

## Information Technology Infrastructure Library (ITIL)

The IT Infrastructure Library (ITIL) is a set of practices for IT Service Management (ITSM) that focuses on aligning IT services with the needs of business. In its current form (known as ITILv3 and ITIL 2011 edition), ITIL is published in a series of five core publications, each of which covers an ITSM lifecycle stage. ITIL describes procedures, tasks and checklists that are not organization-specific, used by an organization for establishing a minimum level of competency. It allows the organization to establish a baseline from which it can plan, implement, and measure. It is used to demonstrate compliance and to measure improvement.

Although the UK Government originally created the ITIL, it has rapidly been adopted across the world as the standard for best practice in the provision of information technology services.

ITIL V3 represents an important change in best practice approach, transforming ITIL from providing a good service to being the most innovative and best in class. Based on a core of five titles, the changes in ITIL V3 reflect the way IT Service Management has matured over the past decades and change the relationship between IT and business.

This release of ITIL V3 brought with it an important change of emphasis, from an operationally Focused set of processes to a mature service management set of practice guidance.

- **Service Strategy:** This provides guidance on clarification and prioritization of service provider investments in services;
- **Service Design:** This provides good-practice guidance on the design of IT services, processes, and other aspects of the service management effort;
- **Service Transition:** This relates to the delivery of services required by a business into live/operational use, and often encompasses the "project" side of IT rather than Business As Usual (BAU);
- **Service Operation:** This provides best practice for achieving the delivery of agreed levels of services both to end-users and the customers (where "customers" refer to those individuals who pay for the service and negotiate the SLAs), and
- **Continual Service Improvement:** This aims to align and realign IT services to changing business needs by identifying and implementing improvements to the IT services that support the business processes.

**Details of the ITIL Framework: Details of these aforementioned volumes are given as follows:**

### **I. Service Strategy:**

The Service Strategy volume provides guidance on the design, development, and implementation of service management, not only as an organizational capability, but also as a strategic asset.

#### **Activities OR Functions:**

- **IT Service Generation:** IT Service Management (ITSM) refers to the implementation information technology services through People, Process and Information Technology.
- **Service Portfolio Management:** IT portfolio management is the application of systematic management to the investments, projects and activities of enterprise.
- **Financial Management:** Financial Management for IT Services' aim is to give accurate cost of IT assets and resources used in providing IT Services.

- **Demand Management:** Demand management is a planning methodology used to manage and forecast the demand of products and services.
- **Business Relationship Management:** Business Relationship Management is a formal approach to providing and consuming knowledge and services via networks.

## II. Service Design:

Service Design translates strategic plans and objectives and creates the designs and specifications for execution through service transition and operations. It provides guidance on combining infrastructure, applications, systems, and processes, along with suppliers and partners, to present feasible service offerings.

### Activities/Functions :

- **Service Catalogue Management:** Service Catalogue management maintains accurate details, dependencies and interfaces of all services made available to customers.
- **Service Level Management:** Service-Level Management is the primary interface with the customer and is responsible for ensuring that the agreed IT services are delivered.
- **Availability Management:** Availability management targets allow organizations to sustain the IT service-availability to support the business at a justifiable cost.
- **Capacity Management:** Capacity management supports the optimum and cost-effective provision of IT services by application sizing; workload management; demand management and so on.
- **IT Service Continuity Management:** IT Service Continuity Management (ITSCM) covers the processes by which IT services can recover and continue even after a serious incident occurs.
- **Information Security Management:** A basic goal of security management is to ensure confidentiality, integrity and availability of information security, which in turn, is to protect information assets against risks.
- **Supplier Management:** The purpose of Supplier Management is to obtain value for money from suppliers and contracts. It ensures that underpinning contracts and agreements align with business needs.

## III. Service Transition (Implementation) :

Service Transition provides guidance on the service design and implementation ensuring that the service delivers the intended strategy and that it can be operated and maintained effectively. The Service Transition volume provides guidance on the development and improvement of capabilities for transitioning new and changed services into operations.

### Activities/Function :

- **Service Transition Planning and Support:** The service transition planning and support process ensures the orderly transition of a new or modified service into production.
- **Change management and Evaluation:** This aims to ensure that standardized methods and procedures are used for efficient handling of all changes. A change is an event that results in a new status of one or more configuration items (CIs), and which is approved by management.
- **Service Asset and Configuration Management:** Service Asset and Configuration Management is primarily focused on maintaining information (i.e., settings) about Configuration Items (i.e., assets) required to deliver an IT service.
- **Release and Deployment Management:** Release and deployment management is used for automated distribution of software across the entire IT infrastructure. Proper software control ensures the availability of licensed, tested, and version-certified software .
- **Service Validation and Testing:** The objective of ITIL Service Validation and Testing is to ensure that deployed Releases must meet customer expectations.
- **Knowledge Management:** Knowledge Management (KM) is the process of capturing, developing, sharing, and effectively using organizational knowledge (i.e. Knowledge of entire IT).

#### **IV. Service Operation (Maintenance ) :**

Service Operation provides guidance on the management of a service through its day-to-day production life. It also provides guidance on supporting operations by means of new models and architectures such as shared services, utility computing, web services, and mobile commerce.

- **Functions:** The major functions are as follows:

- o **Service Desk:** The service desk is one of its primary functions of service operations. Features include Single Point of Contact (SPOC) easier for customers.

- o **Application management:** ITIL application management encompasses a set of best practices proposed to improve the overall quality of IT software development and defining requirements that meet business objectives.

- o **IT Operations:** IT Operations includes output management, job scheduling, backup and restore, network monitoring/management, system monitoring/ management, database monitoring/management storage monitoring/management.

- o **IT Technical Support:** IT technical support provides a number of specialist functions: research and evaluation, proof of concept and pilot engineering, and creation of documentation.

- **Incident Management:** Incident management aims to restore normal service operation as quickly as possible and minimize the adverse effect on business operations.

- **Request fulfillment:** Request fulfillment (or request management) focuses on fulfilling Service Requests, which are often minor changes (e.g., requests to change a password) or requests for information.

- **Event Management:** Event management generates and detects notifications that something is not functioning correctly, leading to an incident being logged.

#### **V. Continual Service Improvement:**

Continual Service Improvement provides guidance on the measurement of service performance through the service life-cycle, suggesting improvements to ensure that a service delivers the maximum benefit. It combines principles, practices, and methods from change management, quality management, and capability improvement to achieve incremental and significant improvements in service quality, operational efficiency, and business continuity.