money, and made them hate CMMI!
But what is it really? Is it an Exam?

I followed another Lead Appraiser that tested each practitioner by having them recite the Generic Practices...

Backwards!

Ouch!

Talk about looking for data in all the wrong places!
It’s really about LEARNING about ourselves

“Wow! We Planned and that project turned out to be faster! AWWWESOME!”
Introduction of Standard (Required) Sampling Factors:

- Location – Where is the work being performed?
- Customer – Who is it being performed for?
- Funding Source – Who is funding the work?
- Management Structure – Who leads what work?
- Type of Work being Performed – Software, engineering?

These factors will determine the “Sub Groups” that are part of the sample. Think of these as “virtual divisions” or the Organizational Unit.
Sampling Factors (example)

Each of these examples is a “sub group” and each has within it “basic units.” Think of these as Projects are support groups (like SEPG teams).

Still with me?
Sampling Formula . . . Seriously.

The “three project minimum” rule is gone forever. …

Minimum number of Basic Units to be selected from a given subgroup

= 

Number of Subgroups \times \text{Number of Basic units in a given Subgroups}

Total number of Basic Units

This is very bad news for professional level-seekers. You know who you are!
Other changes to SCAMPI v1.3

Planning

• Data collection planning is now required
• New Data Sufficiency rules to replace “Focus” and “non-Focus” concepts
• All teams must be trained for EACH appraisal
• Team must meet at least ONCE before each appraisal
• Experience requirement excludes Lead Appraiser!
• Plan and submit to appraisal record to SAS at LEAST 30 days in advance*
• Lead Appraisers can only perform 3 SCAMPI A’s per quarter*

Evidence

• Indirect and Direct Evidence is OUT! Whooo hooo! Oh wait.
• Now we have just “Artifact” and “Affirmation.”

*these were actually slip-streamed into v1.2 in 2010.
My advice? Focus on Learning – not Levels!

Now that we’re mature can I borrow the car?
What? This wasn’t enough for you?

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