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CMMI-ACQ, CMMI-SVC and the Acquisition Guidebook

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CMMI Today

Version 1.1 CMMI Product Suite was released January 2002

- **CMMI Web site visits average over 20,000/day**
- **Over 60,000 people have been trained**
- **Over 1600 “class A” appraisals have been reported to the SEI**

Now we want to continuously improve...



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Major Themes

Reduce complexity & size

Increase coverage

Increase confidence in appraisal results



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Reduced Model Complexity & Size

Eliminated the concepts of **advanced practices** and **common features**

Incorporated **ISM** into **SAM**; eliminated **Supplier Sourcing (SS)** addition

Consolidated and simplified the **IPPD material**; eliminated two process areas (OEI, IT)

Consolidated all definitions in the glossary

Adopted a **single book approach**

Reduced report size **15%**



Increased Model Coverage

Added hardware amplifications

Added two work environment practices (i.e., one in OPD and one in IPM)

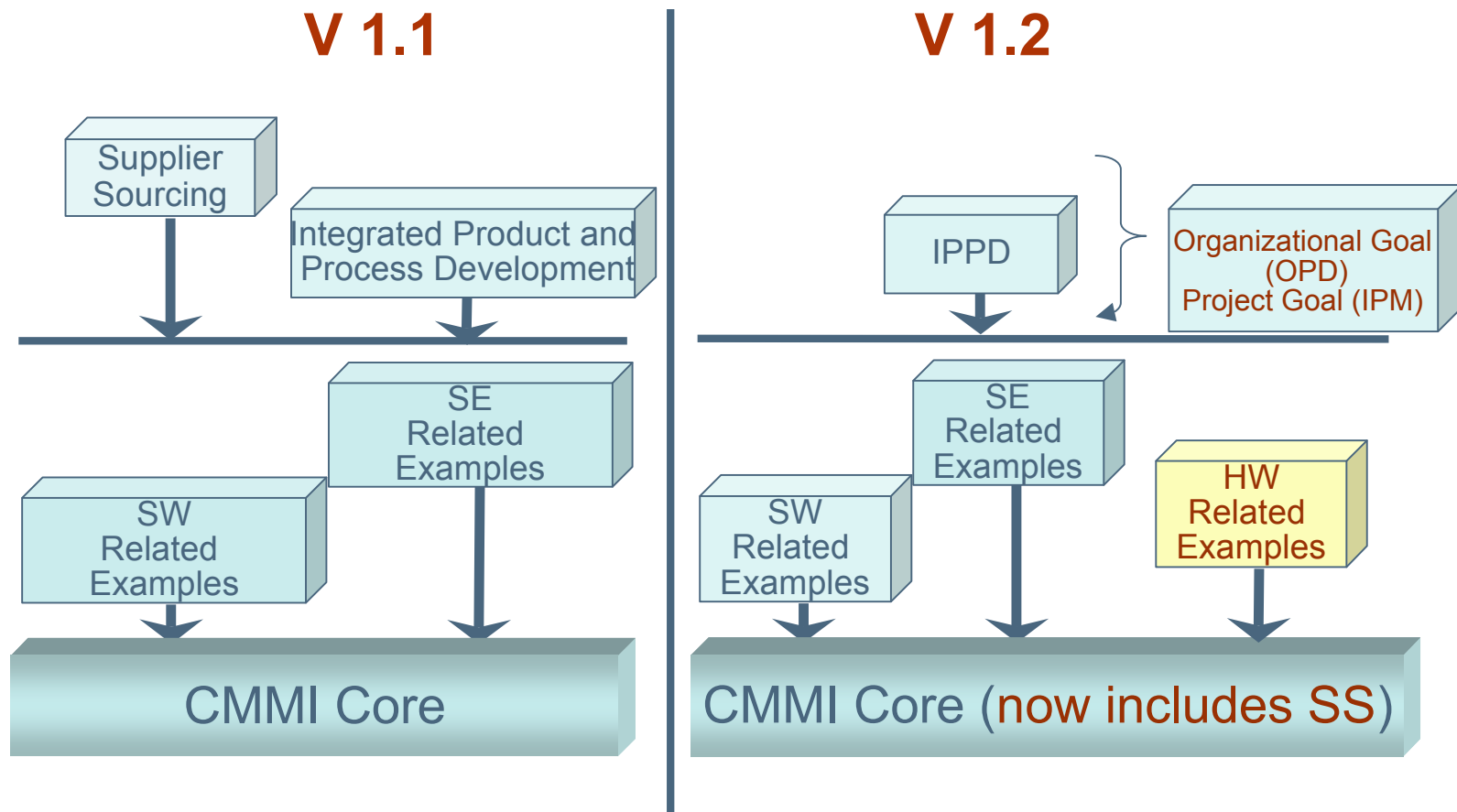
Added goal and two practices in OPF to emphasize importance of project startup

Updated notes on service development and acquisition of critical product elements

Updated name to CMMI for Development (CMMI-DEV) to reflect the expanded coverage



CMMI Model Combinations





Appraisal Method Changes to Build Confidence

Method implementation clarifications

- interviews in “virtual” organizations
- practice characterization rules
- organizational unit sampling options

Appraisal Disclosure Statement (ADS) improvements

- improve usability for sponsor and government
- require sponsor’s signature on the ADS
- require all team members to show agreement on findings
- Both V1.1 and V1.2 ADS reflect these now

Appraisal team will have responsibility for determination of “applicability” for SAM; no other process area exceptions will be accepted for maturity level achievement

Maturity level and capability level shelf life – 3 years, given 1 year of V1.2 availability



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Appraiser Qualification Changes to Build Confidence

All V1.2 Lead Appraisers must:

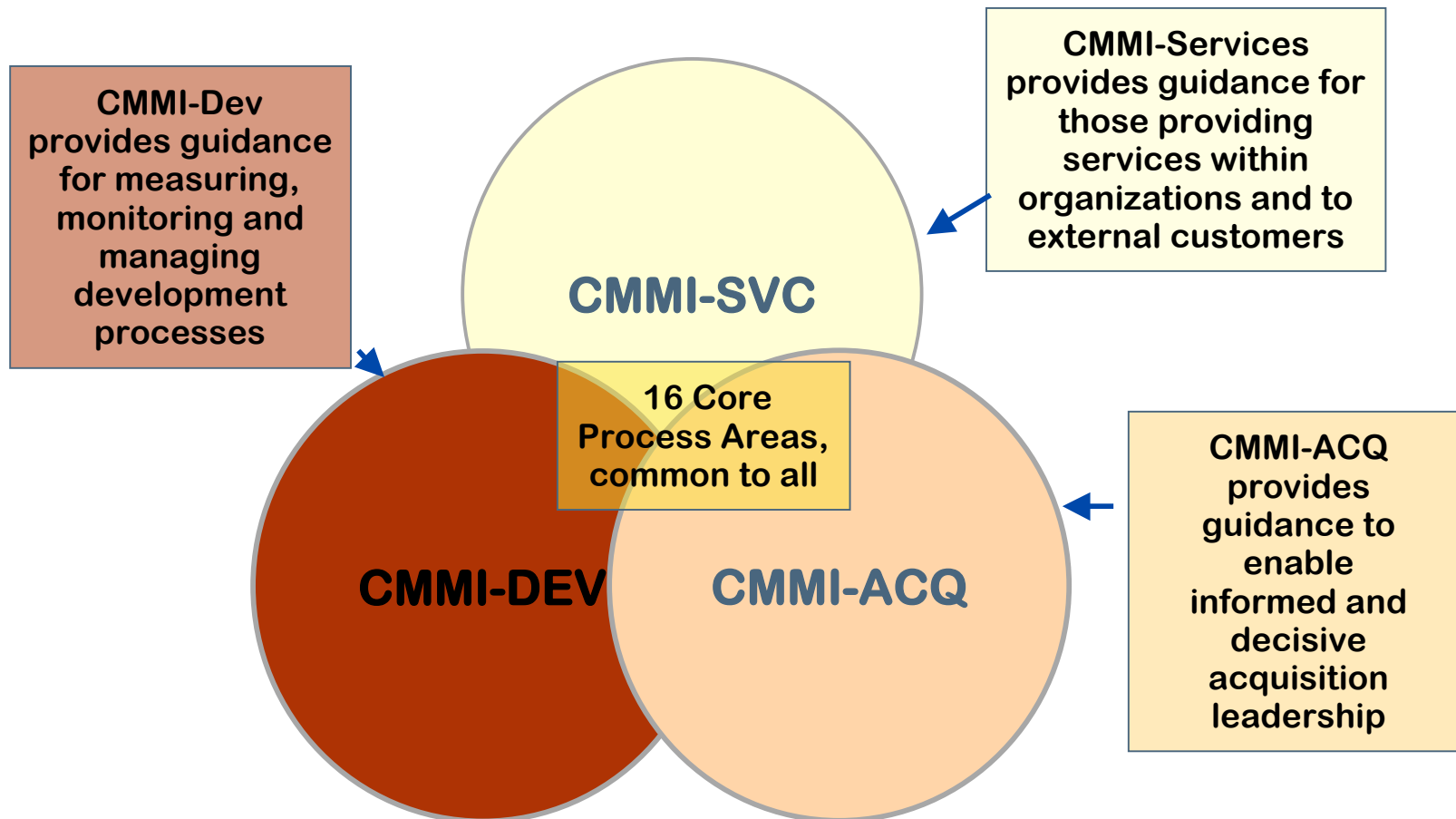
- pass upgrade and refresher testing
- attend “face-to-face” sessions on appraisal quality
- pass an additional oral exam before conducting a high maturity appraisal

All V1.2 Appraisal Team Members must accomplish upgrade training and be registered at SEI

All V1.2 high maturity appraisals must be led by a certified high maturity Lead Appraiser

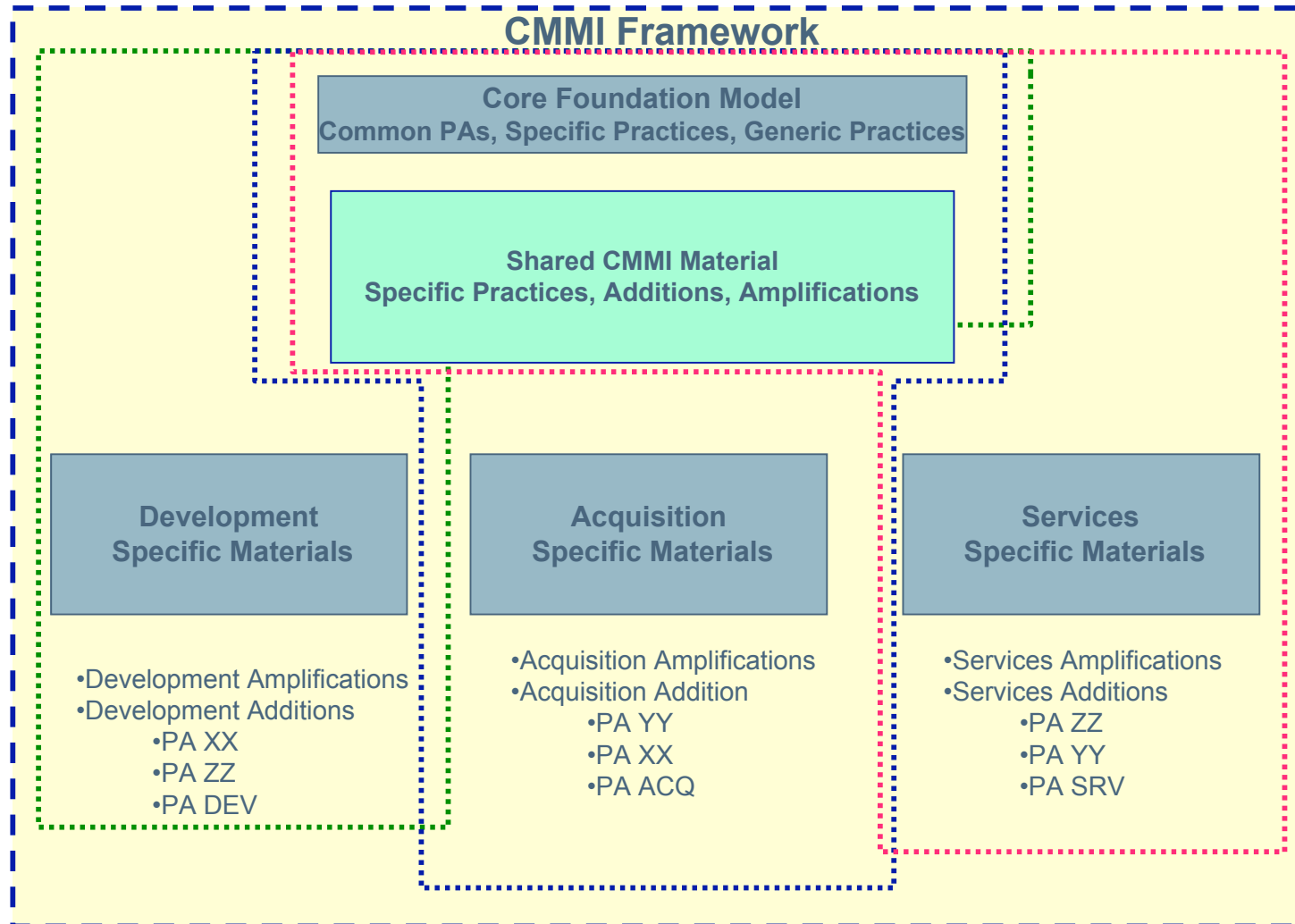


3 Complementary “Constellations”



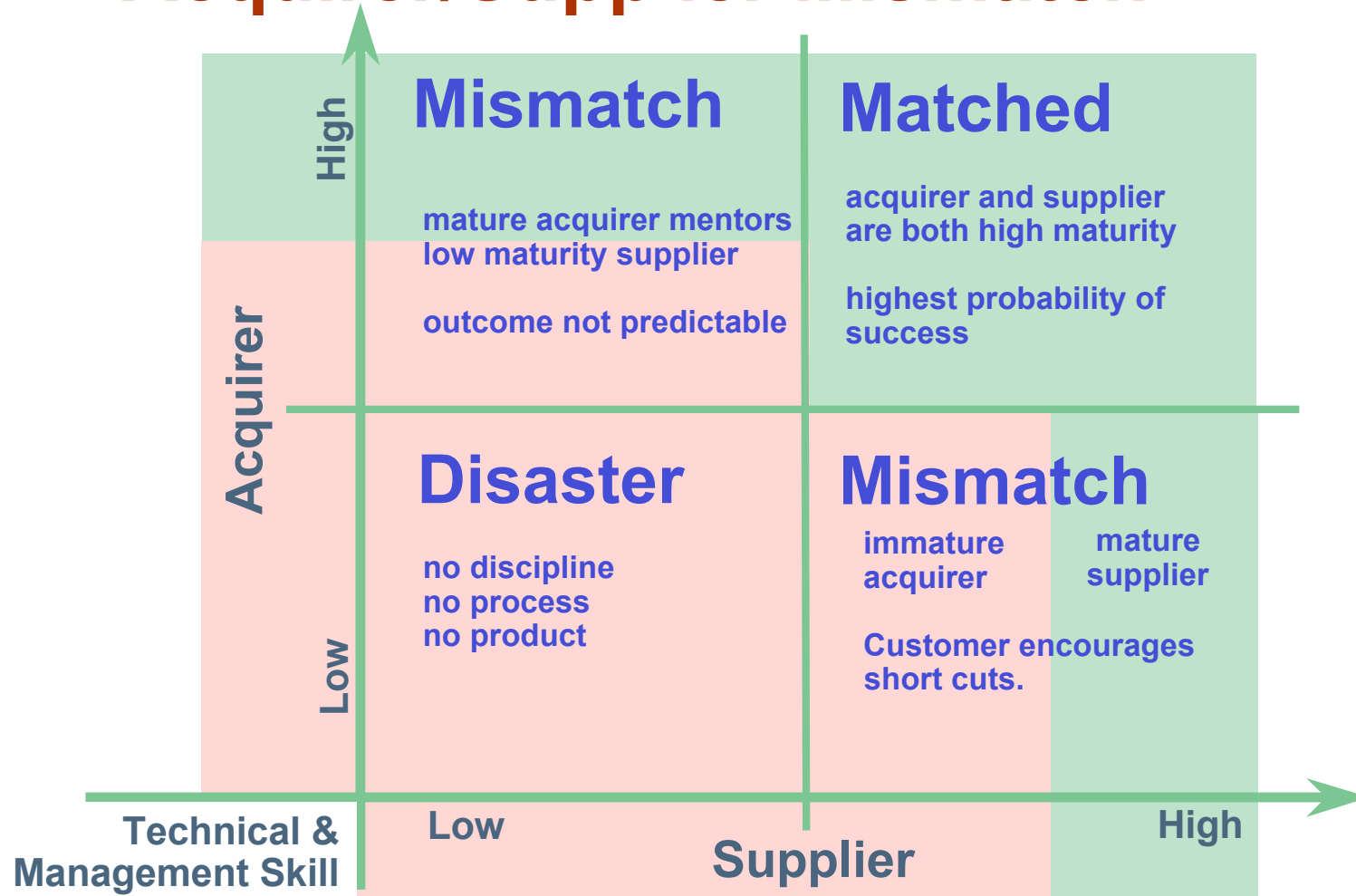


Architecture & Constellations

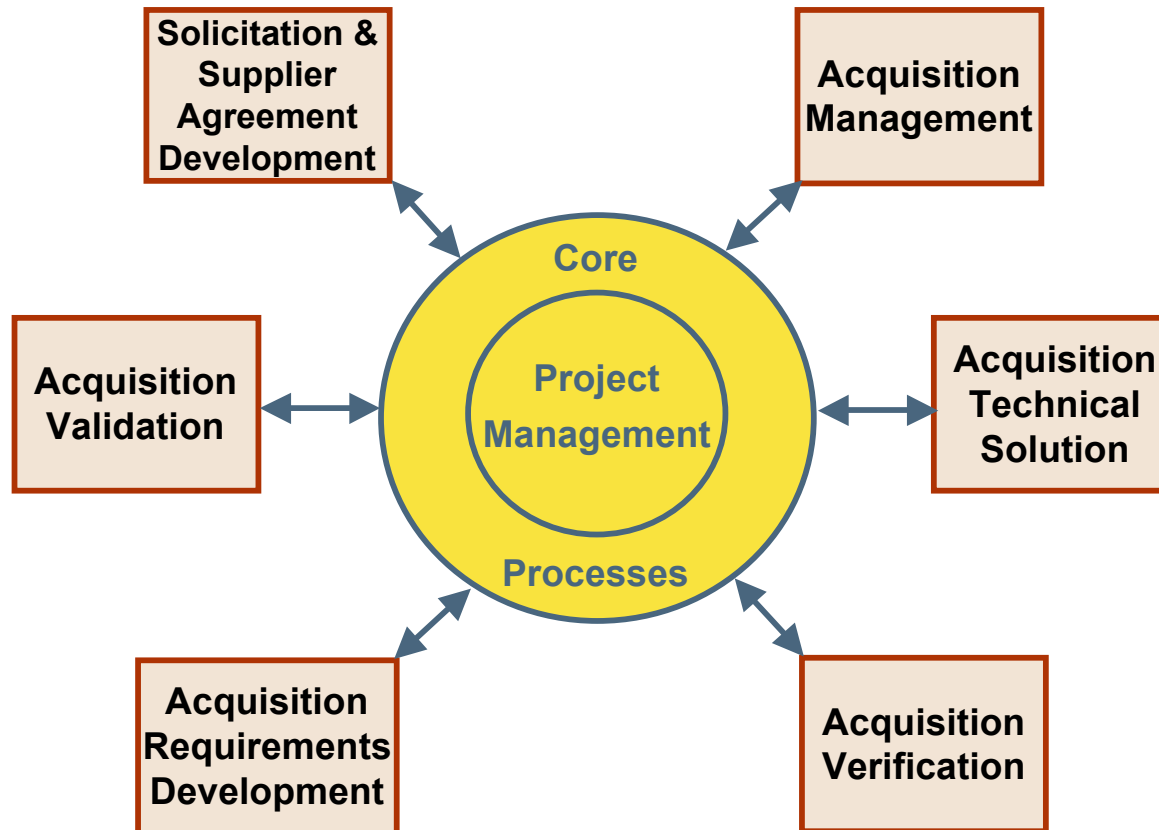




Acquirer/Supplier Mismatch

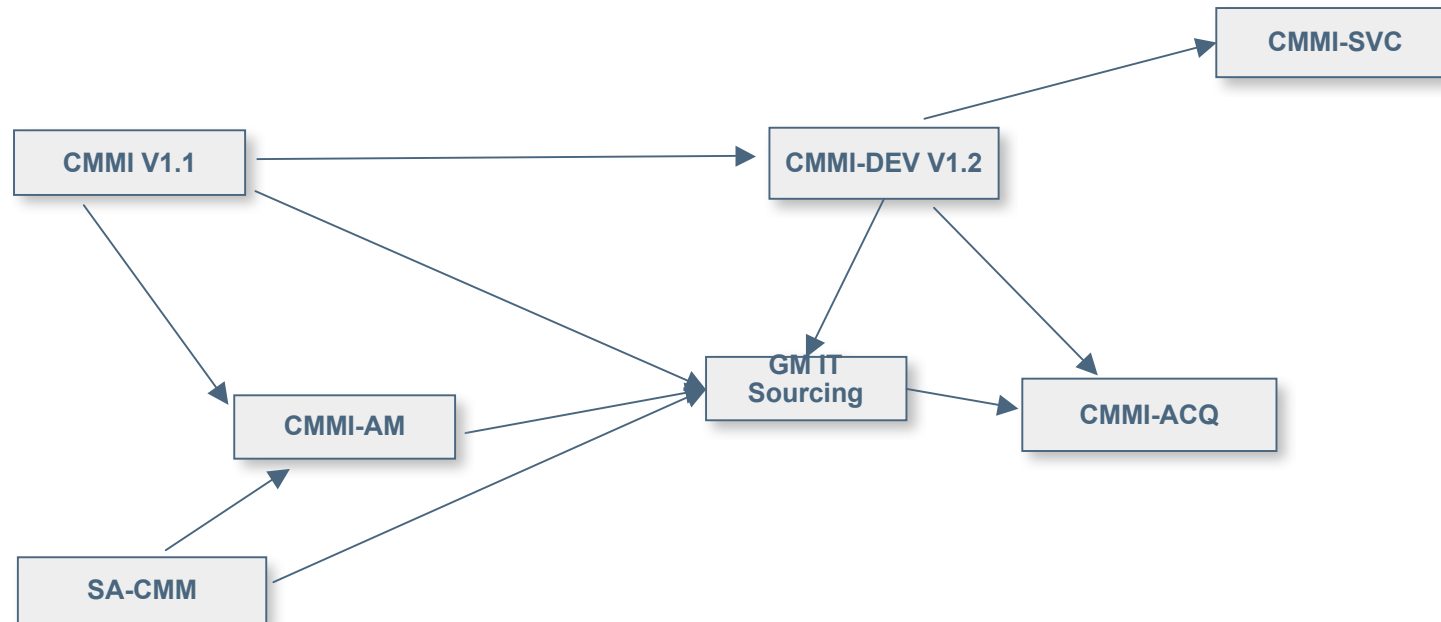


Initial CMMI-ACQ Key Acquisition Processes*





Planned Sequence of Models





Tentative CMMI-ACQ Schedule

June 2006	Special Report published
June-Dec 2006	Piloting to refine practices
Jan-April 2007	Updates written
April-June 2007	QA and final review
June 2007	Release of CMMI-ACQ



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CMMI-ACQ Activities

Completed pilots

- **GM – Warren, MI**
- **Army – Picatinny Arsenal, NJ**
- **USAF – Los Angeles, CA**
- **DMO (Australian DoD) – Canberra, Australia**
- **DHS – “US Visit” Program, Washington, DC**
- **Mil Health Agency -- DC**

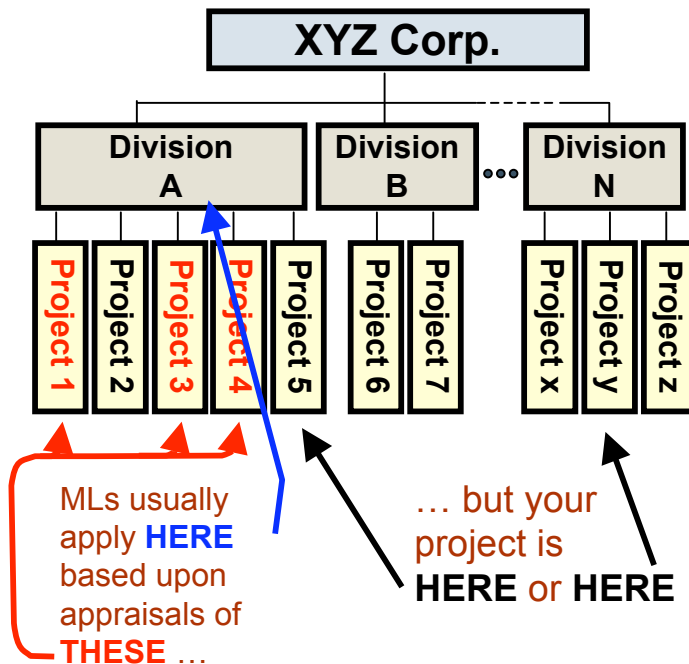
Candidates

- **MDA, Census, HUD, NAVAIR**

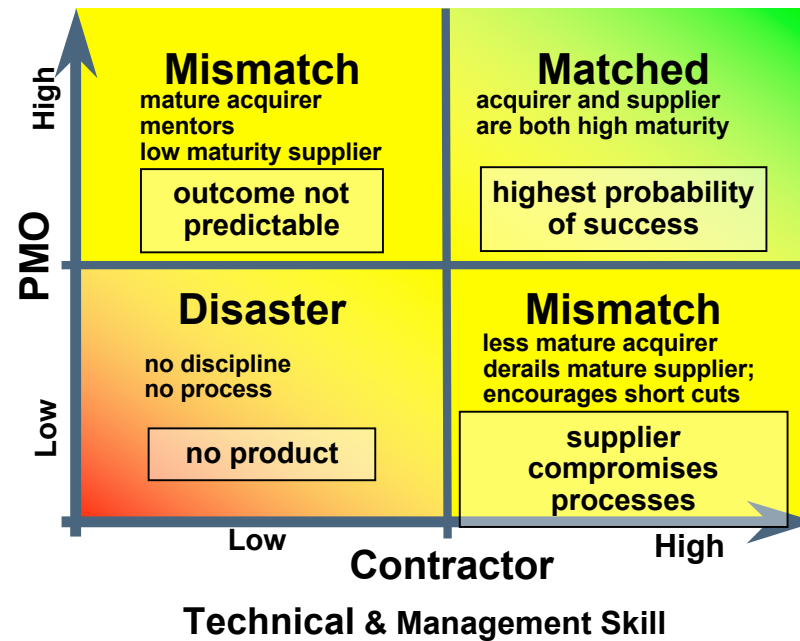


Acquisition Improvement is needed....

Acquirers cannot ensure that mature processes are applied to their programs



Acquirers need more internal process focus





Guidebook Concept

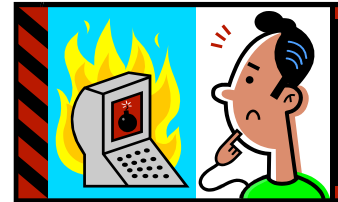
Provide a toolbox for the acquirer to aid in ensuring that the current project benefits from the application of mature processes

- Include practical guidance on how to recognize the real practitioners and identify the abusers
- Encourage the use of capability and maturity profiles, and discourage the use of the "single level" approach
- Improve acquisition organizations' understanding of the meaning of high maturity (levels 4 and 5) and equivalent staging



Why Service Process Improvement?

Customer discontentment



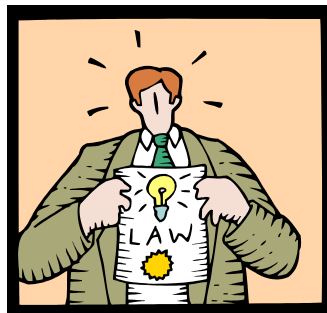
A service society



Global network-centric warfare focus



Legislation





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Purpose & Sponsors

Purpose:

- to extend the CMMI framework to cover the provision of services

Sponsors:

- CMMI Steering Group
- NDIA, Systems Engineering Division
- SEI
- Northrop Grumman – proposed to sponsor a Services CMMI to the CMMI Steering Group in Nov 2004



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Services Team Membership

Membership:

- Jeff Zeidler (Boeing)
- Steve Stern (Lockheed Martin)
- Brandon Buteau (Northrop Grumman)
- Craig Hollenbach (Northrop Grumman) - Lead
- Roy Porter (Northrop Grumman)
- Hal Wilson (Northrop Grumman)
- Frank Niessink (CIBIT)
- Jerry Simpson (SAIC)
- Drew Allison (SSCI)
- Eileen Forrester (SEI)
- Barbara Tyson (SEI)
- Eileen Clark (SRA)
- Joanne O'Leary (SEI)
- Rich Raphael (Northrop Grumman)



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Industry Service Models or Standards

IT service models and standards included in mapping and gap analysis:

- Information Technology Infrastructure Library (ITIL)
- British Standard 15000: IT Service Management (BS 15000)
- Control Objects for Information and related Technology (COBIT)
- Information Technology Services CMM (ITSCMM)



Why do we need a CMMI for Services?

The CMMI emphasizes institutionalization of process maturity in incremental steps.

- A CMMI for Services includes additional process areas necessary for full process institutionalization and innovation.

A CMMI for Services would rapidly leverage investments by the current CMMI user base to bring process maturity to their services efforts.

- CMMI-based improvements have a demonstrated ROI.



Why do we need a CMMI for Services? -- 1

Current IT models do not address the development of service systems as thoroughly as the CMMI.

A CMMI for Services would summarize essential principles from current IT service models.

- Maps from IT service models to a Services CMMI would enable organizations to refer to existing models for extensive best practices for (IT) services.
- Reduces preparation costs for appraisals against multiple models



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Why do we need a CMMI for Services? --2

The CMMI provides a familiar vocabulary.

There is little guidance for appraisers and organizations on applying the CMMI to services efforts.

- The CMMI is supported by standard appraisal methods.



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What is a Service?

As defined in the CMMI context, a service is simply an intangible, non-storable product.



What is the scope of the Services CMMI?

Processes would include

- Service management
- Establishment and delivery of services

Service Domains would include

- Focus on IT services, but broadly defining services to not exclude other industries
- Operations and maintenance (O&M) – e.g., for a delivered system and its operational environment
- Professional services (e.g., engineering services, technical support, resupply services) typically outside the domain of IT services



CMMI for Services & ITIL

The CMMI for Services complements ITIL, since it

- Summarizes ITIL best practices into a small set of specific practices.
- Maps ITIL best practices to CMMI model components, so that users can consult ITIL for additional implementation information.
- Reuses about 80% of the current CMMI model, allowing users to leverage their investments in development-based process training, improvements, and infrastructure to service-based offerings.
- Provides an industry-accepted maturity model, helping organizations to plan and track their incremental progress toward high maturity.
- Uses the same SCAMPI appraisal method that is used with the current CMMI model, allowing organizations to leverage appraisal expertise, preparation methods, and selected artifacts.



What Material is Shared?

The CMMI Architecture team has determined the material that must be present in every model, to include:

- All process management process areas
- Most project management process areas
- Most support process areas
- Generic goals and practices

This will minimize the implementation, training, and appraisal impact upon organizations that are planning to comply with both the current CMMI model and the planned CMMI for Services.



CMMI-SVC PAs

All 16 existing CMMI v1.2 foundation PAs
(REQM adds a goal for service-specific requirements)

New PAs:

- Incident and request management (IRM): to ensure the timely resolution of requests for service and incidents that occur during service delivery
- Problem management (PRM): to prevent incidents from recurring by identifying underlying causes of incidents
- Service transition (ST): to deploy new or updated services
- Capacity and availability management (CAM): to plan and monitor the effective provision of resources necessary to support service requirements
- Service Delivery (SD): to deliver services in accordance with service agreements



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CMMI-SVC PA Additions

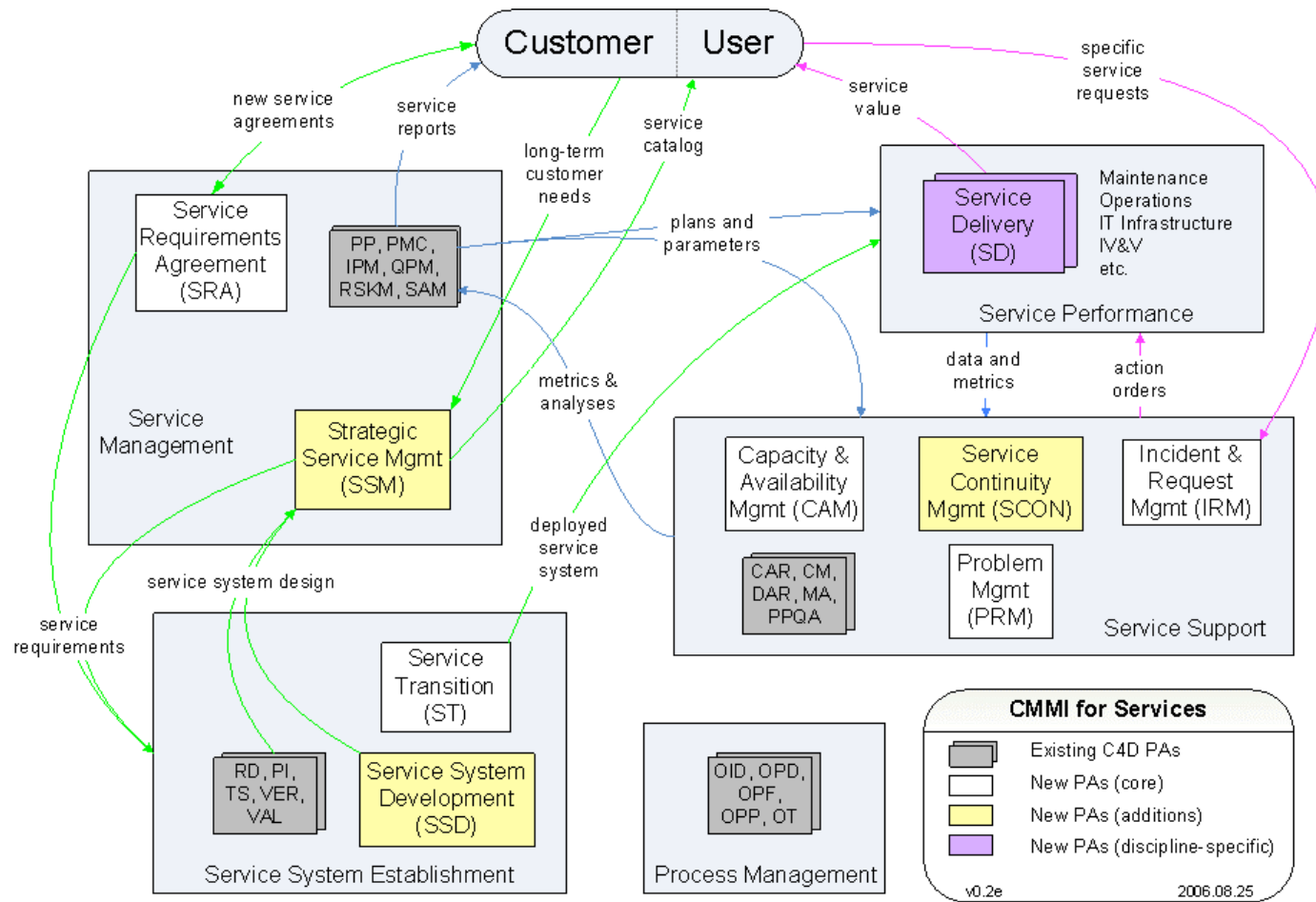
Organizational Service Management (OSM): to establish and maintain standard services that ensure the satisfaction of the organization's customers

Service System Development (SSD): to analyze, design, develop, integrate, and test services to satisfy existing or anticipated service agreements

Service Continuity Management (SCON): to establish and maintain contingency plans for continuity of agreed services following any significant disruption of normal operations



C4S CONOPS





Tentative CMMI-SVC Schedule

Jan-Apr 2007	Limited public review
May-Aug 2007	Piloting
Sep-Nov 2007	Model revision
Dec 2007-Feb 2008	QA and final review
Mar 2008	Release of CMMI-SVC <i>(Model, Method, Training)</i>



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More Information

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