

MTI104 - IT Services

Session-01:

# Practices to Enable Service Support

PRU/SPMI/FR-BM-18/0222



#### **Service Life Cycle**



A service is conceived, designed, built, and supported throughout its life cycle. Key aspects include:

- Services are supported to ensure proper functioning.
- Break-fix is applied when issues occur.
- Smaller modifications are done ad hoc.
- Major changes undergo a continual improvement cycle.
- Activities visible to stakeholders highlight achievements.
- Enablers support service support practices.
- This chapter covers three support enabling practices.

#### **Support Enabling Practices**



The three support enabling practices discussed are:

- Information Security Management
- IT Asset Management
- Service Configuration Management

#### Information Security Management Overview

Information Security Management is crucial due to increasing threats:

- Introduced in design, not as an afterthought.
- Blurred lines with DevSecOps and Rugged DevOps.
- ITIL retains exclusivity in managing internal security.
- Collaboration with DevSecOps for external interfaces.

#### Information Security Management Practice

The purpose is to protect the organization's information:

- Implement security controls, policies, and processes.
- Activities include Detection, Correction, Prevention.
- Detection: Monitoring and identifying threats.
- Correction: Addressing detected threats.
- Prevention: Avoiding future threats.

#### **Information Security Threats**



Key areas of information security threats include:

- Confidentiality: Unauthorized access protection.
- Integrity: Prevention of unauthorized modifications.
- Availability: Ensuring access to authorized parties.
- Authentication: Identifying and verifying entities.
- Nonrepudiation: Proof of actions and agreements.

#### Areas of information security





#### **Information Security Areas**



Expanding field of information security:

- Confidentiality, Integrity, Availability.
- Added areas: Authentication, Nonrepudiation.
- Evolution from ITIL v3 to the current framework.

#### Information Security in Service Value Chain

Information Security Management in SVC:

- Plan: High involvement.
- Design and Transition: High involvement.
- Obtain/Build: High involvement.
- Engage: High involvement.
- Deliver and Support: High involvement.
- Improve: High involvement.

#### **IT Asset Management Overview**

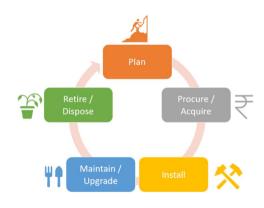


#### IT Asset Management involves:

- Planning and managing IT asset life cycles.
- Maximizing value and controlling costs.
- Managing risks and supporting decision-making.
- Meeting regulatory and contractual requirements.

#### Life cycle of an IT asset





#### IT Asset Management Practice



Purpose and importance of IT asset management:

- Tracking asset life cycles.
- Managing procurement, reuse, retirement, disposal.
- Reducing risks and controlling costs.
- Complying with standards and regulations.

#### **Types of Asset Management**



Types of asset management include:

- Hardware Asset Management
- Software Asset Management
- Client Asset Management
- Cloud-Based Asset Management

## Service Configuration Management PRADITA University

Importance of Service Configuration Management:

- Manages configurations and components.
- Essential for complex systems with multiple dependencies.
- Foundation for project success and service delivery.

## ITIL Definition of Service Configuration Manage

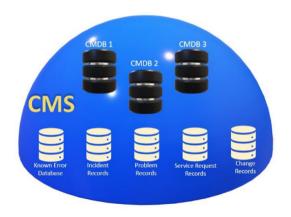
- Purpose: Ensure accurate and reliable configuration information
- Includes CIs and their relationships
- Provides a blueprint of IT services and dependencies
- Enables ease of change, impact analysis, and outage resolution
- Keeps configuration data alive and accessible
- Avoids problems from lack of configuration management
- Essential for current fast-changing environments

#### Configuration Items (CI)



- CI: Component managed to deliver an IT service
- Examples: Servers, routers, applications
- Can be individual components or whole systems
- Decision on CI level: Configuration architect
- Attributes: Owner, location, status, etc.
- Controlled through change management
- Ensures accuracy and prevents unauthorized changes

### Configuration management system (CMS)



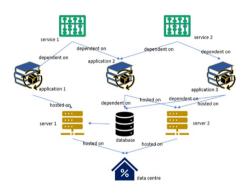
#### CMDB, CMS, and Service Model



- CMDB: Repository of CIs and their relationships
- Tracks dependencies and impacts visually
- CMS: Integrates multiple CMDBs and other databases
- Service Model: Graphical view of CMDB
- Shows relationships between interconnected CIs
- Assists in incident and change management
- Value in application, not just representation

#### Illustration of a service model





### Primary Activities of Service Configuration Mai

- Identify and populate CIs in CMDB
- Modify CMDB with changes
- Conduct periodic validations
- Use auditors and discovery tools for accuracy
- Validate CIs in CMDB and against physical CIs
- Ensure changes are authorized and accurate
- Maintain up-to-date configuration data

### Engagement in Service Value Chain Fradita University

- Plan: Low involvement, but useful for change proposals
- Design and Transition: High involvement, supports design changes
- Obtain/Build: CIs created during this phase
- Engage: High involvement, identifies dependencies
- Deliver and Support: Leverages Cls for efficiency
- Improve: Medium involvement, adapts to improvements
- Evolving practice based on IT needs

#### **Multiple Choice Question**



#### Which of the following is the right definition of an IT asset?

- A. An IT component that goes through the life cycle starting from procurement to disposal
- B. A component that has a financial value and is owned by the service provider to provide services
- C. An IT component that is required to deliver a service
- Any financially valuable component that can contribute to the delivery of an IT product or service