IT Service Management

ITSM/ ITIL Best Practice Process Overview Primer

A Policy Based, Service Provider Approach

Prepared by: Rick Leopoldi
February 13, 2003
Overview
ITSM employs ITIL documented best practices and in most cases extends beyond into additional areas such as enhanced processes and implementation to provide additional value-added functionality. At present, ITSM methods have evolved to include specific ways to enable and optimize assessment, planning, and implementation of ITIL best practices.

Background
One primary origin of ITSM can be found in the systems management services and functions historically done in large scale mainframe environments. Through constant refinement over the years these services and functions attained a high level of maturity. Problem and change management, configuration management, capacity planning, performance management, disaster recovery, availability management, etc. are some examples.

When examining the differences between mainframe systems management services and ITSM, it becomes apparent that when ITSM is applied in today's IT environment and across the enterprise the benefits and sophistication of its best practices are highlighted and exemplified. Where mainframe environments are typically centralized, ITSM is applicable to both distributed and centralized environments. In addition, where mainframe services are typically stand-alone and technology based, ITSM provides for integrated services that are process based with a focus on satisfying business requirements.

Although managing the technology itself is a necessary component of most ITSM solutions, it is not a primary focus. Instead ITSM addresses the need to align the delivery of IT services closely with the needs of the business. This transformation of a traditional "business - IT paradigm" can be depicted by some of the following attributes:

<table>
<thead>
<tr>
<th>Traditional I/T</th>
<th>becomes</th>
<th>ITSM Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology focus</td>
<td>➔</td>
<td>Process focus</td>
</tr>
<tr>
<td>&quot;Fire-fighting&quot;</td>
<td>➔</td>
<td>Preventative</td>
</tr>
<tr>
<td>Reactive</td>
<td>➔</td>
<td>Proactive</td>
</tr>
<tr>
<td>Users</td>
<td>➔</td>
<td>Customers</td>
</tr>
<tr>
<td>Centralized, done in-house</td>
<td>➔</td>
<td>Distributed, sourced</td>
</tr>
<tr>
<td>Isolated, silos</td>
<td>➔</td>
<td>Integrated, enterprise-wide</td>
</tr>
<tr>
<td>&quot;One off,&quot; adhoc</td>
<td>➔</td>
<td>Repeatable, accountable</td>
</tr>
<tr>
<td>Informal processes</td>
<td>➔</td>
<td>Formal best practices</td>
</tr>
<tr>
<td>IT internal perspective</td>
<td>➔</td>
<td>Business perspective</td>
</tr>
<tr>
<td>Operational specific</td>
<td>➔</td>
<td>Service orientation</td>
</tr>
</tbody>
</table>
Business objectives, service level objectives, technology infrastructure and other areas play critical roles in any ITSM method paradigm.

**ITSM General Methodology**

ITSM and ITIL upon which it is based are both an integrated, process based, set of best practices to manage IT services. Whereas ITIL defines and documents the best practices, ITSM employs them to meet unique customer requirements and priorities.

**A Roadmap to Policy Based IT Service Management**

Initially, an Organization Strategy and Requirements Assessment is done to determine what are the organization requirements both now and in the future. This initial assessment determines the current, existing IT infrastructure, processes, and services. It also provides an understanding of a customer's desired future state of IT and the services that it needs to provide to achieve it across the enterprise.

The details of this approach are depicted in the following diagram:
Requirements Definition Process

The process focus areas within the organization and IT infrastructure used to determine associated requirements and metrics are:

- **Business** to determine what are the requirements driven by the organization needs
- **Service** to determine what services need to be provided to satisfy those requirements
- **Operational** to determine what IT infrastructure is needed to support the services
- **Technology** to determine what technology is needed with the IT infrastructure

The following strategy and planning processes take place within the Definition:

- **Business Strategy** - the organizations business strategy, how are the current business requirements are linked to technology infrastructure, what are the processes that do so
- **Service Planning** - how does IT provide services internally and externally for the organization, what are the processes for doing so, what are the Customer Relationship Management processes
- **Organizational Planning** - how does the organization adapt to internal and external business factors that impact the IT infrastructure, what is the impact of corporate culture on IT, how is IT integrated within the organization
- **Technology Planning** - how does IT plan its technology infrastructure internally and externally around the organizations business requirements and model

Once the Requirements Definition is accomplished and Support Services is presented with delivering, managing, and supporting the IT services, ITIL best practices are employed to develop the necessary IT Services Support and Service Delivery processes. Together this provides an enterprise wide ITSM solution based on ITIL best practices that are tailored to the organization's specific and unique business and IT infrastructure requirements.

IT Service Management Processes

ITSM methodology encompasses the following areas (the basic areas of ITIL):

Service Support Processes

- **Incident Management** - the day-to-day process that restores normal acceptable service with a minimal impact on business
• **Change Management** - standard methods and procedures for effective managing of all changes
• **Problem Management** - the diagnosis of the root causes of incidents in an effort to proactively eliminate and manage them
• **Release Management** - testing, verification, and release of changes to the IT environment
• **Configuration Management** - physical and logical perspective of the IT infrastructure and the IT services being provided
• **Performance Management** - the day-to-day monitoring and reporting of resource performance and utilization
• **Service Continuity** - managing an organization's capability to provide the necessary level of service following an interruption of service
• **Service Desk (Function)** - a function not a process, this provides a central point of contact between users and IT

**Service Delivery Process**
• **Service Level Management** - maintain and improve the level of service to the organization
• **Availability Management** - optimize IT infrastructure capabilities, services, and support to minimize service outages and provide sustained levels of service to meet business requirements
• **Capacity Management** - enables an organization to tactically manage resources and strategically plan for future resource requirements
• **Financial Management** - managing the costs associated with providing the organization with the resources needed to meet requirements

Depending on the ITSM consulting methodology that is employed, additional value-added areas can be included. These areas could be separate but dependent on those listed above, such as **Print and Output Management**, or they could be sub-processes of those listed above, such as **IT Strategy Development**.

**ITSM General Implementation**
A typical high-level overview of an ITSM implementation *structure* encompasses the following:
• Determine the current, existing IT infrastructure, processes, and services
• Develop some desired future state of IT and the services that it needs to provide
• Architect a "roadmap" that depicts how to get to the desired state from the current state
• Determine the steps needed to execute the "roadmap"
The ITSM implementation *framework* for each of the IT Service Delivery and Service Management areas listed above is a 5-phase model:

- **Assessment** - determine the current state and begin to collect and understand the metrics for the future desired state
- **Architect and Design** - develop a mature design for the future desired state
- **Planning** - develop those plans necessary to achieve the future desired state in a phased evolutionary fashion
- **Implementation** - implement and deploy the plans within IT and across the enterprise to achieve the future desired state
- **Support** - manage, maintain, and improve the future desired state being able to adaptively integrate enhancements as needed or required

Within this *framework*, effectively managing IT as an enterprise wide, service oriented entity typically comprises one or more of the following separate and distinct *perspectives*:

- **People** - quantity and quality of expertise and knowledge
- **Process** - IT and organization specific practices, procedures, guidelines, etc. and the level of complexity and sophistication of them
- **Technology** - the total logical and physical technology infrastructure consisting of hardware, software, communication networks, applications, DBMS, etc.
- **Organization** - internal and external business factors that affect IT, how IT and the organization interface, what is the organization's "corporate culture", what are the organization's direction and how does that affect IT
- **Integration** - how is IT integrated within the business model, what services does IT provide, how are the services provided, and how are best practices employed within IT