Service Level Management Framework

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Agenda

- Service Level Management in a modern IT organisation
- Implement the SLM process into an development model (RWM)
- Service Level Management Decision Support System Architecture
The goals of this Service Level Management Framework

Service Level Management Framework

**Target Audience:** project managers, DW-architects, IT managers, business consultants.

**Aims:** To provide an implementation framework in which to:

- Appreciate the concept of Service Level Management
- Deploy a Service Level Management Decision Support System
Service Level Management (SLM) is a *process* to *define*, *negotiate* and *manage* delivered IT services and service levels, for the customer and the IT supplier.

Definition of service: technology + (HW, SW, communication, people) + organisation of those resources producing and delivering the services.

The SLM process should be implemented into an development model to be manageable.
Service Level Agreements (SLA)

Customer → SLA → Supplier

- Specification
  - offers

- Services

SLA
- manage

Deliverance
- contains

Right service
- Happy Customer
- Right price
- Right time
- Right quality

IT Supporting Functions

Distributed environment
- Unix/NT
- MVS
- AS/400

Resources
- Time/project system
- Infoman/Tivoli

Service
- Network Services
- PBX
Customer Service in IT

Key Transitions Toward Service Management:

- Users --> Customers
- Inward Looking --> Outward Looking
- Technology Focus --> Process Focus
- Fragmented, Silos --> Integrated, end to end
- Reactive --> Proactive

Source: Executive Guide to Service Management, Northeast Consulting
Based on two main documents:

1. *ITIL: IT Infrastructure Library Methodology*

The role of ITIL in the SLMF:
- Provides the basic foundational tools for defining service levels
- Provides a standardised terminology for the description of Service Management processes.
2. The SAS Rapid Warehousing Methodology (RWM)

The role of RWM in the SLMF:

- Outlines a plan for implementing the SLM process
- Business focus
- Detailed project definition and requirements gathering Workshops
- Use of Rapid Application Development (RAD) approaches
SAS Rapid Warehousing Methodology

Assessment: Identify the organisation’s readiness for undertaking a data warehouse project.

Requirements: Initiate the project, gather the business requirements, and define the system acceptance criteria.

Design: Analyse and design the warehouse system architecture. Confirm the acceptance test criteria.

Construction: Develop, acceptance test, and hand over the warehouse and exploitation application.

Deployment: Roll out to the production environment and ensure knowledge transfer and user access throughout the organisation.

Review: Review the project development process, review deployment and impacts on the business.

On-going Administration & Maintenance

Evolving, Integrated

Specific Build, Focussed

High Level, Strategic

Assessment

Requirements

Review

Design

Construction

Deployment

Development & Testing

SAS Institute

Rapid Warehousing
Implementation of a Service Level Management DSS

Issues:

- Project Management
- Resource management (Project Team and support)
- Phases
- Quality management
- Data management
- Role of hardware and software
Suggested tools to use:

- **Process Diagrams:**
  Enables the implementors to define & develop SLA

- **Service Level Management Readiness Questionnaire:**
  Enables the implementor to assess the status of the organisations readiness to embark on an SLM DSS project

- **Service Level Management Requirements Questionnaire:**
  Enables implementor to assess the requirements for an organisations SLM DSS
• Define the Services
• Develop workload profiles
• Negotiate these services and levels with customers
• Realising the organisational goals
• Set up the Service levels
• Drawing up the agreement(s)
Example SLA

<table>
<thead>
<tr>
<th>Organisation</th>
<th>ABC Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Ayres Rock, Australia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Problem Request Service</th>
<th>Customer Service</th>
<th>Service Type</th>
<th>Sub</th>
<th>Physical Infrastructure</th>
<th>Operating System</th>
<th>Applications</th>
<th>Audited Service</th>
<th>Helpdesk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Sub Type Category</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrative</td>
<td>Helpdesk hardware, systems and personnel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Default PUS Settings</th>
<th>Resolution Service Level (hrs)</th>
<th>Availability Service Level (hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority</td>
<td>1</td>
<td>External</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within 2 hours</td>
</tr>
<tr>
<td>Urgency</td>
<td>2</td>
<td>Internal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within 1 hour</td>
</tr>
<tr>
<td>Severity</td>
<td>1</td>
<td>Monitoring Tool</td>
</tr>
<tr>
<td>Reporting Technique</td>
<td>Call Records (AHD)</td>
<td>Analysis of Request</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management System by SAS</td>
</tr>
<tr>
<td>Responsible Person</td>
<td>RBU Customer Admin</td>
<td>Responsible Person</td>
</tr>
<tr>
<td>Calendar Sensitivity</td>
<td></td>
<td>Calendar Sensitivity</td>
</tr>
</tbody>
</table>
## Service Level Management Readiness Questionnaire

These questions provide specific information about service level agreements (whether or not these are currently used). This information is a good indication of the required complexity and sophistication of the proposed solution.

1. What type of organization is the company?  
   - **IT Service provider**
   - Manages NW/OS Infrastructure
   - Customer, Problem & Request services

2. What is the role of IT within the company?  
   - **Internal customers:**
     - Account managers, Field service managers
   - **External customers:**
     - Banks, Retail, Manufacturing...

3. What kind of services does IT provide to the business?  

4. Who are the principal customers of IT?
Tools - The SLM Requirements
Questionnaires

Service Level Management Requirements Questionnaire

IDENTIFY BUSINESS REQUIREMENTS

1. What critical services, processes and applications need to be defined in the service level agreement?

   SERVICES: Customer Services
   PROCESSES: Helpdesk processes
   APPLICATIONS: Various Banking Applications, Warehouse systems,

2. Identify the correlation between each service and the business strategy for the customer

<table>
<thead>
<tr>
<th>Service</th>
<th>Describe the service and its importance for the customer and supplier.</th>
<th>What is the criterion to use for each service</th>
</tr>
</thead>
</table>
| Customer Services| 2 categories: helpdesk services, Security services                    | Availability,
                                                             Telephone answering, Politeness                |
                                                             .........................
SLM DSS Objectives

Measure the performance of the SLA against ‘actual’ events

*We need a Service Level Agreement plus ‘real event’ data to measure performance*

Reporting interface

- Customer
- IT supplier

*A Reporting interface is required to suit both IT Supplier and the customer*
Service Level Management DSS

- Role of SAS Software
- Product specific roles (IT Service Vision, Enterprise Reporter, IT Charge Manager)
- Data Modeling based on RWM
- Architecture considerations:
  - Data management
  - Data warehouse environment
  - Data flow
  - Reporting
Service Level Management DSS

Operational data
- Server
- Inventory
- Networks
- Applications

IT administration
- Performance Throughput Business
- Comparison tables
- Exceptions Capacity Helpdesk
- Metadata

Service level information mart (SLIM)
- Service level management data models
- Service level management tables
- Service level management logic
- Metadata

Transposition
- Service level agreement logic

IT Service Vision reporting
- Capacity Performance Exceptions

SLM subject based IT Service Vision data warehouse (MDDB based....)

Measurement Data for SLA

ITSV Integration against datasources

SAS/IntrNet based reporting

IT Service Vision data warehouse
Questions?