13 ITIL Mind Maps:
- Service Management as a Practice
- ITIL Service Strategy
- ITIL Service Strategy Processes
- ITIL Service Design
- ITIL Service Design Processes
- ITIL Service Transition
- ITIL Service Transition (SACM)
- ITIL Service Transition (Change and Evaluation)
- ITIL Service Operation
- ITIL Service Operation Functions
- ITIL Service Operation Processes
- ITIL Continual Service Improvement
- ITIL CSI Improvement Processes

ITIL® 2011 Mind Maps
ITIL - Service Management as a Practice

Service Management as a Practice

Facilitates outcomes without costs & risks
- Uncertainty of outcome
- Risk
- Functionality
- Fitness for purpose
- What the customer gets
- Fitness for use
- Performance
- How service is delivered
- Economic value
- Reputation
- Shown by

Value to customers

Core
- Enabling
- Classification

Maintenance
- Prime customer contact
- Ensures delivery meets requirements
- Identify areas for input into CSI register / raise RFC's
- Communication with Process Owners
- Reporting & monitoring
- Accountable for delivery of service

Set of specialised capabilities
- Provides value for customers via services
- IT service management

Process Owner

Defines Strategy, policy, standards
- Assists with design
- Documentation
- Audits
- Communication
- Input to CSI register
- Process manager
- Process practitioner

Process
- Controls
- Objectives
- Feedback
- Activities
- Procedures
- Metrics
- Improvement
- Roles
- Enablers

Service Owner

Service Management

Best Practice

Sources
- Standards - ISO20000
- Training and education
- Internal and external experience
- Research
- Industry practice - Sarbanes Oxley (SOX), Financial Services Authority (FSA)

Enablers
- Employees
- Customers
- Suppliers
- Advisors
- Technology

Knowledge to achieve business objectives

Definitions
- Process
- Coordinated activities
- Performance driven
- Creates value for customers
- Defines roles, activities, guidelines
- Characteristics
- Measurable
- Specific Results
- Customers
- Responds to triggers

Function
- Specialised units
- Perform certain types of work

Role
- Responsibility within process or function

RACI Model
- Responsible
- Accountable
- One person
- Consulted
- Informed
- Clarifies roles and responsibilities

For Online ITIL Training and Details of Special Offers - Visit: www.itiltrainingzone.com
Automation can affect performance

- Simplify processes
- Understand flow of activities
- Maintain interactions

Define the market and identify customers

- Understand the customer
- Quantify the outcomes
- Classify and visualise the service
- Understand the opportunities

Define services based on outcomes

- Core Services - deliver basic outcomes
- Enabling services are needed in order for a core service to be delivered
- Enhancing services are excitement factors
- Supporting Services - either enable or enhance the value proposition

Packaging core and supporting services will also have an impact on the design and operation of a service

Service Strategy

- Establish and maintain business relationships
- Ensure service provider can meet needs of the business
- Assist business in articulating value of service

- Strategy principles

- Define market and identify customers
- Understand the customer
- Quantify the outcomes
- Classify and visualise the service
- Understand the opportunities
- Define services based on outcomes

- Service models

- Core Services - deliver basic outcomes
- Enabling services are needed in order for a core service to be delivered
- Enhancing services are excitement factors
- Supporting Services - either enable or enhance the value proposition

Packaging core and supporting services will also have an impact on the design and operation of a service

- Assets

- Strategic Asset
- Service Management
- Financials
- Infrastructure
- Applications
- People
- Information
- Management
- Processes
- Organization
- Knowledge
- People

- Opposing dynamics

- Future vs Present
- Operational effectiveness vs improvements in functionality
- Value capture

- 4 P's

- Perspective
- Vision
- Positions
- Business Portrayal
- Plans
- How to achieve vision
- Patterns
- Ongoing Actions

- Benefits

- Cost effectiveness
- Value for customer
- Standardised processes
- Services create value
- Respond quickly to changes in business environment

- Kano model

- Basic factors
- Excitement factors
- Performance factors

For Online ITIL Training and Details of Special Offers - Visit: www.itiltrainingzone.com
Design IT services, together with the governing IT practices, processes and policies, to realize the service provider’s strategy and to facilitate the introduction of these services into supported environments ensuring quality service delivery, customer satisfaction and cost-effective service provision.

**4 P's**

- **People**
- **Products**
- **Partners**
- **Processes**

**Key Principles**

- **Design coordination**
  - Define and maintain policies and methods
  - Plan design resources and capabilities
  - Coordinate design activities
  - Manage design risks and issues
  - Improve service design
  - Plan, coordinate and monitor individual designs
  - Review designs and ensure handover of SDPs

- **Supplier Management**
  - Identify business need
  - Evaluation and procurement of new contracts and suppliers
  - Supplier and contract categorisation
  - Maintain supplier and contract management information system (SCMS)
  - Manage and ensure compliance of suppliers

- **Benefits**
  - Reduced total cost of ownership (TCO)
  - Improved quality of service
  - Easier implementation of new services
  - Better service alignment
  - Improve service performance
  - Improve IT governance
  - Improved service alignment
  - More effective service management
  - Better IT processes
  - Improved information and decision making

**Other Service Design Processes**

- Plan and coordinate the resources and capabilities required to design new or changed services
- Produce associated service design packages
- Ensure service designs and/or SDPs are produced and handed over to service transition
- Manage the quality criteria, requirements and handover between design, strategy and transition
- Ensure all service models and service solution designs conform to strategic, architectural, governance and other corporate requirements
- Improve the effectiveness and efficiency of service design activities and processes
- Ensure that all parties adopt a common framework of standard, reusable design practices
- Monitor and improve the performance of the service design lifecycle stage

**Objectives**

- Coordinate all design activities
- Produce associated service design packages
- Ensure service designs and/or SDPs are produced and handed over to service transition
- Manage the quality criteria, requirements and handover between design, strategy and transition
- Ensure all service models and service solution designs conform to strategic, architectural, governance and other corporate requirements
- Improve the effectiveness and efficiency of service design activities and processes
- Ensure that all parties adopt a common framework of standard, reusable design practices
- Monitor and improve the performance of the service design lifecycle stage

**Inputs**

- Corporate visions, strategies, etc
- Service management visions, strategies, policies, objectives and plans
- Constraints and requirements for compliance with standards and regulations
- IT strategies, policies and plans
- Business requirements
- Service portfolio
- ITSM processes, risks and issues registers
- Revisions to IT strategies, policies, designs, plans, architectures, processes
- Service level package

- Statement of requirements (SOR)
- Identification of business case
- Evaluation and procurement of new contracts and suppliers
- Supplier and contract categorisation
- Maintenance of supplier contract management information system (SCMS)
- Manage and ensure compliance of suppliers

**Balanced design**

- Functionality
- Resources
- Schedule

**Technology and management architectures**

- Business / organisation
- Enterprise
- Service
- Application
- Data / Information
- Environment
- IT infrastructure
- Design top down, build bottom up

**Processes required**

- Progress
- Compliance
- Efficiency

**Measurement methods and metrics**

- Availability
- Capacity
- Service Level
- Service Catalogue

**Service solutions**

- Why should a customer buy these services?
- Why should they buy these services from us?
- What are the pricing or chargeback models?
- What are our strengths and weaknesses, priorities and risks?
- How should our resources and capabilities be allocated?

**Opportunity**

- Value proposition
- Business outcomes supported
- Business cases

**Portfolios and Processes**

- Service solutions
- Systems and tools
- Service portfolio
- Why should we look for opportunities to expand our service offerings?
- What are the technical and business challenges we need to overcome?
- How can our existing service portfolio be optimized?
- What are the key areas for investment?

**Contents**

- Priorities
- Risks
- Offerings and packages
- Investments required
- Ongoing costs and pricing

**Offerings and packages**

- Support levels of performance
- Prices
- Minimum requirements
- Ordering and request
- Support terms and conditions
- Points of contact
- Pricing and charging

**Implementation**

- Identify business need
- Statement of requirements (SOR)
- Invitation to tender (ITT)
- Business case
- Evaluation and procurement of new contracts and suppliers
- Award contract
- Negotiate
- Select supplier
- Supplier and contract categorisation
- Supplier Management

For Online ITIL Training and Details of Special Offers - Visit: www.itiltrainingzone.com
ITIL Service Design Processes

Service Catalogue Management

Information Security Management

Availability Management

Capacity Management

IT Service Continuity Management (ITSC)

Manage information contained in service catalogue
Ensure service catalogue is available and accurate
Ensure service catalogue supports evolving needs of service management processes
Live services
Business service catalogue
Technical service catalogue
Delivered service matches or exceeds needs of customer
Perform as agreed
Service availability
Component availability
Design for availability and recovery
Reliability
Perform as per its agreed function
Maintainability
Speed to restore to normal working
Serviceability
Ability of 3rd party to meet terms of contract
Proactive Activities
Identifying vital business functions (VBFs)
Designing in availability
Component failure impact analysis (CFIA)
Single point of failure (SPOF)
Fault tree analysis (FTA)
Modeling
Risk assessment
Planned maintenance
Projected service outage document (PSO) document
Reactive Activities
Monitor, measure, analyse, report
Unavailability analysis
Expanded incident lifecycle
Service failure analysis (SFA)
Component failure impact analysis (CFIA)
IT Service Continuity Management (ITSC)
Required services resumed within required and agreed timescales
Support business continuity management (BCM)
Agreed and required timescales
Process
Initiation
Policy setting
Terms of reference and scope
Resource allocation
Project organizational and control structure
Agree project and quality plans
Business impact analysis (BIA)
Risk analysis
Requirements & strategy
Business continuity and recovery plan
ITSC strategy
Organisation
Gradual
Intermediate
Fast
Immediate
Implementation
Develop plans / procedures
Test plan / procedures
Education, awareness, training
Ongoing operations
Testing
Testing
Feedback & adjust
Change management
Innovation

For Online ITIL Training and Details of Special Offers - Visit: www.itiltrainingzone.com
ITIL Service Transition

Objectives
- Plan and manage service changes efficiently and effectively
- Manage risks relating to new, changed or retired services
- Successfully deploy service releases into supported environments
- Set correct expectations on the performance and use of new or changed services
- Ensure that service changes create the expected business value
- Provide good-quality knowledge and information about services and service assets.

Benefits
- Confidence that a new or changed service will deliver the value and outcomes required of it
- Provides a measured degree of confidence.

Process
- Define customer requirements
- Define service requirements
- Design service solution
- Design service release
- Validate service solution
- Validate service release
- Service acceptance
- Service operational readiness
- Service release package
- Component and assembly
- Plan and design tests
- Test environment
- Levels of testing
- Verify test plan and designs
- Prepare test environment
- Perform tests
- Evaluate exit criteria
- Report
- Test and clean up

Roles
- Test manager
- Should be separate to release and deployment manager
- Test and deployment manager

Transition Planning and Support
- See "Change and Change evaluation Map"
- See "Knowledge, Service Asset and Configuration Map"

Activities
- Produce transition strategy
- Plan and coordinate transition
- Provide transition process support
- Produce transition strategy
- Plan and coordinate transition
- Provide transition process support
- Prepare for transition
- Plan and coordinate transition
- Provide transition process support

Release and Deployment Management
- Release options
- Big bang / phased
- Push / pull
- Automated / manual

Release unit
- Full
- Data
- Package

Service Validation and Testing
- Library of tests
- Plan and design tests
- Test environment
- Levels of testing
- Verify test plan and designs
- Prepare test environment
- Perform tests
- Evaluate exit criteria
- Report
- Test and clean up

Service Asset and Configuration
- See "Knowledge, Service Asset and Configuration Map"

Knowledge
- Business and service performance measures
- Strong communication process
- Kotter's 8 steps
- Leadership
- Organisational adoption
- Governance process
- Organisational capabilities
- Emotional cycle of change

Difficulties
- Speed vs accuracy
- Safety critical services
- Restricted resources
- Working with difficult customers

Managing People
- Stakeholder change
- Communications
- Stakeholder map
- Stakeholder commitment analysis
- Emotional cycle of change

Leadership
- Organisational adoption
- Governance process
- Organisational capabilities
- Business and service performance measures

For Online ITIL Training and Details of Special Offers - Visit: www.itiltrainingzone.com

ITIL is a registered trademark of the Cabinet Office. This document can be shared internally.
ITIL Service Transition - SACM

**SACM Roles**
- Configuration manager
- Configuration librarian
- Configuration analyst
- Configuration tools administrator
- Service asset manager

**SACM Benefits**
- Design, manage & maintain configuration management system (CMS)
- Control receipt, identification, storage of CIs
- Create process & procedures & training
- Regular housekeeping
- Amend database to suit business requirements
- Design & maintain asset management systems
- Asset management system processes & procedures
- Agree naming convention

**SACM Activities**
- Configuration management databases (CMDBs)
- Definitive media libraries (DMLs)
- Known error databases (KEDBs)
- Availability management information system (AMIS)
- Capacity management information system (CMIS)

**Knowledge Management**
- Service knowledge management system (SKMS)
- Data, information & tools layer
- Information integration layer
- Modelling
- Knowledge processing layer
- Reports
- Presentation layer

**Service Transition: Knowledge Management - Service Asset and Configuration Management**
- Service knowledge management system (SKMS)
- Data, information and tools layer
- Information integration layer
- Modelling
- Knowledge processing layer
- Reports
- Presentation layer

**For Online ITIL Training and Details of Special Offers - Visit:  www.itiltrainingzone.com**
Service Transition

- Change Management (ChM)
- Change Evaluation (ChE)

**Change Assessment**
- **7 R's:** Raised, Reason, Return, Risk, Resource, Responsible, Relationship
- Impact
- Cost

**Change Process**
- Recorded
- Assessed/evaluated
- Authorised
- Prioritised
- Planned
- Tested
- Implemented
- Reviewed

**Request for Change**
- Strategic
- Tactical
- Operational activity
- User access request
- Reboot
- Project change proposal
- Preauthorised, accepted procedure
- Interface with request fulfilment
- Emergency change
- Standard change
- Normal change

**Emergency Change Advisory Board (ECAB)**
- Control using change model
- Consider remediation / back out plans
- Test as much as possible
- Retrospective RFC

**Change Advisory Board (CAB)**
- Regular
- Assess, plan, schedule changes
- Review previous changes
- Flexible membership
- Change schedule (CS)
- Projected service outage (PSO)

**Change and Evaluation**
- Set stakeholder expectations correctly
- Evaluate the intended and unintended effects of a service change
- Provide effective and accurate information to change management
- Provide good-quality outputs so that change management can expedite an effective decision about whether or not a service change is to be authorized.
- Evaluation required before each of authorization by the suitable authority to provide advice and guidance
- Change evaluation is concerned with value.
- Establish the use made of resources in terms of delivered benefit

**Change Risks**
- Lack of commitment to the process by the business, management or IT staff
- Bypassing the process
- Change assessment being reduced to box ticking
- Overly-bureaucratic process
- Insufficient time

For Online ITIL Training and Details of Special Offers - Visit: [www.itiltrainingzone.com](http://www.itiltrainingzone.com)
ITIL Service Operation

**Value to business**
- Reduced labour / costs
- Reduced duration / frequency of service outages
- Meet goals of ISM policy
- Increased effectiveness and efficiency

**Benefits**
- Manage operational costs
- Maintain live services to defined service standards
- Identify incidents & problems
- Protect live services
- Proactive activities

**Objectives**
- Deliver services at agreed levels to the business users and customers.
- Manage the technology used to deliver the services and to collect information on performance & Service metrics.

**Scope**
- Services
  - Service management processes
- Technology
- People

**Balance**
- Internal (technology) vs external (services)
- Stability vs responsiveness
- Cost vs quality
- Reactive vs proactive

**Processes**
- Incident management
- Problem management
- Access management
- Request fulfilment

See "Service Operation Processes" map

See "Service Operation Functions" map

**Functions**
- Technical management
  - IT Operations management
  - Common service operation activities
- Service desk
- Application management

**For Online ITIL Training and Details of Special Offers - Visit:** [www.itiltrainingzone.com]
**ITIL Service Operation Processes**

**Purpose:**
- Identify recurring requirements.
- Adaptiveness to IT activity.
- Identify potential improvements.
- Increased availability and customer satisfaction.
- Restore service availability.
- Incident is an unplanned interruption to an IT Service.
- Reduction in the quality of an IT Service.
- Failure of a CI that has not yet impacted an IT service.

**Benefits:**
- Eliminate recurring incidents.
- Minimise impact of incidents that cannot be prevented.
- Prevent problems and resulting incidents from happening.

**Problem:**
- Underlying cause of one or more incidents.

**Workaround:**
- Temporary way of overcoming difficulties.
- Predefined.

**Known Error (KE):**
- Problem diagnosis complete and workaround identified.

**Process:**
- Detection.
- Categorisation.
- Prioritisation.
- Resolution.
- Closure.

**Input:**
- Event management.
- Incident management.
- Problem management.

**Output:**
- RFCs.
- Workarounds.

**Techniques:**
- Kepner & Tregoe.
- Ishikawa.
- Brainstorming.
- Chronological.
- Pareto.
- Affinity mapping.
- 5 Whys.
- Hypothesis testing.
- Lotus blossom.

**Request Model:**
- Predefined method to handle repeat requests.

**Service Request:**
- Day to day demands from users.
- Small changes.
- Low risk and cost.
- Frequently performed.
- Pre-approved by change authority.

**Self service and self select tool:**
- Service desk.
- Pre-approved changes.

**Channel for:**
- Information on availability of services.
- General information.
- Comments and complaints.

**Event Management**
- Detect, analyse, take appropriate control action.
- Early detection of events.
- Assign support before outage occurs.
- Detectable or discernable occurrence.

**Informational:**
- Types of event.
- Information.
- Warning.
- Exception.
- Constant state CIs.
- Software licence.
- Security.

**Scope:**
- Normal activity.
- Any change of state that has significance for the management of a CI.

**Service Operation Processes**
- Identification.
- Logging.
- Categorisation.
- Prioritisation.
- Urgency.
- Business impact.
- Investigation and diagnosis.
- Technical.
- Resolution and recovery.

**Access Management**
- User's rights and privileges.
- Restricting non-users access.
- Logging and tracking access.

**Request Fulfilment**
- Request from HR or manager.
- RFC.

**Service Request**
- Managed as service request.
- Pre-approved change.

**For Online ITIL Training and Details of Special Offers - Visit: [www.ititrainingzone.com](http://www.iti.trainingzone.com)**

*ITIL is a registered trademark of the Cabinet Office. This document may be shared internally.*
**ITIL Continual Service Improvement**

**Value**
- Lead to a gradual and continual improvement in service quality
- Ensure that IT services remain continuously aligned to business requirements
- Gradual improvements in cost effectiveness through a reduction in costs and or the capability to handle more work at the same cost
- Identify opportunities for improvement in all lifecycle stages and processes through monitoring and reporting
- Identify opportunities for improvements in organizational structure, resourcing capabilities, partners, technology, staff skills, training and communications

**Enterprise Governance**
- Provides an environment within which CSI can operate and thrive
- Business governance
  - Responsibility of board of directors and executive management
  - Ensures IT sustains and extends the organisation's strategies and objectives
- IT governance
  - Leadership processes
  - Organisational structure

**Objectives**
- Ensure applicable quality management methods are used to support continual improvement activities
- Ensure that processes have clearly defined objectives and measurements that lead to actionable improvements
- Understand what to measure, why it is being measured and what the successful outcome should be

**Critical Roles**
- CSI manager
  - Ownership is fundamental to any improvement strategy
  - Accountable for the success of CSI in the organization
  - Chief advocate and owns all CSI issues
- Service Owner
  - Accountable to the customer for the initiation, transition and ongoing maintenance and support of a particular service
  - Accountable to the IT director or service management director for the delivery of the service
- Reporting analyst
  - Reviews and analyses data from components, systems and sub systems in order to obtain a true and end-to-end service achievement
- Service level manager
  - Accountable for the delivery of a specific IT service
  - Responsible to the customer for the initiation, transition and ongoing maintenance and support of a particular service

**Methods and Techniques**
- Define success
- Build framework
- Choose measures
- Define procedures & policies
- Steps
  - Assessment
    - Gap analysis
    - Benchmarking
  - Comparison with Industry norms
    - Process maturity comparison
    - Total cost of ownership (TCO)
    - Return on Investment (ROI)
  - Predict and report service performance against targets
    - Service measurement
      - Performance
      - Availability
      - Technology
      - CSF
      - KPI
      - Process
      - Service
      - Metrics
      - CSF
      - KPI
      - Performance
      - Availability
      - Process
      - Service
      - Metrics
  - Financial
  - Customer
  - Innovation
  - Internal
  - Balanced Scorecard
    - Strengths
    - Weaknesses
    - Opportunities
    - Threats
    - SWOT
    - Baselines
    - Used to establish an initial data point to determine if a service or process needs to be improved
    - Must be documented, recognized and accepted throughout the organization
    - Must be validated, recognized and accepted at each level
    - Baselines
    - To validate
    - To direct
    - To justify
    - Measure value
  - Tactical process maturity
  - Operational metrics and KPIs
  - Improvement opportunities should be categorized into initiatives that can be achieved quickly, or in the medium or longer term
  - Each improvement initiative should show the benefits that will be achieved by its implementation
    - Should be held and regarded as part of the service knowledge management system (SKMS)
    - Provides a coordinated, consistent view of the potentially many improvement activities

**CSI processes and integration with other processes**
- see "CSI Integration" Map
- 7 Step Improvement
- Deming cycle

**For Online ITIL Training and Details of Special Offers - Visit:**
[www.itiltrainingzone.com](http://www.itiltrainingzone.com)
ITIL CSI Processes and Interaction

CSI Approach

CSI 7 Step Process

Security

Financial

Problem

Service Desk and Incident Management

Knowledge

Continual Service Improvement processes and interaction with other processes

ITIL Deming Cycle

What is the vision?
Where are we now?
Where do we want to be?
How will we get there?
How do we know we have arrived?
How do we keep the momentum going?

Plan
Do
Check
Act

To align business needs with IT service delivery

Identify strategy for improvement
Define what will you measure
Gather the data
Process the data
Analyse the information and data
Present and use the information
Implement improvement

Defining security monitoring and data collection requirements
Monitoring, verifying and tracking the levels of security according to the organizational security policies and guidelines
Assisting in determining effects of security measures on the data monitoring and collection from the confidentiality, integrity and availability perspectives
Processing response and resolution data on security incidents
Creating trend analyses on security breaches
Validating success of risk mitigation strategies
Utilizing the agreed upon reporting format
Analysing processed data for accuracy

Monitoring and collecting data associated with the actual expenditures versus budget
Provides input on questions such as whether costing or revenue targets are on track
Monitors the ongoing cost per service etc
Provides the necessary templates to assist CSI to create the budget and expenditure reports for the various improvement initiatives
Provides the means to compute the ROI of the improvements

Documenting and reviewing incident trends on incidents, service requests and telephony statistics over a period of time to identify any consistent patterns
Comparing results with prior months, quarters or annual reports
Comparing results with agreed-to levels of service
Identifying improvement opportunities
Analysing processed data for accuracy
Input into SIPS

What do we know?
How do we keep the momentum going?

Identify risk
Identify changes that affect ITSC
Regulatory impact

Change & Release

Identifying changes that affect ITSC

Capacity

Business
Component
Iterative activities
Application sizing
Demand management
Modeling
SIPs and reports

Manage RFCs from SIPS
Implementing improvement
Post Implementation review
CAB
Kotter’s 8 steps

Component failure impact analysis
Fault tree analysis
Service fault analysis
Technical observation
Extended incident lifecycle
SIPs and reports

ITSC

Identifying internal relationships in IT organizations, negotiating terms and responsibilities and codifying them with operational level agreements (OLAs)
Working with the supplier manager to identify existing contractual relationships with external vendors and verifying that the underpinning contracts (UCs) meet the revised business requirements
Using the service catalogue as the baseline to negotiate service level agreements (SLAs) with the business
Reviewing service achievement and identifying where improvements are required, feeding them into CSI

Availability

Service level

Comparing results with prior months, quarters or annual reports
Comparing results with agreed-to levels of service
Identifying improvement opportunities
Analysing processed data for accuracy
Input into SIPS

ITSC

Identifying risk
Identify changes that affect ITSC
Regulatory impact

SKMS CMS CMDB
Data, information, knowledge, wisdom
Shared knowledge
Inclusion in CSI register
Building SIPS

For Online ITIL Training and Details of Special Offers - Visit: www.itiltrainingzone.com