ITIL Foundations – LinkedIn Learning

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- **ITIL – Information Technology Infrastructure Library**
  - A set of service management best practice publications.
  - An industry of training, certification, consulting, and tooling.
  - ITIL is vendor neutral.

- **ITIL has developed into the most widely used and accepted framework for Information Technology Service Management (ITSM) in the world.** The framework is a structured approach to ITSM that eases Risk Management for government organisations and businesses. ITIL also improves customer relationships, defines cost-effective operations, and stabilises the IT environment. The popularity of ITIL is because it allows for growth, scale, and change – three integral elements for any organisation in any industry. (source: https://www.theknowledgeacademy.com/blog/itil-4-key-concepts/)

- ITIL 4 was created in 2019. ITIL v3 retired in 2022. However knowing ITIL v3 concepts and terminologies are embedded in many software tools and systems that are still valid. Understanding and familiarizing with ITIL v3 still helps in picking up these aforementioned systems and tools and working with ease with said tools.

Service – creates value for both the provider and consumer.
IT Service – IT represents the provider and the service. E.g. AWS, Microsoft 365 etc.

Stakeholders of an IT Services - peoples and organisations that have a stake in the value of a service.
E.g. Provider / Suppliers, Consumers (users, sponsors, customers), others (shareholders), Investors etc.

Value – Perceived benefits, usefulness, and importance of something to stakeholders. Value changes over times.

Outcome - a result for a stakeholder enabled by one or more outputs where outputs are tangible or intangible deliverables.

The service management capability must include systems for ensuring both good reality and good perception over time and changing circumstances.

ITSM – IT Service Management
Implementing and managing the quality of IT services that provide value stakeholders seek.

Why ITIL for your organisation?
- Alignment – align IT capability/costs to needs
- Efficiency – extend existing resources
- Reliability – ensure consistent performance
- Agility – adjust to business/technology changes
- Compliance – with regulatory requirements

Basics of ITIL v3
    Concept #1 – Service, Service Management, and the 4 Ps
    4 Ps
- **People**
- **Process**
- **Products**
- **Partners (suppliers)**

    4Ps can help understand the proper scope of consideration.

    Concept #2: The service lifecycle
    ITIL v3 arranges service management processes and functions into a lifecycle from strategy to design to transition to operation, and a continual improvement.

    Concept #3: Terminology, Key Principles, and Models
    ITIL glossary covers hundreds of concepts, definitions, and acronyms. All of these definitions and distinctions serve an essential purpose, providing a common and complete enough language. When people do not share the same language and understanding, a lot of time and resources get wasted defining and redefining terms, and in making and recovering from errors due to a lack of shared understanding of terminology.

    A shared understanding of standardized definitions for common IT terms is one of the most valuable aspects of adopting and adapting ITIL.

    7 Foundational Principles and models
- Value creation through services
  It describes how value is defined by customers through an affordable mix of features, and it's a function of what it helps them achieve in terms of objectives and at what cost compared to alternatives.

- People, processes, products, and partners
  Think of it as a correct scope of consideration for anything in service management.

○   Five aspects of service design
    Services, management information systems and tools, technology and management
    architectures, processes, and measurement methods and metrics

○   CSI approach
    Critical Service Improvement approach

○   CSFs and KPIs
    Critical Success Factors and Key Performance Indicators

○   Baselines
    Snapshots, for example, of a service or a process, recorded at a specific point in time as a
    primary reference point for later comparison.

○   Technology, process, and service metrics
    Collect these metrics.
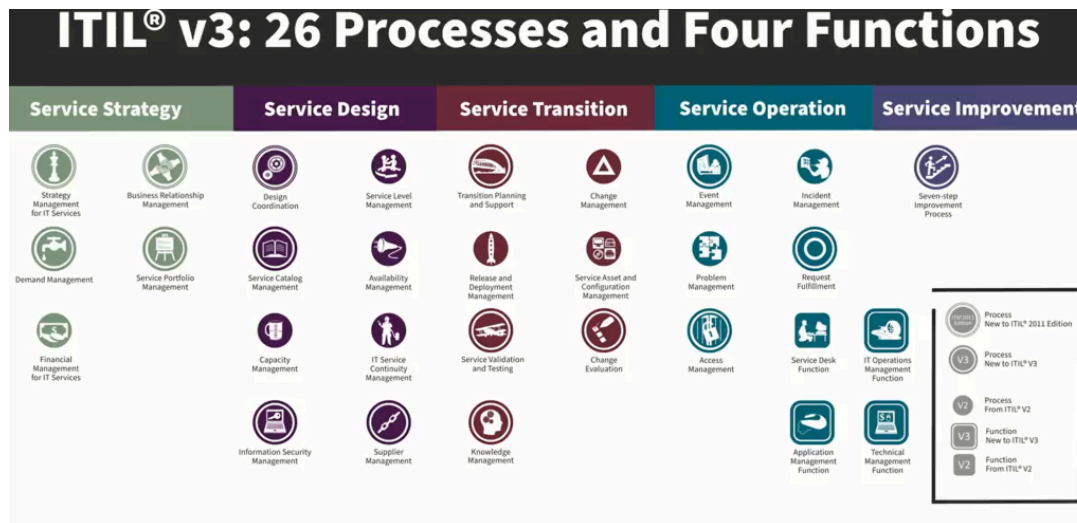
ITIL v3 Service Strategy processes
   a.   Strategy Management for IT Services
   b.   Service Portfolio Management
   c.   Financial Management for IT Services
   d.   Demand Management
   e.   Business Relationship Management

ITIL v3 Service Design Processes.
   a.   Design Coordination
   b.   Service Catalog Management
   c.   Service Level Management
   d.   Availability Management
   e.   Capacity Management
   f.   IT Service Continuity Management
   g.   Information Security Management
   h.   Supplier Management

ITIL v3 Service Transition Processes
   a.   Transition Planning and Support
   b.   Change Management
   c.   Service Asset and Confirmation Management
   d.   Release and Deployment Management
   e.   Service Validation and Testing
   f.   Change Evaluation
   g.   Knowledge Management

ITIL v3 Service Operation Processes
   a.   Event Management
   b.   Incident Management
   c.   Request Fulfillment
   d.   Problem Management
   e.   Access Management

ITIL v3 Service Operation Functions
   a.   Service Desk
   b.   Technical Management
   c.   IT Operations Management
   d.   Application Management

ITIL v3 Continual Improvement
   a.   Identify

    b. Define
    c. Gather
    d. Process
    e. Analyze
    f. Present
    g. Implement

ITIL v3 Service Managment Roles
    a. Process Owner
    b. Process Manager
    c. Process Practioner
    d. Service Owner

    RACI Model – WHO IS;
        Responsible
        Accountable
        Consulted
        Informed

    ○ Service Automation

ITIL 4 Foundation Syllabus/Exam Specs

1. **Services, Service management (four dimensions)**
   a. Organizations and people
   b. Information and technology
   c. Partners and Suppliers
   d. Value streams and processes
2. **Service value chain**
   a. Plan
   b. Improve
   c. Engage
   d. Design and Transition
   e. Obtain/build
   f. Deliver and Support
3. **Service value system**
   a. Guiding principles
   b. Governance
   c. Service value chain
   d. Practices
   e. Continual Improvement
4. **Terminology, seven guiding principles**
   The ITIL 4 exam specification includes 19 key terms and 7 guiding principles

   Availability, change, configuration item, cost, value, organization, outcome, output, risk, customers and users, event, incident, IT asset, known error, problem, service, service consumption, service management, service offering, service provision, service relationship management, sponsor, utility and warranty, and seven guiding princples:
   a. Focus on value
   b. Start where you are
   c. Progress iteratively with feedback
   d. Collaborate and promote visibility
   e. Think and work holistically
   f. Keep it simple and practical
   g. Optimize and automate.

5. **34 ITIL practices (seven cited in Foundation)**
   https://itsm.tools/34-itil-4-management-practices/

6. **Principle #7: optimize and automate.**

ITIL 4 tends to be descriptive and not prescriptive. It is up to the teams and organizations how to implement them in their practice.

Seek to understand ITIL:
- Terminology
- Principles
- Practices
- Concepts
- Models

ITIL 4 Management Practices

General Management Practices (14)	Service Management Practices (17)	Technical Management Practices (3)
Architecture management	**Availability management**	**Deployment management**
Continual improvement	Business analysis	Infrastructure and platform management

Information security management	Capacity and performance management	Software development and management
Knowledge management	Change enablement	
Measurement and reporting	Incident management	
Organizational change management	IT asset management	
Portfolio management	Monitoring and event management	
Project management	Problem management	
Relationship management	Release management	
Risk management	Service catalog management	
Service financial management	Service configuration management	
Strategy management	Service continuity management	
Supplier management	Service design	
Workforce and talent management	Service desk	
	Service level management	
	Service request management	
	Service validation and testing	

- All explained here in detail - https://itsm.tools/34-itil-4-management-practices/

ITIL 4 - Service Management
Service Value chain

ITIL 4 users practices instead of processes like in ITIL v3.

4 Dimensions of Service Management
1. Organisations and People
2. Information and Technology
3. Partners and Suppliers
4. Value Streams and Processes

Five Components of Service Value System
1. Plan
   Foster a shared understanding of the vision, improvement direction, and status of all dimenions of service management for product and services

2. Improve
   Ensure continual improvement of products, services, and practices across all value chain activities and service management dimensions

3. Engage
   Foster a good understanding of stakeholder needs, transparency, and continual engagement and good relationships with all stakeholders.

4. Design and Transition
   Ensure that products and services continually meet stakeholder expectations for quality, costs, and time to market.

5. Obtain/Build
   Ensure that service components are available when needed and meet agreed specifications

6. Deliver and Support
   Ensure that services are delivered and supported according to agreed specifications to meet consumer needs.

7 Guiding Principles
1. **Focus on Value** – Everything we do must add value from the stakeholder's perspective

2. **Start where you are** – Don't start from scratch – leverage what's already available, and directly observe and fully understand the current state first.

3. **Progress iteratively with feedback** – Don't try to do everything at once. Organize work into smaller, manageable chunks done more often, and use feedback in each iteration to ensure that actions are appropriate

4. **Collaborate and promote visibility** – Work together across boundaries for more buy-in and success, share information, build understanding and rust, and make work and consequences visible.

5. **Think and work holistically** – work on the service, not just its parts, and integrate information, technology, organization, people, practices, partners and agreements.

6. **Keep it simple and practical** – eliminate anything that provides no value, use the minimal number of steps to accomplish the objectives and use outcome based thinking for practical solutions and results

7. **Optimize and automate** – use resources (particularly human resources) wisely, eliminate anything wasteful, and use technology to achieve what it can and human intervention where it can adds value.

ITIL 4 Practices;
Information Security management
Protecting an organization by understanding and managing risks to the confidentiality, integrity, and availability of information.

Relationship Management
Establishing and nurturing links between an organization and its stakeholders at strategic and tactical levels.

Supplier Management
Ensuring that an organization suppliers and their performance levels are managed appropriately to support the provision of seamless quality products and services.

IT Assest Management
Planning and managing the full lifecycle of all IT assets

Monitoring and Event Management
Systematically observing services and service components, and recording and reporting selected changes of state identified as events.

Release Management
Making new and changed services and features available for use

Service Configuration Management
Ensuring that accurate and reliable information about the configuration of services and the configuration of items that support them, is available when and where needed.

Deployment Management
Moving new or changed hardware, software, documentation, processes, or any other service component to live environments

Incident Management
Minimizing the negative impact of incidents by restoring normal service operation as quickly as possible

Problem Management
Reducing the likelihood and impact of incidents by identifying actual and potential causes of incidents, and manaing workarounds and known errors

Service Request Management
Supporting the agreed quality of a service by handling all predefined, user-initiated service requests in an effective and user-friendly manner.

Service Level Management
Setting clear business based targets for service performance so that the delivery of a service can be properly assessed, monitored, and managed against these targets.

Service Desk
Capturing demand for incident resolution and service requests. Communication concentration points between providers and users.

Change Enablement
Ensuring that risks are properly assessed, authorizing changes to proceed, and managing a change schedule in order to maximize the number of successful IT changes.

Continual Improvement
Aligning an organization's practices and services with changing business needs through the ongoing identification and improvement of all elements involved in the effective management of service management

Foundation Level Terminology and Model
IT Asset
- **Definition**: Any resource or capability that contributes to the delivery of an IT service. This includes hardware, software, data, and personnel.
- **Importance**: IT assets are managed throughout their lifecycle to ensure they are used effectively and provide value to the organization.
Event

- **Definition**: Any detectable or discernible occurrence that has significance for the management of the IT infrastructure or the delivery of IT services.
- **Examples**: System alerts, error messages, or service status changes.
- **Purpose**: Events are typically managed through event management to ensure that normal operations continue without interruption.

Configuration Item (CI)
- **Definition**: Any component or other service asset that needs to be managed to deliver an IT service.
- **Examples**: Servers, applications, network components, or any other IT service component.
- **Purpose**: CIs are tracked and managed through the Configuration Management Database (CMDB) to ensure the integrity and accuracy of service management processes.

Change
- **Definition**: The addition, modification, or removal of anything that could affect IT services.
- **Types**: Changes can be standard (pre-approved), normal (requires approval), or emergency (requires expedited handling).
- **Purpose**: Managed through Change Management to minimize disruption to services.

Incident
- **Definition**: An unplanned interruption to an IT service or a reduction in the quality of an IT service.
- **Objective**: The primary goal is to restore normal service operation as quickly as possible and minimize the impact on business operations.

Problem
- **Definition**: The underlying cause of one or more incidents.
- **Objective**: Managed through Problem Management to identify the root cause of incidents and prevent their recurrence.

Known Error
- **Definition**: A problem that has been analyzed and has a documented root cause and workaround.
- **Objective**: Known errors are managed in a way that allows the organization to respond to incidents more efficiently by using the documented workaround.

Continual Improvement Model (CIM)
- **Definition**: A model that ensures IT services are aligned with changing business needs by identifying and implementing improvements.
- **Steps**:
  1. **What is the vision?** - Understand and define the business goals.
  2. **Where are we now?** - Assess the current state.
  3. **Where do we want to be?** - Define the target state.
  4. **How do we get there?** - Plan the improvements.
  5. **Take action** - Implement the improvement plan.
  6. **Did we get there?** - Measure and evaluate the results.
  7. **How do we keep the momentum going?** - Maintain and further refine improvements.

These concepts and models are fundamental in IT service management frameworks such as ITIL (Information Technology Infrastructure Library).