

CMMI FOR SERVICES

另一种服务管理的视角

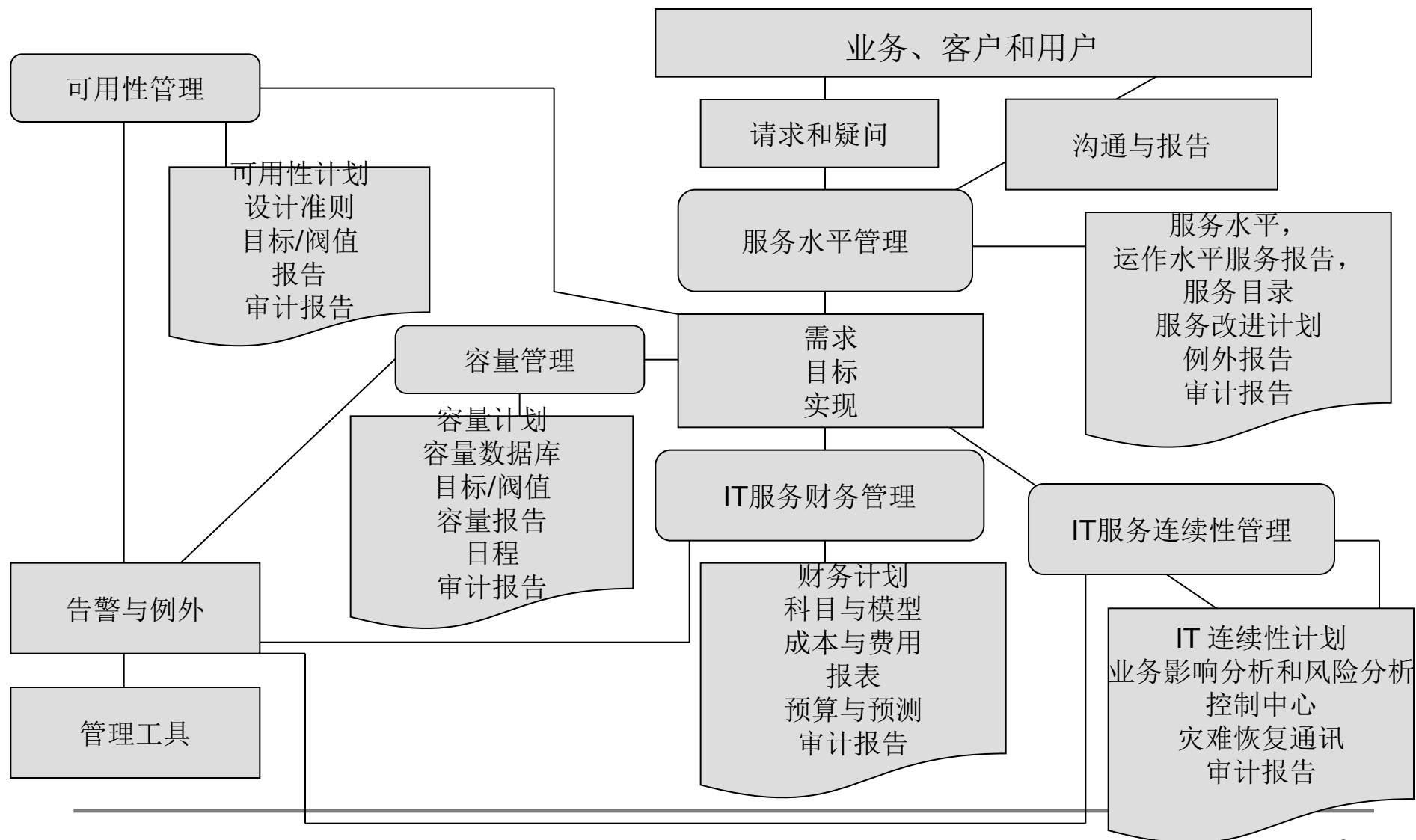
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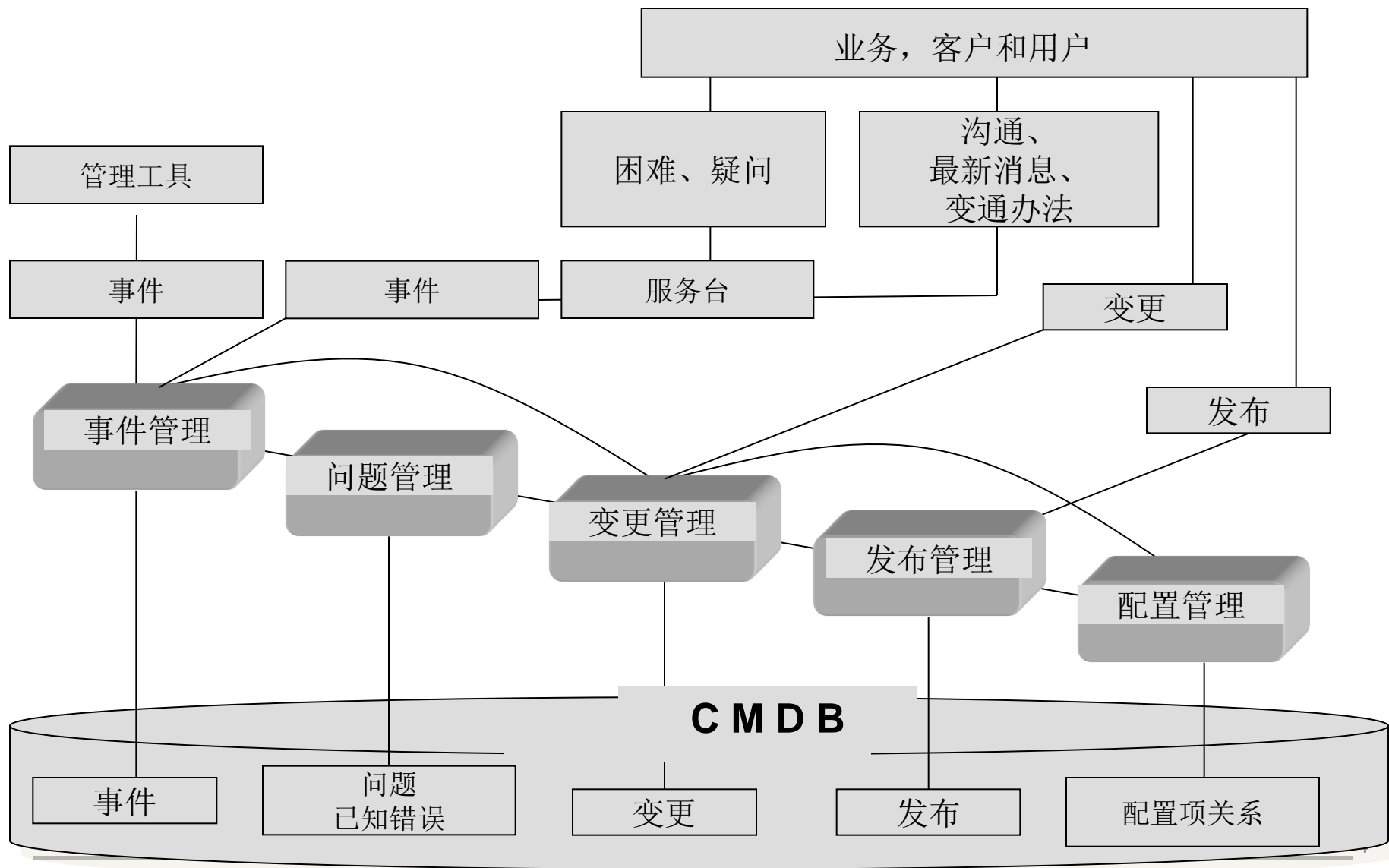
主要内容

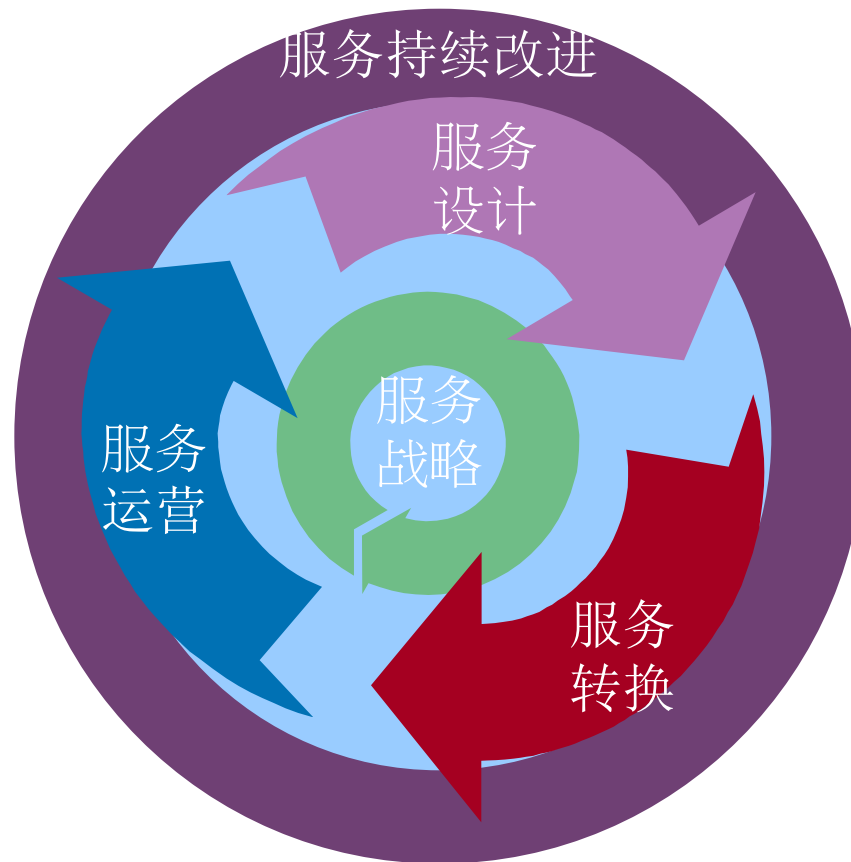
- ITIL 与 ISO 20000回顾
 - CMMI SVC
 - CMMI SVC 过程域结构
 - CMMI 通用过程域
 - CMMI 改进路径
-

ITIL V2-服务提供

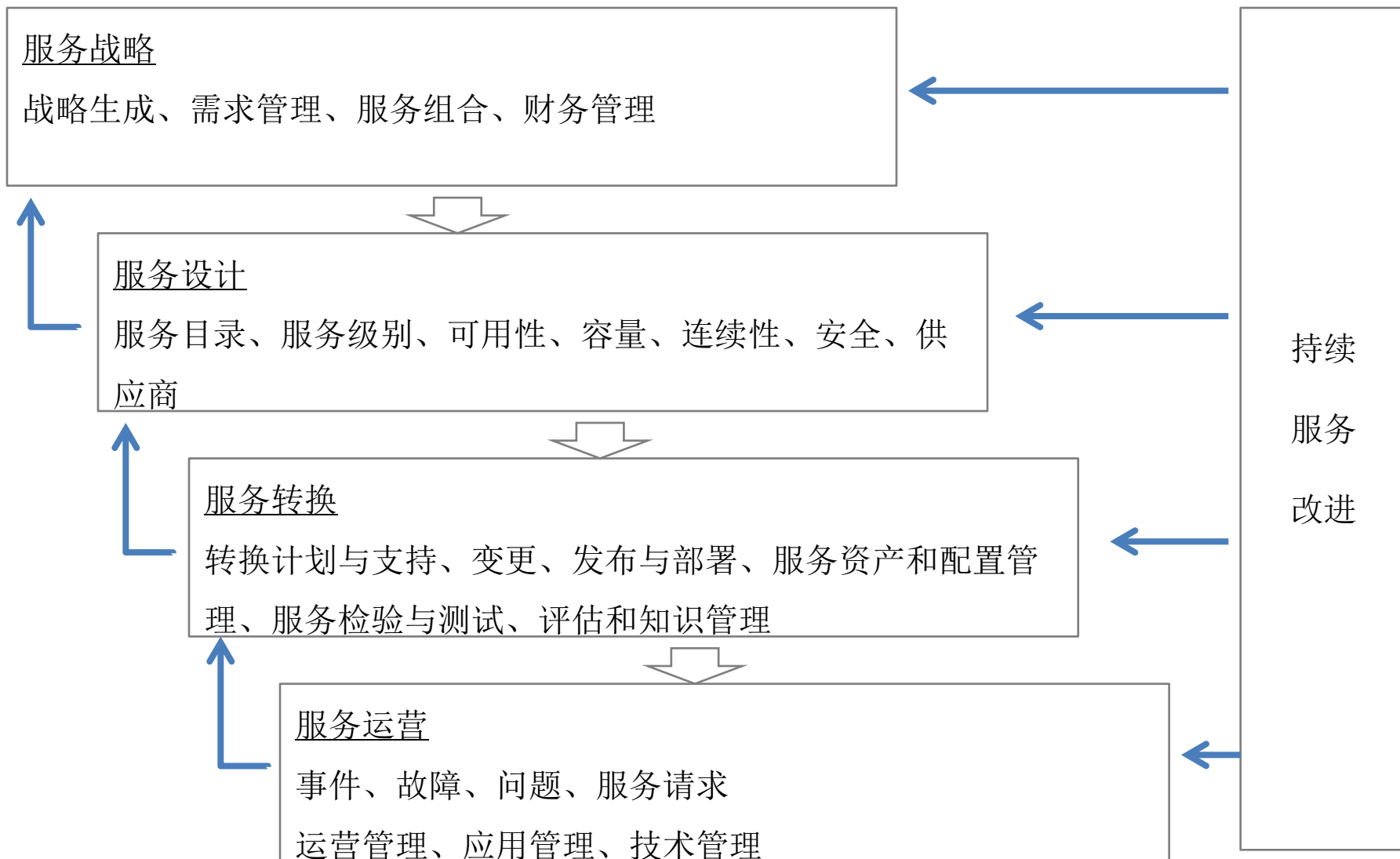


ITIL-V2服务支持

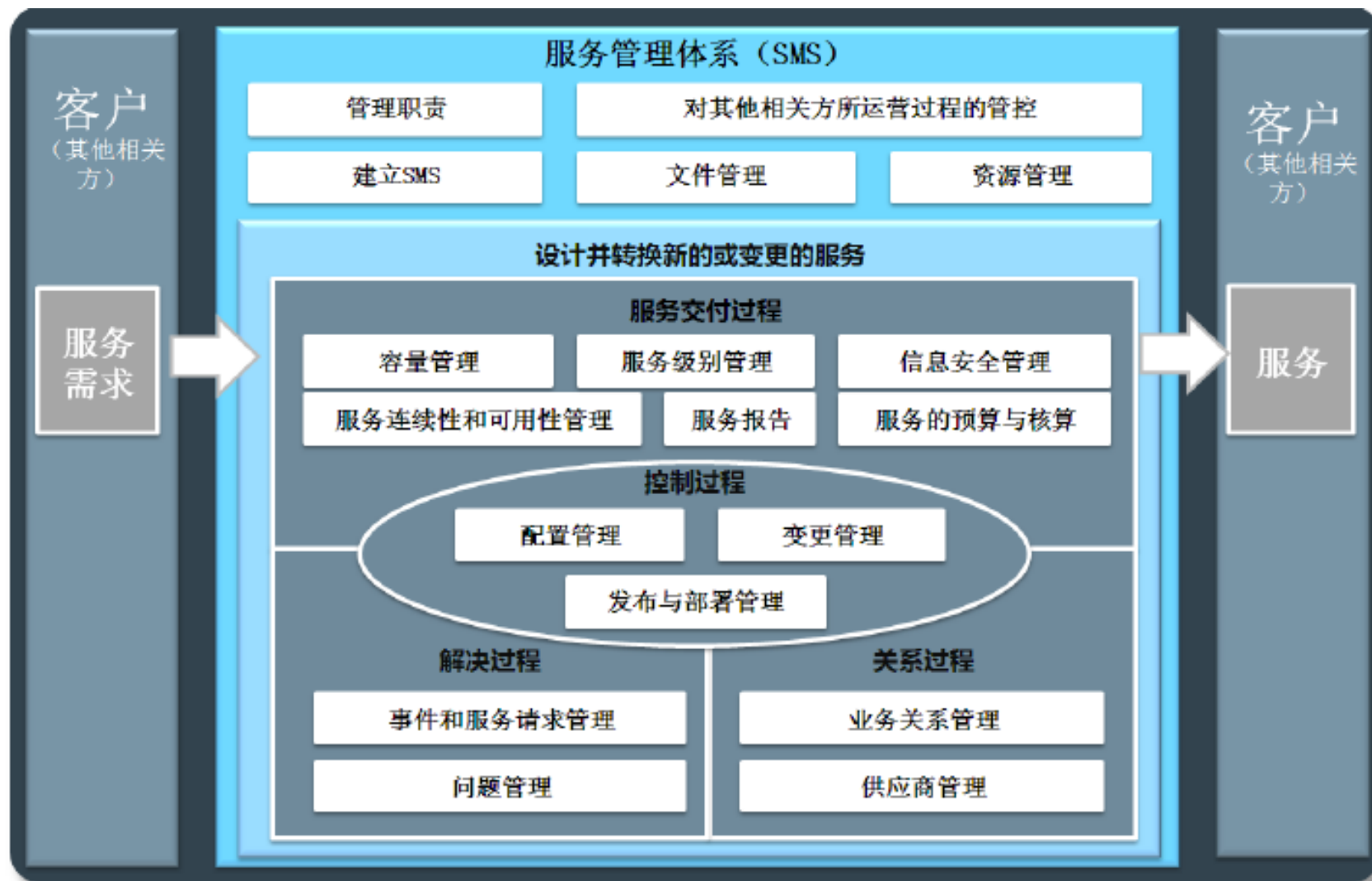




ITIL –V3流程



ISO 20000-2011



从哪里改进？

□ ITIL

- V2:
 - 服务台和事件管理
 - 服务目录
 - 配置管理
 - ?
- V3:
 - 服务运营
 - 服务设计和转换
- 评估、改进

□ 20000

- SMS
 - 设计和转换服务
 - 4组13流程
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主要内容

- ITIL 与 ISO 20000回顾

- CMMI SVC

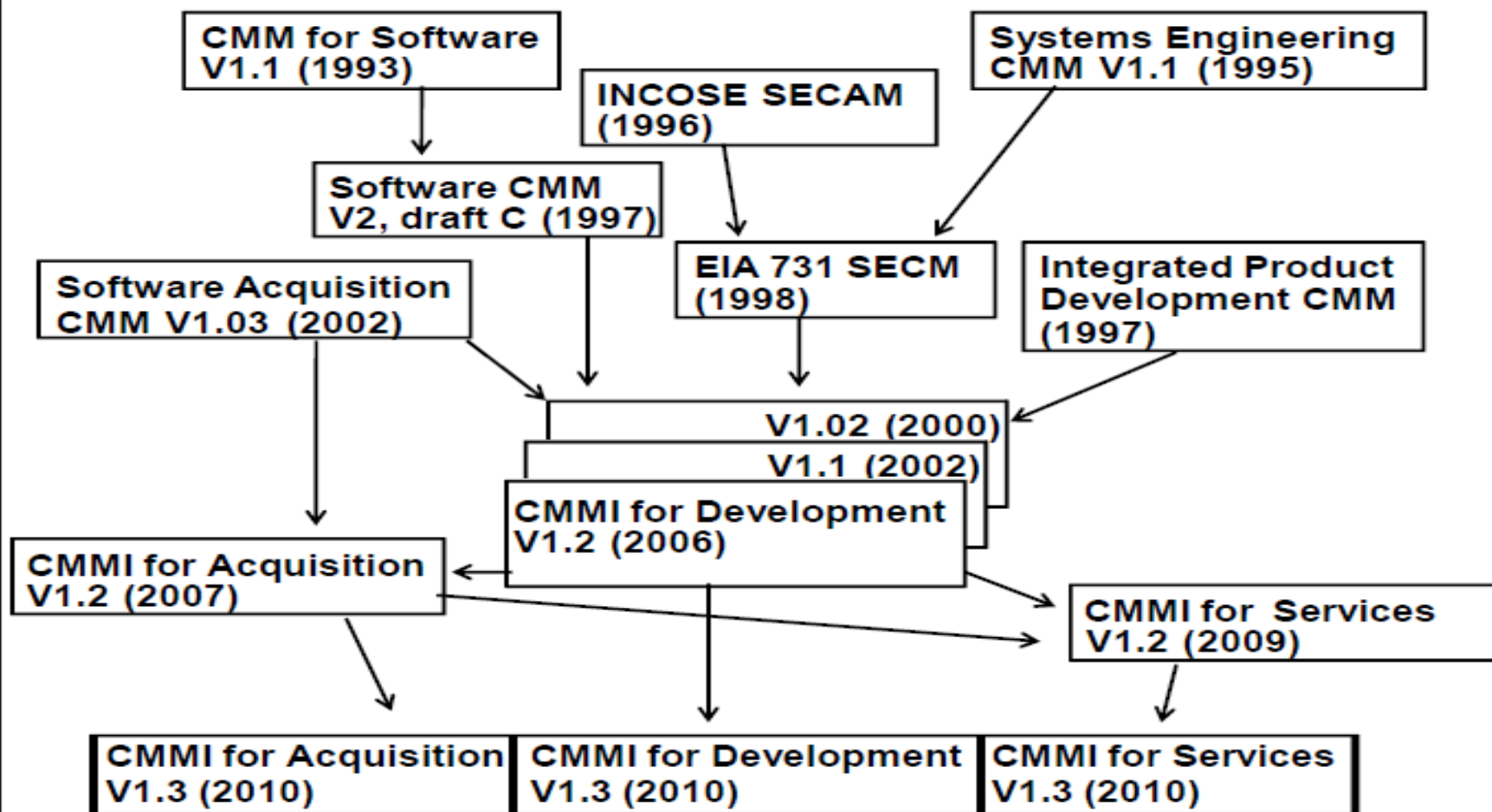
- CMMI SVC 过程域结构

- CMMI 通用过程域

- CMMI 改进路径

CMMI 发展历史

History of CMMs



CMMI for Services

□ 参考/相关

- ITIL
- 20000
- COBIT
- ITSCMM

□ 面向所有各种行业服务

- 医疗、财务、运输
 - Education, energy, health care, transportation, finance, insurance, and hospitality are possibilities.
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CMMI SVC结构 (1)

Maturity Level	Service Establishment and Delivery	Project and Work Management	Support	Process Management
5			Causal Analysis and Resolution (CAR) 原因分析与解决	Organizational Performance Management (OPM)组织绩效管理
4		Quantitative Work Management (QWM)定量工作管理		Organizational Process Performance (OPP)组织过程绩效
3	Incident Resolution and Prevention (IRP) 事件解决与预防	Capacity and Availability Management (CAM)容量与可用性管理	Decision Analysis and Resolution (DAR) 决策分析与解决	Organizational Process Definition (OPD) 组织过程定义
	Service System Development (SSD)服务系统开发	Integrated Work Management (IWM)集成工作管理		Organizational Process Focus (OPF)组织过程聚焦
	Service System Transition (SST) 服务系统转换	Risk Management (RSKM)风险管理		Organizational Training (OT) 组织培训
	Strategic Service Management (STSM)服务战略管理	Service Continuity (SCON)服务连续性		
2	Service Delivery (SD)服务交付	Work Planning (WP)工作规划	Configuration Management (CM) 配置管理	
		Work Monitoring and Control (WMC)工作监控	Measurement and Analysis (MA) 度量与分析	
		Requirements Management (REQM)需求管理	Process and Product Quality Assurance (PPQA)过程与产出物质质量保障	
		Supplier Agreement Management (SAM)供应商协议管理		

CMMI-SVC结构（2）

□ 5成熟度等级

- 初始级-混乱、混沌
- 管理级-制度化、流程、保障资源
- 定义级-更多的服务专有流程，建立了组织级的标准，通过裁剪适应需要
- 量化管理-量化管理目标，预期的绩效指标，纠正流程差异
- 优化管理级-建立流程改进目标，持续改进，体系改进

□ 4过程组

□ 24特别过程域

□ 1通用过程域

CMM-SVC结构 (3)

□ 4过程组

- 服务建立与交付
 - 项目与工作管理
 - 支持
 - 流程管理
-

24流程-(1)

- ❑ Capacity and Availability Management (CAM):
 - making sure you have enough of the resources you need to deliver services and that they are available when needed—at an appropriate cost 具有足够资源保障容量和可用性
 - ❑ Incident Resolution and Prevention (IRP):
 - handling what goes wrong—and preventing it from going wrong if you can 处理问题，预防发生
 - ❑ Service Continuity (SCON):
 - being ready to recover from a disaster and get back to delivering your service 灾难恢复
 - ❑ Service Delivery (SD):
 - setting up agreements, taking care of service requests, and operating the service system 设立协议，处理服务请求，运营服务系统
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24流程-(2)

- ❑ Strategic Service Management (STSM):
 - deciding what services you should be providing, making them standard, and letting people know about them 决定提供什么服务, 采用什么标准
 - ❑ Service System Development (SSD):
 - making sure you have everything you need to deliver services, including people, processes, consumables, and equipment 确保能够提供服务, 人、流程、易耗品、设备
 - ❑ Service System Transition (SST):
 - getting new systems in place, changing existing systems, or retiring obsolete systems—all while making sure nothing goes terribly wrong with the service 新系统就绪, 变更系统, 不出错
-

24流程-(3)

- ❑ Causal Analysis and Resolution (CAR):
 - getting to the sources of selected work results and taking effective action to enable good results and prevent bad results in other work 找到原因，寻求解决方案
 - ❑ Configuration Management (CM)
 - controlling changes to your crucial work products 控制关键产出物的变更
 - ❑ Decision Analysis and Resolution (DAR):
 - using a formal decision-making process on the decisions that matter most in your business 采用正式的决策流程
 - ❑ Integrated Work Management (IWM):
 - getting the most from defined processes and all participants when managing complex service 管理复杂服务
-

24流程-(4)

- Measurement and Analysis (MA):
 - knowing what to count and measure to manage your service
度量和分析
 - Organizational Performance Management (OPM):
 - managing your improvements and innovations using a
statistical understanding of your process performance在统计的基础上进行管理改进
 - Organizational Process Definition (OPD):
 - establishing standard processes and spreading them
throughout your organization建立标准流程，并扩展到组织
-

24流程-(4)

- ❑ Organizational Process Focus (OPF):
 - figuring out your current process strengths and weaknesses, planning what to do to improve, and putting those improvements in place 指出过程优缺点, 并改进
 - ❑ Organizational Process Performance (OPP):
 - making sure you understand your process performance and how it affects service quality 理解过程绩效
 - ❑ Organizational Training (OT):
 - developing the skills and knowledge your people need to deliver superior service 人员知识和技能培训
 - ❑ Process and Product Quality Assurance (PPQA):
 - checking to see that you are actually doing things the way you say you will in your policies, standards, and procedures 质量保障, 是否按照政策、标准和程序
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24流程-(5)

- ❑ Quantitative Work Management (QWM):
 - managing service to quantitative process and performance objectives 流程和绩效目标的量化管理
 - ❑ Requirements Management (REQM):
 - keeping clear with your customers and other stakeholders about the service you provide, and adjusting when you find inconsistencies or mismatched expectations
 - ❑ Risk Management (RSKM):
 - supporting the success of your service mission by anticipating problems and how you will handle them—before they occur
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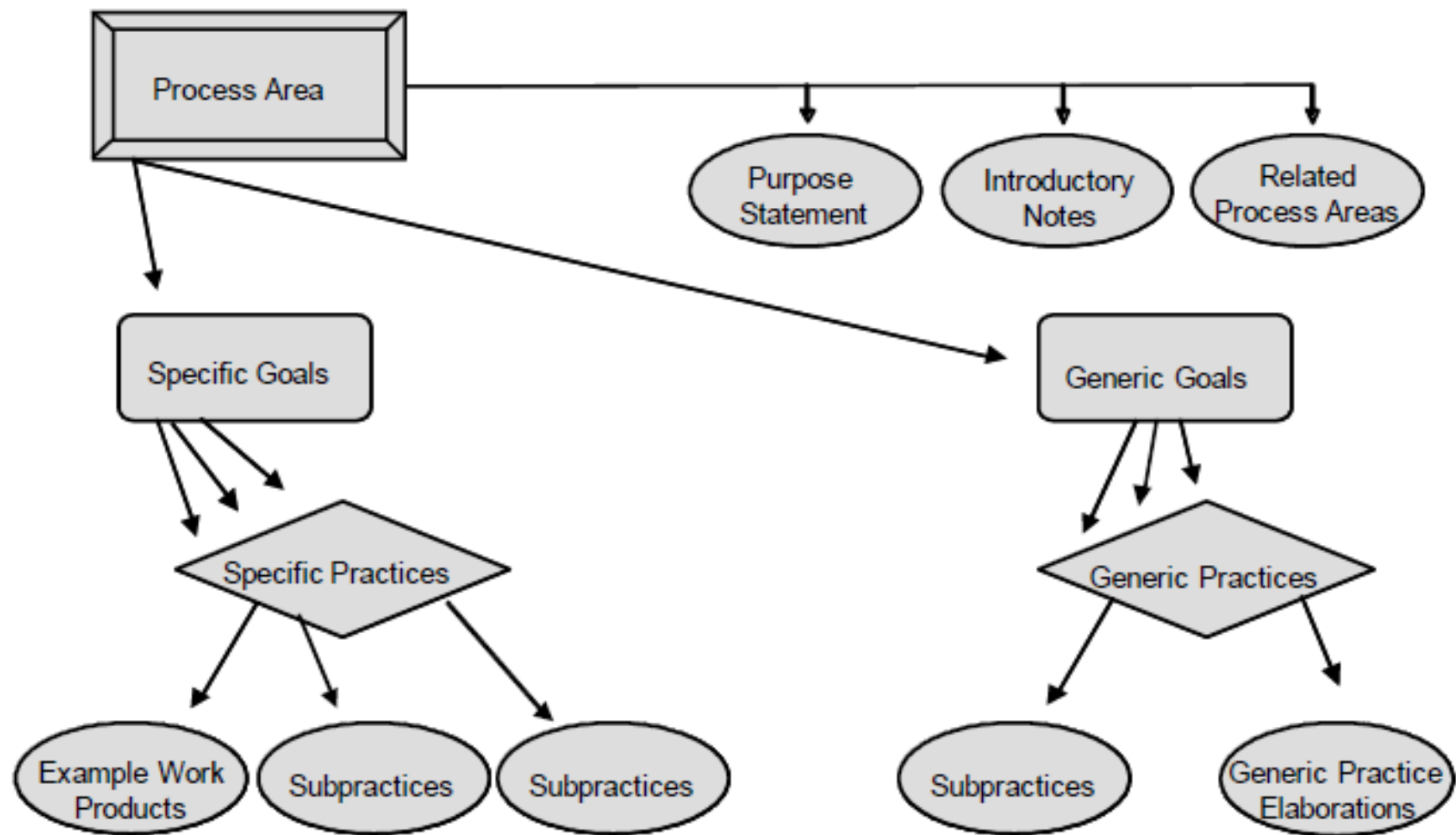
24流程-(6)

- ❑ Supplier Agreement Management (SAM):
 - getting what you need and what you expect from suppliers who affect your service 供应商
 - ❑ Work Planning (WP):
 - estimating costs, effort, and schedules, figuring out how you' ll provide the service, and involving the right people—all while watching your risks and making sure you' ve got the resources you need 成本、工作量、日程
 - ❑ Work Monitoring and Control (WMC):
 - making sure what' s supposed to be happening in your service work is happening, and fixing what isn' t going as planned 监控
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-

过程域结构



SERVICE DELIVERY

- The purpose of Service Delivery (SD) is to deliver services in accordance with service agreements. SD 的目的是按照服务协议交付服务。

SG 1 Establish Service Agreements

SP 1.1 Analyze Existing Agreements and Service Data

SP 1.2 Establish the Service Agreement

SG 2 Prepare for Service Delivery

SP 2.1 Establish the Service Delivery Approach

SP 2.2 Prepare for Service System Operations

SP 2.3 Establish a Request Management System

SG 3 Deliver Services

SP 3.1 Receive and Process Service Requests

SP 3.2 Operate the Service System

SP 3.3 Maintain the Service System

SERVICE DELIVERY-2

- Special Goal
 - Special Practice
 - Example Work Products
 - Subpractices
 - Reference
 - 建立服务协议
 - 准备交付服务
 - 交付服务
 - 条文
-

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通用流程域与通用实践

Generic Goal

Progression of Processes

GG 1

Performed process

GG 2

Managed process

GG 3

Defined process

GG 1 Achieve Specific Goals

- GP 1.1 Perform Specific Practices

GG 2 Institutionalize a Managed Process

- ❑ GP 2.1 Establish an Organizational Policy
 - ❑ GP 2.2 Plan the Process
 - ❑ GP 2.3 Provide Resources
 - ❑ GP 2.4 Assign Responsibility
 - ❑ GP 2.5 Train People
 - ❑ GP 2.6 Control Work Products
 - ❑ GP 2.7 Identify and Involve Relevant Stakeholders
 - ❑ GP 2.8 Monitor and Control the Process
 - ❑ GP 2.9 Objectively Evaluate Adherence
 - ❑ GP 2.10 Review Status with Higher Level Management
-

GG 3 Institutionalize a Defined Process

- GP 3.1 Establish a Defined Process
 - GP 3.2 Collect Process Related Experiences
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A defined process

□ 一个定义级流程包括：

- Purpose
 - Inputs
 - Entry criteria
 - Activities
 - Roles
 - Measures
 - Verification steps
 - Outputs
 - Exit criteria
-

能力度等级

- 不完整级
 - 1执行级
 - 所有的SP都得到执行
 - 2管理级
 - 计划、资源、责任、培训和控制流程
 - 3定义级
 - 具有标准
 - 4量化管理级
 - 量化与分析
 - 5优化级
 - 持续优化
-

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改进路径

□ 渐进式

- 选取流程域
- 采用能力度改进

□ 阶段式

- 按照成熟度改进
 - 二级成熟度
 - 二级成熟度流程达到二级以上能力等级
 - 三级成熟度
 - 二级和三级流程达到三级以上能力等级
 - 四级成熟度
 - 二、三、四级流程达到三级以上能力等级
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Q&A