# First Steps in implementing the CMMI for Services Model and ITIL - A Tutorial

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### Purpose

To identify and describe the steps and also provide examples of tools /techniques that we have found useful in implementing both the IT Infrastructure Library (ITIL) and the CMMI for Services model



### Topics <sub>-1</sub>

- ➤IT Infrastructure Library (ITIL)
- CMMI for Services Model
- ➤ Uniting ITIL and CMMI SVCS
- Getting Started
- **>** Sponsorship
- Process Improvement Plan
- Implementing and operating ITIL-based service Management
- >Infrastructure Development
  - > Physical Infrastructure
  - > Political Infrastructure
  - Process Improvement Infrastructure

### Topics <sub>-2</sub>

- CMMI for Services Appraisal Tools
- Practice Implementation Indicator Templates (PIIDs)
- >GAP Analysis Appraisal Results Tool
- >GAP Analysis Appraisal Action Item List
- Process Action Plans
- **Summary**

### IT Infrastructure Library (ITIL)

#### What is ITIL?



ITIL is the most widely accepted approach to IT service management in the world. ITIL provides a cohesive set of best practice, drawn from the public and private sectors internationally.

www.itil-officialsite.com

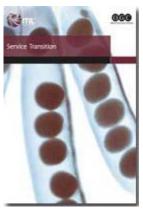


Version 2: Service Delivery & Service Support

Version 3:Service Strategy, Service Design, Service Transition, Service Operation & Continual Service Improvement











## History of ITIL \_ 1



- ▶ITIL was published between 1989 and 1995 by Her Majesty's Stationery Office (HMSO) in the UK on behalf of the Central Communications and Telecommunications Agency (CCTA) now subsumed within the Office of Government Commerce (OGC).
- Its early use was principally confined to the UK and Netherlands.

Page 8, itSMF An Introductory Overview of ITIL® V3, http://www.best-management-practice.com/gempdf/itSMF An Introductory Overview of ITIL V3.pdf

### History of ITIL <sub>2</sub>



- ➤ A second version of ITIL was published as a set of revised books between 2000 and 2004.
- The initial version of ITIL consisted of a library of 31 associated books covering all aspects of IT service provision.

Page 8, itSMF An Introductory Overview of ITIL® V3, <a href="http://www.best-management-practice.com/gempdf/itSMF">http://www.best-management-practice.com/gempdf/itSMF</a> An Introductory Overview of ITIL V3.pdf

## History of ITIL <sub>- 3</sub>



- The initial version was then revised and replaced by seven, more closely connected and consistent books (ITIL v2) consolidated within an overall framework
- This second version became universally accepted and is now used in many countries by thousands of organizations as the basis for effective IT service provision

Page 8, itSMF An Introductory Overview of ITIL® V3, <a href="http://www.best-management-practice.com/gempdf/itSMF\_An\_Introductory\_Overview\_of\_ITIL\_V3.pdf">http://www.best-management-practice.com/gempdf/itSMF\_An\_Introductory\_Overview\_of\_ITIL\_V3.pdf</a>

### History of ITIL \_ 4



In 2007, ITIL v2 was superseded by an enhanced and consolidated third version of ITIL, consisting of five core books covering the service lifecycle, together with the Official Introduction

Page 8, itSMF An Introductory Overview of ITIL® V3, <a href="http://www.best-management-practice.com/gempdf/itSMF">http://www.best-management-practice.com/gempdf/itSMF</a> An Introductory Overview of ITIL V3.pdf

### The ITIL Industry

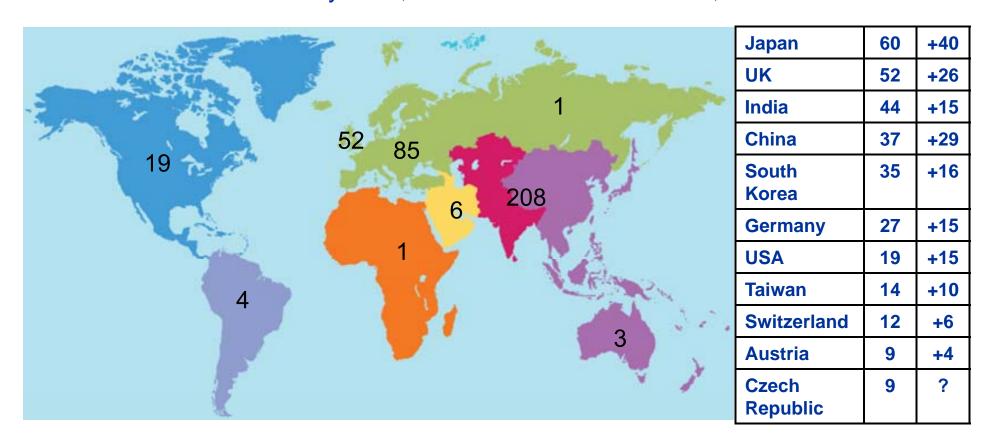


- > ITIL used by all Industry sectors
  - > Large and small organisations
  - > 50 itSMF international chapters
  - Example organisations:
    - > NHS Connecting for Health, British Airways, GCHQ, Barclays, Unilever, HP, Microsoft
- Service Management tools
  - > e.g. Remedy, Assyst, HP Service Manager, Service-Now
- Training and qualifications
- Consultancy
- International Standard ISO/IEC 20000
  - > 383 organisations globally

http://www.isoiec20000certification.com

### Top 10 countries with ISO/IEC 20000 Certificates

As at May 13th, 2009 and 31st December, 2007



Source: <a href="http://www.isoiec20000certification.com/">http://www.isoiec20000certification.com/</a>

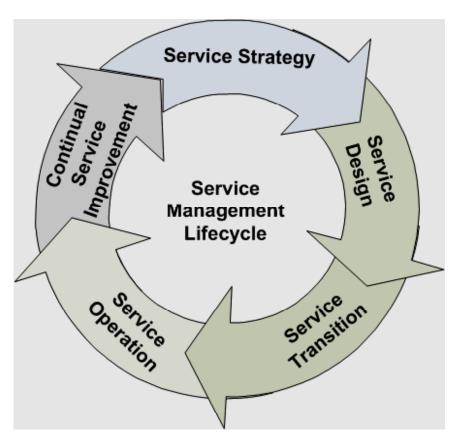
### Benefits of adopting ITIL include \_1

- Improved IT services through the use of proven best practice processes
- Improved customer satisfaction through a more professional approach to service delivery
- Reduced costs
- >Auditable standards and guidance (ISO 20000)
- Competitive edge

### Benefits of adopting ITIL include -2

- >Improved productivity of IT and user staff
- >Improved use of skills and experience
- Improved delivery of third party services through the specification of ITIL or ISO 20000 as the standard for service delivery in services procurements

### The ITIL v3 Lifecycle



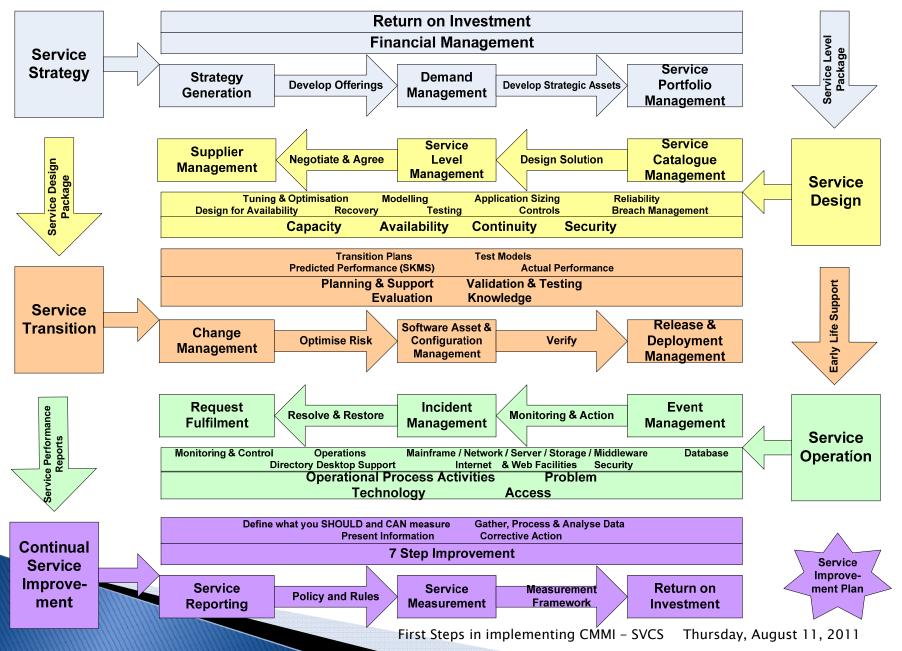
Service Strategy

- Views service management as an organisational capability and a strategic asset
- What services? To whom? What delivery strategy? Why?

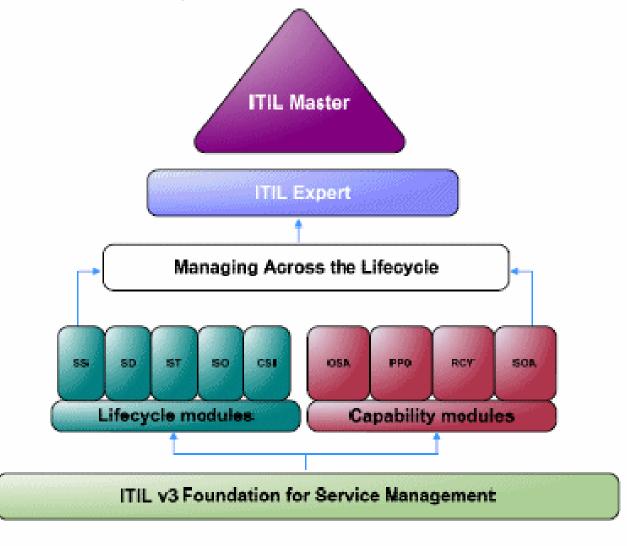
Service Design

- Strategy is turned into a blueprint for delivery of new and changed services
- Service Transition
  - How the service design becomes operational – with risks managed
- Service Operation
  - How to maintain service stability in an every-changing world
- Continual Service Improvement
  - A quality approach to improving the effectiveness and efficiency of the whole lifecycle

### ITIL v3 Process Map



### The ITIL v3 Qualifications Scheme



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## Foundation Certificate: Example exam question

- The priority of an Incident is BEST described as?
  - a) The relative importance of the Incident based on impact and urgency
  - b) The speed with which the Incident needs to be resolved
  - c) The number of staff that will be assigned to work on the Incident so that it is resolved in time
  - The escalation path that will be followed to ensure resolution of the Incident

### Answer to the Example exam question

- $\triangleright$  Answer = A
- ➤ "Prioritization can normally be determined by taking into account both the urgency of the incident (How quickly the business needs a resolution) and the level of impact it is causing" [Service Operation, Page 50]

### **CMMI** for Services

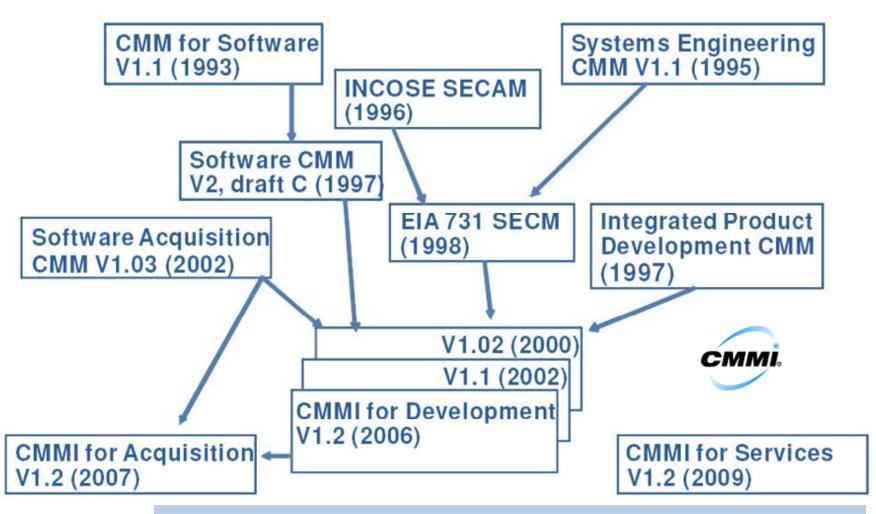
### **Origins of CMMI**



- The Capability Maturity
  Model (CMM) was
  developed from 1987 until
  1997
- The CMMI is the successor of the CMM reference model and was released in 2002



### **History of CMMs**



SECM is the Electronic Industries Alliance standard 731, or the Systems Engineering Capability Model. INCOSE SECAM is International Council on Systems Engineering Systems Engineering Capability Assessment Model [EIA 2002].

## Capability Maturity Model Integrated (CMMI) <sub>- 1</sub>

- ➤ Capability Maturity Model Integrated (CMMI®) is a process improvement approach that provides organizations with the essential elements of effective processes
- The latest version of CMMI® version 1.2 was released in August 2006

CMMI.

## Capability Maturity Model Integrated (CMMI) <sub>- 2</sub>

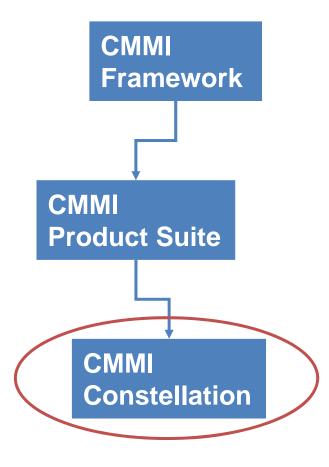


- ➤There are 3 constellations of CMMI:
  - 1. CMMI Development (CMMI-DEV)
  - 2. CMMI Services (CMMI–SVC)
  - 3. CMMI Acquisition (CMMI–ACQ)

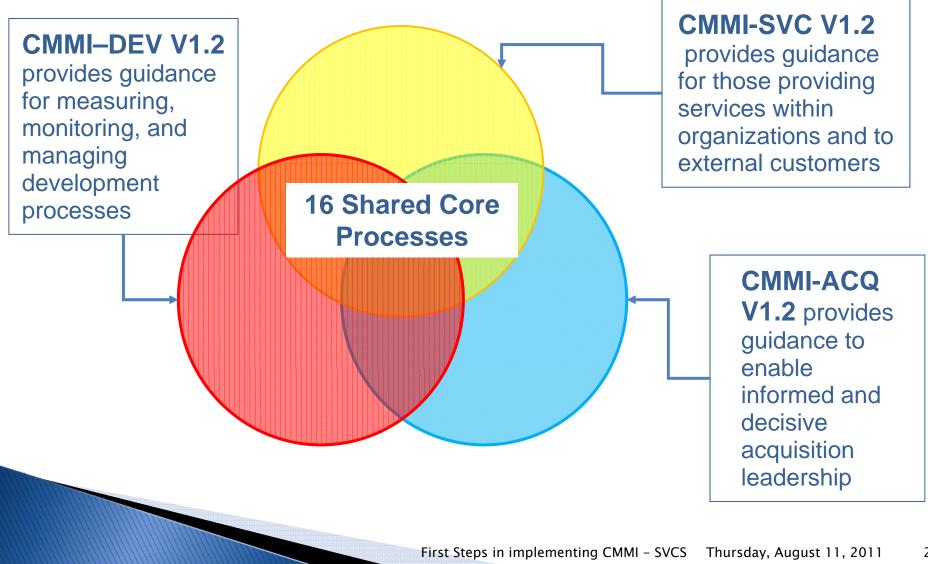
A "constellation" is defined as a collection of components that are used to construct models, training materials, and appraisal materials in an area of interest (e.g., services and development)

### **Terminology - Constellation**

- The CMMI
  Constellation is the collection of CMMI
  Models
- Each CMMI Model focuses on process improvement within a particular area of interest



### The 3 CMMI Constellations



### Purpose of CMMI for Services \_1

The CMMI for Services (CMMI-SVC) V1.2 model is a collection of best practices that includes services best practices from government and industry



### Purpose of CMMI for Services \_2

CMMI-SVC incorporates work by several service organizations to adapt CMMI for use in the service industry and is based on model components common to all CMMI models and constellations

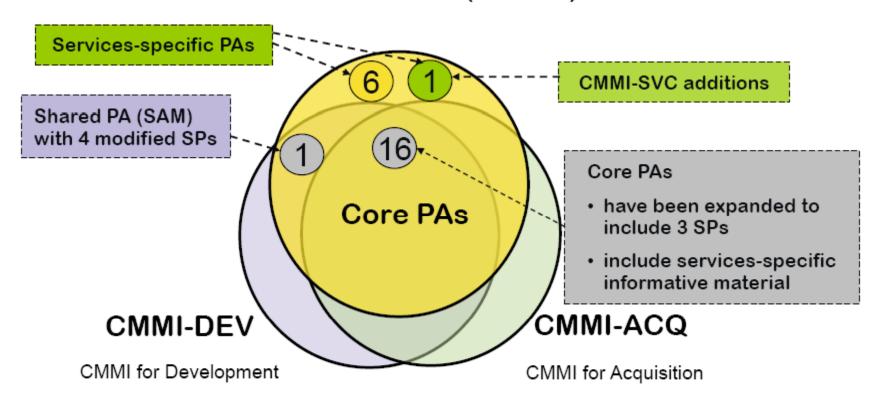
## CMMI and Other Service Focused Standards and Models

- ➤ CMMI-SVC draws on concepts and practices from CMMI and other service-focused standards and models, including:
  - ➤ Information Technology Infrastructure Library (ITIL)
  - ➤ISO/IEC 20000: Information Technology Service Management
  - Control Objects for Information and related Technology (CobiT)
  - Information Technology Services Capability Maturity Model (ITSCMM)

## CMMI-SVC content and other constellations



CMMI-SVC (24 PAs)



**CMMI-SVCS Webinar** from October 23, 2008 http://www.sei.cmu.edu/collaborating/spins/pdfs/cmmi\_svc.pdf

## What does the CMMI for Services Model say?

➤ CMMI-SVC does not specify that a project or organization must follow a particular process flow or that a certain number of services be delivered per day or specific performance targets be achieved...

...only that they have processes in place for adequately addressing service-related practices

#### What are the characteristics of service providers?



#### Services delivery has a different business rhythm than development

#### Variable and repetitive services must be planned

- Planning is focused on ongoing delivery rather than product completion
- Delivery is planned for repetition rather than completion with testing
- · Services are intangible so size cannot be used to estimate cost and schedule
- Planning must account for the availability and capacity of resources

#### Service levels are contractually specified and measured

· Services by nature interact with a customer or end user throughout performance of agreement

#### Variable and repetitive service requests must be managed

- · Constant changes in customers and requirements
- Must log and track requests to completion

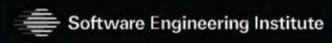
#### Variable and repetitive service incidents must be managed

- Must log and track incidents
- · Those that are problems must be assigned and tracked to closure
- Problem trends must be collected, analyzed, and remedied

#### Variable and repetitive service delivery must be managed

- Services delivery exhibits variability (e.g., duration, resources) over time
- Capacity and availability of resources must be actively monitored

Service providers share a common service management approach



Carnegie Mellon

CMMI for Services(CMMI-SVC) Forrester, June, 2008 © 2008 Carnegie Mellon University

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## Comparison between CMMI-Dev and CMMI-SVC <sub>1</sub>



- CMMI-DEV, v1.2 was released in August 2006 and focuses on product and service development
- CMMI-SVC, v1.2 was released in February 2009 and focuses on service establishment, management, and delivery

Comparisons of CMMI-SVC, V1.2 and CMMI-DEV, V1.2 http://www.sei.cmu.edu/cmmi/models/SVC-v12-comparetoDEV.html

## Comparison between CMMI-Dev and CMMI-SVC \_ 2



CMMI-SVC, V1.2	CMMI-DEV, V1.2	
Chapter 4 covers only the Services-related process areas.	Chapter 4 covers all of the process areas in the model.	
No Engineering process areas appear in the model.	No Service Establishment and Delivery process areas appear in the model.	
The model has 24 process areas.	The model has 22 process areas.	
Generic practices are listed only in the Generic Goals and Generic Practices section. GP elaborations also are located in this section of the model.	Generic practices are listed both in the Generic Goals and Generic Practices section and at the end of each process area. GP elaborations also are located at the end of each process area.	
No IPPD additions appear in the model.	IPPD additions appear in the model.	

Comparisons of CMMI-SVC, V1.2 and CMMI-DEV, V1.2 http://www.sei.cmu.edu/cmmi/models/SVC-v12-comparetoDEV.html

## Comparison between CMMI-Dev and CMMI-SVC <sub>- 3</sub>



CMMI-SVC, V1.2	CMMI-DEV, V1.2	
Integrated teaming is covered in the specific practices of IPM and OPD, not as IPPD additions, but rather as specific practices inherent in these process areas (IPM SP 1.6 and OPD SP 1.7).	Integrated teaming is covered in the specific practices of IPM and OPD as part of the IPPD group of additions.	
SSD additions covering service system development appear in the model.	No SSD additions appear in the model.	
Many examples are included specifically for service organizations.	Few examples are included specifically for service organizations.	
No amplifications appear in the model.	Amplifications for software engineering, systems engineering, and hardware appear in the model.	

Comparisons of CMMI-SVC, V1.2 and CMMI-DEV, V1.2

http://www.sei.cmu.edu/cmmi/models/SVC-v12-comparetoDEV.html

### CMMI for Services - 24 Process Areas \_ 1

Process Area Category	Category	Maturity Level
Capacity and Availability Management (CAM)	Project Management	3
Causal Analysis and Resolution (CAR)	Support	5
Configuration Management (CM)	Support	2
Decision Analysis and Resolution (DAR)	Support	3
Integrated Project Management (IPM)	Project Management	3
Incident Resolution and Prevention (IRP)	Service Establishment and Delivery	3
Measurement and Analysis (MA)	Support	2
Organizational Innovation and Deployment (OID)	Process Management	5
Organizational Process Definition (OPD)	Process Management	3
Organizational Process Focus (OPF)	Process Management	3
Organizational Process Performance (OPP)	Process Management	4
Organizational Training (OT)	Process Management	3

All CMMI-SVC model practices focus on the activities of the service provider

#### CMMI for Services – 24 Process Areas <sub>- 2</sub>

Process Area Category	Category	Maturity Level
Project Monitoring and Control (PMC)	Project Management	2
Project Planning (PP)	Project Management	2
Process and Product Quality Assurance (PPQA)	Support	2
Quantitative Project Management (QPM)	Project Management	4
Requirements Management (REQM)	Project Management	2
Risk Management (RSKM)	Project Management	3
Supplier Agreement Management (SAM)	Project Management	2
Service Continuity (SCON)	Project Management	3
Service Delivery (SD)	Service Establishment and Delivery	2
Service System Development (SSD)	Service Establishment and Delivery	3
Service System Transition (SST)	Service Establishment and Delivery	3
Strategic Service Management (STSM)	Service Establishment and Delivery	3

#### Maturity Level

#### Another View of the CMMI for Services v1.2 Process Areas

(5) Optimizing

Causal Analysis & Resolution

Organizational Innovation & Deployment



(4) Quantitatively Managed

Quantitative Project Management Organizational Process Performance

(3) Defined Incident Resolution & Prevention Service System Delivery Service System Transition Strategic Service Management Organizational Process Definition

efined

Capacity and Availability Management

Integrated Project Management Risk Management Service Continuity Organizational Process Focus

Organizational Training

(2) Managed Configuration Management Measurement & Analysis Decision
Analysis &
Resolution

Process & Product Quality Assurance Service Delivery

Project Monitoring & Control Project Planning Requirements Management Supplier Agreement Management

## Why should an organization map its existing processes to process areas? - 1

A project or organization maps its processes to the process areas contained in this document in order to determine whether processes are in place for adequately addressing service-related practices

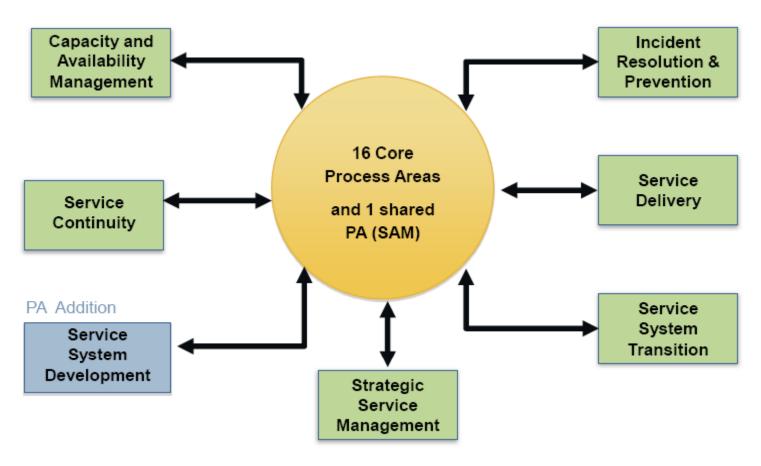
## Why should an organization map its existing processes to process areas? - 2

The mapping of processes to process areas enables service providers to track their progress against the CMMI-SVC model as they implement processes

It is not intended that every process area of the CMMI-SVC will map one to one with a given organization's or project's processes

#### **CMMI-SVC Content**





CMMI-SVCS Webinar from October 23, 2008 http://www.sei.cmu.edu/collaborating/spins/pdfs/cmmi\_svc.pdf

# CMMI-SVC services-specific PAs in English <sub>-1</sub>

- Capacity and Availability Management (CAM):
  - making sure you have the resources you need to deliver services and that they are available when needed—at an appropriate cost
- ➤ Incident Resolution and Prevention (IRP):
  - handling what goes wrong—and preventing it from going wrong in the first place if you can
- ➤ Strategic Service Management (STSM):
  - deciding what services you should be providing, making them standard, and letting people know about them

CMMI-SVCS Webinar from October 23, 2008 http://www.sei.cmu.edu/collaborating/spins/pdfs/cmmi\_svc.pdf

## CMMI-SVC services-specific PAs in English <sub>-2</sub>

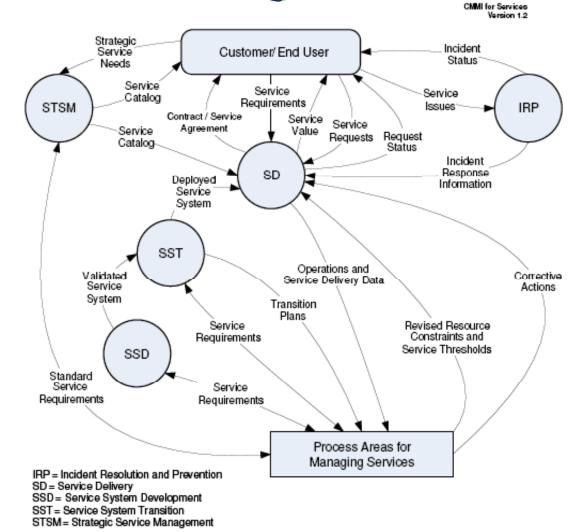
- Service System Development (SSD):
  - making sure you have everything you need to deliver the service, including people, processes, consumables, and equipment
- Service System Transition (SST): getting new systems in place, changing existing systems, retiring obsolete systems, all while making sure nothing goes terribly wrong with service delivery
- Service Delivery (SD):
  - setting up agreements, taking care of service requests, and operating the service system
- Service Continuity Management (SCON):
  - being ready to recover from a disaster and get back to delivering your service

CMMI-SVCS Webinar from October 23, 2008 http://www.sei.cmu.edu/collaborating/spins/pdfs/cmmi\_svc.pdf

#### CMMI Process Area Relationships for Establishing and Delivering Services

All of the process areas shown in this diagram are in the Service Establishment and Delivery process area category

Note that the Service Delivery process area occupies a central role in these relationships

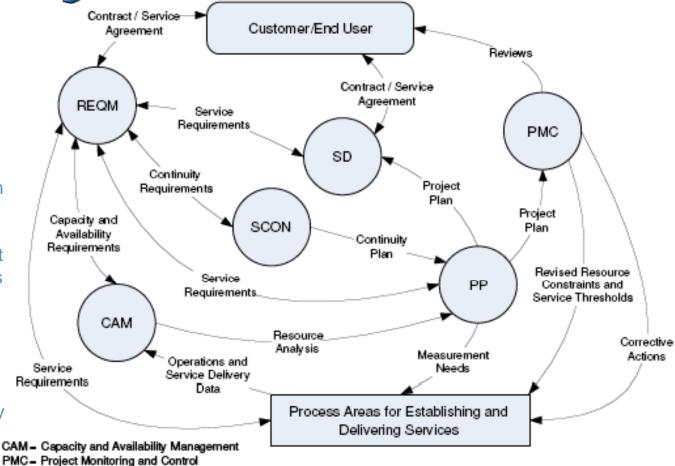


CMMI Process Area Relationships for

Service Management

Most of the process areas shown in this diagram are in the Project Management process area category, with the exception of Service Deliverv

The reason that this diagram refers to "service management" rather than "project management" is that the Service Delivery process area contributes both to **Project Management** as well as to Service Establishment and Delivery, but can only be part of a single process area category in a CMMI model



PP - Project Planning

REQM - Requirements Management

SCON - Service Continuity

SD - Service Delivery

#### **Terminology**

- 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

#### Exercise 1

Implementing and operating Service
Management:
Blockers and Enablers

#### Exercise 1

- Pick a process area or function that has given you issues in the past
- What problems have you encountered in implementing or operating "best practice" Service Management in your chosen process or function
- What preventive or corrective action can you recommend?
- Logistics
  - Two groups left and right
  - > You have 20 minutes
  - > Elect a representative
  - Representative addresses the group with findings 5 minutes each
- Possible areas you could choose:
  - ➤ Service Desk
  - Incident / Problem / Change / Configuration / Release Management
  - Service Level / Financial / Availability / Capacity / Service Continuity Management

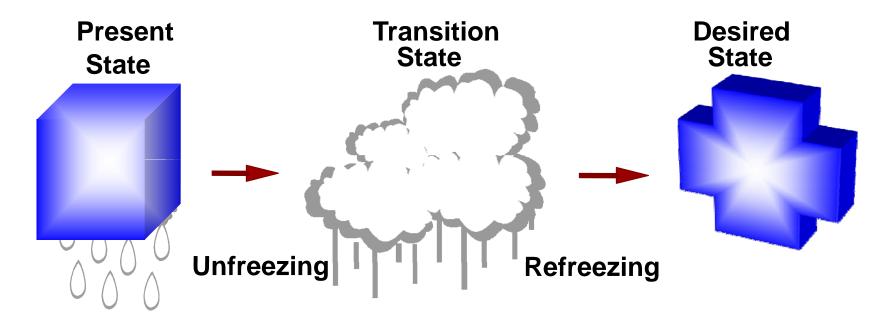
# Uniting ITIL and CMMI for Services

#### Slide 49

**DAJ7** I think this should be later

DAJex, 5/17/2009

#### A Simple Change Model



Management Commitment
Process Assessment
Action Planning

Process Improvement Activities
Action Plan Implementation

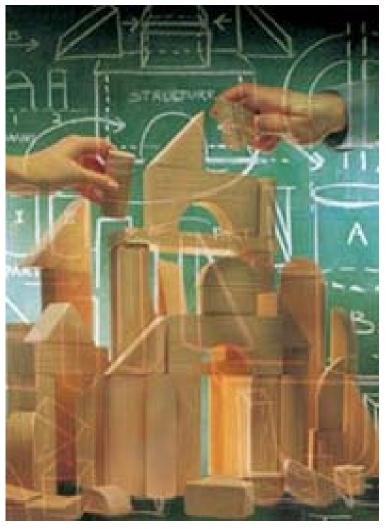
#### **Process Improvement**

Process improvement occurs within the context of the organization's needs and is used to address the organization's objectives



#### Long Lasting Change

- The Key to implementing change effectively is to create an infrastructure that supports the new change
- Without a positive and supportive infrastructure, change may not be lasting



#### **Uniting ITIL and CMMI**

> Why did we want to unite our approach...

#### > CMMI:

- is a process improvement approach that provides guidance for improving the ability to manage the lifecycle of products and services, and is focused on the required organizational practices
- provides a model of what to do but does not specify how to do it or who does it

#### > ITIL:

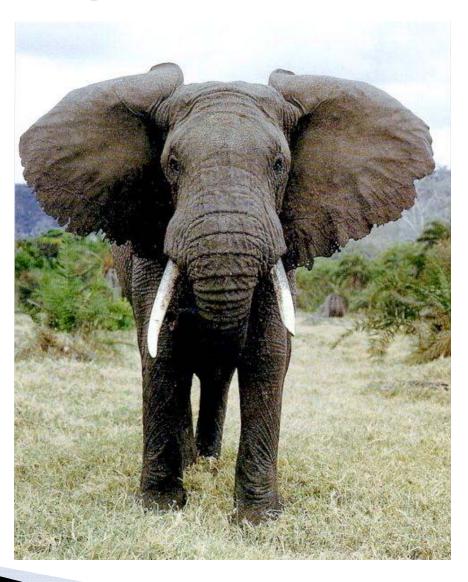
- is strong in IT processes, and with v3, it has improved its coverage of the service design process
- > is useful in helping achieve the goals that are established by CMMI

For example: CMMI's goal of establishing a baseline of identified work products for configuration management can be achieved through ITIL v3's Service Asset and Configuration Management and its use of CMDBs

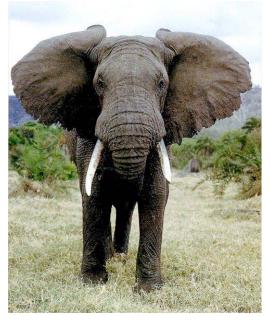
Ref: ITIL Continual Service Improvement book, Appendix 1

### Implementing Service Management based on ITIL and CMMI for Services

#### Where do you start?



#### Where do you start?



- Understand WHY you need to do "something"
- Get Sponsorship and Management Commitment
- ➤ Initiate an Implementation Project
- Conduct a Maturity Assessment and Gap Analysis
- Initiate a Continual Service Improvement Programme
- >LAUNCH IT
- Identify Champions and off you go...

## Sponsorship and Management Commitment

- >Starts in the boardroom
- ➤Initial investment will be required but Service Management *should* pay for itself
- >Appoint a Service Management Champion
  - ➤ Design Authority
  - ➤ Visionary / Do-er / Leader / Carer a team player
- Sort out internal politics across the management team
- Communication is key
  - >Objectives, plans, successes, risks and issues
- > Business and IT alignment is also key

#### Initiate an implementation Project

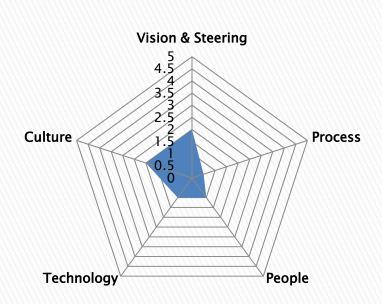
- > ITIL favours PRINCE2
  - but any robust and flexible methodology will do
- Get these in place first:
  - ▶Project Brief
  - ▶Project Approach
  - Project Board
  - Project Initiation
- ➤ The Project Plan
  - will be produced by the Maturity Assessment and Gap Analysis
  - ➤ And delivered by the CSI Programme

#### Maturity Assessment & Gap Analysis

- > Many methods to choose from
  - > itSMF Self Assessment Questionnaire

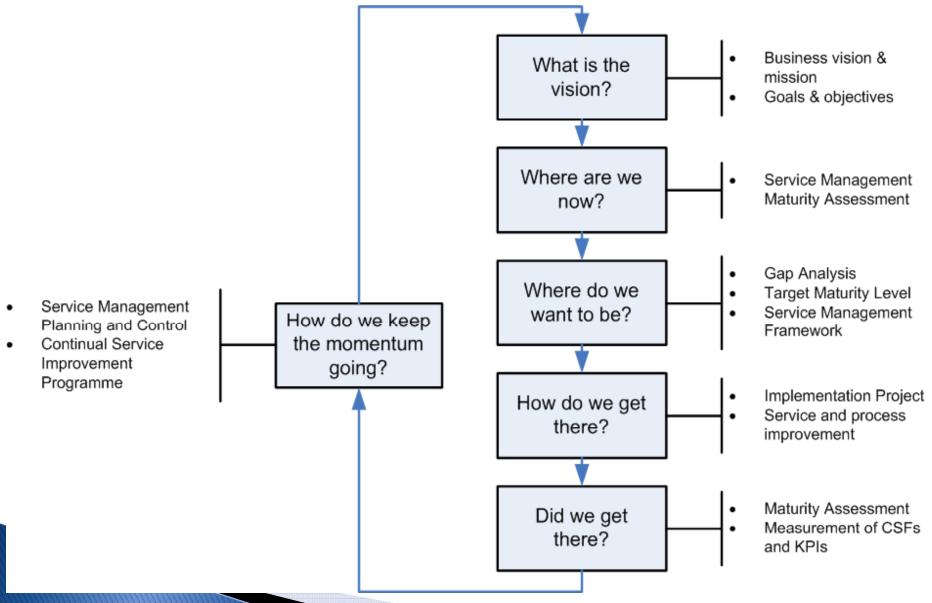
http://www.itsmf.co.uk/BestPractice/SelfAssessment.aspx

- ➤ ISO/IEC 20000 audit
- ➤ CobiT
- > CMMI
- > ITIL Process Maturity Framework

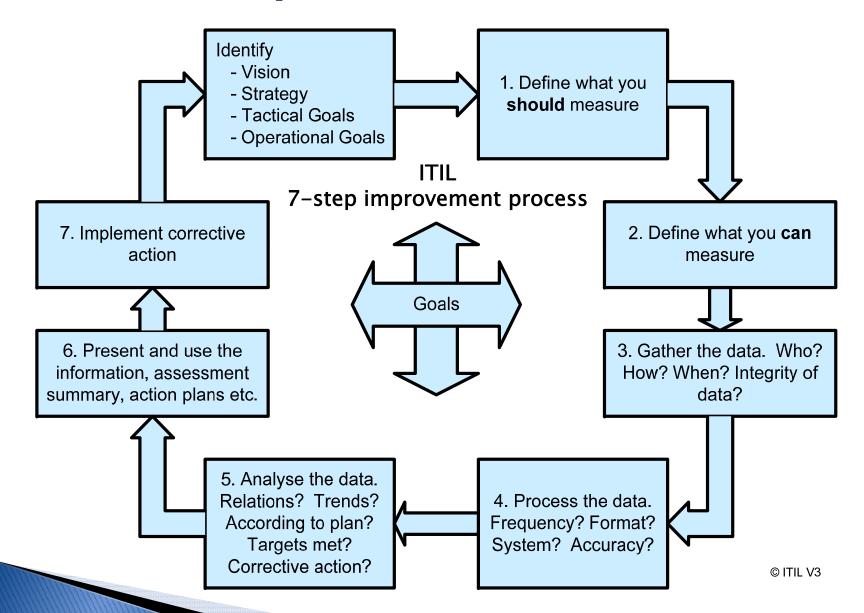


ITIL Process Maturity Framework							
	Vision and steering	Process	People	Technology	Culture		
1)	Minimal funds and resources with little activity	Loosely defined processes and procedures, used re-actively when problems occur	Loosely defined roles or responsibilities	Manual processes or a few specific discrete tools (pockets/islands)	Tool and technology-based and driven with a strong activity foc		
	Results temporary, not retained	Totally reactive processes					
	Sporadic reports and reviews	Irregular, unplanned activities					
Repeatable (Level 2)	No clear objectives or formal targets	Defined processes and procedures	Self-contained roles and responsibilities	Many discrete tools, but a lack of control	Product and service-based and driven		
	Funds and resources available	Largely reactive process		Data stored in separate locations			
	Irregular, unplanned activities, reporting and reviews	Irregular, unplanned activities					
(Level 3)	Documented and agreed formal objectives and targets	Clearly defined and well-publicised processes and procedures	Clearly defined and agreed roles and responsibilities	Continuous data collection with alarm and threshold monitoring	Service and Customer-oriented with a formalised approach		
	Formally published, monitored and reviewed plans	Regular, planned activities		Consolidated data retained and used for formal planning, forecasting and trending			
	Well-funded and appropriately resourced	Good documentation		Some Service Management functions underpinned by ITIL compliant tools			
	Regular, planned reporting and reviews	Occasionally proactive process					
(Level 4)	Clear direction with business goals, objectives and formal targets, measured progress	Well-defined processes, procedures and standards, included in all IT staff job descriptions	working	Continuous monitoring measurement, reporting and threshold alerting to a centralised set of integrated toolsets, databases and processes	Business focused with an understanding of the wider issu		
	Effective management reports actively used	Clearly defined process interfaces and dependencies	Responsibilities clearly defined in all IT job descriptions				
	Integrated process plans linked to business and IT plans	Integrated Service Management and systems development processes					
	Regular improvements, planned and reviewed	Mainly proactive process					
(Level 5)	Integrated strategic plans inextricably linked with overall business plans, goals and objectives	Well-defined processes and procedures part of corporate culture		Well-documented overall tool architecture with complete integration in all areas of people, processes and technology	A continuous improvement attitude, together with a strategic business focus.		
	Continuous, monitoring, measurement, reporting alerting and reviews linked to a continuous process of improvement	Proactive and pre-emptive process	Roles and responsibilities part of an overall corporate culture		An understanding of the value of IT to the business and its role within the business value chain		
	Regular reviews and/or audits for effectiveness, efficiency and compliance						

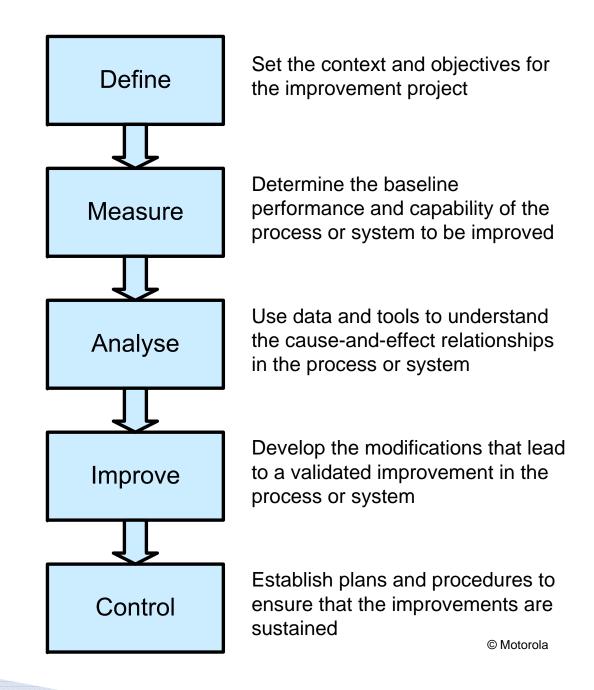
#### **Continual Service Improvement**

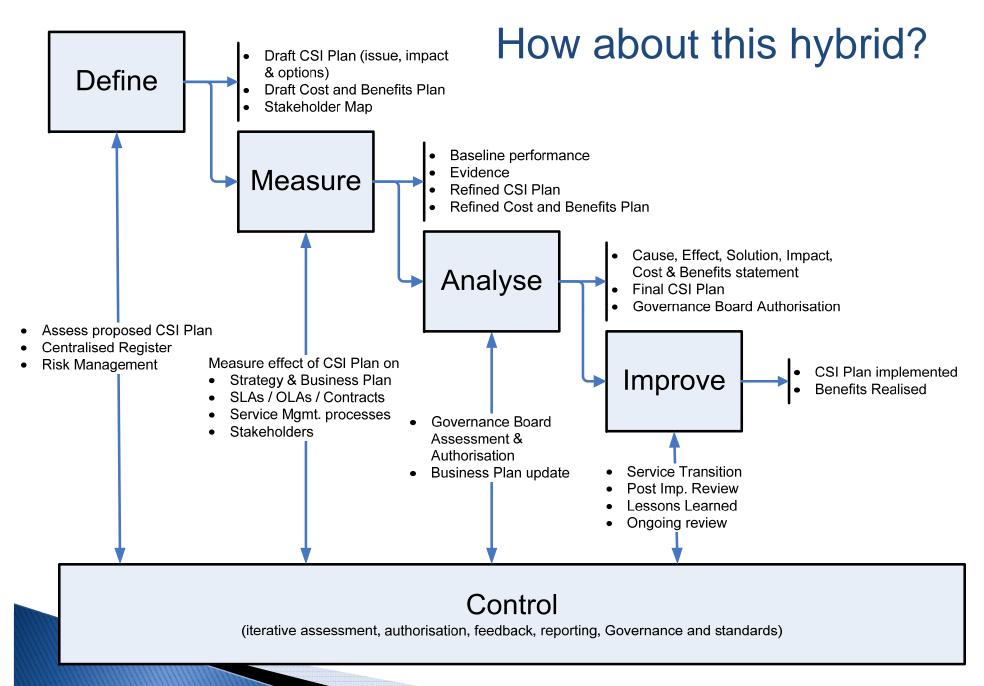


#### Which CSI process?

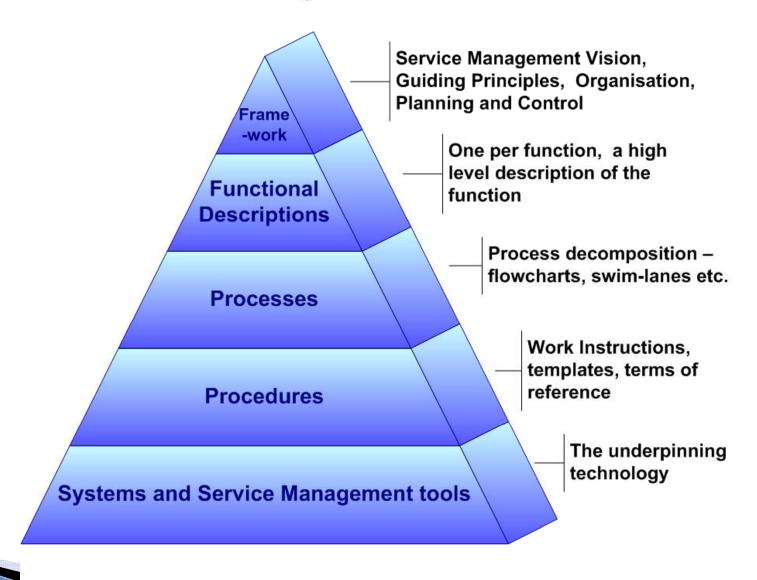


# Or the Six Sigma DMAIC process?





#### The Service Management Model



#### The launch

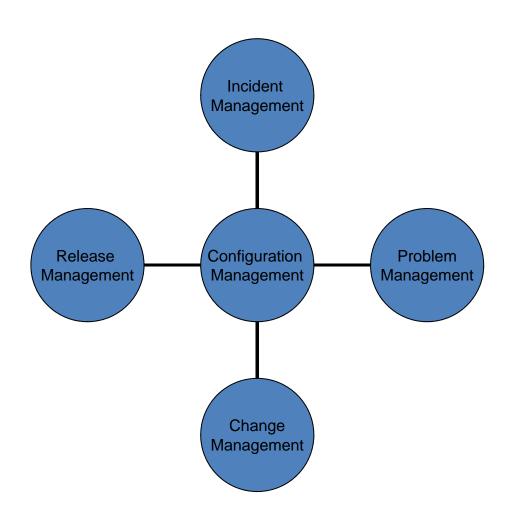
- ➤ Mandatory
- Pilot the launch internally first
  - ➤ Get internal buy-in
  - > Tailor messages based on feedback
  - Be specific "make it real"
- Develop a Communications Strategy and Plan
- > Use all available and culturally acceptable media
  - Be creative if existing communications channels are deficient or ineffective
- > Include all stakeholders
  - The client / customers / the business
  - Internal delivery and support staff
  - > Third parties
- > Follow up the launch with REGULAR communications
  - > Execute the Communications Plan!

#### Some ITIL fundamentals

- Adopt, Adopt or ignore the ITIL guide-lines in accordance with business need
- Service Management is one discipline not many
- Service Management is forward and outward looking
- Each element of Service Management adds value to the business
- > Service Management processes underpin Business processes
- Service Management tools underpin Service Management processes
- Service Management is a key enabler for excellent customer service
- Every Process and Activity has an owner
- No Gaps No Overlaps
- Processes and Tools are great! But PEOPLE make it happen
- Configuration Management is the hub of the Service Management Wheel
- Service Management implementation doesn't end (Continual Service Improvement)

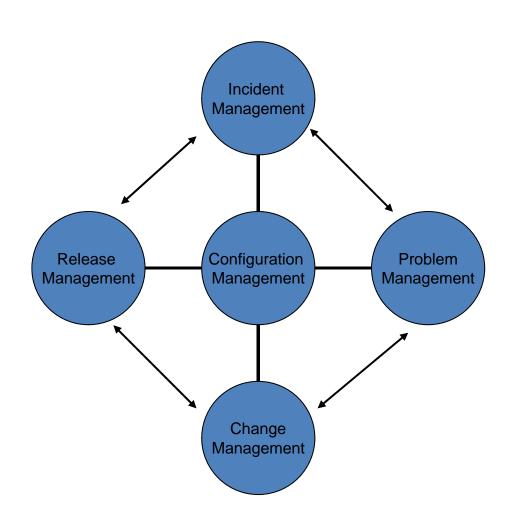
## Configuration Management at the centre of Service Support (ITIL v2)





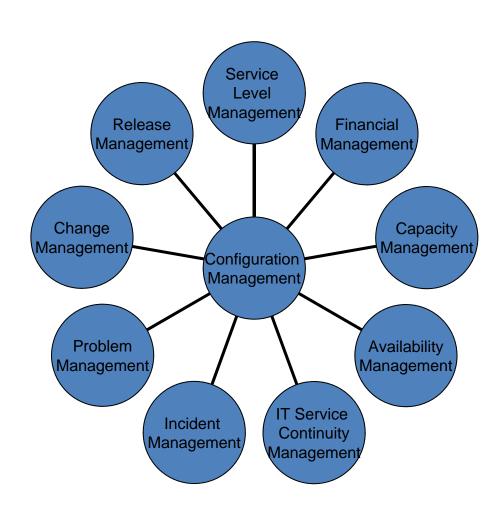
## Configuration Management at the centre of Service Support (ITIL v2)





## Configuration Management at the centre of Service Management (ITIL v2)





#### Process Improvement Plan

#### Development of Process Improvement Plan

- The Process Improvement Plan is a plan for achieving organizational process improvement objectives based on a thorough understanding of current strengths and weaknesses of the organization's processes and process assets
- The organization's Process Improvement Plan addresses appraisal planning, process action planning, pilot planning, and deployment planning
- The Process Improvement Plan is a document...not a schedule...

#### Exercise 2

- The task here is to develop a table of contents that would be used in a Process Improvement Plan
- ➤ A typical Process Improvement Plan Table of Contents (ToC) is provided
- Your job is to identify what else should be or could be included, and then develop an improved TOC

## Typical Process Improvement Plan Table of Contents (ToC)

- 1. Introduction
  - 1.1 Purpose
  - 1.2 Background
  - 1.3 Scope
  - 1.4 Document Structure
  - 1.5 Relationship to Other Documents
  - 1.6 References
  - 1.7 Abbreviations
  - 1.8 Acronyms
- 2. Process Improvement Background
- 3. Process Improvement Organization
- 4. Process Improvement Goals
- 5. Process Improvement Implementation
- 6. Process Improvement Tracking
- 7. Risk Management
- 8. Process Improvement Schedule
- 9. Appendix

#### Results of Exercise 2

- Results will be presented during the tutorial at the conference
- ➤ A summary of results can be obtained after the conference by contacting either of the two presenters

#### Infrastructure Development

#### Infrastructure

- There are three types of Infrastructure that must be considered
- Physical Infrastructure
  - Documentation Repositories
  - Measurement Repositories
  - Access and Security
- > Political Infrastructure
  - ➤ Organization Chart
  - > Roles and Responsibilities
  - **≻** Policies
- Process Improvement Infrastructure
  - Process Improvement Group
  - Change Control Board
  - Peer Review

## Physical Infrastructure

## The Importance of Effective Communication

- The single most important element of a successful Process Improvement Initiative is Effective Communication
- Without effective communication there is no way to be successful
- Effective Usage of an Intranet can be the key to ensuring that a process improvement initiative moves forward
- Ineffective usage of an Intranet can stop a process improvement initiative in its tracks

#### Repository Navigation \_ 1

- As you develop repositories of information, it is important to create Navigation Menus, WebPages, etc., that will assist you in locating documents easily
- The following WebPages were actually developed as Word documents and were then published as .html

The advantage of this was that everyone who had Word could update them with hyperlinks as needed. This simple solution was very cost effective

# A Simple CMMI - SVCS Navigation Menu [Information and Training]

#### CMMI navigation menu

Information Navigation Menu

Process Improvement navigation menu

Models	Orientation and Training	Other Presentations	Tutorials	CMMI Mappings
- CMMI V1.2 for Development	- An Overview of the CMMI	- Best of Everything - ITIL CMMI LEAN - Banerjee	- Service Level Management	- ITIL and CMMI Corresponding Approach
- CMMI for Services V1.2	- CMMI Overview - SEI Version	- CMMI for Services - Hollenbach	-	- ITIL CMMI Comparison
- CMMI V1.2 for Acquisition	- An Introduction to CMMI training	- CMMI for Services - Lamri	-	- Integrating CMMI with COBIT and ITIL - Curtis
- CMMI for Services (Partner and Piloting Draft 09/2008)	- Brainstorming - A Tool for Generating Ideas	- CMMI for Services Overview - Phillips	-	-
Technical Notes	Quick References	- CMMI-SVC Panel - SEPG 08	-	-
- Interpreting CMMI for Services - 03tn005	- CMMI-SVC-Quick-Reference- v1.2	- Integrating CMMI and ITIL - Kopcho	-	-
-		- Quality for IT Development & IT Service - Richter	-	-
-	-	- Service Extensions to the CMMI v2d5	里	-
Process Area Sortings	Appraisal Information	Topic	Topic	Topic
- Process Area Sortings	-	-	-	-
-	12		-	
_	2	-	-	-
-	-		-	-
CMMI Metrics	Topic	Topic	Topic	Topic
-	-	-	-	-
	-	40	-	198
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# A Simple CMMI – SVCS Navigation Menu [Appraisal]

