

2ª CONFERÊNCIA DA QUALIDADE DE SOFTWARE

Panorama Atual e Perspectivas
da Qualidade de Software



dias
11 e 12
novembro 2009
das 8h30 às 18h

local



Unidade Mooca
Rua Taquari, 546
Auditório Térreo - SP

apoio:



A 2ª edição da Conferência trará um panorama atual da Qualidade de Software no Brasil, com relatos de empresas que obtiveram excelentes resultados na implantação de programas de melhorias de processos e suas perspectivas para os próximos anos.

Venha participar das palestras e debater com especialistas da Engenharia e da Qualidade de Software assuntos que podem interessar diretamente à sua empresa, como:

- *Resultados e perspectivas do mercado de TI no Brasil;*
- *Relatos de implementação de programas de melhorias (CMMI, MPS.BR, TMMI, SCRUM, ITIL, ISO9000, entre outros);*
- *Métricas e controle estatístico de processo aplicados ao desenvolvimento de software;*
- *Importância do fator humano na definição e manutenção de processos.*

PALESTRAS CONFIRMADAS:

- **SEPIN/MCT**
(Secret. Espec. de Política de Inform./
Min. Ciência da Tecnologia)
- **SERPRO**
(Serv. Federal de Processamento de Dados)
- **COPPE-UFRJ**
- **7COMm**
- **ASR Consultoria**
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- **Ci&T**
- **Crest**
- **Kaizen**
- **Heptagon**
- **Tecnométrica**

CMMI-Services – Visao Geral & CMMI v1.3 Plans



SEI Partner
Carnegie Mellon[®]



Antonio Braga
Crest Consulting
Novembro/09

This presentation was created using slides from CMMI for Services presentation and Supplement CMMI-Services course Which property belongs to Software Engineering Institute

What Is the CMMI for Services?

CMMI-SVC extends the coverage of the CMMI Product Suite to cover the establishment, management, and delivery of services.

Like every CMMI model, CMMI-SVC

- is a process improvement approach that provides organizations with the essential elements of effective processes (PAs),
- can be used to guide improvement across a team, project, division, or an entire organization, and
- helps to set process improvement goals and priorities, provide guidance for quality processes, and provide a point of reference for appraising current processes.

Why Is the CMMI-SVC Needed?

Service providers deserve a consistent benchmark as a basis for process improvement that is appropriate to the work they do and is based on a proven approach.

- Demand for process improvement in services is likely to grow: services constitute more than 80% of the U.S. and global economy.
- CMMI-SVC addresses the needs of a wide range of service types through focusing on common processes.
- Many existing models are designed for specific services or industries.
- Other existing models do not provide a clear improvement path.
- Some services organizations use CMMI-DEV, but its practices are not fully aligned with services activities.

What Types of Services Does CMMI-SVC Cover?



Crest Consulting

CMMI-Services

How Do Services Differ from Other Products?

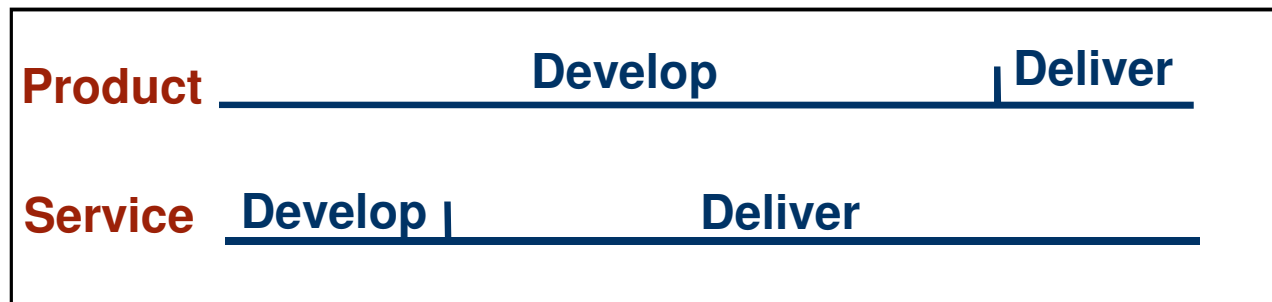
A service is an **intangible, non-storable** product (e.g., operations, maintenance, logistics, and IT).

Services imply **on-going relationships** governed by service agreements.

Services are delivered through the operation of a service system.

Services are **simultaneously** produced and consumed.

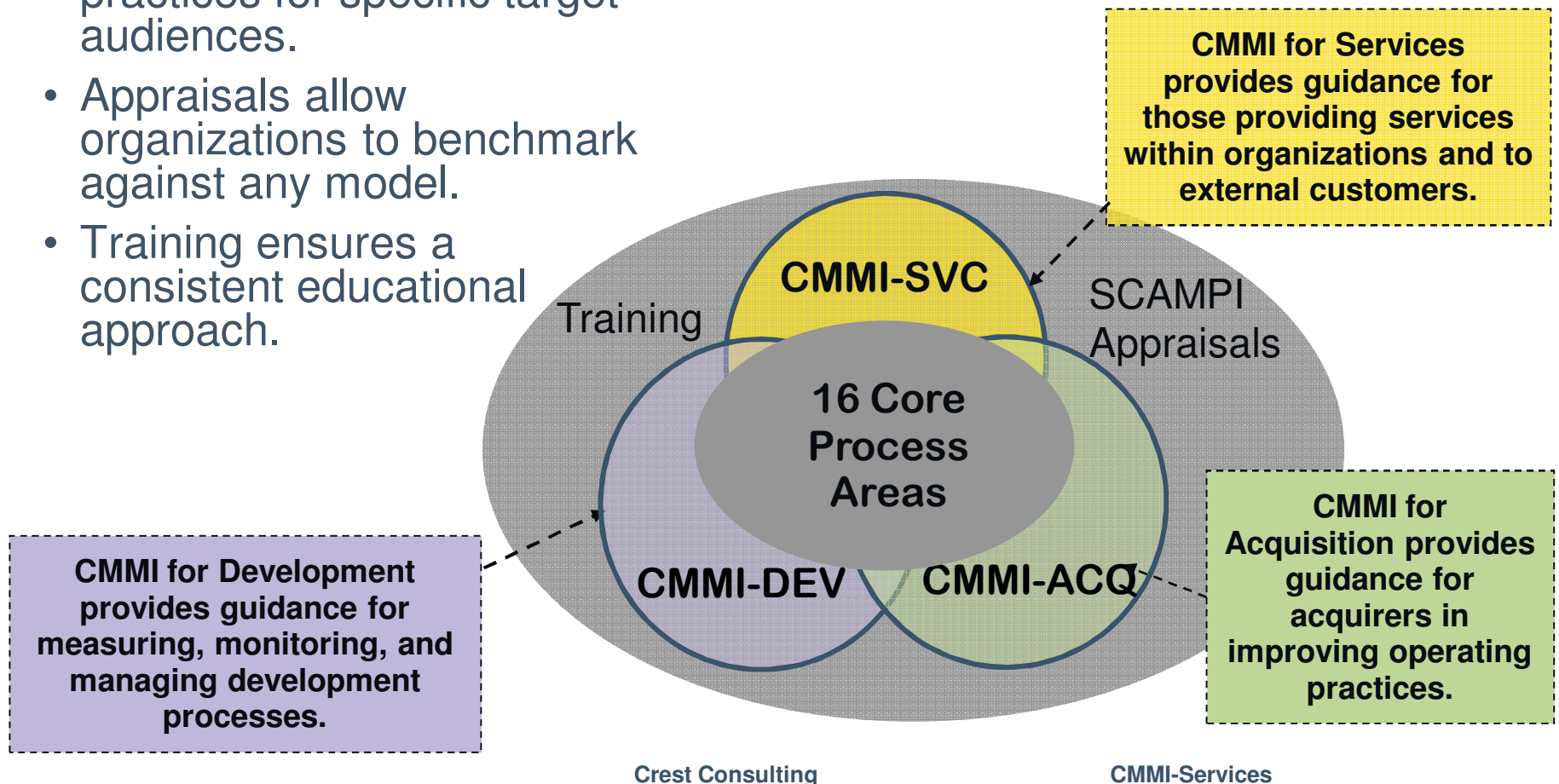
Services have a different business rhythm.



Flexible and Leverageable Product Suite

The CMMI Product Suite is composed of models, training, and appraisals:

- Models describe best practices for specific target audiences.
- Appraisals allow organizations to benchmark against any model.
- Training ensures a consistent educational approach.



Appraisal Approach

The SCAMPI approach will be used.

CMMI-SVC based SCAMPI A appraisals will be accepted in September 2009.

CMMI-SVC Training

Initial training for CMMI-SVC will do the following:

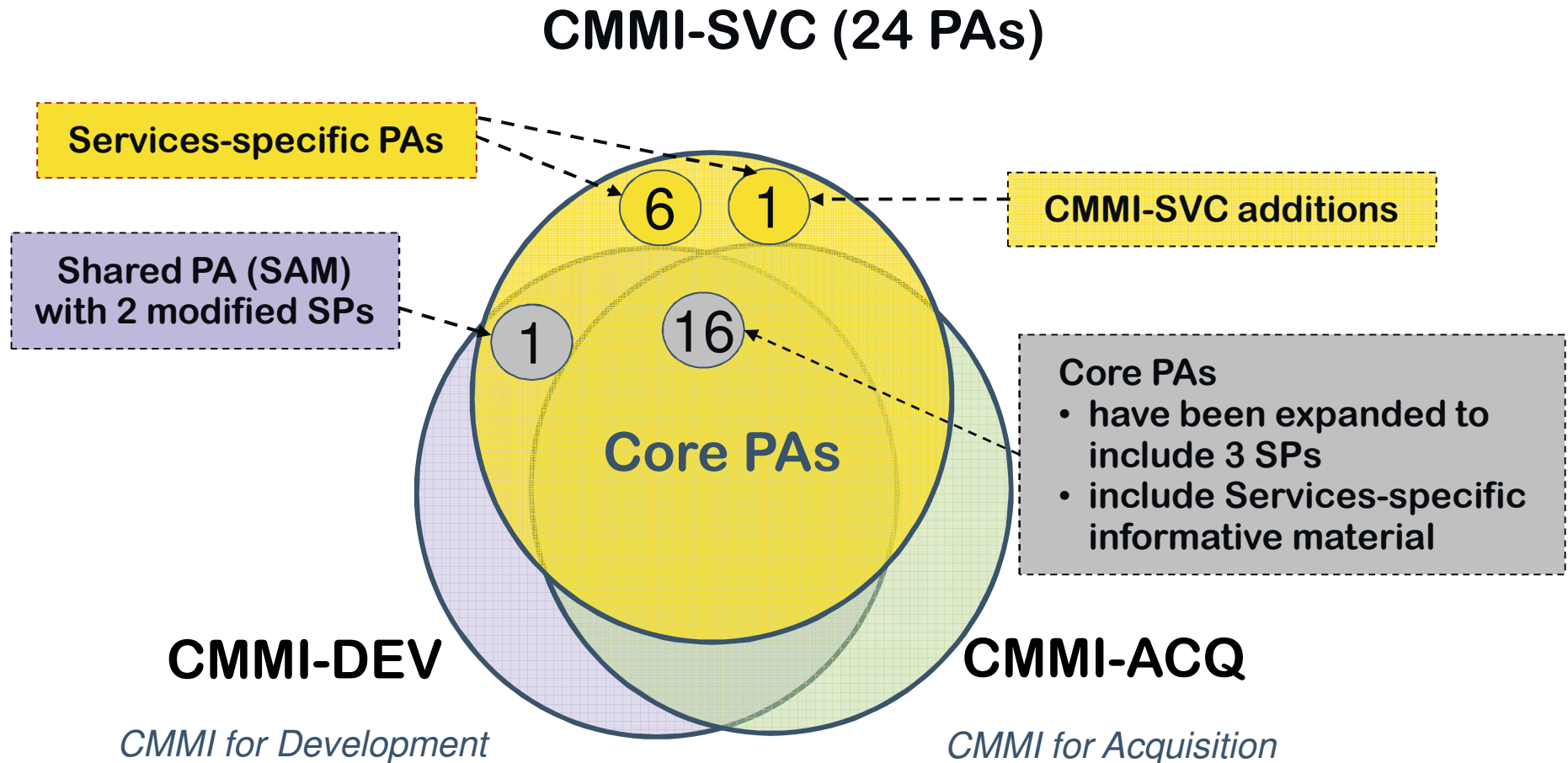
- assume the completion of existing *Introduction to CMMI* training

The *Introduction to CMMI* course will be revised at a later date to accommodate a multiple CMMI model approach.

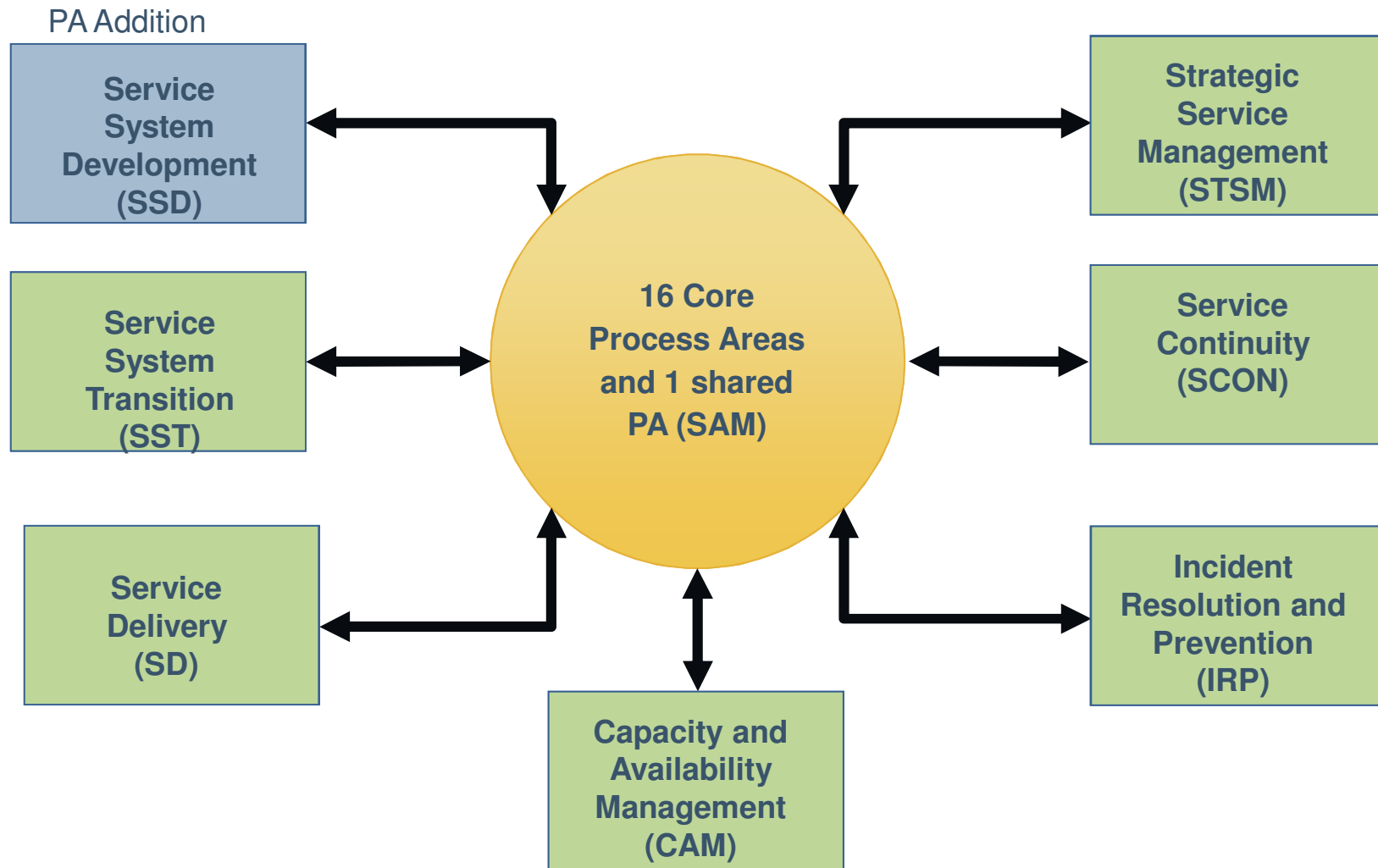
Other training

- Tutorials are available at various conferences.
- SCAMPI team training for CMMI-SVC based appraisals is available.

Relationships to Other Constellations



CMMI-SVC v1.2 Process Areas



CMMI-SVC Content

CMMI-SVC consists of the 16 core PAs, one shared PA, and 7 service-specific PAs, 1 of which is an addition.

Core PAs in CMMI-SVC include the following:

- Services-specific informative material
- expanded expected material (3 specific practices)
 - A project strategy specific practice in Project Planning
 - Integrated teaming specific practices, one in Organization Process Definition and one in Integrated Project Management
- the Requirements Management PA in the Project Management process area category

CMMI-SVC PA Organization by Maturity Level and Category

ML/ Category	Project Management	Process Management	Service Establishment and Delivery	Support
5		Organizational Innovation and Deployment (OID)		Causal Analysis and Resolution (CAR)
4	Quantitative Project Management (QPM)	Organizational Process Performance (OPP)		
3	<Integrated Project Management (IPM)>, Risk Management (RSKM), <i>Capacity and Availability Management (CAM)</i> , <i>Service Continuity (SCON)</i>	<Organizational Process Definition (OPD)>, Organizational Process Focus (OPF), Organizational Training (OT)	<i>Incident Resolution and Prevention (IRP)</i> , <i>Service System Transition (SST)</i> , <i>Strategic Service Management (STSM)</i> , <u><i>Service System Development (SSD)</i></u>	Decision Analysis and Resolution (DAR)
2	Requirements Management (REQM), <Project Planning (PP)>, Project Monitoring and Control (PMC), <u>Supplier Agreement Management (SAM)</u>		<i>Service Delivery (SD)</i>	Configuration Management (CM), Process and Product Quality Assurance (PPQA), Measurement and Analysis (MA)

Legend: Core PAs in black type; Services specific PAs in *italicized red type*; Additions in *italicized and underlined blue type*; Shared in underlined green type

PAs surrounded by <> have modified or expanded SPs.

Note that Requirements Management is in the Project Management process area category.

CMMI-SVC Specific Process Area Summary

Process Area	Maturity Level	Category	Specific Goals/ Specific Practices
<i>Capacity and Availability Management (CAM)</i>	3	Project Management	2 / 6
<i>Incident Resolution and Prevention (IRP)</i>	3	Service Establishment and Delivery	3 / 11
<i>Service Continuity (SCON)</i>	3	Project Management	3 / 8
<i>Service Delivery (SD)</i>	2	Service Establishment and Delivery	3 / 8
<i>Service System Development (SSD) *</i>	3	Service Establishment and Delivery	3 / 11
<i>Service System Transition (SST)</i>	3	Service Establishment and Delivery	2 / 5
<i>Strategic Service Management (STSM)</i>	3	Service Establishment and Delivery	2 / 4

* Addition

Service Delivery (SD)

Purpose

The purpose of Service Delivery (SD) is to deliver services in accordance with service agreements.

Service System Transition (SST)

Purpose

The purpose of Service System Transition (SST) is to deploy new or significantly changed service system components while managing their effect on ongoing service delivery.

Incident Resolution and Prevention (IRP)

Purpose

The purpose of Incident Resolution and Prevention (IRP) is to ensure timely and effective resolution of service incidents and prevention of service incidents as appropriate.

Capacity and Availability Management (CAM)

Purpose

The purpose of Capacity and Availability Management (CAM) is to ensure effective service system performance and ensure that resources are provided and used effectively to support service requirements.

Service Continuity (SCON)

Purpose

The purpose of Service Continuity (SCON) is to establish and maintain plans to ensure continuity of services during and following any significant disruption of normal operations.

Strategic Service Management (STSM)

Purpose

The purpose of Strategic Service Management (STSM) is to establish and maintain standard services in concert with strategic needs and plans.

Service System Development (SSD)

Purpose

The purpose of Service System Development (SSD) is to analyze, design, develop, integrate, verify, and validate service systems, including service system components, to satisfy existing or anticipated service agreements.

Top-Level Differences Between CMMI-SVC and CMMI-DEV

CMMI-SVC, V1.2	CMMI-DEV, V1.2
Covers generic practices only in the <i>Generic Goals and Generic Practices</i> section	Covers generic practices both in the <i>Generic Goals and Generic Practices</i> section and at the end of each process area
Contains a Service Establishment and Delivery process area category, but no Engineering category	Contains an Engineering process area category, but no Service Establishment and Delivery process area category
Categorizes Requirements Management as a Project Management process area	Categorizes Requirements Management as an Engineering process area

For more information on these differences, see <http://www.sei.cmu.edu/cmmi/models/SVC-v12-comparetoDEV.html>

“Project” in CMMI-SVC

In the context of CMMI-SVC, the term *project* is interpreted to encompass all of the resources required to satisfy a service agreement with a customer. Thus, the concept of *project management* in this context is intended to be similar to the concept of *service management* in other standards and models, although the correspondence may not be exact.

Summary

CMMI-SVC is designed to meet the needs of a wide range of service types.

CMMI-SVC consists of the 16 core PAs, one shared PA, and 7 service-specific PAs, 1 of which is an addition

Core PAs in CMMI-SVC include the following:

- services-specific informative material
- expanded expected material (3 specific practices)
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CMMI v1.3 Plans

CMMI Product Suite, Version 1.3

Version 1.3 will focus on but not be limited to the following:

- High Maturity
- Appraisal efficiency
- Consistency across constellations
- Simplify the generic practices

Version 1.3 is change request (CR) driven. Events such as this conference presentation are for information sharing and dialogue.

Major Model Decisions – PA Categories

PA Categories

There are six PA categories for V1.3: Process Management, Project Management, Support, Engineering, Acquisition, and Service Establishment and Delivery.

All PAs that are core must have the same PA category in all three models and this PA category must be one of the following: Process Management, Project Management, or Support.

PAs that are not core must be assigned to one of the following PA categories: Engineering, Acquisition, or Service Establishment and Delivery.

Category of REQM

REQM is assigned to the Project Management PA category in all CMMI models.

Model Improvements Approved by the CCB

CM – (1) Add notes to SP 1.3 that emphasizes that a baseline represents a fixed set of work products at a distinct point in time, (2) add a note to SP 1.1 that specifies that configuration items may include hardware, equipment, and tangible assets, (3) clarify notes in SP 1.1 and SP 3.2, subp4.

DAR – (1) Add notes to SP 1.2 explaining that a well-defined decision statement places the appropriate focus on the decision to be analyzed and aids in defining evaluation criteria, (2) add notes to the intro notes that discusses how defining the problem helps to define the scope of alternatives to be considered, (3) incorporate communicating to appropriate stakeholders to SP 1.6, subp2, and (4) change the SP 1.5 title to “Evaluate Alternative Solutions.”

OPD – (1) Add an example box to SP 1.1, subp9, and (2) add a note to SP 1.4, subp3 about desirable functions of a measurement repository.

Model Improvements Approved by the CCB

OT – (1) Replace “instructors” with a more general term or add others that may deliver training, (2) replace the word “conduct” with “deliver,” (3) remove the confusing sentence about support groups in the intro notes, (4) eliminate the word “technical” where it causes problems, and (5) clarify a note in SP 2.3.

PPQA – (1) Clarify the example box discussing peer reviews as an objective evaluation method in the intro notes and (2) clarify the last paragraph of the intro notes that discusses the applicability of PPQA at the organizational level.

RSKM – (1) Add to the example box in SP 1.1, subp1 to broaden the scope of risk sources, (2) update the notes of SP 2.1, subp1 to identify risks associated with “business objectives,” (3) make editorial changes to the notes in SP 1.2, subp2 and SP 2.1, subp1.

High Maturity Proposed Changes

The overall objectives of high maturity changes to CMMI models are to do the following:

- Improve the clarity of high maturity practices
- Establish a clear understanding between requirements and expectations

Improve Clarity of High Maturity Practices

Problem statement:

- HM practices are currently unclear, leading to a variety of interpretations.

The objective in a nutshell:

- All CMMI users have a common understanding of the HM Practices.

Provide clarification on the following:

- Process models and process modeling
- How business objectives thread to high maturity
- Common causes - definition/concentration/expectations at ML5
- Defining high maturity expectations on individual PA performance
- High maturity re-structuring (including stronger alignment between ML 4 & ML5)
- Subprocess - selection/definition/level of instantiation

High Maturity Proposed Changes

References to important methods such as Agile methods may be added.

Amplifications may be converted to notes.

Typical work products may be renamed and updated.

A subpractice and notes may be added to IPM that provides for “lowerlevel” CAR activities.

Revise the definitions of the following: process, subprocess, process element, development, corrective action, quality, and supplier.

Considerations for Training

Provide “on-line upgrade” as with V1.2

Maintain one day “difference” supplements for constellations

Deploy a CMMI-SVC three day course

Create a “difference” supplement for DEV

Grato pela atencao

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