IT Services Management
Service Brief

Configuration and Change Management

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Introduction

A primary focus of IT Service Management (ITSM) is the application of IT best practices (founded in ITIL) to enable IT to be a more effective service provider across the enterprise to satisfy the organization’s business requirements.

Although managing the IT infrastructure itself is a necessary component of most ITSM solutions, it is not the primary focus. Instead ITSM addresses the need to align the delivery of IT services closely with the needs of the business. This involves a transformation of the traditional Business - IT paradigm into one that is process-oriented, proactive, and enterprise wide. This service provider paradigm encompasses IT best practices using the perspectives of people, process, technology, organization, and integration.

Within this ITSM service provider paradigm there are several focus areas such as business objectives, service level objectives, and technology infrastructure that along with other areas play critical roles in the ITSM methods and best practices.

Configuration management physical and logical perspective of IT infrastructure and the IT services being provided. Change management standard methods and procedures for effective managing of all changes. Configuration and Change management are part of the SolutionMethod™ IT Service Support Processes.

SolutionMethod™ - A Roadmap to ITSM

SolutionMethod™ describes a service methodology framework for ITSM that is based on ITIL best practices. The focus of SolutionMethod™ is to enable service, its delivery and management. It is an iterative methodology that has multiple entry points but most typically begins with business end-users/Customer requirements and concludes with a qualification and quantification of services provided to satisfy those requirements both tactically and strategically.

This evolutionary approach enables organizations the ability to adaptively integrate best practices based on their specific maturity level and priorities. SolutionMethod™ employs a phased approach to ITSM that consists of assessment, architecture and design, planning, implementation, and support. With each phase 5 perspectives of people, process, technology, organization, and integration are evaluated.
The high level goal for ITSM *structure* encompasses the following:
1) Determine the current, existing IT infrastructure, processes, and services
2) Develop a desired future state of IT and the services it needs to provide
3) Architect a "roadmap" that depicts how to get to the desired state from the current state
4) Determine the steps needed to execute the "roadmap"

The *SolutionMethod™ ITSM framework* for each of the ITIL Service Delivery and Service Management areas 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 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, SolutionMethod™ effectively enables managing IT, as an enterprise wide, service oriented entity comprised of 5 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** - total logical and physical technology infrastructure that consists 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 organizations "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

**Scope and Objectives**

The overall goal of this service is to assess and plan for tactical and strategic technology infrastructure in the ITSM Configuration and Change management areas within the 5 perspectives.

The objective of the Configuration and Change Management process is to provide the necessary control and management of the production environment. Specifically, implementing Configuration and Change Management will:

- Develop an initial Configuration Profile of the logical and physical IT infrastructure across the 5 perspectives of people, process, technology, organization, and integration.
- Set up a Configuration Management function to identify and register key production components. Develop a procedure for tracking the “state changes” of these components and their relationship to IT users.
- Develop a consistent quality of change system that will assess risks, prioritize and authorize changes, plan and schedule implementation, and perform change back-out if required.
- Develop communication and linkages to other IT Service Delivery and Service Support processes. Provide process metrics and an audit trail of all changes and configurations.

The focus of the Change and Configuration Management service is to directly impact a customer’s business goal of having a highly available computing environment. Significant downtime is caused by unauthorized change to the
environment. The resulting attempts at repair are made more difficult and time-consuming without a detailed understanding of the current state of environmental components. For these reasons, Configuration and Change Management fully support this goal by bringing the computing environment to a known baseline state (Configuration Management), and by formalizing the manner in which changes are made to the environment (Change Management). Business cost savings occur from an increased amount of application and system availability.

The final outcome of this service is to assess and plan a customer unique set of best practices for configuration and change management processes that includes the appropriate synergy between them. This includes the dependencies and linkages of the configuration and management of all changes made to it with other processes like availability, service level management, incident and problem management, and Service Desk. This will provide the customer with a model to be used for developing a tactical and strategic position and direction for ITSM best practices.
Approach

The SolutionMethod™ approach depicted below is used for this Configuration and Change Management service.

Experience has shown that typically, Configuration and Change Management processes are best implemented initially as a manual system. Once the processes have been in practice for some appropriate period, then the processes can take advantage of automation options of Change assessment and tracking and automated review and registration of Configuration Data Base (CMDB) items (CI’s).

The following is a high-level list of tasks for this service:

1) Assemble a project team that includes the appropriate skill sets necessary to complete a successful project engagement

2) Conduct a project kick-off meeting between the consulting team and a comparable organization team. At this meeting an initial project plan
will be developed and refined. This plan will be used to document, plan, and track the activities and results of the engagement.

3) Gather and assemble all appropriate information about the customer’s current configuration and change management processes, their inter-relationship and dependencies. This includes the environment, the objectives, requirements, and expectations for a desired future state. This information is supplied from existing documentation, interviews with the required organization personnel, and observation.

4) Analyze the information gathered as it relates to findings in the areas of IT service management and the processes that support it. This analysis will focus on organization’s people, processes, technology, organization, and integration perspectives both in a tactical and strategic perspective. It will specifically focus on satisfying tactical requirements and strategic positioning to include full ITSM positioning.

5) Analyze the current Configuration and Change Management process that includes but is not limited to:
   - Define the processes and necessary activities for Configuration and Change Management
   - Develop any necessary models, policies, and templates needed for a Configuration Management Data Base and items (CI's) that it will contain.
   - Define the process roles and responsibilities (For example, a Change Advisory Board or CAB).
   - Define the interfaces between Configuration and Change Management and synergy within ITSM Service Delivery and Service Support processes within IT and the rest of the organization.

6) Develop a list that includes prioritized tactical recommendations for configuration and change management in areas of IT Infrastructure and the processes that support it.

7) Develop a solution model that focuses on strategic IT infrastructure and processes based on an alignment with tactical recommendations, ITSM requirements, and strategic organizational goals.

8) Assess the organization training requirements for configuration and change management areas.

9) Develop a training plan for the organization team.

10) Develop an analysis report and associated customer management presentation that includes prioritized tactical recommendations for technology infrastructure and the ITSM processes that support it. These processes will be customer unique best practices for configuration and change management.

11) Develop an outline for recommended strategic IT infrastructure plan that includes “next steps” to meet the organization’s full ITSM
requirements. This includes a size and scope for the effort and anticipated deliverables.

**Deliverables**

1) A report documenting the configuration and change management analysis findings within the customer’s IT Infrastructure at an appropriately high level that includes:
   - The organization’s current configuration and the existing processes to manage changes to it
   - The organization’s requirements and expectations for a desired future state
   - A gap analysis of the current state and the desired future state
   - The alternatives for achieving the desired state
   - A list of tactical recommendations, in customer specified priority order, for the steps to position the current state of the IT infrastructure to meet strategic ITSM requirements. This will encompass the perspectives of people, process, technology, organization, and integration

2) An initial IT infrastructure strategic plan for configuration and change management to achieve the desired state that encompasses the perspectives of people, process, technology, organization, and integration

3) A senior management level presentation summarizing findings, expectations, recommendations, and future ITSM direction.