IT Services Management
Service Brief

Service Continuity
(Disaster Recovery Planning)

Prepared by:
Rick Leopoldi
May 25, 2002

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.

Service Continuity (Disaster Recovery Planning) is managing an organization's capability to provide the necessary level of service following an interruption of service. One of the initial, critical sub-process functions performed when doing Service Continuity is a business impact analysis. Both of these require extensive fact-finding and analytical activities to help ensure that the risk of making arbitrary and possibly incorrect decisions about the importance and recovery sequence of business functions and automated application systems is minimized. Service Continuity (including the Business Impact Analysis sub-process) 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

People • Process • Technology
Organization • Integration

assessment, architecture and design, planning, implementation, and support. With each phase 5 perspectives of people, process, technology, organization, and integration are evaluated.
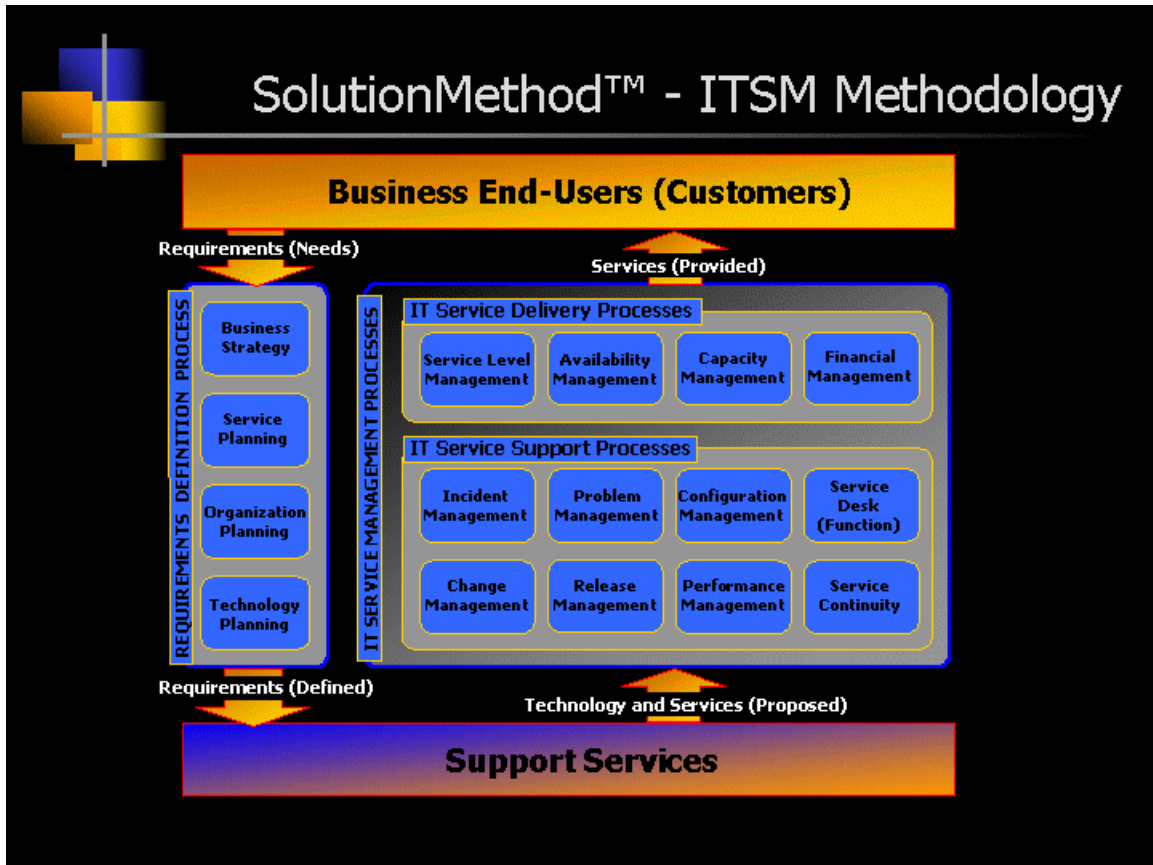
The high level goal for ITSM *structure* encompasses the following:
1) Determine the current, existing IT infrastructure, processes, and services
2) Develop a desired future state of IT and the services it needs to provide
3) Architect a "roadmap" that depicts how to get to the desired state from the 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

People • Process • Technology
Organization • Integration

- **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

Overview Service Continuity

In today's world, where information is the heart of any organization, companies need to guarantee the successful recovery of computer resources and the continued processing of critical data even in the face of disasters.

Customers having recognized that need, wish to determine the major systems and functions that must be recovered should a prolonged and indeterminate loss of the primary data center occur. In addition, they wished to know the operating, financial, legal, and regulatory effects of such an interruption and how to reduce those possible adverse effects.

Typically, a customer's IT department wish to contract an outside consulting organization that specializes in Service Continuity. The first step is to conduct a business impact analysis to obtain the required information and to recommend additional required action items.

A business impact analysis requires extensive fact-finding and analytical activities to help ensure that the risk of making arbitrary and possibly incorrect decisions about the importance and recovery sequence of business functions and automated application systems is minimized.

People • Process • Technology
Organization • Integration

Within the scope of a business impact analysis, the existing information technology infrastructure as well as current available and proven technology is reviewed and evaluated. The applications and the associated business areas that they support are also evaluated for criticality of processing and importance to the business process of the Customer.

A list of recommendations based on the analysis is used to arrive at a workable solution which when implemented will support a selected Service Continuity strategy in a cost-effective, yet efficient manner.

Background

This section summarizes the understanding and appreciation of the customer's current environment.

Customers typically exploit multiple platforms that comprise mainframe, server, and workstation platforms. The majority of their critical workload can be executed on one or more of these platforms. It is possible that Customers are also in the process of converting their applications from one platform to another. Possible delays are normal and anticipated for these types of conversions.

1) Requirements

The ultimate goal of Customer is to develop a disaster recovery plan, which will protect their critical workload in case of emergencies. Before implementing a disaster recovery plan, a business impact analysis is usually done with the objective to provide information on:

- The criticality of application systems in relationship with the business function they support,
- The platform on which application systems are currently executing
- A risk analysis of the business impact if application systems are not available due to emergencies.

In addition, alternative recovery strategies are developed based on the business impact analysis together with possible information technology infrastructure alternatives for disaster recovery that will implement those recovery strategies.

2) Methodology

The following is a high level list of tasks that detail the Service Continuity methodology:

People • Process • Technology
Organization • Integration

- Identify the major business areas within Customer as well as the associated application areas and programs that support them
- Analyze and quantify the criticality of those business areas as it relates to business impact
- Assess of the business impact on these critical systems and business functions
- Determine high level recommendations for possible recovery scenarios for the existing platforms and provide the parameters for the contemplated Service Continuity effort which evolve from the selected recovery strategy and information technology infrastructure for disaster recovery

3) Summary

- Customer will need disaster recovery capability for all their platforms; mainframe, server, and workstation, regardless of where they reside
- The findings of a business impact analysis provides the decision criteria for the preferred solution in terms of risk analysis and should be utilized to enable any subsequent Service Continuity implementation.

Scope and Objectives

The overall goal of this service is to assess and plan for tactical and strategic technology infrastructure in the ITSM Service Continuity area within the 5 perspectives.

The following scope and objectives encompass the Service Continuity service:

- Assist Customer's IT department in reviewing their computer applications to determine criticality and recovery sequence as part of a business impact analysis effort.
- Conduct interviews with data processing personnel and key users, or their representatives, of the critical application systems to obtain required information.
- Assist in establishing a high-level Service Continuity strategy that will meet Customer's disaster recovery requirements and exploit their information technology infrastructure.
- Review and evaluate Customer's existing information technology infrastructure as well as current available and proven technology.
- Provide recommendations to align the information technology infrastructure to support the contemplated Service Continuity strategy in a cost-effective manner.

People • Process • Technology
Organization • Integration

- Produce an initial Service Continuity plan and a written business impact analysis with recommendations.

Approach

The SolutionMethod™ approach depicted below is used for this Service Continuity.
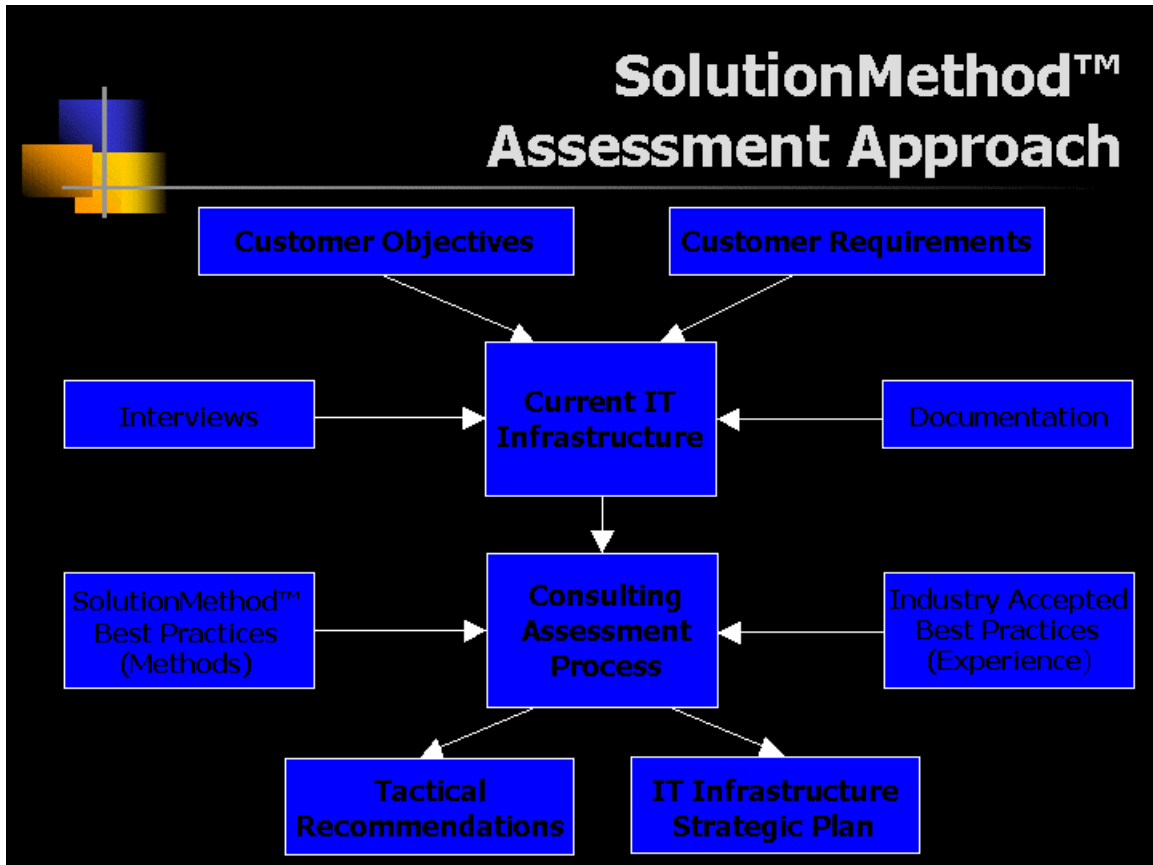
This consulting assignment is managed by a project manager and conducted by experienced consultants. Specialist expertise will be allocated to the project as required.

The approach consists of primarily understanding the Customer environment while educating their appropriate personnel in disaster recovery planning and the business impact analysis portion of that effort.
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

People • Process • Technology
Organization • Integration

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) Customer applications development personnel are interviewed and complete application system questionnaires, in addition to, interviews and questionnaires with key users or their representatives of the critical systems and the completion of the business impact analysis templates.

4) Through information obtained from Customer personnel and interviews with high-level key users of the critical systems, or their representatives, the exposures of a prolonged and indeterminate loss of the data center are documented and recommendations are made and presented.

5) During this task the application system questionnaires are completed and criticality definitions are determined that reflect the business priorities of the application systems.

6) A criticality matrix and recovery sequence is developed based on the completed application system questionnaires. The criticality classifications and recovery sequence of application systems are developed and will be presented to the appropriate Customer personnel for confirmation in a criticality planning session for subsequent approval by management.

7) Based on a review and evaluation of the existing information technology infrastructure and connectivity architecture, the recommendations are developed to assist in positioning the information technology infrastructure to support the strategic Service Continuity plan.

8) Assess the organization training requirements for Service Continuity 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 Service Continuity based on the Business Impact Analysis.

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

Deliverables

1) Business Impact analysis templates that detail the critical application definitions that reflect the business priorities of the application systems
2) A criticality matrix and recovery sequence based on the analysis templates.
3) A presentation to the appropriate Customer personnel for confirmation in a criticality planning session for subsequent approval by management
4) A report documenting the business impact analysis findings within the customer's IT Infrastructure at an appropriately high level that includes:
   - The organization's current Service Continuity plan(s) and processes.
   - 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
5) An initial IT infrastructure strategic plan for Service Continuity to achieve the desired state that encompasses the perspectives of people, process, technology, organization, and integration

People • Process • Technology
Organization • Integration