



**ITIL V3 AND THE SERVICE LIFECYCLE**  
PART I – THE MISSING COMPONENT

**PLANVIEW INC.**

**BACKGROUND**

IT departments continually have tremendous demands placed on them to manage new initiatives, projects, incidents, changes, and service requests. At the same time, their people and financial resources are stretched, and are often under scrutiny. Businesses must think and operate globally, there are escalating pressures to conform to government regulations and industry standards, and technology is increasingly complex. IT organizations must go beyond reacting to the latest crises; they must consider their strategic role in the organization and view IT holistically as a valued business service. How do they do that? One way is by planning services and the strategy behind them, building the services, deploying them, operating them, and continually improving them. These make up the steps covered in the ITIL® V3 Service Lifecycle. ITIL offers guidelines on deciding what services to provide and how to manage them and helps IT organizations efficiently deliver value (services).

What is missing are structured business processes that align to a portfolio-driven lifecycle, making it possible for knowledge-driven organizations to drive change and realize higher performance and innovation. These processes are part of a performance management framework that closely aligns with the ITIL framework and lifecycle in flow and functionality. This will be explored more in the second paper in this series entitled "Part II – ITIL V3 and the Service Lifecycle: The Missing Component Delivered."

IT Service Portfolio Management should be incorporated into an overall business management strategy. This paper examines ITIL V3, the Service Lifecycle, the benefits ITIL provides, ways to successfully implement ITIL V3, and what is needed to complete the Service Lifecycle—an integrated IT management framework that includes project portfolio management.

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## INTRODUCTION

Service Level Management has been focused on IT’s view of the world and has had little relevance to business objectives. The expectations of business users have matured and they now demand consistent service guarantees for key applications and services across the entire enterprise. To do this, business processes must be mapped to IT services and the underlying infrastructure components and IT has to prove its value to the business. Figure 1 shows how there is an upward progression of the services perspective from a focus on Infrastructure Management to Business Service Management.

	Typical metrics	Reporting line
<b>Business service management</b>	Time to process completion Processing backlog volume State of business service Business transaction volume	CIO/service owners reporting to LOB executives
<b>IT service management</b>	Service availability Incident closure rate Frequency of changes	CIO reporting to CFO
<b>Infrastructure management</b>	Server availability CPU utilization Disk space	IT operations reporting to CIO

Figure 1. The Services Perspective Has Now Changed

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There are several frameworks available today to help IT with service management, application development, and project and program management. These include Control Objectives for Information and Related Technology (CobIT™), Capability Maturity Model® Integration (CMMI®), PMBoK® (Project Management Body of Knowledge), and ITIL (Information Technology Infrastructure Library).

ITIL has relationships to projects and ties in with portfolio management, which is broadening its perspective to include services. Per Forrester Research, ITIL now has a "Business Service Management flavor." In a September 27, 2004 article, *Network World* called Business Service Management (BSM) "IT’s higher calling." The elevation of IT functions to strategic business services increases the value that IT delivers to an organization. Because of all this, ITIL is taking on a bigger presence and influencing other frameworks, all of which can work together to enable the end-to-end management of the IT organization.

## ITIL BACKGROUND

With Systems Management concepts from IBM, the United Kingdom Government’s Central Computer and Telecommunications Agency (CCTA) project—now the Office of Government Commerce (OGC), an Office of the UK’s Treasury—was given the mission in the 1980s to develop a framework for efficient and financially responsible use of IT resources within the British government and the private sector. ITIL was developed, but was not widely adopted until the mid-1990s as an international standard for IT Service Management. ITIL is supported by an international user group called the IT Service Management Forum International (itSMFI).

ITIL began as a collection of books, or volumes. Each book covers specific practices for IT Service Management and groups related process guidelines into the different aspects of IT management, applications, and services. ITIL V1 had 34 volumes, ITIL V2 had 9, and ITIL V3—published in June, 2007—has 5 core volumes. The evolution of ITIL has been to make it more accessible, more affordable, more relevant, and to provide increasingly common language for talking about IT services.



Figure 2. ITIL V2 and ITIL V3 Additions

ITIL V2, represented in the light green in Figure 2, took a process-centric view, focused on getting services in place faster or doing work-arounds, but did not describe the design, strategy behind, or continual improvement of services and the Service Lifecycle. Version 3, shown in the dark green boxes in Figure 2, is evolutionary. It fills those gaps and adds focus on ensuring that the right services are being offered. Its guidance aligns to the full lifecycle of a service and creating a framework that helps to manage services at various life stages.

Pink Elephant, a leader in IT management best practices, and BMC recently surveyed IT executives, directors, managers, and consultants from the Americas, Europe, Middle East, Africa, and Asia Pacific. They found that among IT strategies being implemented, 71% are implementing ITIL. U.S. membership in the IT Service Management Forum nearly tripled in the past three years. Forrester Research found that 80% of the billion-dollar companies will apply ITIL in 2008, and that although there is considerable overhead with implementing ITIL, there is no company too small to need the benefits ITIL offers.

See the Appendix for background information on the ITIL V3 framework.

### BEGINNING TO IMPLEMENT ITIL

Perhaps your CIO has mandated the use of ITIL. Maybe you are an IT Service Provider and your customers need to demonstrate Sarbanes-Oxley compliance, which ITIL can ensure by documenting changes, etc. So how do you begin with ITIL?

It is not advisable to try and implement all of ITIL at once; in fact, most companies just use the parts they want to use. You don't have to start with Service Strategy. Start small and add on what you need. Begin by looking at where your biggest pain is and then demonstrate an important early success. Pink Elephant and BMC found in their previously cited survey that the most common ITIL process implemented first is Incident Management, followed by Service Desk and Change Management. Internal and external customers interact daily at these levels and these processes have a lot of visibility within the business.

In the Pink Elephant/BMC Survey, respondents said that the biggest challenges to ITIL implementation are cultural. Forrester Research says that it is essential to include business partners in the project team and start from the top-down. By having top management's buy-in, the whole business has a mandate to adopt ITIL and to put in place the necessary organizational changes to be successful.

Pink Elephant suggests that you begin by providing ITIL education for your employees. After training, they then become involved in the planning and strategy development. Next there is process design and implementation, followed by tool selection and implementation.

So what are the benefits of implementing ITIL? Let's take a look.

### ITIL V3 SERVICE LIFECYCLE BENEFITS

There are many benefits to using ITIL V3. The respondents in the Pink Elephant/BMC survey said that the primary benefits from ITIL implementations are process standardization and efficiency. With the introduction of the service lifecycle in ITIL V3, business value-based reports and metrics are a big part of ITIL because of the addition of Continual Service Improvement (CSI). With CSI, you gather, measure, process, analyze, evaluate, report, and improve. You get a clear picture of the Return on Investment (ROI) you made in ITIL.

In ITIL V3 you also get a complete picture of ITIL operations because you can see assets, capacity, and costs across the service portfolio. With this complete picture and increased visibility, the CIO has more leverage to get the resources needed to do the work requested and to shelf less important (to the business) projects. Services are aligned to the business and consider demand/resource planning and financial management.

All stakeholders become participants in deciding the priorities of services and no longer have the ability to undermine the success of IT with emergency requests without understanding that there will be associated costs and trade-offs to the business. This ensures that internal and external customers with the highest priority needs get services first and there is improved use of IT investments.

IT can expect to experience transparency and a better reputation within the organization due to ITIL-enabled improvements in financial management and IT investments. ITIL inherently has other benefits, which include a long-needed common dictionary, accessibility, ready training, and a comprehensive methodology and guides. As brilliant as ITIL V3 is, though, it is missing an essential piece that is needed in the Service Lifecycle.

### COMPLETING THE ITIL V3 SERVICE LIFECYCLE

With the addition of Demand Management to ITIL V3, an organization is not just looking at what Capacity is available, but also what Capacity is required. This allows managers to do better strategic planning and design of services. The element that is missing in the ITIL V3 framework is Service Development—or Project Portfolio Management. Figure 3 shows that addition to create a new framework, which completes and supports the Service Lifecycle.



Figure 3. Completing the ITIL V3 Service Lifecycle with the Addition of Project Portfolio Management to Create a Next Step in the Evolution of ITIL

With the addition of Project Management to the ITIL V3 Service Lifecycle, Portfolio Management functionality can be applied. IT demand can be divided into these categories: strategic projects, major projects, other planned work (takes two days to two weeks to execute), service work (discrete services charged back to customer groups), and ongoing work (shared services or overhead work). Figure 4 shows how business demand can be funneled into strategic demand, tactical demand, and operational demand.

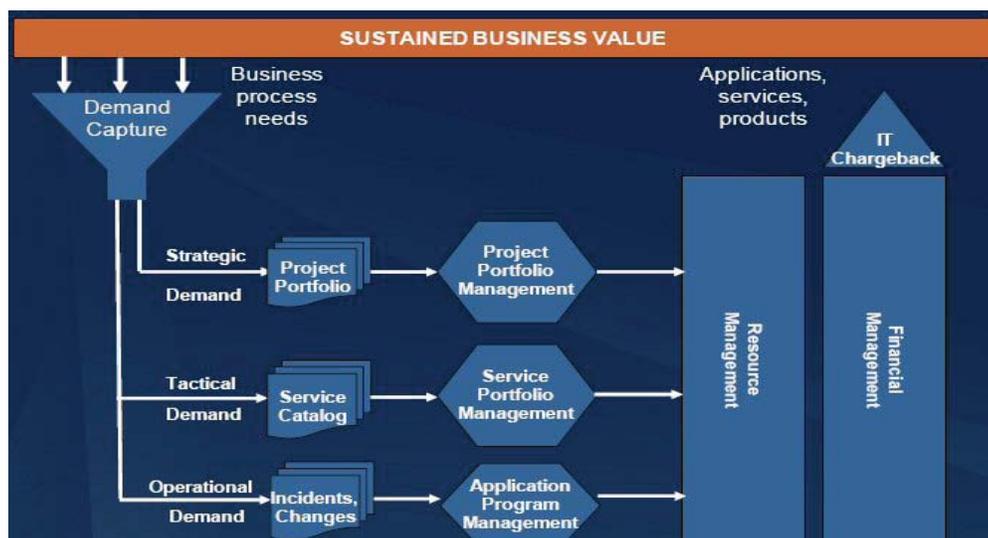


Figure 4. Demand Management—Strategic, Tactical, and Operational

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IT Service Management may already be using Service Portfolio Management—described in Figure 5 and added to ITIL V3—which offers concise, integrated offerings, active client management, transparent operations, and cost-effective delivery. This does not give IT managers the complete capability they need to manage demand.

SERVICE PORTFOLIO MANAGEMENT								
	Financial Management	Application Portfolio Optimization	Service Catalog	Visual Topology	Service and Asset Dashboards	Labor Management	Business Service Level Agreement	Service Demand Management
Benefits	Define, manage, and control business service spending	Simplify application infrastructure Improve IT performance	Standardize the delivery of business services	Clearly define the relationships needed to deliver a service	Achieve enterprise-wide visibility	Understand total cost and value	Formalize service requests	Quickly analyze business services
	Discover total cost of ownership of a business service	Reduce spending	Manage expectations between IT and business according to ITIL standards	Review the status of business services accurately and effectively	Improve communication and enhance decision-making	Rationalize projects and assets	Manage requests	Simplify workflow
	Reallocate resources to strategic initiatives	Retire low-value applications					Improve customer satisfaction	Improve IT performance

Figure 5. Service Portfolio Management

IT needs extended Portfolio Management systems that can aggregate demand, as is shown in Figure 6 below, through a merger of Project Portfolio Management (PPM), which is integrated with strategic planning, and Business Service Management (BSM).

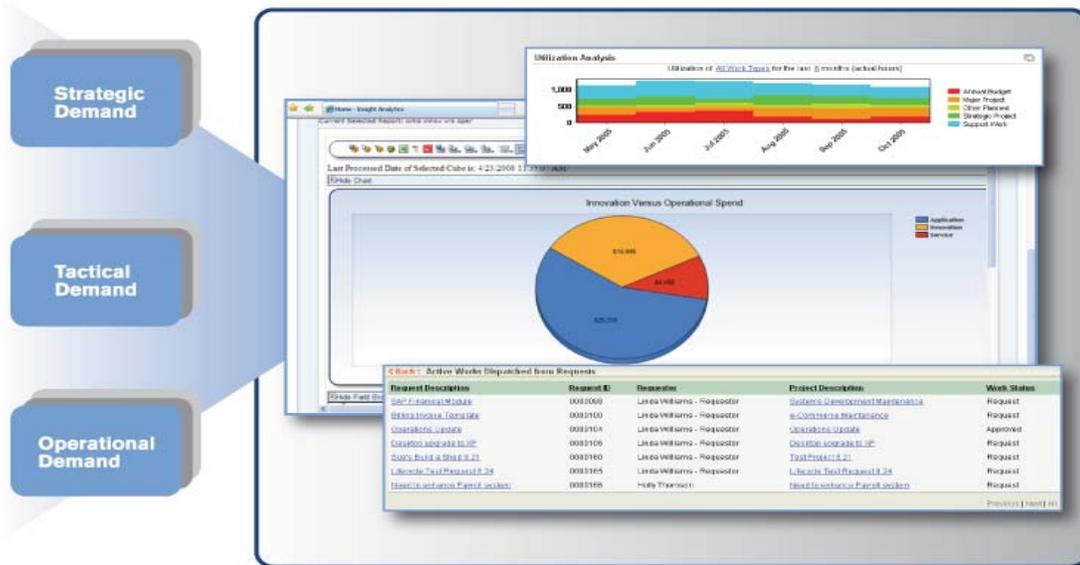


Figure 6. IT Demand Aggregation

Forrester Research states that a new front office is needed for IT-business relations and that it will be responsible for interacting with the business to:

- Understand demand for new projects and service requests

- Translate business needs into the portfolio of IT services
- Manage the service levels and budgets for those services

Forrester also states that the back office will be responsible for the day-to-day operations of the IT infrastructure.

So how do you integrate different IT management disciplines, approaches, and methodologies (including ITIL) and handle IT demand strategically so that it feeds the needs of the business, and stay within budget and SLA restrictions? An integrated business process framework that serves the IT front and back offices is needed.

### SUMMARY

Building a common operating framework requires consensus, which is only possible through a common approach that brings together strategic, financial, product, services, operational, customer, and technical perceptions. Forrester Research says the expected business process benefits of doing this are:

- Predictability of IT results, which means better control of changes, better control of deployment, and better control of capacity requirements
- IT cost reduction through reduction of unplanned and unscheduled work resulting from incidents and problems and faster resolution of incidents and problems
- Better resource allocation due to fewer resources being allocated to maintenance and support and more agility and responsiveness to business needs

ITIL is emerging as the preferred approach to IT Service Management. Earlier ITIL versions focused on optimizing ITSM processes and functions. Version 3 adds focus on achieving desired customer outcomes and is more strategic in its approach. As organizations grow in maturity, they will begin to utilize more and more ITIL V3 processes.

An IT organization can not use just one methodology, though, any more than they can use just one tool. Today, the IT ecosystem is made of many tools—service desk, configuration management, provisioning, event, identity, storage, and more. ITIL is not performed by one application, but by many methodologies such as PMI®/Project Management, CMMi, COBIT, and Six Sigma.

ITIL V3 is a significant step forward, but is still primarily a CIO-down initiative. It still relies upon related disciplines and processes such as program and project management, financial management, resource management, and strategic planning. To survive and thrive today, IT organizations must integrate different IT management disciplines, approaches, and methodologies and this requires an operational framework. Planview provides this framework, which establishes a roadmap for the alignment of processes, terminology, and work management approaches and handles the end-to-end lifecycle of IT services.

For more information, see the second paper in this series: ” Part II – ITIL V3 and the Service Lifecycle: The Missing Component Delivered.”

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Wikipedia page on ITIL – [http://en.wikipedia.org/wiki/Information\\_Technology\\_Infrastructure\\_Library](http://en.wikipedia.org/wiki/Information_Technology_Infrastructure_Library)



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## APPENDIX: ITIL V3 FRAMEWORK

The ITIL V3 framework has the following structure, which is depicted in Figure 7.

- **Five core books**, which reflect the life stages of IT services and emphasize creating business value rather than just executing processes. The five core volumes are Service Strategy, Service Design, Service Transition, Service Operation, and Continual Service Improvement.
- **Complementary Publications**, which include specific content that targets particular situations, industries, and environments and helps with customizing ITIL to suit your specific requirements.
- **Web Support Services**, which provide online ITIL resources such as a glossary, papers, templates, business cases, process maps, and more.



Figure 7. ITIL Service Lifecycle

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Let's discuss each of the core volumes in further detail.

## SERVICE STRATEGY

The Service Strategy book is a major new addition and strength in the ITIL V3 library. It focuses on building a sound service strategy based on services that deliver real value to internal and external customers. This volume introduces the Service Lifecycle. It considers the overall business goals of the organization and gives guidance on strategic analysis, planning, positioning, and implementation for service management capabilities.

### SERVICE STRATEGY

The identification of market opportunities for which services could be developed in order to meet a requirement on the part of internal or external customers. The output is a strategy for the design, implementation, maintenance, and continual improvement of the service as an organizational capability and a strategic asset.

### KEY AREAS

Strategy Generation, Service Portfolio Management, IT Financial Management, Return on Investment, and Demand Management

### TARGET AUDIENCE

CIO, VP of Strategy, Strategic Steering Committee, Corporate Finance, and Executive Leadership Team

### INFLUENCERS

Service Managers, Resource Managers, and Operations Managers

## SERVICE DESIGN

The Service Strategy is used to create an effective Service Design with quality services that meet or exceed customer expectations. This book includes guidelines for creating specifications for execution through service transition and operations.

### SERVICE DESIGN

The activities that take place in order to develop the strategy into a design document that addresses all aspects of the proposed service and the processes intended to support it.

#### KEY AREAS

Availability Management, Capacity Management, Continuity Management, Security Management, Supplier Management, Service Catalog Management, Service Level Management, and Application Management

#### TARGET AUDIENCE

Service Managers, Resource Managers, and Service Providers

#### INFLUENCERS

VP of Strategy, Service Managers, Operations Managers, Program and Project Managers

## SERVICE TRANSITION

The Service Transition Book focuses on implementation. It offers guidance to ensure that the Service Design delivers the intended strategy and that it can be delivered and maintained cost-effectively, with speed, and with minimum disruption to operations. Service Transition helps organizations transition new or changed services into operations and allow for innovation.

### SERVICE TRANSITION

The implementation of the output of the service design activities and the creation of a production service or modification of an existing service.

#### KEY AREAS

Change Management, Release Management, Configuration Management, Asset Management, CAB, and Service Knowledge Management

#### TARGET AUDIENCE

IT Service Managers, Service Owners, and Operational Staff

#### INFLUENCERS

Customers, Service Owners, and Support Staff

## SERVICE OPERATION

Service Operation focuses on effectively managing services that are in production on a day-to-day basis. This book includes delivery and control activities that help deliver high-quality services based on customers' Service Level Agreements (SLAs).

### SERVICE OPERATION

The activities required to operate the services and maintain their functionality as defined in Service Level Agreements with the customers.

### KEY AREAS

Incident Management, Problem Management, Event Management, Access Management, and Service Fulfillment

### TARGET AUDIENCE

Service Owners, Operational Staff, Vendors, and Service Providers

### INFLUENCERS

Customers, End Users, Account Managers, Sales Managers, and IT Managers

## CONTINUAL SERVICE IMPROVEMENT

Continual Service Improvement provides guidance to organizations around improvement to the quality of services that are delivered. This book provides focus to process elements that help identify and introduce a cycle of service management improvements. It also gives structure to assessing and measuring services so that service can be continually improved in order to give maximum benefit to customers.

### CONTINUAL SERVICE IMPROVEMENT

The ability to deliver continual improvement to the quality of the services that the IT organization delivers to the business.

### KEY AREAS

Service Reporting, Service Measurement, and Service Level Management

### TARGET AUDIENCE

Service Planners, Service Designers, Business and IT Leaders, IT Service Managers, Service Owners, and Operational Staff

### INFLUENCERS

Business Leaders, IT Leaders, Customers, Service Owners, Quality and Conformance Managers

## GLOSSARY

**Business Service** An IT Service that directly supports a Business Process, as opposed to an Infrastructure Service which is used internally by the IT Service Provider and is not usually visible to the Business. The term Business Service is also used to mean a Service that is delivered to Business Customers by Business Units. For example delivery of financial services to Customers of a bank, or goods to the Customers of a retail store. Successful delivery of Business Services often depends on one or more IT Services.

**Business Service Management (BSM)** (Service Strategy) (Service Design) An approach to the management of IT Services that considers the Business Processes supported and the Business value provided. This term also means the management of Business Services delivered to Business Customers.

**Capability Maturity Model® Integration (CMMI)** (Continual Service Improvement) CMMI is a process improvement approach developed by the Software Engineering Institute (SEI) of Carnegie Mellon University. CMMI provides organizations with the essential elements of effective processes. It can be used to guide process improvement across a project, a division, or an entire organization. CMMI helps integrate traditionally separate organizational functions, set process improvement goals and priorities, provide guidance for quality processes, and provide a point of reference for appraising current processes. See <http://www.sei.cmu.edu/cmmi/> for more information.

**Change Advisory Board (CAB)** (Service Transition) A group of people that advises the Change Manager in the Assessment, prioritization and scheduling of Changes. This board is usually made up of representatives from all areas within the IT Service Provider, the Business, and Third Parties such as Suppliers.

**COBIT (Control Objectives for Information and related Technology)** (Continual Service Improvement) COBIT provides guidance and Best Practice for the management of IT Processes. COBIT is published by the IT Governance Institute. See <http://www.isaca.org/> for more information.

**Configuration Item (CI)** (Service Transition) Any Component that needs to be managed in order to deliver an IT Service. Information about each CI is recorded in a Configuration Record within the Configuration Management System and is maintained throughout its Lifecycle by Configuration Management. CIs are under the control of Change Management. CIs typically include IT Services, hardware, software, buildings, people, and formal documentation such as Process documentation and SLAs.

**Configuration Management Database (CMDB)** (Service Transition) A database used to store Configuration Records throughout their Lifecycle. The Configuration Management System maintains one or more CMDBs, and each CMDB stores Attributes of CIs, and Relationships with other CIs.

**Configuration Management** (Service Transition) The Process responsible for maintaining information about Configuration Items required to deliver an IT Service, including their Relationships. This information is managed throughout the Lifecycle of the CI. Configuration Management is part of an overall Service Asset and Configuration Management Process.

**ITIL (Information Technology Infrastructure Library)** A set of Best Practice guidance for IT Service Management. ITIL is owned by the OGC and consists of a series of publications giving guidance on the provision of Quality IT Services, and on the Processes and facilities needed to support them. See <http://www.itil.co.uk/> for more information.

**IT Service** A Service provided to one or more Customers by an IT Service Provider. An IT Service is based on the use of Information Technology and supports the Customer's Business Processes. An IT Service is made up from a combination of people, Processes and technology and should be defined in a Service Level Agreement.

**IT Service Management (ITSM)** The implementation and management of Quality IT Services that meet the needs of the Business. IT Service Management is performed by IT Service Providers through an appropriate mix of people, Process and Information Technology.

**PMBok (Project Management Body of Knowledge)** A Project management Standard maintained and published by the Project Management Institute. See <http://www.pmi.org/> for more information.

**Service Catalog (Service Design)** A database or structured Document with information about all Live IT Services, including those available for Deployment. The Service Catalogue is the only part of the Service Portfolio published to Customers, and is used to support the sale and delivery of IT Services. The Service Catalogue includes information about deliverables, prices, contact points, ordering and request Processes.

**Service Knowledge Management System (SKMS) (Service Transition)** A set of tools and databases that are used to manage knowledge and information. The SKMS includes the Configuration Management System, as well as other tools and databases. The SKMS stores, manages, updates, and presents all information that an IT Service Provider needs to manage the full Lifecycle of IT Services.

**Service Level Agreement (SLA) (Service Design) (Continual Service Improvement)** An Agreement between an IT Service Provider and a Customer. The SLA describes the IT Service, documents Service Level Targets, and specifies the responsibilities of the IT Service Provider and the Customer. A single SLA may cover multiple IT Services or multiple Customers.

**Service Management** A set of specialized organizational capabilities for providing value to customers in the form of services.

**Service Management Lifecycle** An approach to IT Service Management that emphasizes the importance of coordination and Control across the various Functions, Processes, and Systems necessary to manage the full Lifecycle of IT Services. The Service Management Lifecycle approach considers the Strategy, Design, Transition, Operation and Continuous Improvement of IT Services.

**Service Portfolio (Service Strategy)** The complete set of Services that are managed by a Service Provider. The Service Portfolio is used to manage the entire Lifecycle of all Services, and includes three Categories: Service Pipeline (proposed or in Development); Service Catalogue (Live or available for Deployment); and Retired Services.

**Service Portfolio Management (SPM) (Service Strategy)** The Process responsible for managing the Service Portfolio. Service Portfolio Management considers Services in terms of the Business value that they provide.

**Service Provider (Service Strategy)** An Organization supplying Services to one or more Internal Customers or External Customers. Service Provider is often used as an abbreviation for IT Service Provider.