TATA CONSULTANCY SERVICES

Match point: Who will win the game, ITIL or CMMI-SVC?

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IT Process and Service Management

Global Consulting Practice

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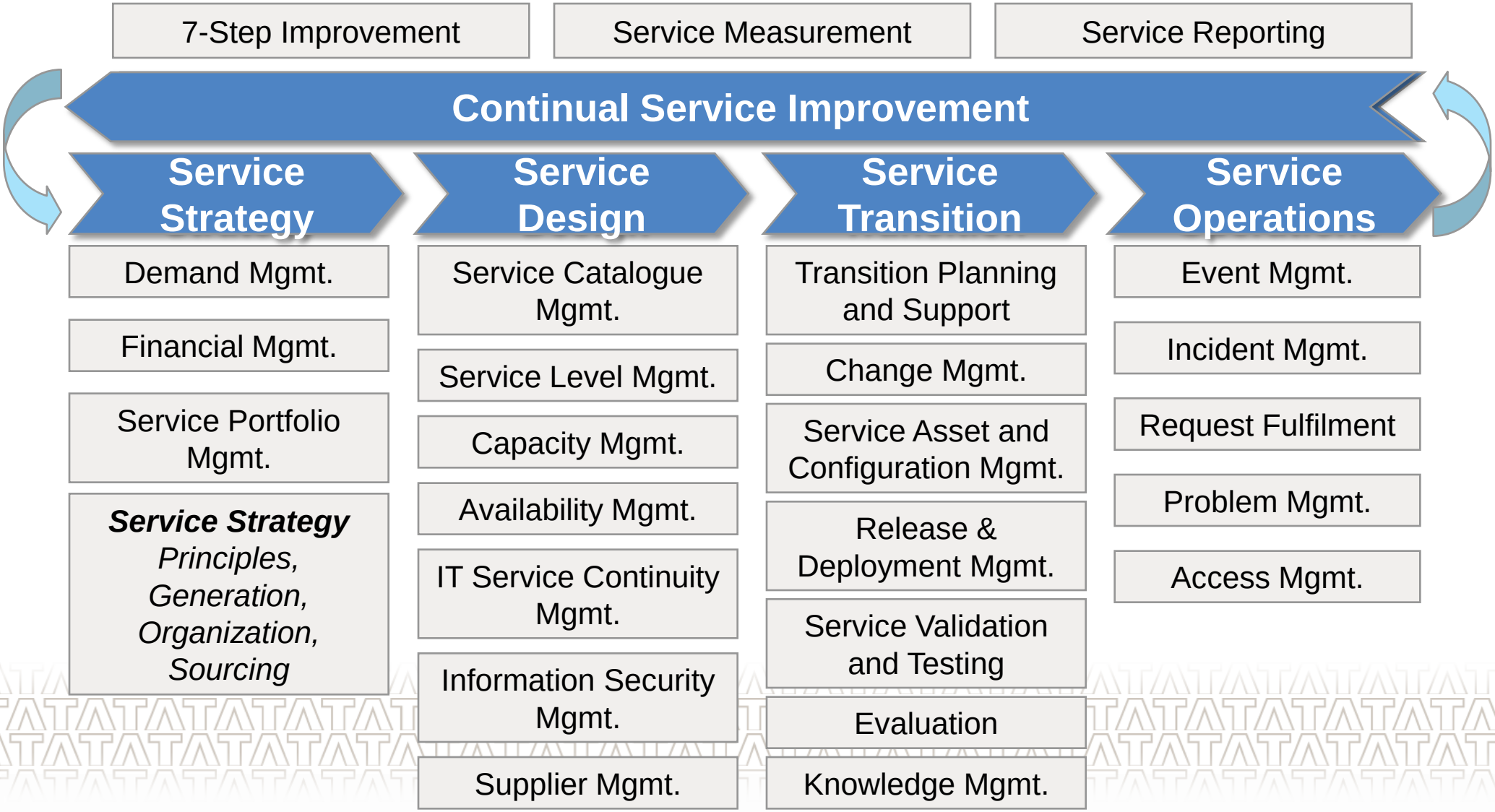
Topics

- **The Players: ITIL and CMMI**
- **The Match**
- **The Winner**

A Brief ITIL Overview

Service Lifecycle approach



A Brief CMMI-SVC Overview

Process Areas in four categories

Process Management	Work Management	Support	Service Establishment and Delivery
Organizational Performance Management	Capacity & Availability Mgmt.	Causal Analysis & Resolution	Incident Resolution & Prevention
Organizational Process Definition	Service Continuity	Configuration Mgmt.	Service Delivery
Organizational Process Focus	Supplier Agreement Mgmt.	Decision Analysis & Resolution	Service System Transition
Organizational Process Performance	Work Monitoring & Control	Measurement & Analysis	Strategic Service Mgmt.
Organizational Training	Work Planning	Process & Product Quality Assurance	Service System Development
	Requirements Mgmt.		
	Risk Mgmt.		
	Quantitative Work Mgmt.		
	Integrated Work Mgmt.		

A Brief Overview

CMMI-SVC has Generic Goals and Practices for Institutionalization

Generic Goals	
GG 1	Achieve Specific Goals
GG 2	Institutionalize a Managed Process
GG 3	Institutionalize a Defined Process
GG 4	Institutionalize a Quantitatively Managed Process
GG 5	Institutionalize an Optimizing Process

Generic means applicable to all Process Areas

Topics

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The Match

High-level differences

	ITIL	CMMI-SVC
Scope	• IT services only	• Any type of service
Model ?	• Collection of good practices	• Well-defined model
Architecture	• 5 Books covering IT Service lifecycle • 4 functions • Roles and responsibilities	• Has 5 Generic Goals with Generic Practices, 24 Process Areas with Specific Goals and Specific Practices
Maturity Model	• Some discussion of Process Maturity Framework	• Embodies Process Maturity Framework
Institutionali-zation	• Not addressed	• Addressed through Generic Goals and Practices
Improvement	• Continual expected; not defined	• Expected, benchmarked through Capability and Maturity Levels
Project Management	• Addresses through reference to other sources: PRINCE 2, PMBOK, etc.	• Explicitly addresses in process areas

The Match

ITIL Service Strategy has no direct equivalent in CMMI-SVC

Service Strategy

Demand Management

Financial Management

Service Portfolio Management

Service Strategy
Principles, Generation, Organization, Sourcing

CMMI-SVC

Strategic Service Mgmt.

The Match

ITIL scores for attention to practical detail

Service Design	CMMI-SVC
Service Catalogue Mgmt.	Strategic Service Mgmt.
Service Level Mgmt.	Service Delivery
Capacity Mgmt.	Capacity & Availability Mgmt.
Availability Mgmt.	
Information Security Mgmt.	Risk Mgmt.
IT Service Continuity Mgmt.	Service Continuity
Supplier Mgmt.	Supplier Agreement Mgmt.

The Match

ITIL holds a slight edge for full-service focus

Service Transition

- Transition Planning & Support
- Release & Deployment Mgmt.
- Change Mgmt.
- *Service Asset & Configuration Mgmt.*
- Service Validation & Testing
- Evaluation
- *Knowledge Mgmt.*

CMMI-SVC

- Service System Transition
- Configuration Mgmt., SG2
- CM SG 1 and 3
- Service System Development
- Decision Analysis & Resolution
- Work Planning
  SP 2.5 Plan Knowledge & Skills

Service Design Principles

The Match

CMMI-SVC catching up, but still running behind

Service Operations

- Request Fulfilment
- Incident Mgmt.
- Problem Mgmt.
- *Event Mgmt.*
- *Access Mgmt.*

CMMI-SVC

- Service Delivery
- Incident Resolution & Prevention
- Causal Analysis & Resolution

The Match

Edge goes to CMMI-SVC for focus on measurement and real improvement

Continual Service Improvement

- 7-Step Improvement
- Service Measurement
- Service Reporting

CMMI-SVC

- Measurement & Analysis
- Organizational Innovation & Deployment
- Organizational Process Performance
- Process & Product Quality Assurance
- Quantitative Work Mgmt.
- GG4 and GG5

The Match

CMMI-SVC scores again for focus on process and work management

Process Management	Work Management
Organizational Process Definition	*Work Monitoring & Control*
Organizational Process Focus	*Work Planning*
Organizational Training	*Requirements Mgmt.*
	Risk Mgmt.
	Integrated Work Mgmt.

ITIL Service Design
Appendix C: Process Framework

ITIL Service Design
Roles: Process Owner

Service Design ***5.1 Requirements Engineering***

The Match

CMMI-SVC leads for its path to process institutionalization

Generic Goal	Progression of Processes
GG 1	Performed process
GG 2	Managed process
GG 3	Defined process
GG 4	Quantitatively managed process
GG 5	Optimizing process

The Match

Advantage ITIL

- **The accepted norm for IT services:** ITIL is widely accepted and adopted
- **Focus is on 'service'** and service lifecycle, an intuitive concept in ITSM.
- **Process content:** Most of the processes in ITIL are written in great detail, covering 'What to do', 'How to do', 'Who will do'
- **Functions** such as Service Desk, Technical Management, IT Operations, Application Management are explcitly covered
- **IT Process Specific, e.g.,**
  - Clear distinction between Incident and Problem
  - Strong Change Management process
  - Focus on Demand, Financial, and Knowledge Management

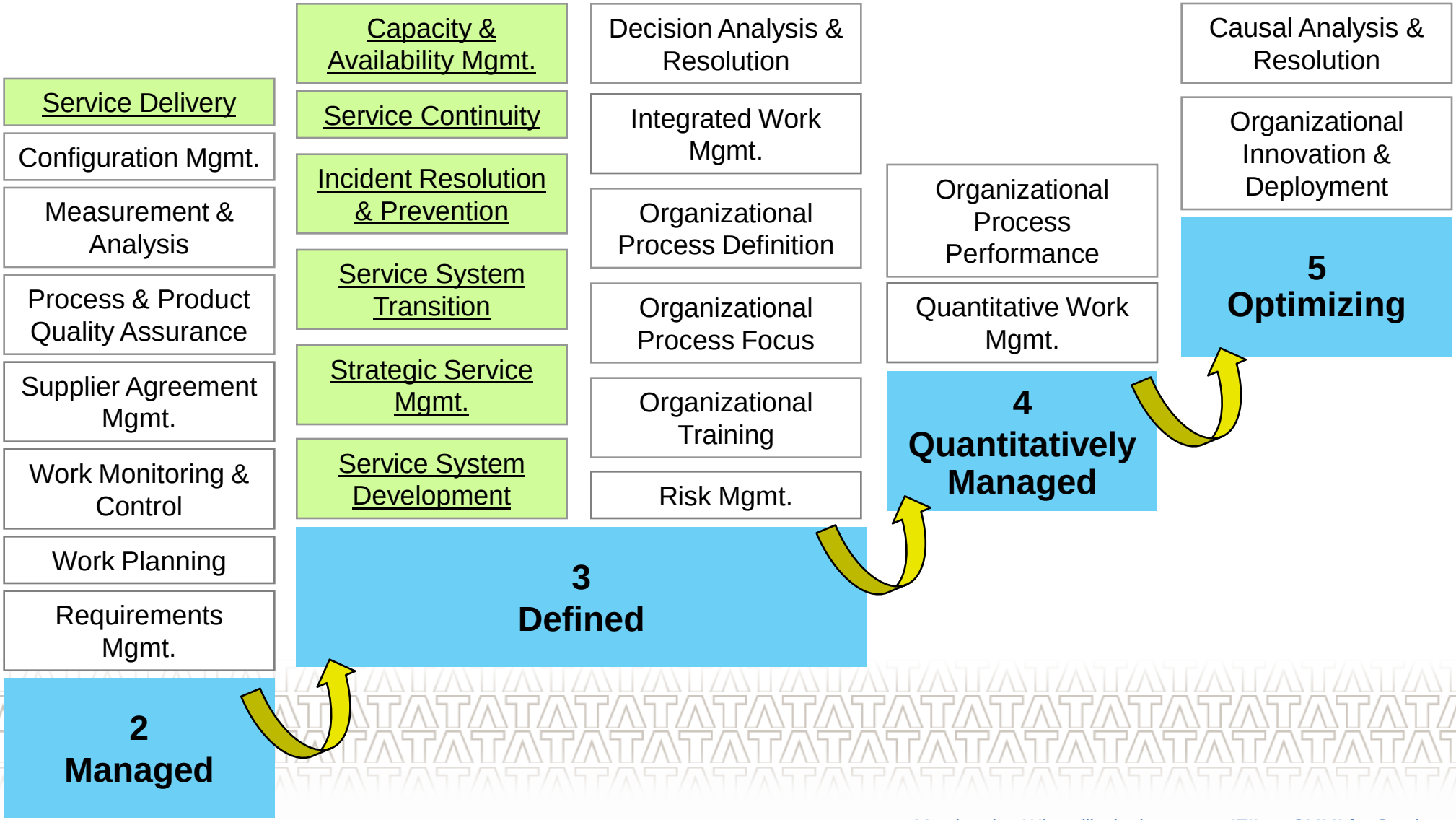
The Match

Advantage CMMI-SVC

- **Wide applicability:** applies to any service; not limited to IT services only
- **Current with DevOps trend:** trend to integrate development (especially with agile methods) and operations seamlessly is ideal for using CMMI-DEV/SVC combinations.
- **Ease of adoption for CMMI-DEV model users:** 70% of the total PAs reused
- **Process management and institutionalization:** through GGs, GPs, and Process Management PAs
- **Focus on work management and strong measurement**
- **Two evolution paths, each with ability to benchmark capability:** dual representations allow flexibility in implementation

The Match

Staged Evolution Path in CMMI-SVC



Topics

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And the winner is…

You

Us

- Complementary models provide leverage
- The CMMI suite can be augmented by ITIL
- An ITIL shop can benchmark with CMMI
- Together they offer a balance of improvement and management focus, detail and service cycle orientation, and effective implementation.
- An organization can begin to move toward full development / service integration using CMMI + ITIL to fulfill business goals

All of Us

Scenario 1

Using ITIL; Adopting CMMI-SVC

1. Make ITIL your base
2. Take
   - Roles, policies, etc., from ITIL
   - Process Management process areas from CMMI-SVC
   - Processes from ITIL SS, SD, SO, ST
   - Project and Work Management process areas from CMMI-SVC / PRINCE2 / PMBOK
3. Adopt from CMMI-SVC
   - Generic Goals and Practices for improvement and evolution
4. Adopt and Adapt from CMMI-SVC
   - Capability levels to measure process capability
   - Maturity levels to measure organization maturity as desired

Scenario 2

Using CMMI-DEV; Adopting CMMI-SVC and/or ITIL

1. Use CMMI-DEV as your base
   - Shift from project management to work management in IT operations
   - Substitute service PAs for engineering PAs or develop a blend that uses both concepts across the development and operations arenas
2. Add
   - Service processes, using ITIL as reference for “How to…”
     - Refer to SS, SO, ST for processes, functions
     - Roles, policies, etc., as needed; can elaborate existing policies or create new ones
3. Extend / expand from CMMI-DEV/SVC
   - Focus on process capability and maturity across development and operations

Scenario 3

New Improvement Effort; Adopting CMMI-SVC and/or ITIL

1. Appraise both development and service functions with CMMI-DEV/SVC
2. Determine, from appraisal results and business drivers, where to start—operations, development, or both—and what areas to focus on.
3. Use ITIL as reference for addressing functions, roles, and detailed activities
4. Use CMMI-DEV/SVC for addressing improvement infrastructure, work and improvement planning and management, and institutionalization
   - Avoid unnecessary duplication by integrating CMMI-DEV with –SVC for institutionalization issues (policy, improvement team, asset library, etc.)
5. Appraise periodically, replan, and go for the next round using both sets of models for guidance

Questions

Acknowledgments

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- Anju Saxena, TCS
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References

- The ITIL Books (v3)
  - ITIL Service Strategy
  - ITIL Service Design
  - ITIL Service Transition
  - ITIL Service Operation
  - ITIL Continual Service Improvement
- CMMI for Service 1.3

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Thank You

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