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

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Topics

• The Players: ITIL and CMMI

• The Match

• The Winner
A Brief ITIL Overview

Service Lifecycle approach

Continual Service Improvement

Service Strategy
- Demand Mgmt.
- Financial Mgmt.
- Service Portfolio Mgmt.
- **Service Strategy Principles, Generation, Organization, Sourcing**

Service Design
- Service Catalogue Mgmt.
- Service Level Mgmt.
- Capacity Mgmt.
- Availability Mgmt.
- IT Service Continuity Mgmt.
- Information Security Mgmt.
- Supplier Mgmt.

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

Service Operations
- Event Mgmt.
- Incident Mgmt.
- Request Fulfilment
- Problem Mgmt.
- Access Mgmt.
# A Brief CMMI-SVC Overview

## Process Areas in four categories

<table>
<thead>
<tr>
<th>Process Management</th>
<th>Work Management</th>
<th>Support</th>
<th>Service Establishment and Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Performance Management</td>
<td>Capacity &amp; Availability Mgmt.</td>
<td>Causal Analysis &amp; Resolution</td>
<td>Incident Resolution &amp; Prevention</td>
</tr>
<tr>
<td>Organizational Process Definition</td>
<td>Service Continuity</td>
<td>Configuration Mgmt.</td>
<td>Service Delivery</td>
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<td>Organizational Process Focus</td>
<td>Supplier Agreement Mgmt.</td>
<td>Decision Analysis &amp; Resolution</td>
<td>Service System Transition</td>
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<td>Organizational Process Performance</td>
<td>Work Monitoring &amp; Control</td>
<td>Measurement &amp; Analysis</td>
<td>Strategic Service Mgmt.</td>
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<td>Organizational Training</td>
<td>Work Planning</td>
<td>Process &amp; Product Quality Assurance</td>
<td>Service System Development</td>
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<td></td>
<td>Requirements Mgmt.</td>
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<tr>
<td></td>
<td>Risk Mgmt.</td>
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<tr>
<td></td>
<td>Quantitative Work Mgmt.</td>
<td></td>
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<tr>
<td></td>
<td>Integrated Work Mgmt.</td>
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</tbody>
</table>
**A Brief Overview**

CMMI-SVC has Generic Goals and Practices for Institutionalization

<table>
<thead>
<tr>
<th>Generic Goals</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GG 1</td>
<td>Achieve Specific Goals</td>
</tr>
<tr>
<td>GG 2</td>
<td>Institutionalize a Managed Process</td>
</tr>
<tr>
<td>GG 3</td>
<td>Institutionalize a Defined Process</td>
</tr>
<tr>
<td>GG 4</td>
<td>Institutionalize a Quantitatively Managed Process</td>
</tr>
<tr>
<td>GG 5</td>
<td>Institutionalize an Optimizing Process</td>
</tr>
</tbody>
</table>

Generic means applicable to all Process Areas
Topics

• The Players: ITIL and CMMI

• The Match

• The Winner
## The Match

### High-level differences

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

**The Match: Who will win the game - ITIL or CMMI for Services**

A White Paper
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

- Service Catalogue Mgmt.
- Service Level Mgmt.
- Capacity Mgmt.
- Availability Mgmt.
- Information Security Mgmt.
- IT Service Continuity Mgmt.
- Supplier Mgmt.

CMMI-SVC

- Strategic Service Mgmt.
- Service Delivery
- Capacity & Availability Mgmt.
- Risk Mgmt.
- Service Continuity
- 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
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
  - Organizational Process Definition
  - Organizational Process Focus
  - Organizational Training

- Work Management
  - Work Monitoring & Control
  - Work Planning
  - 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

<table>
<thead>
<tr>
<th>Generic Goal</th>
<th>Progression of Processes</th>
</tr>
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<tbody>
<tr>
<td>GG 1</td>
<td>Performed process</td>
</tr>
<tr>
<td>GG 2</td>
<td>Managed process</td>
</tr>
<tr>
<td>GG 3</td>
<td>Defined process</td>
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<tr>
<td>GG 4</td>
<td>Quantitatively managed process</td>
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<td>GG 5</td>
<td>Optimizing process</td>
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</table>
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 explicitly 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

- 2 Managed
- 3 Defined
- 4 Quantitatively Managed
- 5 Optimizing

Service Delivery
Configuration Mgmt.
Measurement & Analysis
Process & Product Quality Assurance
Supplier Agreement Mgmt.
Work Monitoring & Control
Work Planning
Requirements Mgmt.

Capacity & Availability Mgmt.
Service Continuity
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Decision Analysis & Resolution
Integrated Work Mgmt.
Organizational Process Definition
Organizational Process Focus
Organizational Training
Risk Mgmt.

Causal Analysis & Resolution
Organizational Innovation & Deployment

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Topics

• The Players: ITIL and CMMI

• The Match

• The Winner
And the winner is…

You

- 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

Us

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
Acknowledgments

Original Research and Concept

- Anju Saxena, TCS
- Monalisa Sircar, TCS
- Rohit Sarin, TCS
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
Thank You

For further details, please contact:

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