# Pocket Guide to the
# ITIL 2011 FOUNDATION CERTIFICATION

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# INTRODUCTION

This pocket guide designed to help and guide aspiring candidates of the ITIL 2011 Foundation Certification, illustrates the syllabus, format, some key concepts, sample exam papers and tips on clearing the final examination. The book includes a mind-map, with the concepts of ITIL presented in an easy-to-understand format. Beginning with a brief introduction into the history of ITIL, this guide hopes to achieve the goal of serving as a valuable resource that will ease the preparation journey of aspirants.

However, as it is aimed at being concise, the information provided here is succinct but in no way an alternative to an elaborately laid preparatory guide or a training. We hope readers benefit from this pocket guide and are able to use this as a navigator in their preparation towards gaining an ITIL 2011 Foundation Certification.

## What is ITIL?

ITIL stands for Information Technology Infrastructure Library. It is a set of best practices that help organizations align their IT services with their business needs.

## A Brief History

ITIL was developed as early as the 1980s and 1990s by the UK government's Central Computer and Telecommunications Agency (CCTA). The first version of ITIL developed by CCTA was called the Government Information Technology Infrastructure Management (GITIM). GITIM was the framework for efficient and responsible use of IT resources within the British Government. It was launched as a series of books shedding light on the best practices and the different components of IT management.

Today, it is maintained by the UK Office of Government Commerce, and is a globally recognized IT Service Management (ITSM) certification. The ITIL Foundation Certification is the entry level certification to the ITSM field, and with this certification, the certified professional can guide the organization in implementing best practices for ITSM as well as promote changes and growth in businesses, by using it as a tool.

The ITIL 2011 Foundation Certification is the latest version of what was initially offered as the ITIL v1, v2 or the v3 (2007) Foundation Certifications. This updated version (2011) is aimed at providing greater clarity over the concepts. Therefore, candidates who have taken the ITIL Foundation examination prior 8th August, 2011 (when examination for this updated version was introduced), do not have to recertify.

The five levels of the ITIL Qualification Scheme are: ITIL Foundation Level, ITIL Intermediate Level, ITIL Managing Across the Lifecycle, ITIL Expert, and ITIL Master.

ITIL MASTER

ITIL EXPERT

MALC
MANAGING ACROSS
THE LIFECYCLE

ITIL INTERMEDIATE

SERVICE CAPABILITY
SERVICE LIFECYCLE
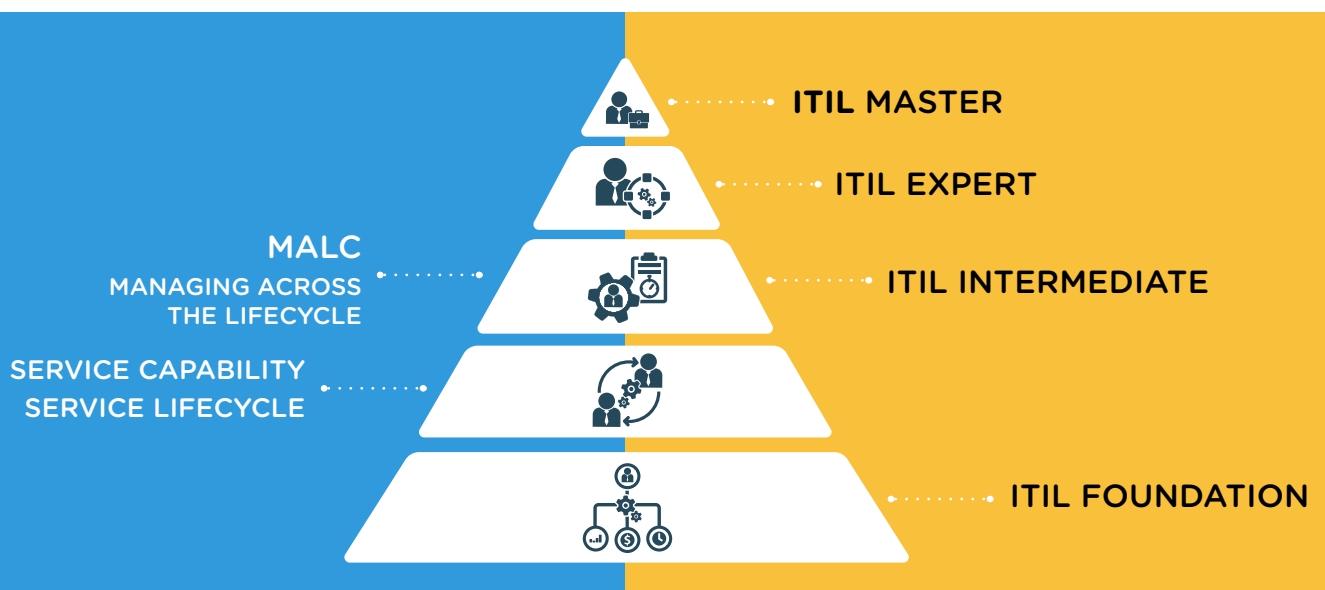
ITIL FOUNDATION

# THE ITIL FOUNDATION CERTIFICATION

The ITIL 2011 Foundation Certification is an entry level certification for candidates who are involved in IT Service Management and seek to gain an understanding of the ITIL framework, key concepts and terminologies, the links between lifecycle stages and the processes, and thereby enhance IT service management in their organization.

And although this certification does not require any educational or professional experience as necessary qualifications, the exam is a prerequisite for candidates who wish to rise up the ITIL ladder and gain the next level of certification in the ITIL Qualification Scheme – the ITIL Intermediate Level.

Training providers and examination institutes recognized and authorized by AXELOS, also known as the AXELOS partners, conduct the exams and act as the accreditation body. APMG is one among the many accreditation bodies for this exam. To take the test, an aspirant must register with an Authorized Training Provider (ATP) recognized by AXELOS, and appear for the test, either online or at an authorized testing center. The exam is conducted in online or paper-based format.

The duration of the ITIL 2011 Foundation Certification exam is 60 minutes, and candidates are expected to answer 40 multiple choice questions. It is a closed-book exam and candidates should be able to gain a minimum score of 26 marks out of the total 40 (65%), in order to pass the examination. And though accredited training for the exam is strongly recommended, it is not a prerequisite.

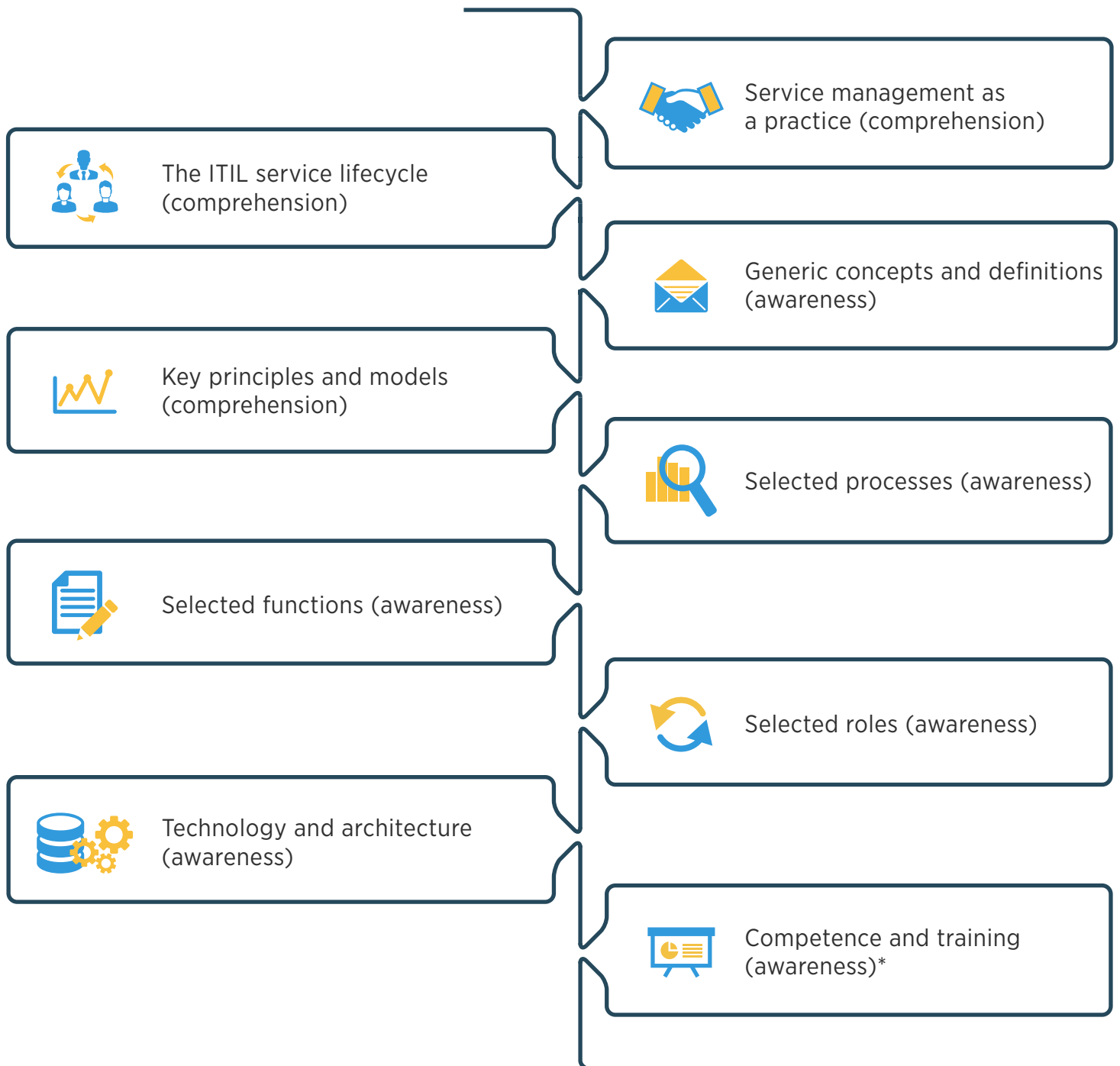The ITIL Foundation Examination is offered in about 21 languages, including: English, French, German, Russian, Spanish and more.

It is to be noted that by gaining this certification, candidates are not automatically qualified to apply the ITIL practices for service management, without further guidance.

Now, first things first! Let's understand the objectives of the ITIL Foundation 2011 Certification.

## Learning Objectives

The core areas on which candidates can improve their knowledge and understanding in ITIL Foundation Certificate in IT Service Management, are as follows:

The ITIL service lifecycle (comprehension)

Service management as a practice (comprehension)

Generic concepts and definitions (awareness)

Key principles and models (comprehension)

Selected processes (awareness)

Selected functions (awareness)

Selected roles (awareness)

Technology and architecture (awareness)

Competence and training (awareness)*

As should be obvious, areas that have been specified as 'comprehension' are topics where the candidate is expected to possess a thorough understanding, while 'awareness' suggests areas on which candidates are expected to gain knowledge on a superficial level.

*Source: https://www.axelos.com/Corporate/media/Files/Syllabi/The_ITIL_Foundation_Certificate_Syllabus_v5-5.pdf

# Some tips to keep in mind before getting started on your preparation

Prior to commencing preparation, it is highly recommended that the candidate familiarize himself with the syllabus of the ITIL certification and read through any exam-notes they can lay their hands on (avoid 'peruse'). In addition, as with any professional certification exam, advice from peers and certified ITIL professionals will help ease the process greatly. Here are a few pointers to help you on your way. The following cues will help you in this regard:

Understand and memorize the terms and definitions in use. You should also understand the subtle differences between the terms. This will help you save time when having to decide between two seemingly correct answers of a multiple choice question.

Other important aspects to remember in your preparation is the interrelationships, jurisdiction, the different processes, sub-processes and functions involved in the ITIL framework.

While memorizing, you should also gain knowledge of the overall structure of ITIL framework and be aware of them. Knowing this will help you internalize further knowledge in a systematic fashion.

Often, candidates who work in the ITIL domain tend to answer questions based on best practices in their organization, which may not be accurate in the context of the question presented in the exam. This may be right or even wrong on some occasions. It is, therefore, recommended that candidates prepare for the exam with an open-mind rather than applying previously acquired knowledge which may lead them astray.

Again, while memorizing, be sure to memorize the keywords, if not entire sentences, which will help you make the right associations.
A thorough grasp of the concepts and definitions and practice over two sample question paper sets should be adequate enough, for you to take the final test.

Do not wait too long after you have completed training to take up the test. To ensure success, it is advisable that you take the test 2-3 days after you've trained for the final exam.

With these tips in mind, your next step would be to familiarize yourself with the syllabus of the ITIL 2011 Foundation Certification Exam.

# THE SYLLABUS

The Foundation syllabus is spread across 10 units, each unit focusing on a core concept in ITIL.

The ITIL syllabus, as specified in the official site of AXELOS, is as follows.

| UNIT | CORE CONCEPT DISCUSSED | RECOMMENDED STUDY PERIOD |
|---|---|---|
| ITILFND01 | Service management as a practice | 1 hour and 30 minutes |
| ITILFND02 | The ITIL service lifecycle | 1 hour Recommended that the unit be covered as part of other units |
| ITILFND03 | Generic concepts and definitions | Recommended that the unit is covered as part of the training in the other units. |
| ITILFND04 | Key principles and models | 1 hour and 30 minutes |
| ITILFND05 | Processes | 10 hours and 45 minutes |
| ITILFND06 | Functions | Minimum 1 hour |
| ITILFND07 | Roles | Minimum 45 minutes |
| ITILFND08 | Technology and architecture | Recommended that the unit is covered as part of the training in the other units. |
| ITILFND09 | Competence and training | 15 minutes |
| ITILFND10 | Mock exam | 2 hours |

Note that this is not necessarily the order in which the units need to be covered. Axelos themselves offer training partners the flexibility to impart training in ITIL in any order of their choice, allowing them to customize unit-delivery to suit their needs

For more detailed information on the official syllabus as devised by AXELOS, download the ITIL syllabus from here:

https://www.axelos.com/Corporate/media/Files/Syllabi/The_ITIL_Foundation_Certificate_Syllabus_v5-5.pdf

Moving on, we now reach the core area in the ITIL 2011 Foundation Examination preparation journey – with the help of some useful preparatory notes.

Note: The information provided in this section is aimed at providing an overview of the ITIL framework; no terminologies nor concepts have been elaborated in detail.

A majority of challenges that businesses face today can be overcome by the proper functioning of the IT department in the business concerned. By adapting quickly to changing needs and optimizing resources and costs, the IT management framework can help businesses meet the challenges of improving performance, improving ROI and minimizing costs and risk in a fast-changing business scenario.

## So, what is IT Service Management?



"*A service is a means of delivering value to the customer by facilitating the outcomes that customers want to achieve without the ownership of specific costs and risks.*"

An IT service is a set of IT-related functions that includes both hardware and software.

IT Service Management includes the entire IT Service provision, for the management of the infrastructure and the environment in which it functions. One of the major goals of a good IT Service Management system is to meet customer requirements and expectations with consistency.

In this regard, the ITIL framework helps meet business needs and customer requirements by implementing a set of functions and processes.

Brief summaries of ITIL's core concepts and functions follow:

# ITIL CORE CONCEPTS

## Services

As stated earlier, services is the means of delivering value to customers without requiring the customer to own specific costs and risks.

## Service Management

It is the set of specialized capabilities for delivering value to customers in the form of services.

## ITIL as a Good Practice Framework

Good practices, as specified here, are those that are widely accepted and adopted, withstood the test of time and fall under a number of sources including: standards, public frameworks, academic research and proprietary knowledge.

## Processes

The processes involved in ITIL are meant to refer to the structured set of activities, designed to achieve specific objectives. The four basic characteristics of a process are: to transform inputs into outputs, to deliver results to specific customers/stakeholders, should be measurable, to be triggered by specific events.

Process inputs are molded and modified by three basic control mechanisms before the output is delivered. They include: the Process Control, the Process itself and the Process Enablers.

Process control include : Process Owner  Process Policy  Process Objectives  Process Documentation  Process Feedback

The Process in itself includes : Activities  Metrics  Improvements  Procedures  Work Instructions  Roles

Process Enablers include : Resources  Capabilities

## Functions

These are the self-contained subsets of an organization that are intended to accomplish certain tasks. These often include the team of people or the tools being used to accomplish the specific task.

The functions add structure and stability to organizations, and should be supported by budget and reporting structures.

## Roles

These include collection of specific responsibilities and privileges that are held by individuals or teams. Standard roles include: Service Owner, Process Owner, and Service Manager.

Service Owner : The prime contact for all service-related issues and enquiries from the customer. Ensures service management systems and tools are in place and meet the needs of the service.

Process Owner : The person who is held accountable for ensuring that a process is fit for purpose.

Service Manager : TA generic term for any manager within the service provider. Most commonly used to refer to a business relationship manager, a process manager or a senior manager with responsibility for IT services overall.
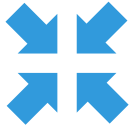
The five stages of the ITIL Service Lifecycle include: Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement.
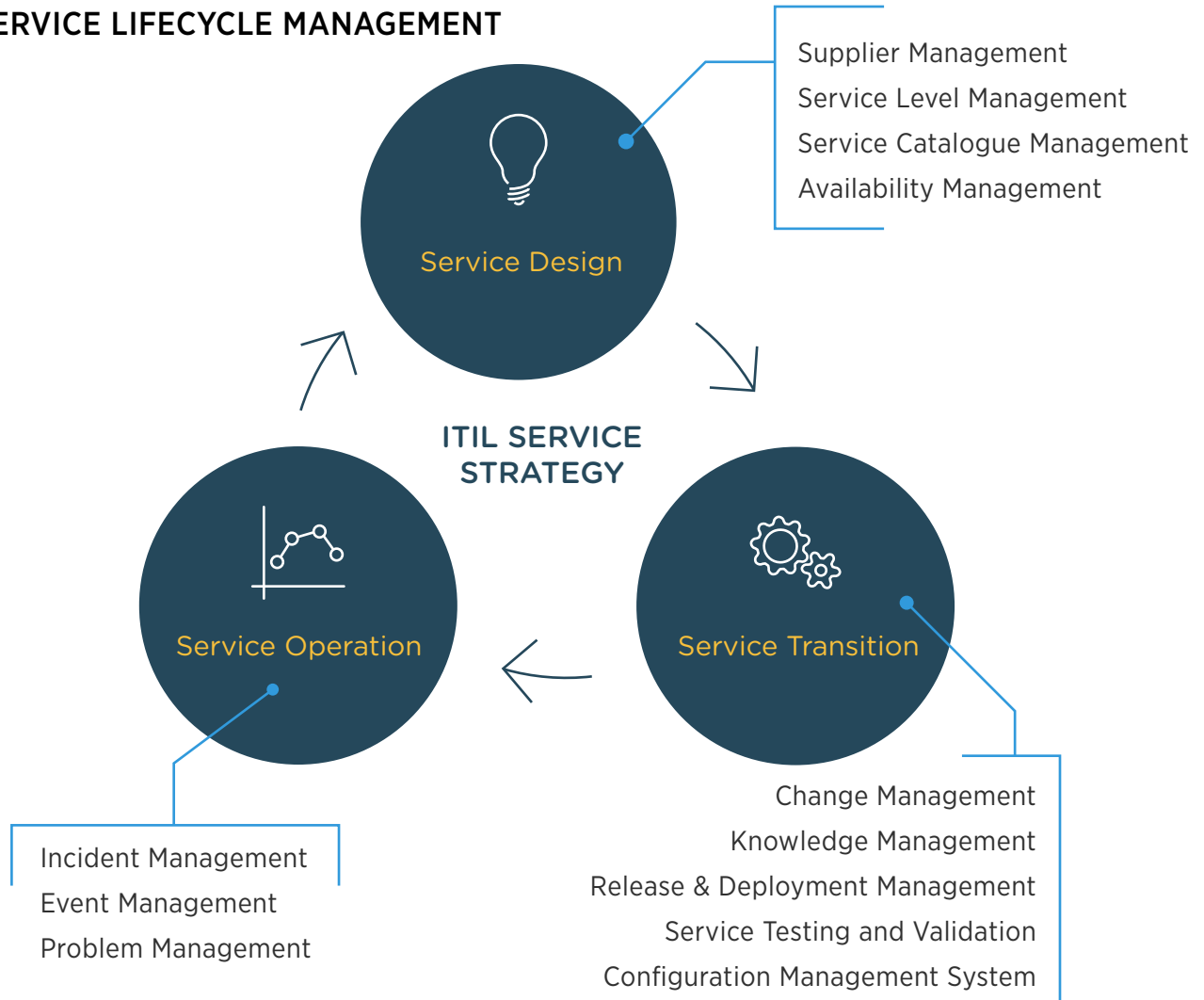
## ITIL SERVICE LIFECYCLE MANAGEMENT

**Service Design**

Supplier Management
Service Level Management
Service Catalogue Management
Availability Management

**ITIL SERVICE STRATEGY**

**Service Operation**

**Service Transition**

Change Management
Knowledge Management
Release & Deployment Management
Service Testing and Validation
Configuration Management System

Incident Management
Event Management
Problem Management

**Service Strategy :** This phase of the Service Lifecycle provides guidance on how to design, develop, and implement IT Service Management

**Service Design :** This phase offers guidance on how to design and develop services and IT Service Management processes that will support the already developed service strategies.

**Service Transition :** This phase of the Service Lifecycle teaches IT professionals and their business associates to manage changes in a productive manner.

**Service Operation :** This phase provides guidance on the practical aspects of day-to-day business operations.

**Continual Service Improvement :** This phase identifies areas where developments and improvements in the IT services can be implemented and suggests possible avenues for progress.

# ITIL Functions

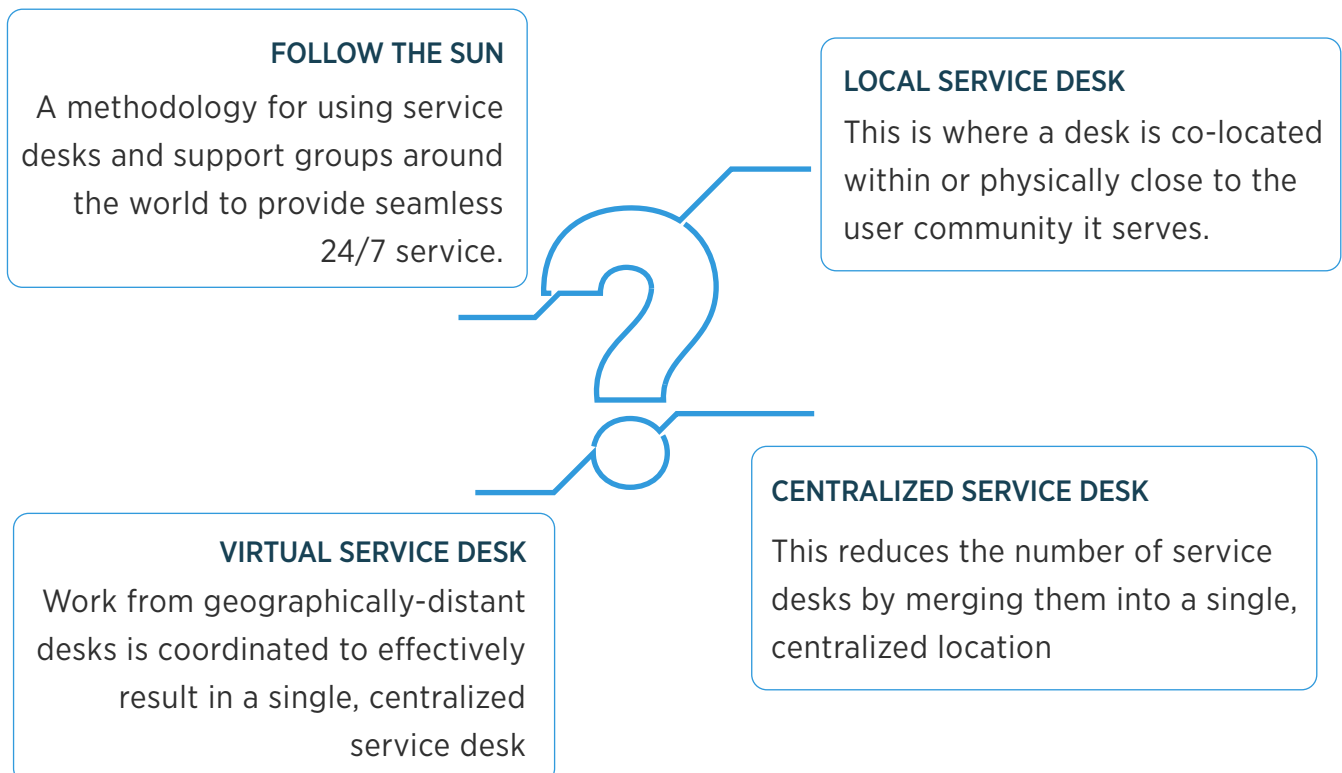| Service Strategy | Service Design | Service Transition |
|---|---|---|
| Financial Management | Service Catalogue Management | Change Management |
| Service Portfolio Management | Service Level Management | Service Asset and Configuration Management |
| Demand Management | Capacity Management | Service Validation and Testing |
| | Service Level Management | Evaluation |
| | IT Service Continuity Management | Knowledge Management |
| | Information Security Management | |
| | Supplier Management | |

| Service Operation | Continual Service Improvement | Operation Functions |
|---|---|---|
| Event Management | The 7-step Improvement Process | Service Desk |
| Incident Management | Service Reporting | Technical Management |
| Request Fulfilment | Service Measurement | IT Operations Management |
| Problem Management | CSI Service Level Management | Application Management |
| Access Management | | |

## Service Desk

This is the single point of contact between the user and the IT department. The Service Desk processes inbound incidents, service requests, change requests, etc. The Service Desk owns and executes incident management process and acts as a hub for all communications internal to IT Service Provider.

The four service desk organizational structure is better explained here:

**FOLLOW THE SUN**
A methodology for using service desks and support groups around the world to provide seamless 24/7 service.

**LOCAL SERVICE DESK**
This is where a desk is co-located within or physically close to the user community it serves.

**VIRTUAL SERVICE DESK**
Work from geographically-distant desks is coordinated to effectively result in a single, centralized service desk

**CENTRALIZED SERVICE DESK**
This reduces the number of service desks by merging them into a single, centralized location

## Technical Management

The primary task of this function is to ensure that the Service Provider has the right set of skills to provide the required services. It represents the different specialized teams or functions within an IT organization, like Networking, Security, Storage, Database, Servers, etc.

On the whole, this deals with the procurement, development and management of the technical skills and resources that is required to support the infrastructure and the ITSM effort.

## Application Management

This seeks to confer specialized skill sets required to support organization's applications and is concerned with the end-to-end management of applications. It is supported by different ITIL core processes.

## IT operations Management

It deals with the day to day maintenance of the IT infrastructure and facilities. The two sub-functions involved in this are: Operations Control and Facilities Management.

Operations Control : Involves the regular maintenance cycles that are associated with infrastructure management, which include: Console Management, Backup and restore operations, Media management, Batch job execution.

Facilities Management : This involves the maintenance of the facilities that house the IT operations and looks after HVAC, Fire suppression, Facilities access, Power, etc.

The next thing to consider in the key concepts of the ITIL certification is the different types of metrics that are part of the Continual Service Improvement (CSI).

# TYPES OF METRICS IN CONTINUAL SERVICE IMPROVEMENT (CSI)

## What are metrics?

A metric is a scale of measurement defined in terms of a well-defined unit. It defines what is to be measured and is a system of parameters or ways of quantitative assessment of a process that is to be measured.

The three types of metrics that an organization needs to collect in order to support CSI and other process activities are:

### TECHNOLOGY METRICS
Often associated with component and application-based metrics such as performance, availability, etc. The various design architects and technical specialists are responsible for defining the technology metrics.

### PROCESS METRICS
This is captured in the form of KPIs – Key Performance Indicators, and activity metrics for the service management processes and which determine the overall quality of the process. KPIs help answer key questions based on the quality, performance, value and compliance. CSI would use these metrics to identify improvement opportunities at each process.

### SERVICE METRICS
This is a measure of the end-to-end service performance. Individual technology and process metrics are used when calculating the end-to-end service metrics.

## SEVEN STEP IMPROVEMENT PROCESS

CSI uses a seven step improvement process plan which is critical for itself and other stages of the ITIL lifecycle. They are as follows:

**1** **Determining what to measure**

Identifying what should be measured should be done as early as the planning for Service Design and Service Strategy. The exact items that are to be measured should be clarified and noted.

**2** **Defining the areas that you can measure**

After having identified and noted the service level requirements, budget constraints and IT capabilities, the areas to measure are to be identified and defined. By having the different processes and functions mapped out, CSI, upon gap analysis, finds out what areas can be improved.

**3** **Gathering the data**

The next step should be to gather raw facts and quantitative data. Data is usually gathered according to the goals and objectives of the service operation. Upon identification of the goals and objectives, data should be collected by various means.

**4** **Processing the data**

During this stage, the collected data is processed in conjunction with the ITIL's Critical Success Factor and specified Key Performance Indicators. The raw data is insulated and organized according to its distinctive categories and operations, which makes for easier comparison and analysis of data.

**5** **Analyzing the data**

Once the data has reached the target and is instantly codified, information is generated as the data gathered is carefully analyzed and carefully compared to find the missing gaps, flaws and its overall effect of the collected information on the company.

**6** **Presenting the data for usage**

The analyzed data is presented in a clear and well defined manner to the owners and managing operators. The collected data is distributed and explained in a way that meets the company's demands and at the same offers solutions and steps for improvement.

**7** **Change implementation**

Upon completion of all the above stated steps, the collected data can be used to usher in change. Based on insights from the collected data, CSI can offer many options and solutions to the identified problems in the various service operations.

Through implementation of these seven steps, CSI can identify the needs of the company. In the long run, the collected data helps compare and contrast past instances to present emergency conditions. The 7 step improvement process is thus important as it assists service resources and teams to identify and analyze which aspects of their operations need monitoring and development.

Once your preparation for the ITIL 2011 Foundation Certification is complete, make sure you practice with the sample question papers, preferably two sets. And while giving a shot at them, be mindful of the tips that we have shared earlier in this eBook!

This eBook which is structured around the mind map that is added to the end of the eBook is an attempt at enlightening aspiring candidates on the key concepts. And although not exhaustive, we hope this eBook has laid a strong foundation to the basics of the ITIL 2011 Foundation certification.

To help you perfect your preparation and ace the ITIL Foundation Exam, Simplilearn offers a comprehensive ITIL training course. With world-class training and well-planned modules, this course will see you cracking the ITIL exam first time out! Click here to know more.

## GOOD LUCK!

## CORE CONCEPTS

A set of best-practice publications for IT service management

**Function**
A team or group of people and the tools or other resources they use to carry out one or more processes or activities.

**Role**
Set of responsibilities, activities and authorities assigned to a person or team

**Process**
- Measurable
- Delivers specific results
- Deliver primary outcomes to customers or stakeholders
- Responds to specific events

## LIFECYCLE

### Service Strategy

**Purpose**
- ✓ Design, develop, and implement service management as a strategic asset
- ✓ Define the strategic objectives of the IT organization

**Processes**
- ✓ Strategy management for IT servicesmanagement as a strategic asset
- ✓ Service Portfolio management
- ✓ Finance management for IT services
- ✓ Demand management
- ✓ Business Relationship management

### Service Design

**Purpose**
- ✓ Design of new or changed services together with governing IT practices, processes and policies for introduction into the live environment.

**Key Aspects**
- ✓ Design Management information systems and tools
- ✓ Design of service solutions
- ✓ Design of technology architectures
- ✓ Design processes
- ✓ Design measurement methods and metrics

**Primary output of Service Design**
- ✓ Service Design Package (SDP)
  - ▪ Contents
    - Business Requirements
    - Service Applicability
    - Service Contacts
    - Service Functional Requirements
    - Service Level Requirements
    - Service Program
    - Service Transition Plan
    - Service Operational Plan
    - Service Acceptance Criteria
    - Service Design & Topology
    - Organizational Readiness Assessment

**Processes**
- ✓ Service Catalogue Management
- ✓ Service Level Management
- ✓ Supplier Management
- ✓ Capacity Management
- ✓ Availability management
- ✓ IT Service Continuity management
- ✓ Information Security management
- ✓ Design co-ordination

## Processes

✓ Transition Planning and Support
  ■ Purpose
    - Provide overall planning for service transitions and to coordinate the resources that they require

✓ Change Management
  ■ Purpose
    - Control the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services
  ■ Change Types
    - Normal changes
    - Standard changes
    - Emergency changes
  ■ Change Proposal
  ■ Change Advisory board
  ■ 7 R's
    - Who raised the change?
    - What is the Reason for the change?
    - What is the Return required from the change?
    - What are the Risks involved in the change?
    - What Resources are required to deliver the change?
    - Who is Responsible for the build, test, and implementation of the change?
    - What is the Relationship between the change and other changes

✓ Service Asset and Configuration management
  ■ Purpose
    - To ensure that the assets required to deliver services are properly controlled

✓ Release and Deployment management
  ■ Purpose
    - To plan, schedule and control the build, test and deployment of releases
    - To deliver new functionality required by the business while protecting the integrity of existing services

✓ Knowledge management
  ■ Purpose
    - Share perspectives, ideas, experience and information
    - To ensure that these are available in the right place, right time to enable informed decisions
    - To improve efficiency by reducing the need to rediscover knowledge
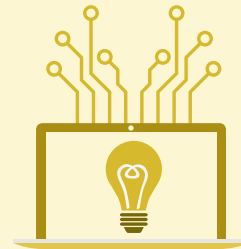
## Purpose

✓ To coordinate and carry out the activities and processes required to deliver and manage services at agreed levels to business users and customers

✓ Responsible for the ongoing management of technology that is used to deliver and support services

## Processes

✓ Event management
  ■ Purpose
    - Manage events throughout their lifecycle
    - Detect events, make sense of them and determine appropriate control action
  ■ Types
    - Informational
    - Warning
    - Exceptional

✓ Incident management
  ■ Purpose
    - To restore normal services operation as quickly as possible and thereby minimize the adverse impact on the business operations

✓ Problem management
  ■ Purpose
    - To identify the root cause of incidents or to minimize the adverse impacts of incidents and problems

✓ Request fulfillment
  ■ Purpose
    - Manage all service requests raised by the users throughout the lifecycle
  ■ Request Model
  ■ Service Request

✓ Access management
  ■ Purpose
    - To grant access to other authorized users the right to use a service while preventing access to non-authorized users by enforcing the policies defined by Information Security and Availability management
  ■ Activities
    - Verification
    - Providing rights
    - Monitoring identity status
    - Logging and tracking access
    - Removing or restricting rights

**Service Transition**    **LIFECYCLE**    **Service Operations**

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## METRICS

**Technology metrics**
Often associated with component and application-based metrics such as performance, availability etc.

**Process metrics**
Captured in the form of Key Performance Indicators (KPIs) and activity metrics for the service management processes.
Help to determine the overall health of a process

**Service metrics**
Results of the end-to-end service.
Component metrics are used to calculate the service metrics

## LIFECYCLE

Service Operations

### Functions

✓ Service Desk
- Purpose
  - Improved customer service, perception of IT and satisfaction with IT services
  - Increase accessibility to IT services through a single point of contact, communication and information
  - Better quality and faster turnaround of customer or user IT requests

✓ Technical management
- Purpose
  - To help plan, implement and maintain a stable technical infrastructure
- Role
  - Custodian of technical knowledge and expertise related to managing IT Infrastructure.
  - Provides detailed technical skills and resources needed to support the ongoing operation of the IT Infrastructure.
  - Plays an important role in providing the actual resources to support the IT Service Management lifecycle.
  - Ensures resources are effectively trained and deployed to design, build, transition, operate and improve the technology to deliver and support IT Services.

✓ Applications management
- Purpose
  - Application management is responsible for managing applications throughout their lifecycle
- Activities
  - Application Management
  - Application development
  - Identify skills required to support the applications
  - Deciding whether to build or buy

✓ IT operations management
- Purpose
  - Building, repeatable, consistent actions which if repeated frequently at the right qualitative level will ensure the success of operations
  - The actual value of the services being delivered by the organization is delivered and measured
- Sub Functions
  - IT operations control and Facilities management
- Role
  - Oversees the execution and monitoring of the operational activities and events in the IT infrastructure.
  - Includes console management, job scheduling, Backup and restore, Print and output management and maintenance activities

## SEVEN STEP IMPROVEMENT PROCESS

**Stage**
- Identify the strategy for improvement
- Define what you will measure
- Gather the data
- Process the data
- Analyze the information and data
- Present and use the information
- Implement improvement

**Purpose**
To define and manage the steps needed to identify, define, gather, process, analyze, present and implement improvements

### Continual Service Improvement

**Purpose**
✓ To align IT services with changing business needs by identifying and implementing improvements to IT services and processes that support the business.
✓ Improve effectiveness, efficiency and economics of all processes associated with delivering services

**Goal**
✓ To coordinate the design of metrics, data collection and reporting activities from the other processes and functions

**Model**
✓ What is the vision?
✓ Where are we now?
✓ Where do we want to be?
✓ How do we get there?
✓ Did we get there?
✓ How do we keep the momentum going?