

CMMI Status and Future

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November 2011



Topics



2011 Highlights

SEI Family of Models: Status & Plans

Future of the CMMI Product Suite



2011 Highlights

131,664 students trained in Introduction to CMMI as of 30 September 2011:

- **2011 Delivery:** SEI: 198 Partner: 10,133
- **Total Delivery:** SEI: 7,596 Partner: 124,068

Release of the Resilience Management Model (RMM)

Release of the Smart Grid Maturity Model (SGMM)

CMMI Translations



CMMI Translations

What's New?

- New Translations
 - CMMI-DEV V1.3 Dutch
 - CMMI-DEV V1.3 French
 - Intro to CMMI-DEV V1.3 course French



CMMI Translations

What's Next?

- CMMI-DEV V1.3
 - German
 - Korean
 - Portuguese
 - Simplified Chinese
 - Spanish
 - Traditional Chinese
- CMMI-SVC V1.3
 - Arabic
- Intro to CMMI-DEV course
 - German

<http://www.sei.cmu.edu/cmmi/solutions/translations/>



The screenshot shows the CMMI website with a navigation bar at the top containing links: HOME, OUR WORK, OUR SOLUTIONS, PRODUCTS & SERVICES, LIBRARY, NEWS, CAREERS, ABOUT US, and BLOG. Below the navigation bar is a large banner image with the text "CMMI Capability Maturity Model Integration (CMMI)". Under the banner is a secondary navigation bar with links: Overview, Why CMMI, Getting Started, CMMI Solutions, CMMI Compatibility, Research, and Our People. The main content area is titled "適用於發展的正式中文版,採購的正式中文版,以及服務的正式中文版" (Formal Chinese version for development, procurement, and services). It includes a paragraph about the CMMI DEV / ACQ / SVC models and reports, a link to "Submitting CMMI Change Requests", and a table of translations. A sidebar on the right lists various CMMI models and translations, including "CMMI for Acquisitions", "CMMI for Development", "CMMI for Services", "People CMM", "Appraisals", "Translations", "CMMI DEV v1.3 Dutch", "CMMI pour le développement version 1.3", "CMMI Richtlinien für Prozess-Integration und Produkt-Verbesserung", and "CMMI V1.2 モデル - 顧客のための公式版".

適用於發展的正式中文版,採購的正式中文版,以及服務的正式中文版

下列表格所包含的CMMI DEV / ACQ / SVC模式和報告,可協助組織進行流程改善活動;同時也包含文件相關資訊(如文件名稱、發行日期、勘誤表、更新說明等)。

請參考[Submitting CMMI Change Requests](#)以獲取如何針對CMMI產品,提交變更請求的資訊。

有關 DEV/ACQ 中文版的變更請求,請使用 [DEV-ACQ 中文版變更請求表](#)。

有關 SVC 中文版的變更請求,請使用 [SVC 中文版變更請求表](#)。

文件名稱	發行日期	相關資訊
適用於服務的CMMI 1.2版(PDF)	2008年2月	
適用於採購的CMMI 1.2版 (PDF版)	2008年11月	勘誤表(最近更新日期 2008/10/30)



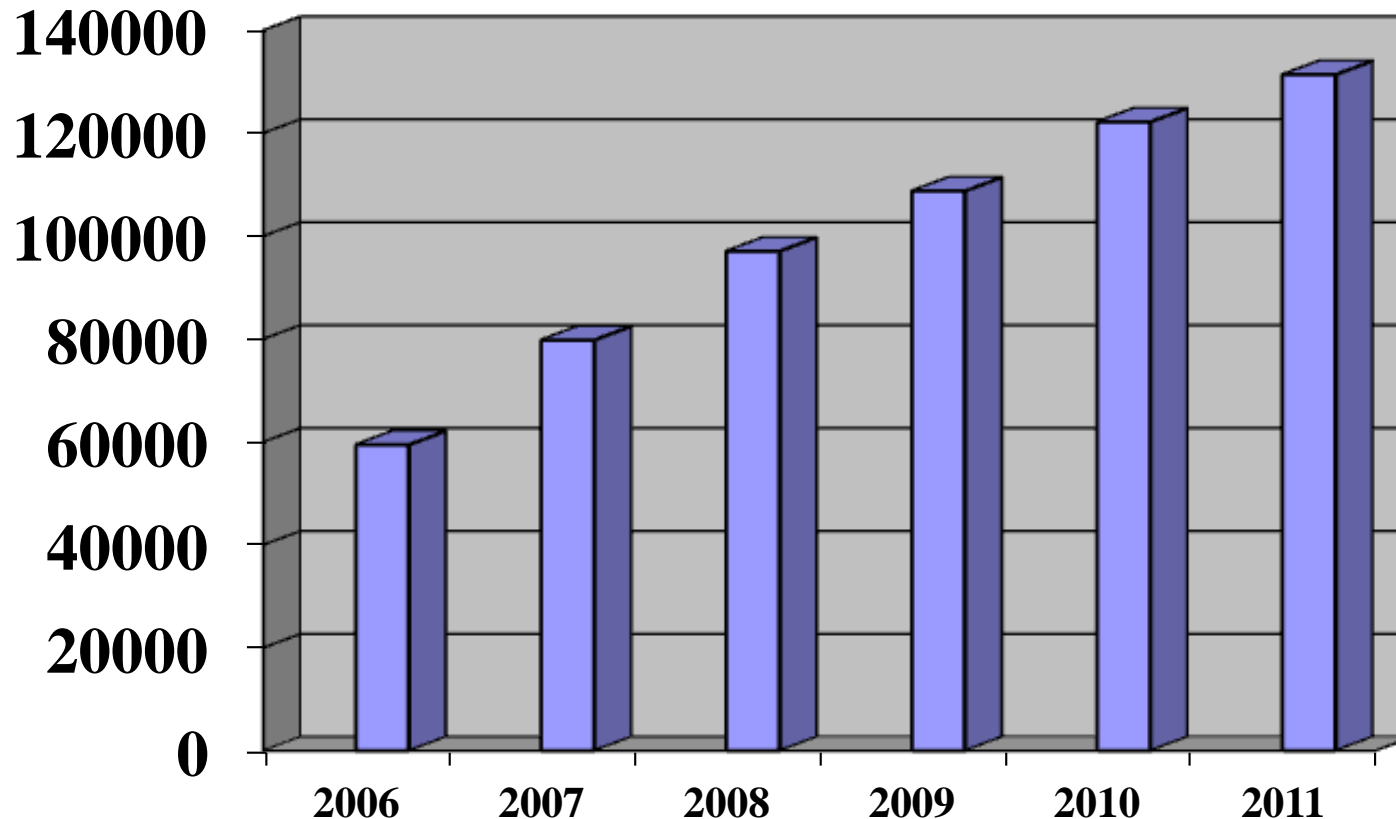
CMMI Transition Status

Reported to the SEI as of 10-31-11

Training	
Introduction to CMMI DEV (cumulative/v1.3)	131,345/7,485
Intermediate Concepts of CMMI (cumulative/v1.3)	3,276 / 54
Understanding CMMI High Maturity Practices (cumulative/v1.3)	682 / 47
Acquisition Supplement for Development (cumulative/v1.3)	1,556 / 208
Services Supplement for CMMI for Development	3231
Introduction to CMMI for Services	1094
Development Supplement for CMMI for Services	151
Certifications	
SEI-Certified Introduction to CMMI for Development Instructors (v1.2/v1.3)	388 / 386
SEI-Certified Acquisition Supplement for CMMI –DEV Instructors (v1.2/v1.3)	64 / 70
SEI-Certified Services Supplement for CMMI –DEV Instructors	158
SEI-Certified Introduction to CMMI for Services Instructors	88
SEI-Certified Development Supplement for CMMI-SVC Instructors	42
SCAMPI-DEV Lead Appraisers (v1.2/v1.3)	421 / 321
SCAMPI High Maturity Lead Appraisers	140
CMMI-ACQ Lead Appraisers (v1.2/v1.3)	76 / 53
CMMI-SVC Lead Appraisers (v1.2/v1.3)	171 / 138

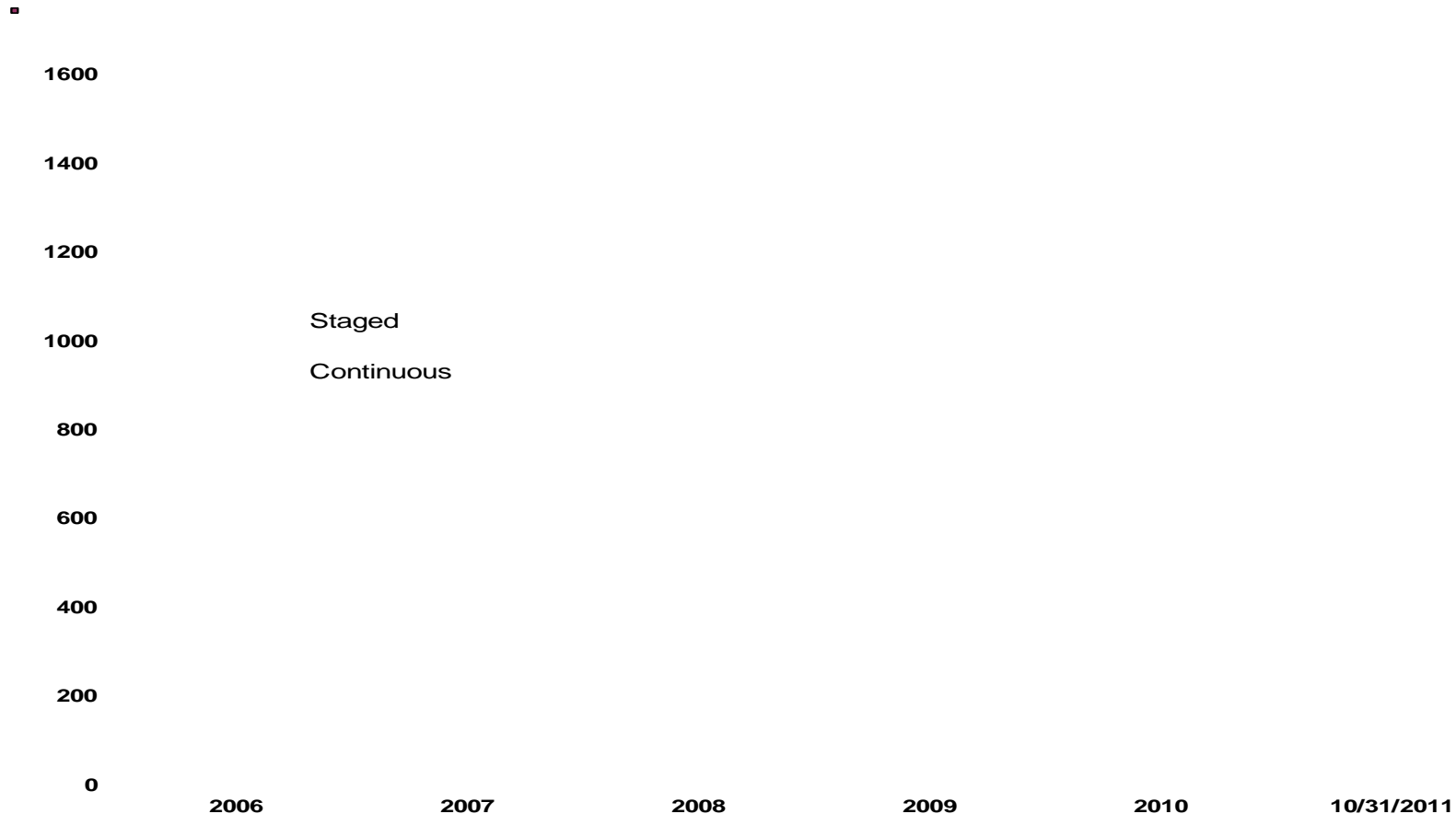


Introduction to CMMI-DEV Attendees Cumulative as of 10-31-11



Number of SCAMPI V1.2/V1.3, Class A Appraisals Conducted by Year by Representation* Reported as of 10-31-2011

*Where Representation is reported



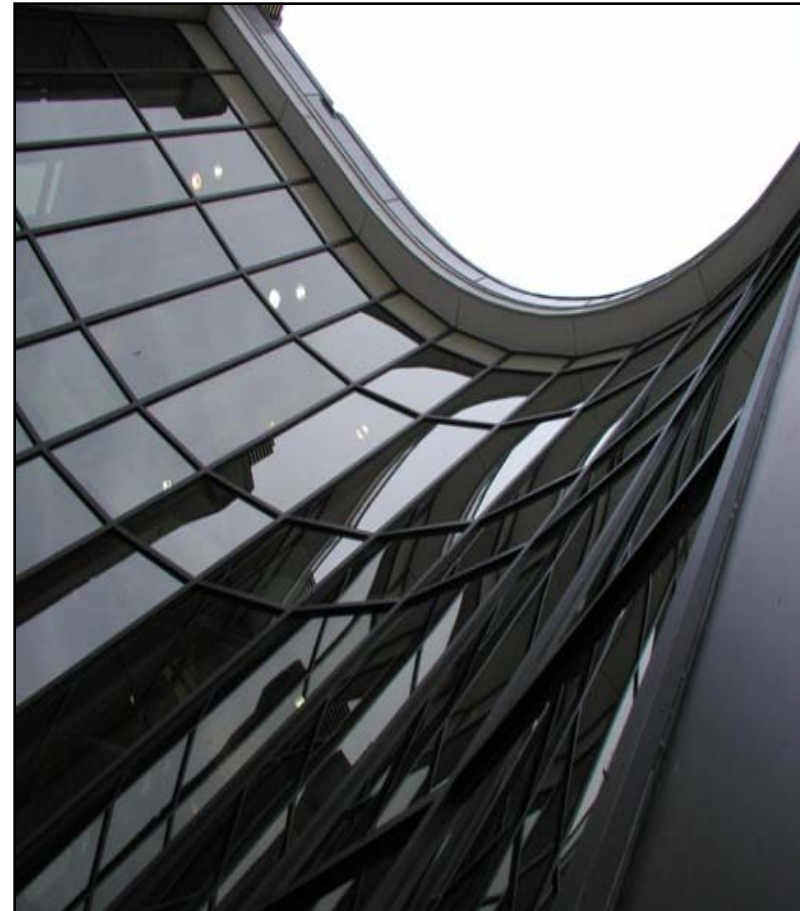
Topics

2011 Highlights

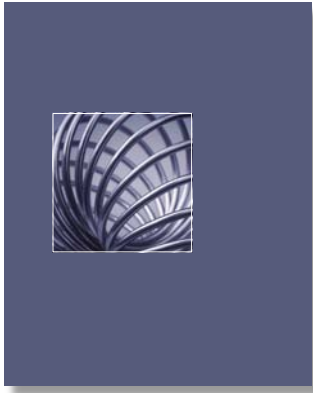


SEI Family of Models: Status & Plans

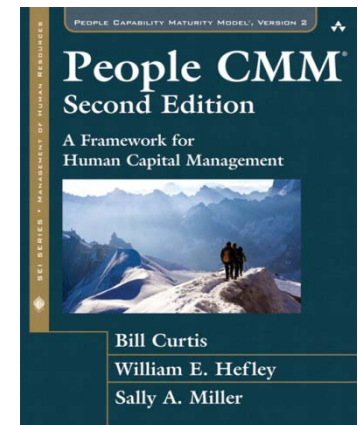
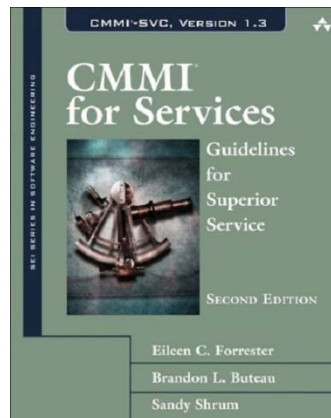
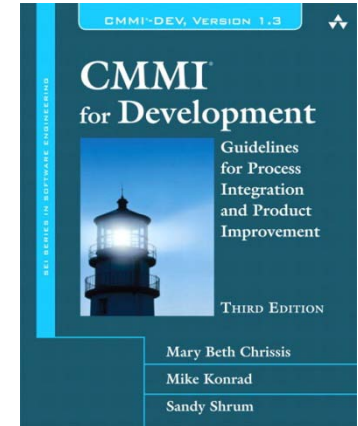
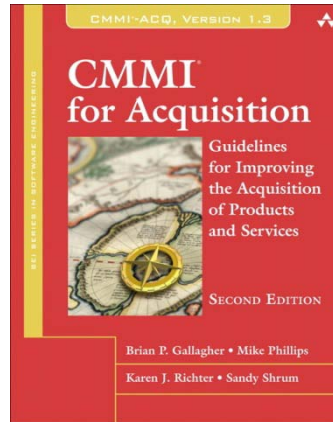
Future of the CMMI Product Suite



SEI Family of Models



ENTERPRISE DATA MANAGEMENT
EDM
COUNCIL



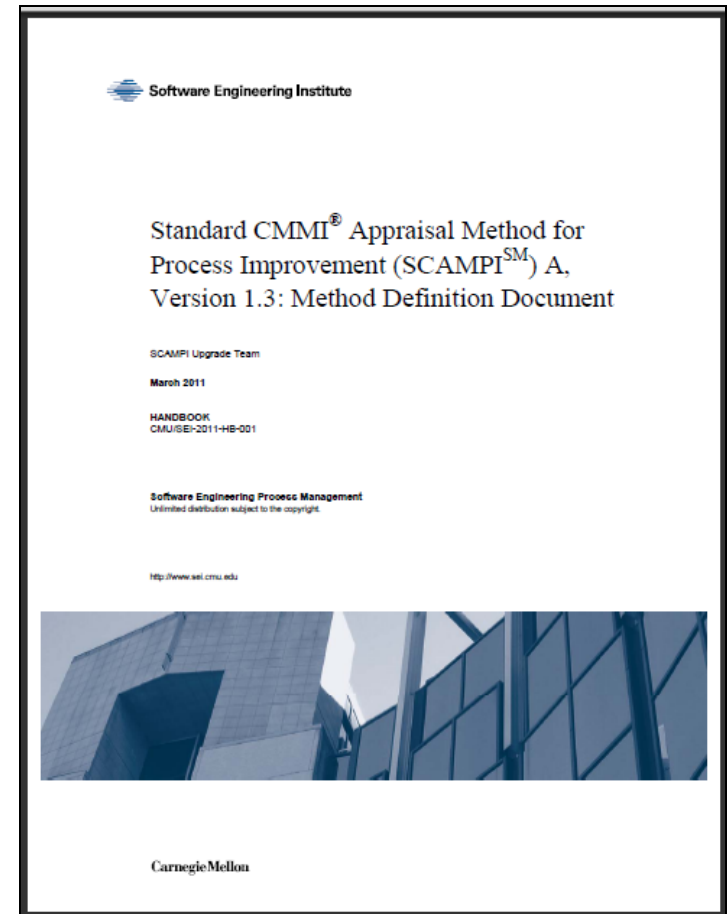
SCAMPI Appraisal Program

Status

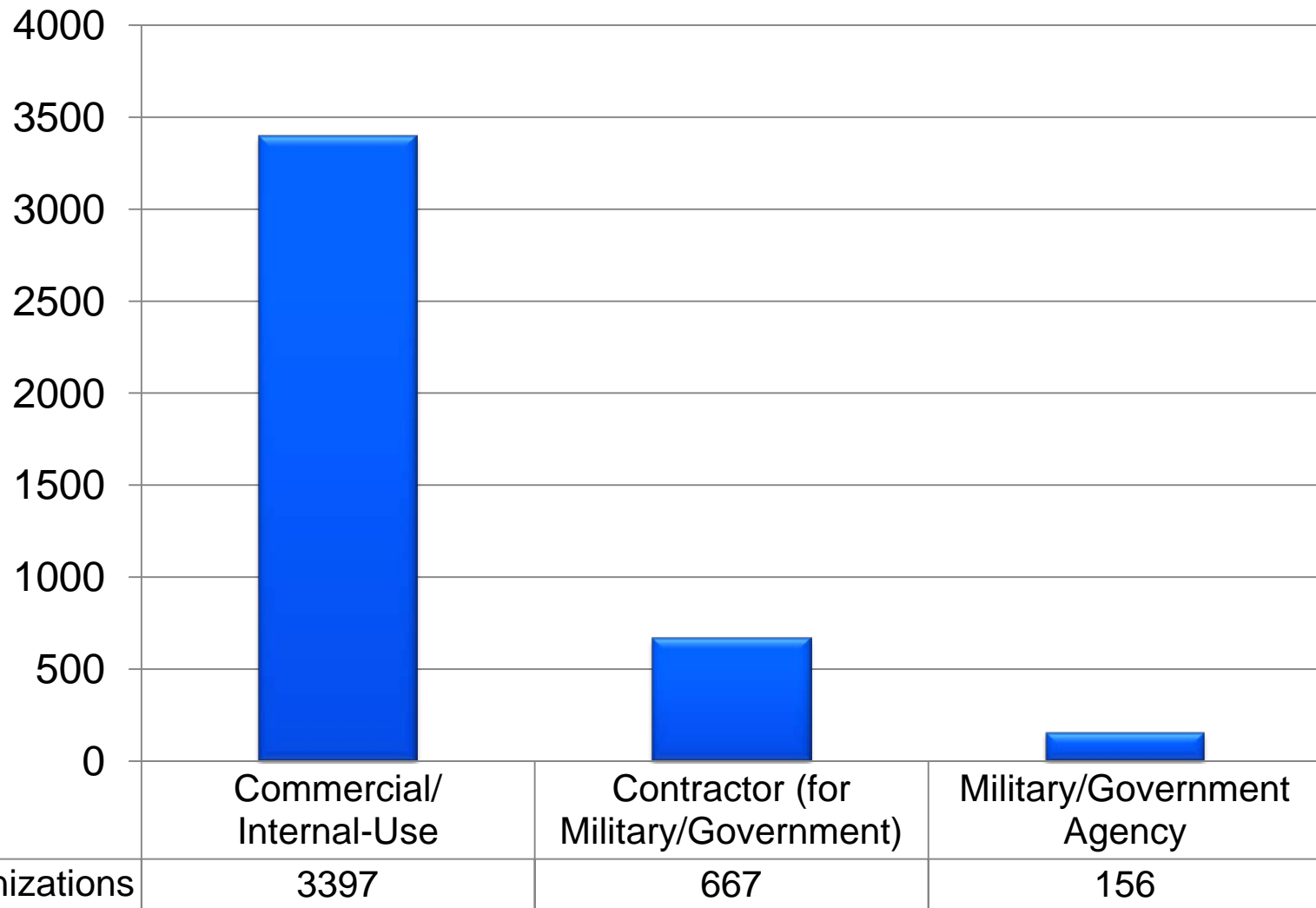
- Release of SCAMPI Lead Appraiser Training (SLAT) course
- First delivery in September
 - Feedback was positive

Plans

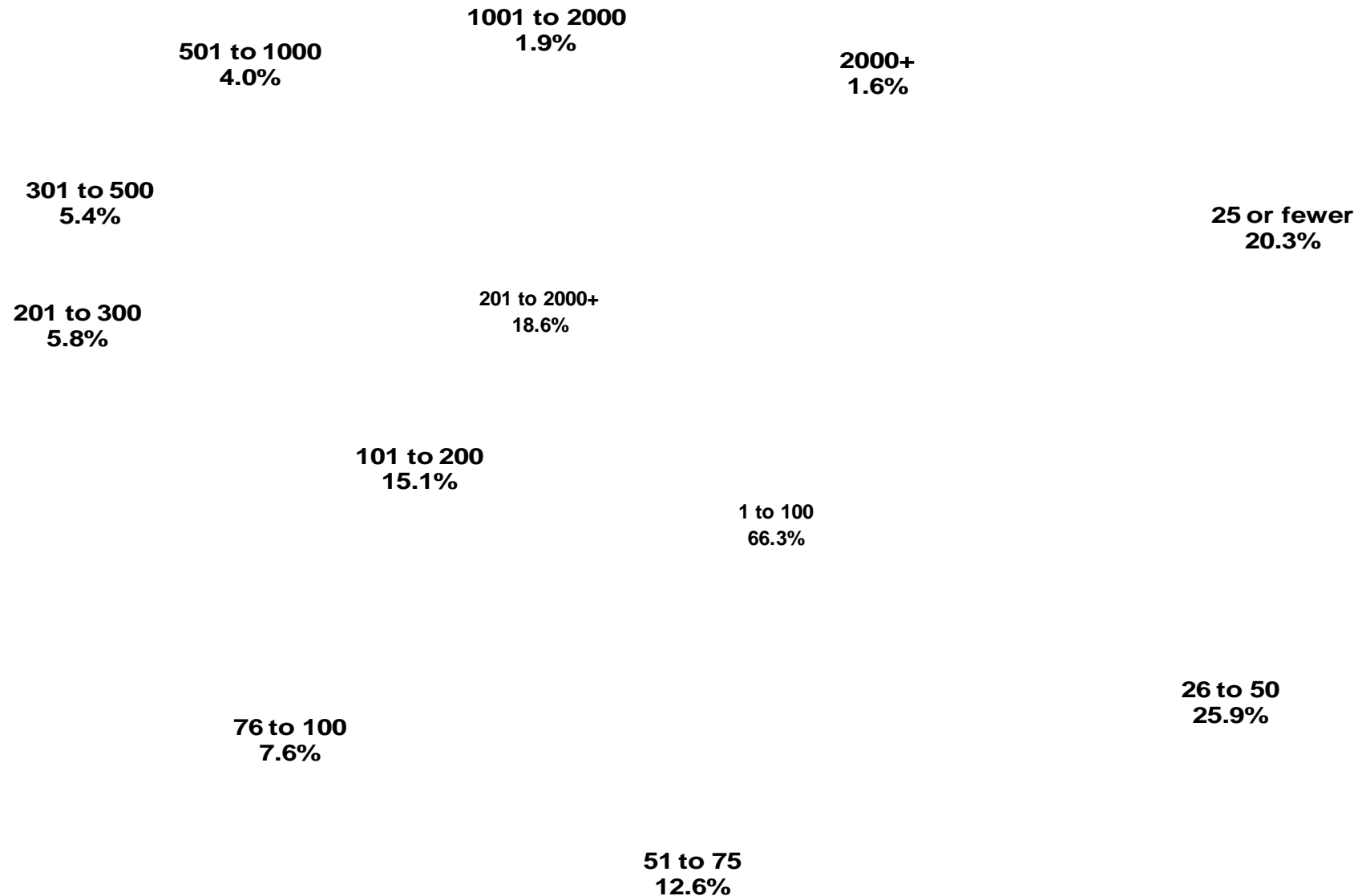
- Merger of B&C handbook into the Method Description Document (MDD)
- Completion of On-line SLAT



SCAMPI Appraisals - Organization Type

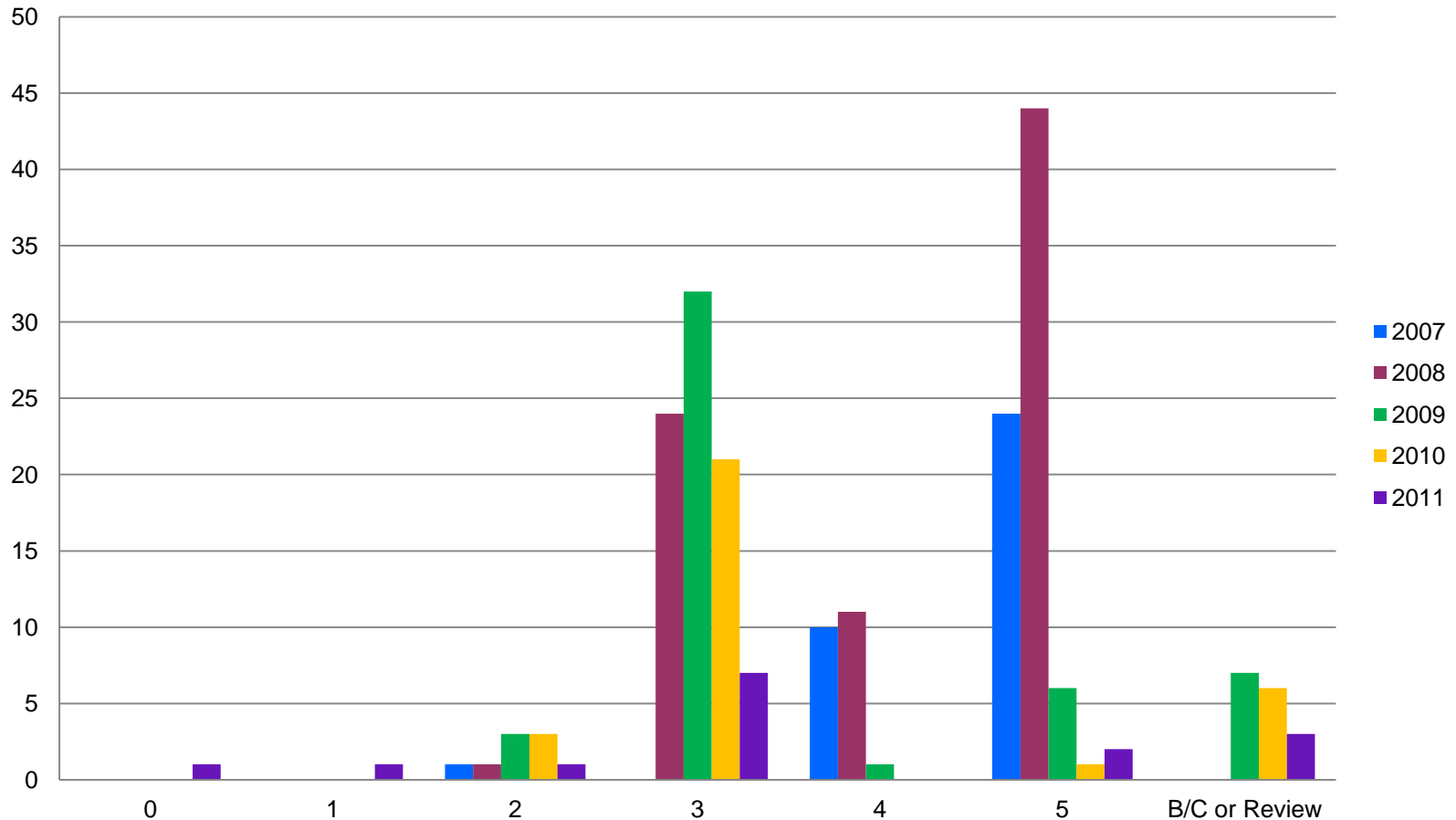


Size of Appraised Organizations



Appraisal Maturity Levels Audited or Reviewed

Audits and Reviews by Maturity Level



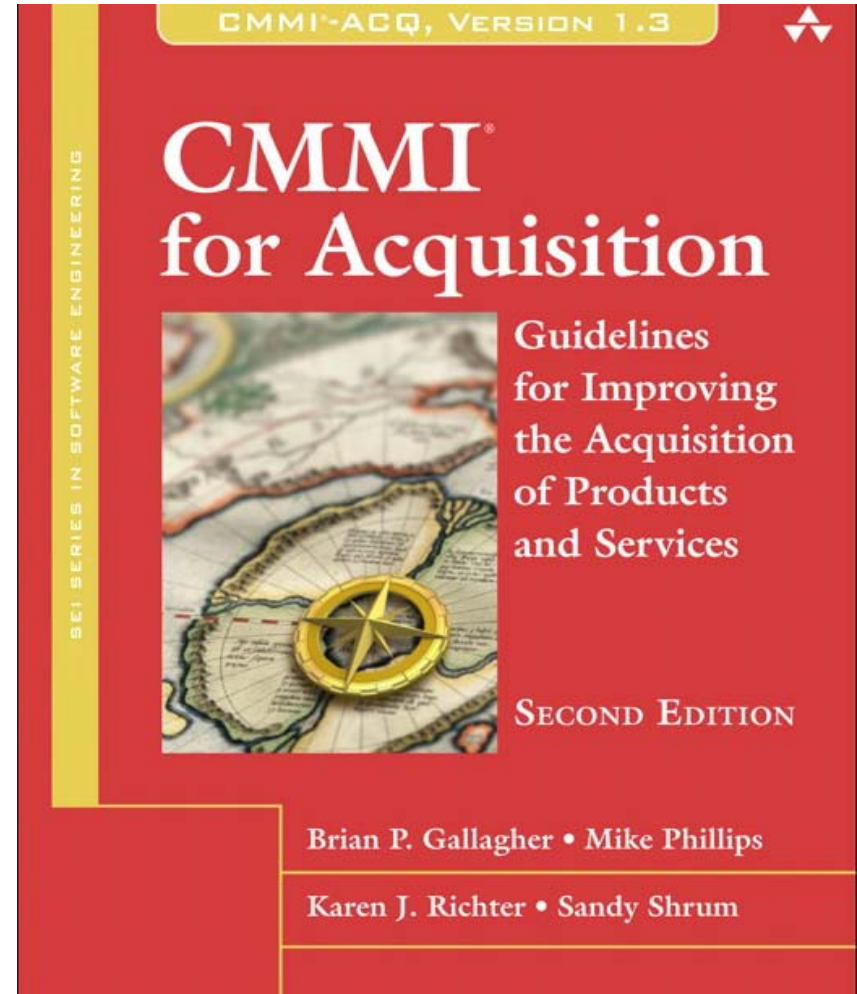
CMMI-ACQ

Status

- Alex Stall has accepted the product manager role for CMMI-ACQ

Plans

- Define the market(s)
- Define what acquisition is to the non-DoD market
- Increase interest and adoption



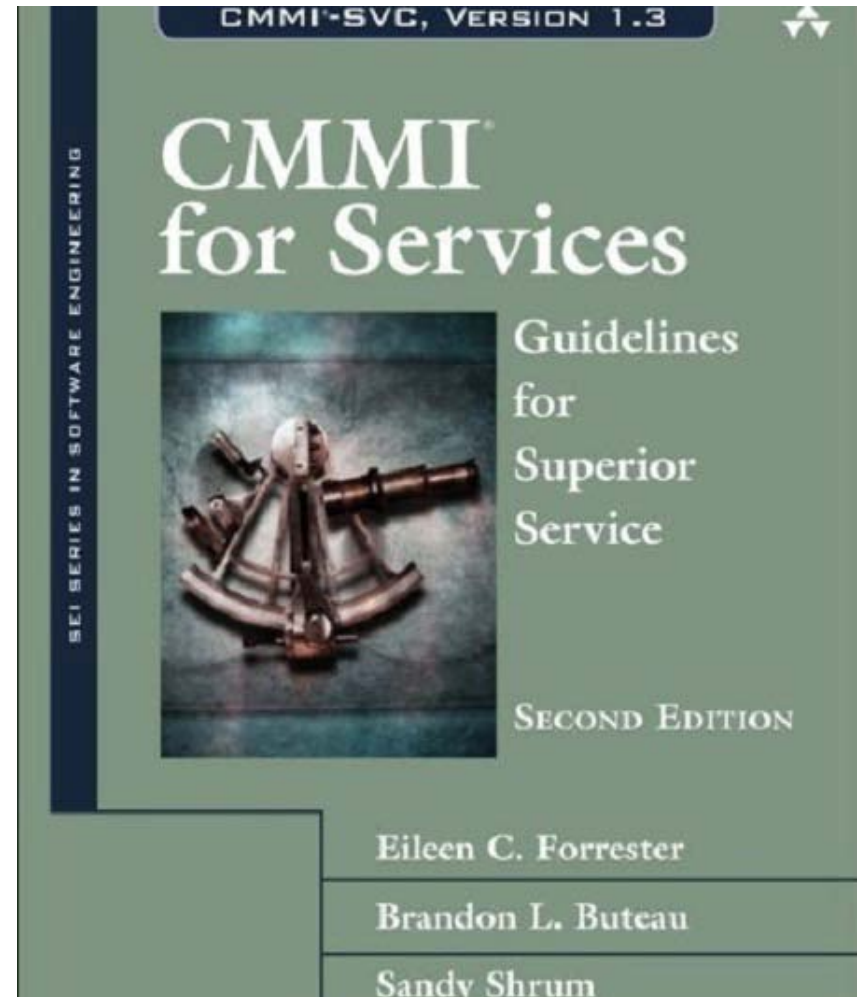
CMMI-SVC

Status

- More than 130 appraisals reported
 - 25% increase quarter over quarter in appraisals
- Documented ROI examples from partners
- Five graduate dissertations /theses have been written on CMMI-SVC
- Two books by partners featuring CMMI-SVC have been published, and a third book by a partner is under way
- Over 100 examples submitted about SVC implementation

Plans

- Advanced SVC training
- Produce guidance on high maturity in service settings
- Evaluating new pricing and certification path
- Focus sessions for Partner input



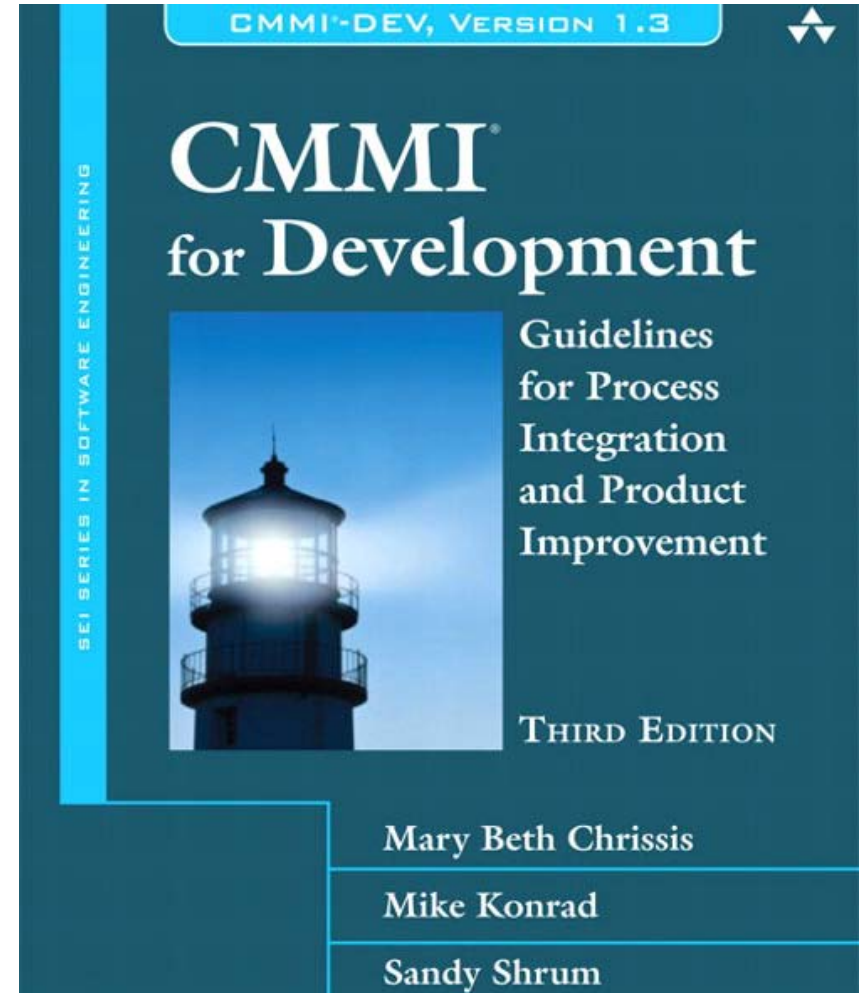
CMMI-DEV

Status

- Ten CMMI translations on-going
- CMMI courses were updated
- Intro to CMMI v1.2 will be retired on November 30, 2011
- 95% of the CMMI-DEV instructors have upgraded to V1.3

Plans

- Incorporate Lean and Agile principles
- Devise lightweight, cost effective solutions
- Selected training to eLearning
- Re-focus use of CMMI on achieving superior attention, motivation, and cooperation to improve performance



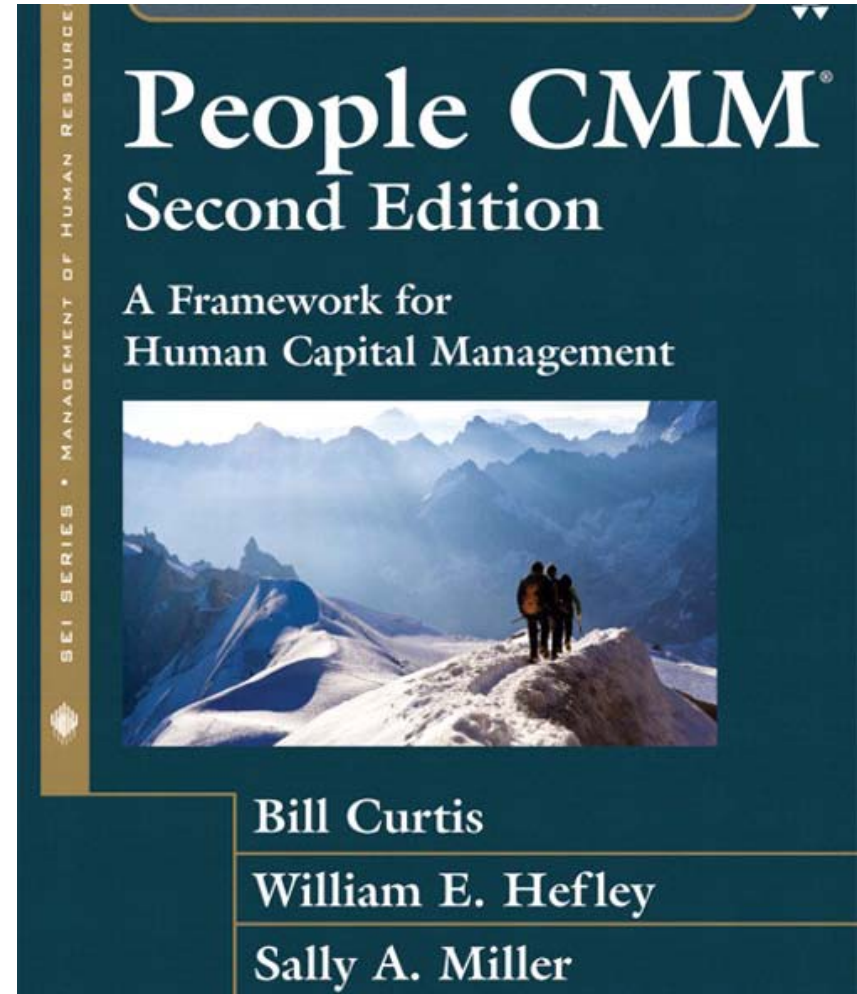
People CMM

Status

- Ongoing revisions to model aimed at version 2

Plans

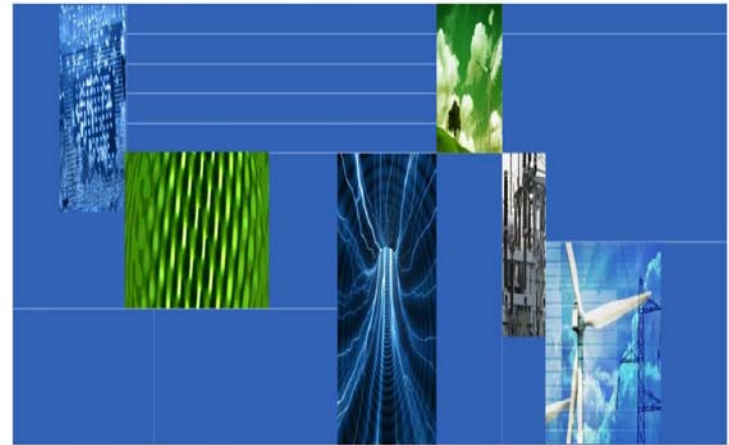
- Continue working on change packages for the next version of the People CMM which will bring the People CMM in line with V1.3 of CMMI
- SEI People CMM SCAMPI



Smart Grid Maturity Model

Status

- Creation of a management tool for the utility industry Smart Grid transformation
- Utilities need to use the SGMM to:
 - Develop effective roadmaps
 - Track progress
 - Understand their posture in comparison to peers
- SEI Training and licensing available



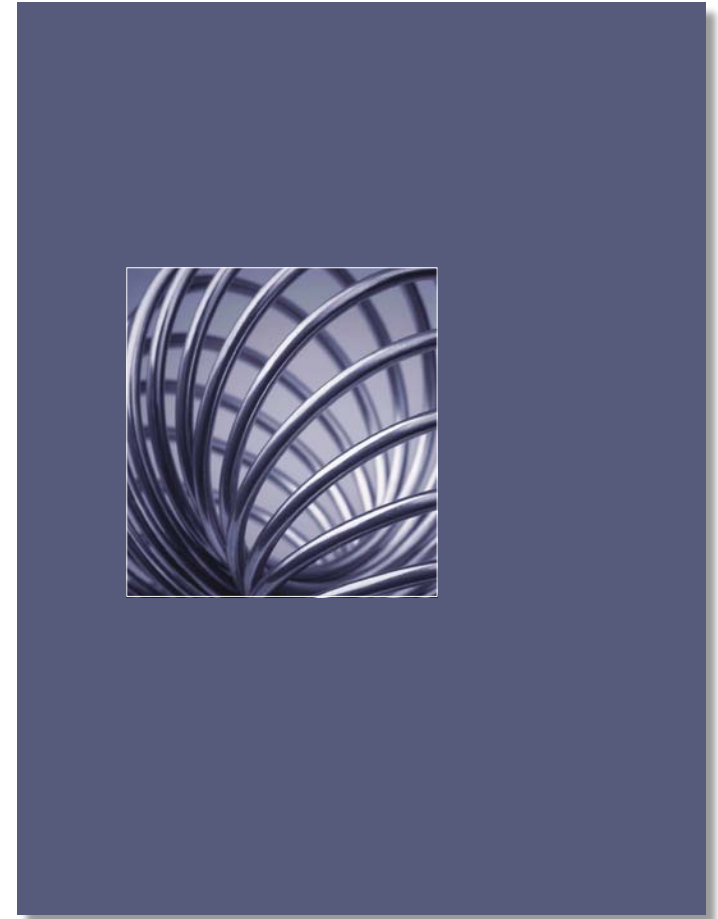
CERT Resilience Management Model (RMM)

Status

- Model v1.1 and appraisal method published
- Introductory courses
 - Model training
 - “How-to” CERT courses
 - Executive workshops
- Advanced courses
 - User Groups
 - Practitioner training
 - Appraisal leader training
 - Instructor training

Plans

- Certifications
 - Lead Appraiser
 - Navigator
 - Coach
 - Instructor



Data Management Maturity Model (DMM)

Status

- Created in collaboration with data practitioners of the financial information industry
- Focus on how to turn 'art and practice' into 'science and discipline'.

Plans

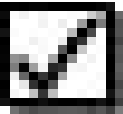
- The final output will be a framework document and accompanying assessment methodology (SCAMPI) for
 - Evaluating the efficiency of data management practices
 - Measuring the maturity of operational integration
 - Establishing best practices that can be adopted in varying domains worldwide



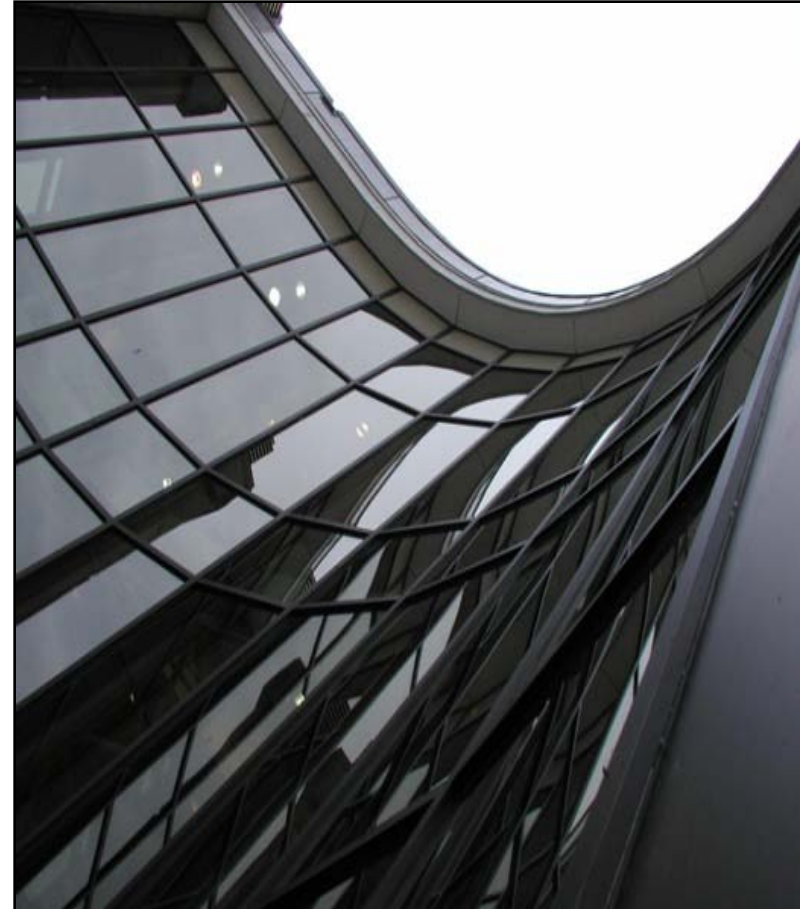
Today's Discussions...

2011 Highlights

SEI Family of Models: Status & Plans



Future of the CMMI Product Suite



***“The best way to predict the future is
to invent it!”***

Alan Kay, 1971, American computer scientist, researcher, and visionary



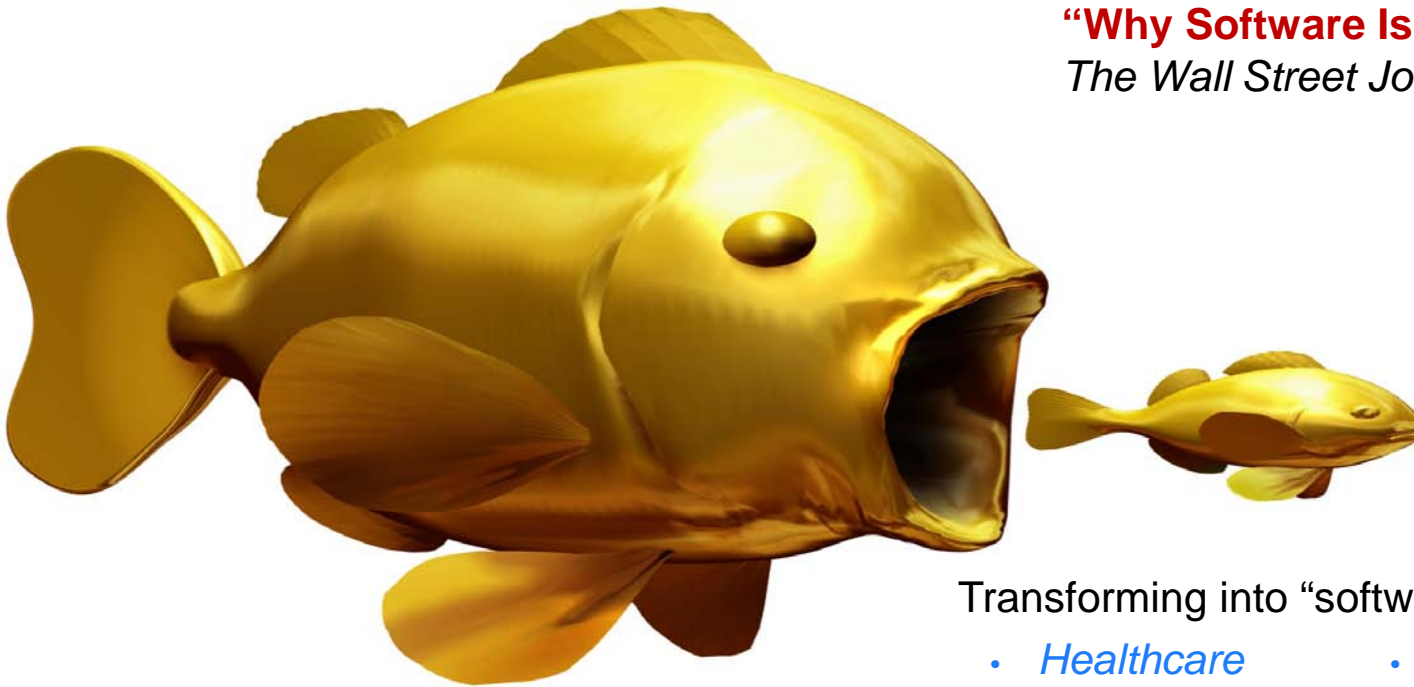
Software Has Come of Age

“...we are in the middle of a dramatic and broad technological and economic shift in which software companies are poised to take over large swathes of the economy.”

--Marc Andreessen

“Why Software Is Eating the World”

The Wall Street Journal, August 2011

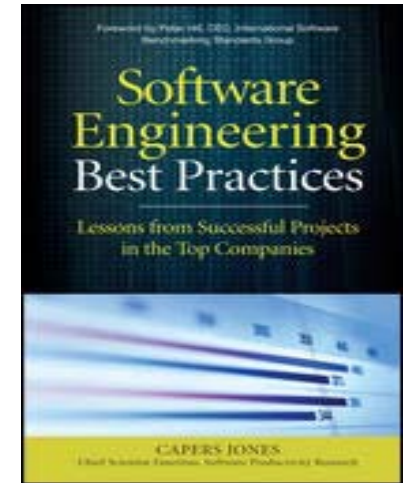
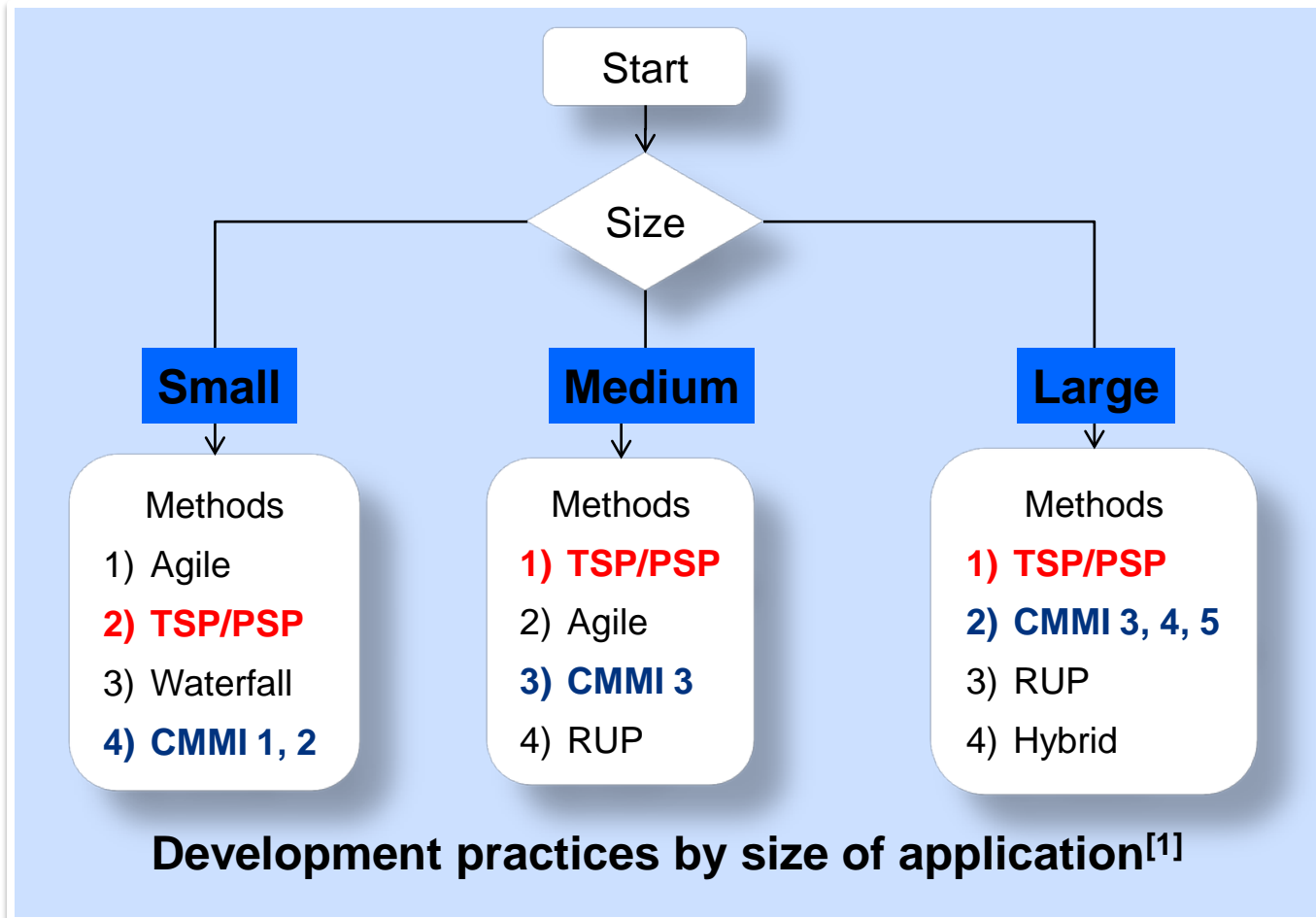


Transforming into “software” companies:

- *Healthcare*
- *Music companies*
- *Telecom*
- *Entertainment Companies*
- *Booksellers*
- *Movie production*
- *Financial services*
- *Education*
- *...*



CMMI & TSP are Ranked Top Software Engineering Best Practices!



[1] Software Engineering Best Practices, by Capers Jones, 2010.

Based on a comprehensive study of 630 organizations and 13,000 projects.



SEI Response: Broader Outreach

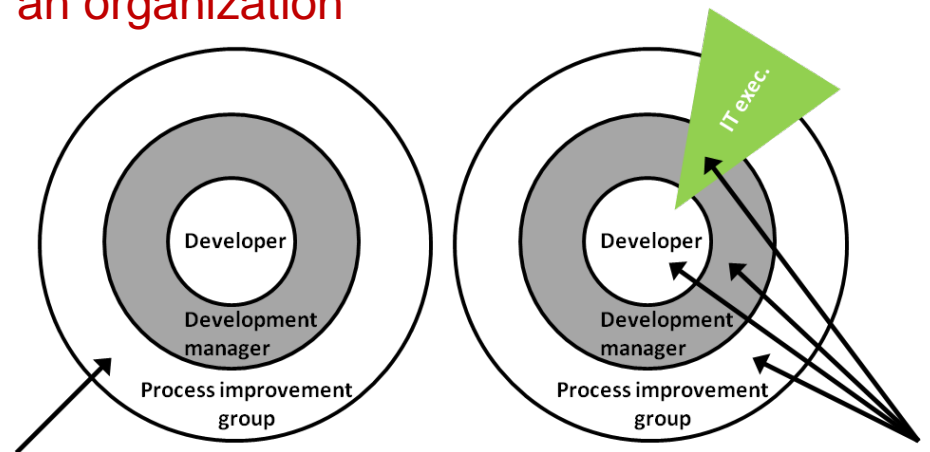
Responsibility for improving software development process



Base: 81 IT professionals

Source: 2009 Global Software Development Process Online Survey

Shifting SEI process improvement brand messaging to multiple targets in an organization



New Directions: Multi-Model Implementations

“Forrester Research’s survey of Dr. Dobb’s readers underscores what the SEI and Partners already know: software development process is a multi-model world.”

--SEI Market Insights Research Report

The SEI is developing a common language for development and a way to attain and measure improvement in multi-model environments.

CECOM Application

- CECOM Software Engineering Center is applying CMMI-DEV, CMMI-ACQ, and CMMI-SVC to meet its complex needs.
- “Hybrid” model approach offers each Mission Area Directorate to concentrate on their specific process improvement needs.



CMMI: What's Next? - 1

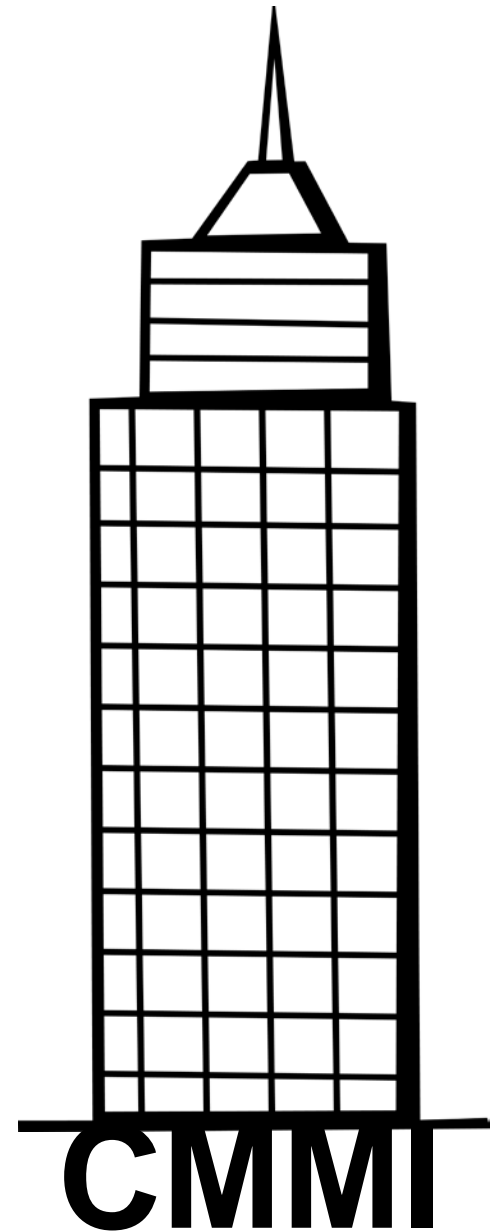
New Positioning:

- Drive down the costs of using CMMI by providing innovative technology-supported solutions
 - On-line tools for CMMI Assessments/Appraisals
 - Contextual help for key processes and key practices
 - eLearning (bite-sized CMMI training segments delivered just in time)
 - manage adoption of disruptive technologies (e.g., mobile apps, cloud, social networks, ...)



CMMI: What's Next? - 2

- Marketing/Imaging/Messaging:
 - Initiate faster, better, cheaper thinking without sacrificing quality and brand image
 - Market our products and services as an expert's toolkit
- Consider approaches to Small and Medium Enterprise market (low cost, high volume, high automation)
- Investigate marrying CMMI with more performance-oriented approaches
- Address Multi model integration for SEPM and NON-SEPM products and performance measures



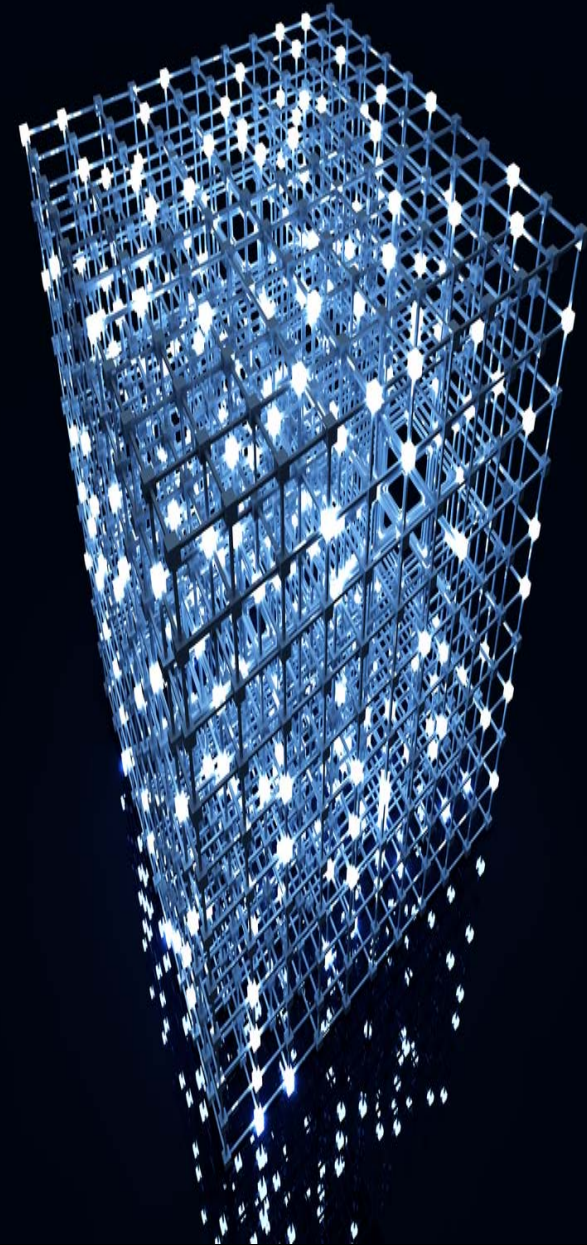
Program Direction

Better integration of SEI process and measurement products and efforts.

Development of next-generation integrated software models, methods, and practices.

Increased focus on the transition and application of SEI solutions to the problems of industry and the world.

Increased research focus on software engineering methods, models, and measurement practices



One Vision of the Future CMMI Product Suite

Process Integration

- Models, Methods, Standards
 - CMMI, ISO, COBIT, Six Sigma, IT Mark, TSP, AIM, CENELEC, RMM, SGMM, Lean, and Agile, etc.
- Dynamically build models/hybrids of other models, methods, and standards
 - Use only the practices/parts the organization needs
 - Build the appraisal rules
- Performance data submissions as a part of appraisals

Project and Program Management using High Maturity Techniques

Coach/Mentor Credentials for Process Improvement

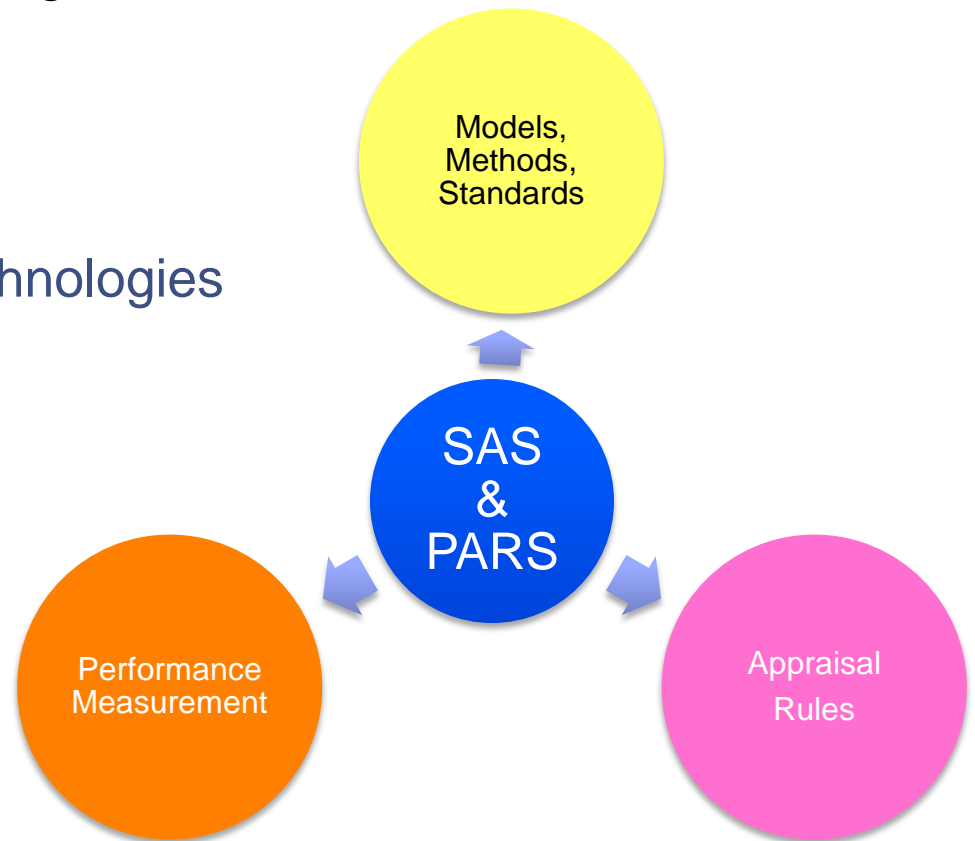


Moving to the Future

We need to move the technology forward.

We need to capitalize on our strengths:

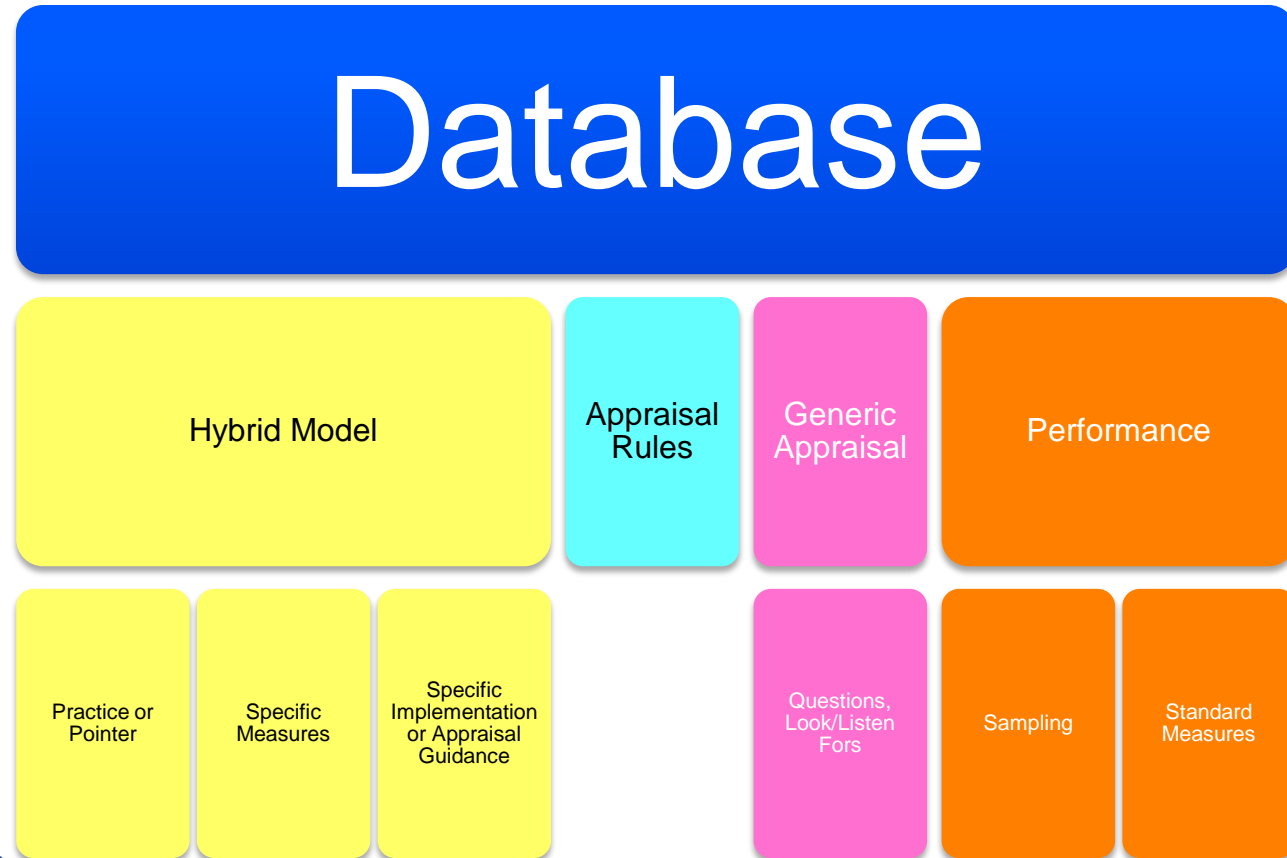
- Model technology
- Appraisal technology
- Measurement technology
- Process & engineering technologies
 - TSP
 - Architecture
- Trusted broker
 - SAS
 - PARS



Concept - Models

Database

- Hybrid model
 - Tree structure
 - Model references
 - Interpretational/implementation rules
- Performance
 - Work sampling
 - Standard set of measures
- Appraisal rules
 - Generic for whole model
 - Specific for individual practices



Generic appraisal

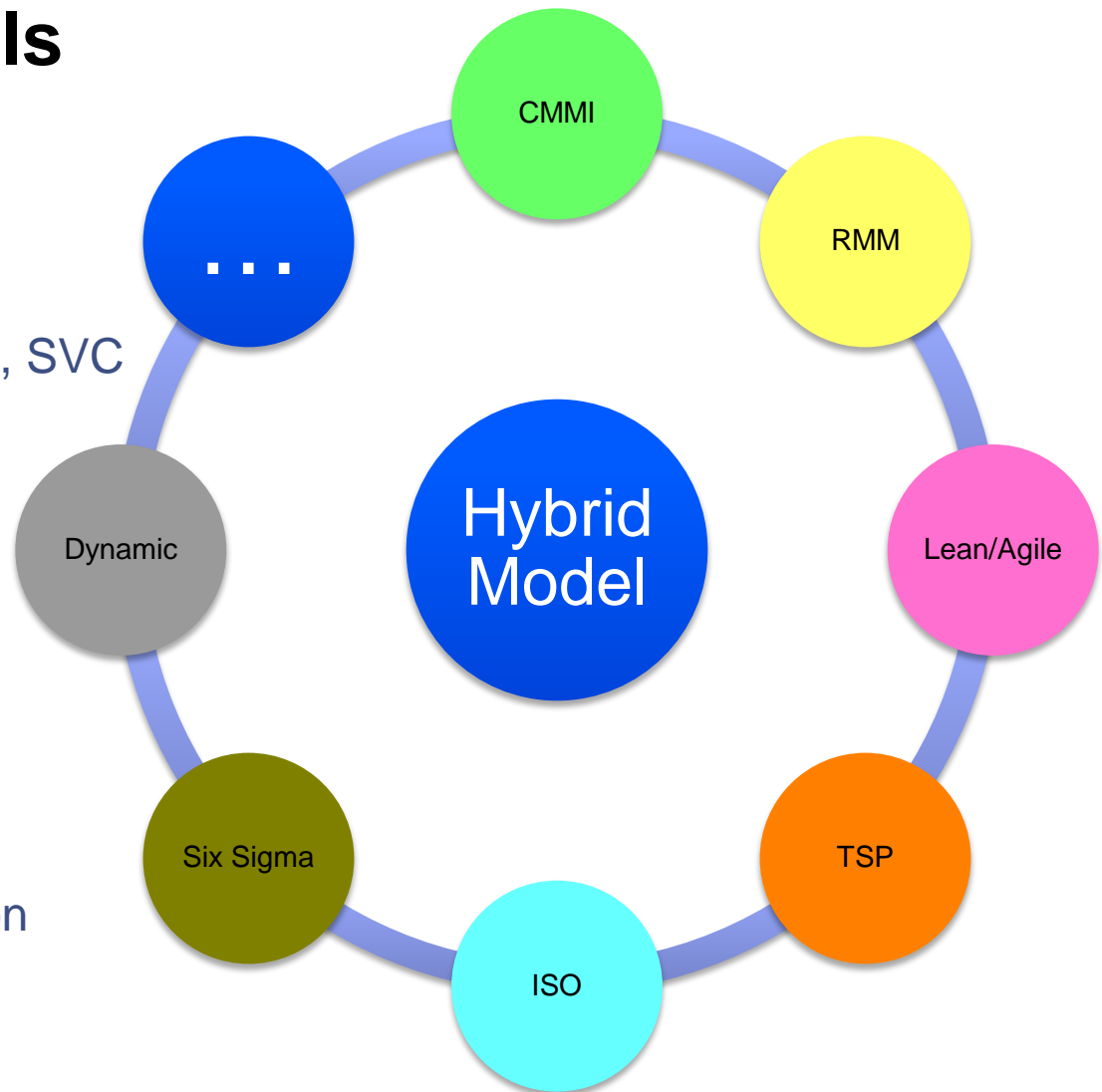
Implementation quick start



Hybrid Models, Appraisal Rules & Generic Appraisals

Models, standards, methods, etc.

- Existing
 - CMMI – ACQ, DEV, SVC
 - RMM
 - SGMM
 - TSP
 - ISO NNN
 - Six Sigma
- Dynamic
 - From literature
 - Constructs based on existing systems or implementations
 - Agile



For More Information

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