

ITIL® 2011 FOUNDATION STUDY NOTES

Pass your ITIL exam with these comprehensive 2011 Foundation study notes and exam tips!

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ITIL[®] 2011 Foundation - Study Notes

Read Me

Hi There,

If you're reading this you've stumbled upon the best study notes you'll find for ITIL 2011. Our students have had great success with our online course using these notes. Still not convinced that these notes are awesome?!

Here's how to use the notes:

Order in which you should review the study materials:

- a. Exam Tips
- b. Overview (a mapping of the Processes/Sub-processes/Functions)
- c. Module 1
- d. Module 2
- e. Module 3 SS (Service Strategy)
- f. Module 4 SD (Service Design)
- g. Module 5 ST (Service Transition)
- h. Module 6 SO (Service Operation)
- i. Module 7 CSI (Continual Service Improvement)
- j. Overview (a mapping of the Processes/Sub-processes/Functions)
- 1. The first page of every note contains a list of constructs (processes / functions / etc.) that may be tested on. If you can go through the first page of every document and answer/define/understand the constructs without looking at the answers listed on the subsequent pages, you're ready to move onto the next document.
- 2. While these notes are close to a complete study guide, keep in mind that getting answers wrong on the practice tests is an invaluable exercise which will help you determine the constructs you still need to decipher. For example, I thought I knew what a "workaround" was, but I had to get it wrong on the practice exam to recognize I needed to understand/memorize ITIL's definition.

Best of luck! And hey, if you need help, don't hesitate to contact us (<u>info@thoughtrock.net</u>) regardless of whether you're taking the course through us. We'll help!

Your study partner, Thought Rock

Visit <u>www.thoughtrock.net/theitilexam</u> for more details.



ITIL 2011 Foundation - Study Notes

Quick Exam Tips

Prepping for the ITIL 2011 Foundation Exam? Here are some key points to keep in mind:

- 1. Memorize your definitions. The questions on the exam will provide 2 out of 4 answers that make sense and are very similar when referring to a term, and so if you don't have the term memorized, you'll be stuck. Trust us; 15 questions on the exam will be just like this.
- 2. Understanding the interrelationships, jurisdictions, and subtle differences between the terms, processes, sub-processes & functions is just as important as understanding the constructs themselves. For example:
 - What is the difference between Availability & Capacity Management?
 - How does Operational Control differ from Technical Management?
 - What is the difference between a workaround and a resolution in the context of Incident Management?
 - What's in the Service Catalogue compared to the Service Pipeline compared to the Service Portfolio?
 - What's a Rollout compared to a Deployment?
 - Any of the roles! What does an Asset Manager do compared to a Configuration Manager? Service Owner vs. Process Owner?
 - Event vs. Alert vs. Incident?
- 3. When memorizing definitions, you can get stuck in the weeds. Knowing the overall structure of ITIL 2011 will help you organize the information in your mind and help resolve jurisdiction questions (i.e. who does what?). So create an outline like this (we've started it off for you):
 - Service Strategy
 - 1.1. Service Portfolio
 - 3.1. Financial Management
 - Service Design
 - 1.1. Change Management
 - 2.1. Etc.



Core Lifecycle Stages Flow





Module 1: Introducing ITIL 2011

Outline

- 1. Module 1 Introducing ITIL
 - 1.1 ITSM –Defined
 - Provides (3)
 - Doesn't Include
 - Objectives
 - 1.2 ITIL
 - 1.3 Best Practice
 - 1.4 ITIL Core Lifecycle
 - 1.5 Functions vs. Processes
 - 1.6 Authority Matrix
 - How it helps
 - RACI model
 - 1.7 Customers and Stakeholders
 - 1.8 Process Owner vs. Service Owner
 - 1.9 Process manager vs. Process Practitioner
 - 1.10 Technology Tools
 - 1.11 Services

Learning Objectives

This course is divided into modules. Each module has objectives, activities, and a quiz. This first module provides an overview of ITIL and ITSM. Take a minute to read the objectives for this module.

By the end of this module, you will be able to:



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General Terms and Definitions Matrix

Term	Definition/Point
ITSM	A process-centered approach to delivery IT services that meets business needs according to performance targets.
	 Set of organizational capabilities/resources to add value to services/goods Capabilities are skills and require raw materials; resources are the raw materials
ITIL	Provides:
	 Best practices for ITSM Common language Drives continual improvement
	Doesn't include methodology to implement
	Objective:
	 Contribute value to the organization by alignment of IT & business Increase efficiency (cost/time) Improve effectiveness (meet quality requirements)
	Successful Because:
	Vendor Neutral
	Non-PrescriptiveBest Practice in ITSM
	Focus:
ITIL Lifecycle	 Understanding IT service needs Improving quality service provisioning Providing cost justifiable service quality Identifying roles/responsibilities Using KB approach Identifying KPI's
Best Practice	Best = superior outcomes to normal practices in wide industry use. Sources include:
	 Public frameworks Standards Proprietary knowledge of organizations and individuals
How ITIL can help add value	 Documenting, negotiating, & solidifying customer/business targets



Term	Definition/Point
	 Regularly assess customer's perceptions via feedback Ensure IT percepted adapt to business
ITIL Core Lifecycle	 5 stages I. Service Strategy – strategic approach to ITSM II. Service Design –holistic approach to thoroughly designing services with the 4Ps and 5 Design Aspects III. Service Transition – develops/improves capabilities for new/changing IT services into ops; focuses on moving from objective to how to achieve it IV. Service Operation – deliver/support IT services per SLAs; effective/efficiency key V. CSI – provide structure stability strength to service mgmt capabilities with principles methods & tools
Function, Roles, Processes	 Function – units carrying out things; contain on BOK; provide structure Roles – staff involved in process/service delivery; key roles are Process Owner vs. Service Owner Processes – Set of coordinated activities combining capabilities & resources to produce value-add outcome to stakeholder
ITIL Processes	Integrated processes through which organizations can meet goals with efficiency and effectiveness. Primary characteristics of processes: Measurable Specific results Stakeholders Specific events Inputs activities output
Authority Matrix	 Clarifies activities to do: Responsibility – execution of process/activities Accountable – ownership of quality/end result Consulted – involvement through input of knowledge Informed – receiving info. about process execution/quality Only 1 person is accountable for an activity; multiple may be responsible. Accountability must remain with 1 person for all activities in a process.

Term	Definition/Point
Customers and stakeholders	 Internal Customers work at same business as Service Provider External Customers work at different business from Service Provider Internal Stakeholders are internal to the Service Provider External Stakeholders are external to the Service Provider, such as Users, Customers, and Suppliers
Process vs. Service Owner	 Process Owner role: Defining processes Assisting in process design Review process strategy Service Owner - Initiation, transition, ongoing maintenance /support of service (fulfillment); ensures customers are satisfied.
	Service Owner role:
	 Single point of contact (SPOC) Ensuring delivery meets requirements Identifies opportunities for improvement Works with other owners
Process Manager/Practitioner	 Process Manager accountable for the operational management of a process Process Practitioner responsible for carrying out one or more process activities
Technology tools	 Workflow KB Testing BI Discovery Actions required before selecting tools
Service	 Means of giving value by allowing outcomes sans ownership Enable – provides employee with computer; enables to work By enabling them to work, software and network access are embedded Internal Services are delivered within the same organization External Services are delivered to external customers Three Types of Services:
	Core Service is primary outcome



Term	Definition/Point
	 Enabling Services are necessary to deliver Core
	 Enhancing Services add the excitement factor



Module 2: Overview Core Lifecycle Stages

Outline Core Lifecycle Stages

Service Strategy

- 1. Purpose
- 2. Objectives
- 3. Scope
- 4. Value to Business
- 5. Two Levels of activity for ITSM
- 6. Three Questions
- 7. Resources vs. capabilities definitions + how they're used by each lifecycle stage
- 8. Utility vs. Warranty [review] + how relevant in transition, operation, CSI

Service Design

- 1. Purpose def + consists of (3)
- 2. Objectives
- 3. Scope
- 4. Value to Business
- 5. Main Goal (1) + Designing services (4) + Balance that must be struck
- 6. How Resources & Capabilities used in SS & SD
- 7. Five aspects of SD
- 8. Four P's
- 9. SDP contains...

Service Transition

- 1. Purpose + feature
- 2. Objectives
- 3. Scope
- 4. Value to Business
- 5. Org level vs. service level
- 6. Relevance to res/cap
- 7. Key aspects of SDP (4)

Service Operation

- 1. Purpose
- 2. Objectives
- 3. Scope
- 4. Value to Business
- 5. Four main functions



LEARNING, FULLY LOADED. Continual Service Improvement

- 1. Purpose
- 2. Objectives
- 3. Scope
- 4. Value to Business
- 5. Governance
- 6. Deming cycle
- 7. CSI Approach
- 8. CSI Register

Learning Objectives

Overview & Objectives

By the end of this module, you will be able to:

Identify the purpose for each of the five lifecycle stages.

Explain how ITIL best practices can be helpful in resolving an incident by listening in on a mock ITIL class.

Service Strategy

Term/Theory	Definition/Point
Purpose	Establishes overall strategy for IT
Objectives	 Ensure organization can handle cost/risk well Set expectations of performance Id/select/prioritize business opportunities
Scope	 Define a strategy of services to offer Define a strategy of how to manage those services
Value to Business	Link service provider activities to business outcomes
Two Levels of Activity for ITSM	 Org level – sets direction for IT via strategy and objectives to achieve vision Service level – policies/objectives to ensure value creation
Questions Answered	 How create value? How to define quality? How to efficiently allocate resources across services



	Capabilities turn resources into goods/services.
Resources vs. capabilities + How they fit in Lifecycle	 Service Strategy manages consumption of resources and capabilities by service. Service Design uses resources and capabilities. Service Transition tests against resources and capabilities. Service Operation allocates resources and capabilities. CSI measure/assesses both resources and capabilities.
	Utility – fit for purpose:
Utility & Warranty	 What is delivered What customer gets What gains performance customer gets Functional requirements for service
	Warranty – fit for use (parameters). It must perform within stated parameters:
	 Both Utility & Warranty are tested/validated in transition Utility & Warranty delivered in Operations CSI measures/assesses planned utility & warranty vs. actual delivered in operations.
	 Customer Preferences Customer Perceptions Business Outcomes
Three Value Areas	Patterns of Business Activity (PBA) - Services are designed to enable PBAs which in turn achieve business outcomes.

1

Service Design

Term/ Theory	Definition/Point
	Design of new/changed services for introduction to production:
Purpose	ArchProcessesDocumentation
	Ensures functional/mgmt/operational requirements are considered.
Objectives	More effective and efficient service solutions aligned to the business.
Scope	 Functional requirements Requirements within service level agreements (SLAs) Business benefits Overall design constraints
Value to Business	Deliver quality, cost-effective services and to ensure that the business requirements are being met consistently.
Resources and Capabilities	 <u>Service Strategy</u> manages consumption of resources and capabilities. <u>Service Design</u> produces designs using the allocated resources and capabilities.
Five Aspects to Service Design	 Results-driven approach: Service Solutions Management Systems and Tools Technology Architectures and Management Architectures Process required Measurement Methods and Metrics
4 Ps & Service Design	 People Products/Technology Processes Partners/Supplies
SDP	 Details of all aspects of a service through all stages of lifecycle; produced keeping in mind 5 aspects, 4 p's, and DM options. Passed from Service Design to Service Transition. All details for implementing, evaluating and maintaining service. Includes functional/architectural requirements Consults other stages



Service Transition

By the end of this lesson, you will be able to:

Overview & Objectives	Identify the main goals and objectives of Service Transition.	
	Explain what value Service Transition provides to the business.	

Term/Theory	Definition/Point
Input	 Transitioning new/changed IT services to operation Internal service (move from what's required) to concept of how it's implemented Organizational level: Develops capabilities and resources to allow IT to transition to reality Service level: Resources/capabilities convert DS requirements into portfolio Require good set of processes to implement in operations Provides control; allow you to speed up/slow down
Purpose	 Ensure that new, modified or retired services meet the expectations of the business
Objectives	<u>Primary:</u> delivery service vision in a relevant, timely, quality and cost-effective manner. <u>Tertiary:</u>
	 Plan/manage res to establish service Ensure minimal impact on production
	 Increase stakeholder satisfaction Increase proper use of services
Scope	 The development and improvement of capabilities including release planning, building, testing, evaluation and deployment Introducing, Retiring, or Transferring new or changed services
Value to Business	 Enable projects to estimate the cost, timing, resource requirement and risks more accurately Result in higher volumes of successful change
Resources and Capabilities	Service Transition must test against resources and capabilities.



Term/Theory	Definition/Point
Key aspects of SDP required by ST team	Journey from as is → required. Applicable services packages Service specs/models Arch design required to deliver Definition/design of each release Detailed design of how service components will be assembled Release/deployment plans
Conclusion	SDP completed



Service Operation

Overview & Objectives

By the end of this lesson, you will be able to:

Identify the main goals and objectives of Service Operation.

Define the role of communication in Service Operation.

Term/Theory	Definition/Point
Service Operation	Day-to-day work for the service
Purpose	Primary purpose is deliver/support is services at agreed levels effectiveness/efficiency, providing value to stakeholder.
Objectives	 Support the delivery of IT Services Monitor performance and assess IT Services Manage the people, processes, and technology that deliver and support IT Services
Scope	 The Services Themselves Service Management Processes Technology People
Value to Business	Where processes/activities are executed/delivered/assessed by customers.
Functions	 Four main functions: Service Desk – Single Point of Contact (SPOC) for users when service disruption, service requests, or some RFC's. Technical Mgmt – detailed tech skills to support ongoing operation (key role in design/testing/release/improvement of it services). Operations Control – responsibility for daily operational activities to manage IT infrastructure; breaks down into IT ops control & IT facilities Mgmt. Application Mgmt – detailed tech skills/resources to manage apps through SDLC.
	Required consistent accountability/responsibility via role definition.



Continual Service Improvement

- 1. Purpose
- 2. Objectives
- 3. Scope
- 4. Value to Business
- 5. Address 3 things

By the end of this lesson, you will be able to:



Continual Service Improvement Outline

- 1. Outline
- 2. Deming and CSI Models
- 3. Key Elements of Measurements
 - CSF
 - KPI
 - Metrics
 - Measurements

Continual Service Improvement	
Term/Theory	Definition/Point
Outlines	Integrate with all processes
Continual Service	Provides guidance in evaluating/improving the quality of services by measuring, reporting, and improving service management
Improvement	processes/services.
Purpose	 Primary: align/realign to changing biz needs by implementing improvements.

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Continual Service Improve	ment
	Looking for ways to improve alignment/effectiveness/efficiency.
Objectives	Review, analyze, and make recommendations on processes in each lifecycle stage & op services.
Scope	Address 3 areas: Overall Health of ITSM Alignment of portfolio of services with biz Maturity of IT services
Value to Business	 Lead to a gradual and continual improvement in service quality, where justified Ensure that IT services remain continuously aligned to business requirements
IT Governance	 IT must now comply with new rules and legislation. IT must continually demonstrate compliance through numerous internal and independent audits. The reasons for this gain in IT governance are many including: Sarbannes-Oxley Act 2002 ISO 2000 for ITTTTSM COBIT an IT Audit Framework PMBOK (a methodology for Project Management)
	IT is asked to do more with less and to create additional value while maximizing the use of existing resources. These increasing pressures coincide perfectly with the basic premise of ITIL; that IT is a service business.
Deming cycle	 Mgmt philosophy for establishing quality, productivity, and competitive position: <u>Plan</u> – formulate goal/theory; define how to measure success and plan. <u>Do</u> – execute plan. <u>Check</u> – monitor outcomes vs. expected results and look for lessons learned. <u>Act</u> – integrate lessons learned, adjust theory/method, and determine what more we must learn.
CSI Approach	 Embrace vision by understanding business objective. <u>Baseline assessments</u> - Assess current situation (as is); baseline analysis of current position. Measurable targets. <u>Service & Improvement targets</u> - Understand/agree on priorities based on vision. Detail CSI plan by implementing ITSM processes



Continual Service Improvement		
	• <u>Measurement & Metrics</u> - Verify metrics are in place to see if milestones reached/processes compliant. Ensure momentum is created to ensure it keeps on trucking.	
Key elements of measurements	 CSF Key Performance Indicator (KPI) Metrics Measurements Vary on qualitative and quantitative 	
CSI Register	The CSI register provides a coordinated, consistent view of many improvement activities.	

Exam Recap Summary

Exam Recap Service Strategy (SS):

- Identify purpose, objectives, scope and value.
- Define and explain concept of resources and capabilities.
- Define and explain Value Composition with Utility & Warranty.

Exam Recap Service Design (SD):

- Comprehend the purpose, objectives, scope and value.
- Comprehend and briefly explain what value Service Design offers to the business.
- Understand the importance of people, processes, products and partners in all aspects of Service Design.
- Discuss the five major aspects of Service Design.
- Define and explain the concept of the Service Design Package.

Exam Recap Service Transition (ST):

- Identify the purpose, objectives, scope and value.
- Understand the value that Service Transition provides to the business.

Exam Recap Service Operation (SO):

- Identify the purpose, objectives, scope and value.
- Explain the value that Service Operation provides to the business.
- Define and explain the role of communication in Service Operation.



Exam Recap Continual Service Improvement (CSI):

- Explain the purpose, objectives, scope and value.
- Explain the Deming and CSI Models.
- Explain Governance.
- Define CSI Register.



Module 3: Service Lifecycle Processes

Service Strategy

Service Strategy Outline

1. Outline

1.1 Key decisions (3)

2 Service Portfolio

- 2.1 Contains (4)
- 2.2 Service Catalog
 - What is it?
 - Contains (4)
- 2.3 Service Pipeline
- 2.4 Retired Services

3 Business Relationship Management (BRM)

- 3.1 Purpose, objectives, and scope
- 3.2 Differences between SLM and BRM

4 Financial Management

- 4.1 Purpose and objectives
- 4.2 Three main activities
- 4.3 Two main cycles
- 4.4 Service Valuation and goal

What's the difference between Service Portfolio & Service Catalogue?

The Service Portfolio is composed of all services committed to IT customers – current, under development and future—as part of continual service improvement. The Service Catalogue is that portion of the Services Portfolio that is currently available to IT customers, so it's a subset of it.



By the end of this lesson, you will be able to:



Term/Theory	Definition/Point
Service Strategy	 Service Portfolio Financial Mgmt Business Relationship Mgmt
Service Portfolio	Entered into Service Portfolio; acts as basis of decision framework. Key questions:
	 Why buy services? Why buy from us? Pricing model? Strengths/priorities/risks
	Once go decision made and entered into Service Catalogue, Service Design architects the services for transition.
X	Service Portfolio
	DescriptionValue proposition
	Business cases
	 Priorities Risk Management
	Offerings and packagesCosts and pricing
Business Case	Decision support/planning tool; helps predict outcome of proposed action/justifies investment.

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Service Catalogue	 Service Catalogue(s) Services Supported products Polices Ordering ad request Procedures Support terms and conditions Entry points and escalations One component of Service Portfolio. Projection of services actual/projected capabilities. It's published to customers; supports sale/delivery. Includes information about: deliveries, prices, contact points, ordering and request processes. Service Pipeline – initial stage of new services; document listing all services under consideration/development. Retired Services – final stage in lifecycle of all services; repository of offerings/lessons learned when delivering services in the past; permanent removal of IT services or CI from production, pricing and chargeback.
Business Relationship Management	 Purpose: To establish and maintain a business relationship between the service provider and customer, and to identify customer needs. The primary measure is customer satisfaction. Objectives include: Understand the customer's perspective for services and priorities Understand the customer and their business outcome drivers Proactively understand changes to the customer environment Scope: BRM is the primary process for strategic customer communication with all departments in the service provider, including application development teams within the service provider's organization. BRM depends on several service management processes/functions
	 SLM compared to BRM: The SLM process exists to ensure that agreed achievable levels of service are provided to the customer and users. The BRM process is focused on a more strategic perspective: Identification of customers' needs and ensuring that the service provider is able to meet them Focuses on the overall relationship between the service provider and their customer



Financial Management	 Secure the appropriate level of funding to design, develop and deliver services that meet the strategy of the organization. Act as a gatekeeper that ensures that the service provider does not commit to services that they are not able to provide. Maintains the balance of supply and demand between the service provider and customers through appropriate charges / pricing.
	ROI, VOI, cost-benefit analysis, costing models, IT budget, user charges support the business decision to provide or not provide a service.
	3 main activities
	 Budgeting IT accounting Charging
	2 main cycles
	Planning Cycle (annual)Operational Cycle (monthly or quarterly)
	Encapsulated within SP elements of the business case & risk assessment.
	<u>SLP</u> – contains all work done so far. SD uses to create SD.

Exam Recap Service Strategy

Define and explain the following concepts:

- Service Portfolio •
- Service Catalog •
- **Business Case**
- Risk

Understand and State the objectives for:

- Business Relationship Management Process Financial Management Process •



Design Outline Flow



¹Availability, reliability, maintainability, capacity, serviceability

²Biz, Service, component

³Control plan implement evaluate csi

⁴BIA & Identification of VBF's



Service Design (Part 1: Design Coordination, Service Catalogue Mgmt and Service Level Mgmt)

By the end of this lesson, you will be able to:



1.0 Outline: Main purpose is the design of new or changed services.

1.1 Design Coordination		
Term/Theory	Definition/Point	
Purpose, Objectives	 Single point of coordination and control for all activities and processes within this stage of the service lifecycle Ensure the consistent design of appropriate services Plan and coordinate the resources and capabilities required to design new or changed services Produce service design packages (SDPs) based on service charters and change requests 	
Scope	 Not every design activity requires the same level of rigor to ensure success. A significant number of design efforts will require little or no individual attention from the design coordination process. Most design coordination process activity focuses around those design efforts that are part of a project, as well as those that are associated with changes of defined types. 	
Activities	 Assisting and supporting each project or other change through all the service design activities and processes Maintaining policies, guidelines, standards, budgets, models Coordinating, prioritizing, scheduling all service design resources Ensuring that all requirements are appropriately addressed in service designs, particularly utility and warranty requirements Ensuring the production of service designs and/or Service Design Packages (SDP) and their handover to service transition 	



1.2 Service Catalogue Management	
Term/Theory	Definition/Point
Objectives	 Creates and manages accurate Service Catalogue Ensure information up to date including interdependencies Includes both new/existing Support sales/delivery
Basic Two View Service Catalogue	 <u>Business Service Catalogue</u> – Customer view of Service Catalogue which details all services <u>Technical Service Catalogue</u> – Details all IT services, CIs, components, etc.
Multi-View Service Catalog	The preferred situation adopted by more mature organizations typically project more than two views, such as:
	 Wholesale customer view Retail customer view Supporting services view

1.3 Service Level Management		
Term/Theory	Definition/Point	
Objectives	Negotiates SLA's and ensures they're met. Impacts 2 other stages (trans/ops):	
	 Define, document, agree, monitor, measure, report and review the level of IT services provided Provide and improve the relationship and communication with the business and customers Ensure that specific and measurable targets are developed for all IT services Monitor and improve customer satisfaction with the quality of service delivered Ensure that IT and the customers have clear expectations of the level of service to be delivered 	
	 Ensure that proactive measures to improve the levels of service delivered are implemented whatever the costs are justified 	
Service Level Requirements	 Requirements for a customer facing aspect of an IT service Based on business objectives and used to negotiate agreed SL 	

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1.3 Service Level Management		
Term/Theory	Definition/Point	
	 targets from customer perspective Includes: Availability Reliability (time entre inc) Maintainability MTTR Serviceability – ability of 3rd party to meet terms of contract capacity 	
Underpinning contracts	Contract between suppliers/external partners	
Operating Level Agreements (OLA)	Contract between internal units	
Service Level Agreements (SLA)	 Basis for managing relationship between service provider and customer. Defines key targets/responsibilities for both parties Match biz needs/expectations to IT services. OLA/UC's support SLA 	
Service Level Mgmt (SLM)	 Ensures all ITSM processes, OLA's, and UC's are appropriate given SL targets. Represents IT to the business. Provides POC to business managers/customers to IT. Responsible for agreeing and documenting service level targets/responsibilities for every activity in IT. SLM must have close interface with SPM. Planning coordinating drafting agreeing monitoring reporting on targets in SLA. 	
SLA Process Activities	 Service Level Management Process Activities: 1. Design Service Level Agreement framework structures: Service-based SLA (covers one service for all customers) Customer-based SLA (covers one customer for all services) Multi-level SLA (combinations of the above) 2. Determine, document, and agree on the requirements for new services and produce Service Level Requirements on an iterative basis. 3. Monitor service performance against SLA. 4. Collate, measure, and improve customer satisfaction. 	



1.3 Service Level Manag	ement
Term/Theory	Definition/Point
	and UCs) and service scope.
	6. Produce service reports.
	 Conduct service reviews and initiate necessary improvements within an overall Service Improvement Plan.
	 Review and revise SLAs, service scope, and underpinning agreements.
	9. Develop contacts and relationships.
	10. Record and manage both complaints and compliments.



Service Design (Part 2: Availability Mgmt, Capacity Mgmt & Information Security Mgmt)

By the end of this lesson, you will be able to:



What's the difference between Capacity Mgmt & Availability Mgmt?

The <u>Capacity Mgmt</u> process is responsible for ensuring that the capacity of IT services and the IT infrastructure is able to deliver agreed SL Targets in a cost effective and timely manner.

The <u>Availability Mgmt</u> process is responsible for ensuring that the people, process, and technology are appropriate [given SLA's].

2.1 Availability Management	
Term/Theory	Definition/Point
Responsible	For ensuring all IT infrastructure processes, tools, and staff roles are appropriate given SL availability targets.
Objectives	Manage availability of services and resources.
	More objectives include:
	 Produce and maintain an appropriate and up-to-date Availability Plan. Provide advice and guidance to all other areas of the business and IT on all availability-related issues. Ensure that service availability achievements meet or exceed their agreed targets.
	 Assist with the diagnosis and resolution of Availability Plan, and the performance and capacity of all services and resources. Assess the impact of all changes on the Availability Plan, and the performance and capacity of all services and resources. Ensure that proactive measures to improve the availability of services are implemented wherever it is necessary and cost-justifiable to do so.
Terms	 <u>Component Availability</u> – all aspects of assessing availability <u>Service Availability</u> – all aspects of assessing impact/potential impact of component available/unavailable.



2.1 Availability Management	
Term/Theory	Definition/Point
Four Availability Strategies	<u>Vital Business Functions (VBF)</u> – functions critical to business process which may require special IT service designs. May avail themselves of following strategies:
	 <u>HA</u> –minimizes effect of IT component failure. <u>Fault Tolerance</u> – ability of IT service Configuration Item or component to operate correctly when other related parts fail. <u>Continuous Operation</u> – approach to eliminate planned downtime. C's avail – approach to achieve 100% available
Two Key Elements	 <u>Proactive Activities</u> – planning, design, improvement of availability cost-justifiable and meets needs of business. <u>Reactive Activities</u> – monitoring, measuring, analysis, and reporting for service and component availability. Key output for availability is measurement/reporting.
Additional Info	 Availability plans/designs given to SLM process; provided for in OLA's/UC's in Service Operation.

Exam Recap Service Design (SD) Part 2: Availability Management:

- Objectives for Availability Mgmt.
- Reactive and proactive activities
- Vital Business Functions (VBF)
- Indicators and Levels of Availability

2.2 Capacity Management	
Term/Theory	Definition/Point
Responsible	For maximum throughput a CI/service can deliver while meeting Service Level targets.
Objectives	Manage capacity of IT services/infrastructure can deliver Service Level targets efficiently and effectively.
	More objectives:
	 Produce and maintain an appropriate and up-to-date Capacity Plan which reflects the current and future needs of the business. Provide advice and guidance to all the other areas of the business and IT on all capacity and performance related issues.



2.2 Capacity Management		
Term/Theory	Definition/Point	
	Manage performance / capacity of services and resources to ensure agreed service performance achievements meet their targets.	
Activities	 <u>Reactive Activities</u> - monitoring, measuring analysis, reporting <u>Proactive Activities</u> - trending, modeling, tuning, optimizing 	
Three Sub-processes	 Creates plans/designs via three sub-processes: <u>Business Capacity Mgmt</u> – focused on business requirements. <u>Service Capacity Mgmt</u> – focused on delivery of existing service (capacity vs. SLA & SLR targets); proactive/reactive strategies. <u>Component Capacity Mgmt</u> – all components used to meet service requirements. 	

Exam Recap Service Design (SD) Part 2: Capacity Management:

- Objectives for Capacity Mgmt.
- Reactive vs. proactive activities
- Capacity Mgmt sub-processes

2.3 Information Security Management	
Term/Theory	Definition/Point
Responsible	For management of security risks
Purpose	Align IT security with Business Security
Objectives	Ensures (CIA) confidentiality, integrity, availability of assets, information, data and IT services always matches the agreed needs of the business
Activities	 The production, maintenance, distribution and enforcement of an information security policy and supporting security policies Implement security controls supporting the information security policy and manage risks with access to services, information and systems Management of all security breaches, incidents and problems associated with The proactive improvement of security controls, and security risk management and the reduction of security risks Integration of security aspects within all other ITSM processes



Exam Recap Service Design (SD) Part 2: Information Security Management:

- Objectives for Information Security Mgmt. (including confidentiality, integrity, and availability)
- Information Security policy
- Terms and definitions

Service Design (Part 3: IT Service Continuity & Supplier Mgmt)

By the end of this lesson, you will be able to:

 Identify the objectives of the IT Service Continuity Management process.

 Define Business Impact Analysis & Vital Business Functions.

 Define the relationship between Business Continuity Management and ITSCM.

 Overview & Objectives

 Identify the objectives of the Supplier Management Process.

 Recognize the difference between a service provider and a supplier.

Identify the purpose of the Supplier Contract database.

3.1 IT Service Continuity Management	
Term/Theory	Definition/Point
Responsible	For responding to disasters:
	 Identifies IT services deemed critical to survival of business. Ensures resumption given required timescales (computer systems, db's, telecom, environment, tech support, sd, apps, nw).
Objectives	Goal is to support overall Business Continuity Mgmt. process by ensuring required facilities can be resumed within agreed scales.
	Objectives include:
	 Maintain a set of IT service continuity plans and IT recovery plans that meet or exceed the agreed business continuity targets and support overall organizational Business Continuity Plans (BCPs). Complete regular Business Impact Analysis (BIA) to ensure that all

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3.1 IT Service Continuity Management		
Term/Theory	Definition/Point	
	 continuity plans are aligned with changing business impacts and requirements. Conduct regular Risk Analysis that manages IT services within agreed level of business risk. This is done in conjunction with the business, Availability Management and Security Management. Provide advice and guidance to all other areas of the business and IT on all continuity and recovery-related issues. Assess the impact of all changes on plans for IT Service Continuity and IT recovery. Ensure that proactive measures to ensure the availability of services are implemented whenever it is cost-justifiable to do so. Ensure the necessary contracts with suppliers (Supplier Management process) include the necessary recovery capability to support all continuity plans. 	
Two Key Concepts	 <u>Business Impact Analysis (BIA)</u> – seeks to identify company's critical business services by analyzing outages and severity; identifies recovery requirements. <u>Vital Business Functions (VBF)</u> – Functions critical to success of business processes; BIA id's VBF's, inducing people, processes, and IT services. Is important to ITSCM, Avail, BCM. 	
Terms	 <u>ITSCM</u> - Cyclic process to ensure alignment with BCP and priorities. <u>BCM</u> - to implement ITSCM, you need to identify key business processes. <u>Initiation</u> - relationship between ITSCM and BCM 	

Exam Recap Service Design (SD) Part 3: IT Service Continuity Management:

- Objectives for ITSCM
- Vital Business Functions (VBF)
- Business Continuity Management (BCM)
- Initiation stage of the Service Continuity lifecycle



3.2 IT Supplier Management		
Term/Theory	Definition/Point	
Responsible	 For building a value network and managing contracts: Manages overall network and value chain; working toward integrating contracts/policies with our own. Ensures suppliers meet terms conditions and terms of contracts. Establish new suppliers in transition. Review performance and renew/terminate contracts in operation. 	
Objectives	 Objectives include: Ensure that suppliers meet the service targets, terms, and conditions contained in their contracts. Ensure that the underpinning contracts and agreements with suppliers are aligned to business needs. Manage supplier performance through targets outlined in SLRs and SLAs. Manage relationships with suppliers. Negotiate and agree contracts with suppliers and manage them through their lifecycle. 	
Service Provider vs. Supplier	 <u>Service Provider</u> (help with email) – supplies IT services to customers. <u>Supplier</u> (give you box) – supplies goods required to delivery IT services (telco's, consultants, etc.). These are written as UC's. 	
Terms	Supplier Categories - Strategic, tactical, operational, commodity	

Exam Recap Service Design (SD) Part 3: IT Service Continuity Management:

- Objectives of the Supply Management process
- Differences between Service Provider and Supplier
- Differences between underpinning contract and contract
- Key terms and definitions



Service Transition

To boldly build, test, and implement SDP's into Service Operation.

Service Transition Outline

Part 1. Change Mgmt	Part 2. Release Mgmt & Deployment Mgmt	Part 3. Service Asset & Configuration Mgmt
 1.1 Outline Focuses on Primary focus Where strategic and corrective changes take place 1.2 Basic Concepts RFC CAB, ECAB, Change Authority Back out plan Change Schedule 	 Part 2. Release Mgmt & Deployment Mgmt 2.1 Outline Full architecture broken down into tech/ non-tech activities Responsible for planning , scheduling & controlling release from test production Primary objective* how it compares to primary objective of change 2.2. Concepts 	Configuration Mgmt 3.1 Outline • Yep • Critically interdependent with (2) processes 3.2 Differences between SA / C mgmt 3.3 CMDB; critical aspect thereof 3.4 Cl 3.5 CMS 3.6 Configuration baseline 3.7 SKMS supported by data in
 1.3 Three Types of changes *difference between std and normal change 1.4 Change Model 1.5 Change process 6 1.6 KPI's of Change (3) 1.7 Seven R's of change1 	 Storage areas for authorized media and hardware spare parts 1. DML 2. DSS R&D Models Release approaches 2.4 Roles (3) 2.5 Terms Release Deployment Rollout Release Unit 	CMS and CMDB 3.8 SA Manager, C Manager, C analyst, C librarian, CMS admin, C ctrl board, janitor 3.9 Terms • Asset Management • Attribute • Baseline • Configuration Management • CMS • Configuration Baseline • Service Asset • SKMS • Baseline • Snapshot • Cl
Part 4. Knowledge Mgmt	 Data-Information-Knowledge- CMDB-CMS-SKMS-Decisions 	Wisdom (DIKW)



Service Transition (Part 1: Transition Planning / Support and Change Mgmt)

By the end of this lesson, you will be able to:

Explain the high level purpose, objectives, and scopeof the Transition Planning and Support process.



Explain the high level objectives, scope, basic concepts, process activities of the Change Management process.

Define and explain the concept of service change.

Define and explain the concept of change types (normal, standard, and emergency).

1.1 Outlines:

- Help to plan, build, test, and implement SDP's into Production.
- Internal service to IT: what is required and how it's implemented

1.2 Transition Planning and Support	
Term/Theory	Definition/Point
Purpose	Provide overall planning for service transitions and to coordinate the resources that they require.
Objectives	 Plan and coordinate resources ensuring requirements of service strategy encoded in service design are effectively realized in service operation. Coordinate activities across projects, suppliers and service teams Establish new or changed services into supported environments within the predicted cost, quality and time estimates. Provide clear plans that enable customer and business change projects to align their activities with the service transition plans. Identify, manage and control risks, to minimize the chance of failure and disruption across transition activities
Scope and Activities	 Maintaining policies, standards and models for service transition Guiding each major change through all the service transition processes Coordinating multiple transitions to be managed at the same time Prioritizing conflicting requirements for service transition resources Planning the budget and resources needed to fulfil future requirements for service transition



1.3 Change Management	
Term/Theory	Definition/Point
Outlines	 <u>Focus on</u> - Service change (addition, modification or removal of planned service, component) <u>Primary objective</u> - Beneficial changes w/minimal disruption of IT services. <u>Other objectives</u>: 1.21. Changes done in a controlled manner. 1.22. Changes recorded, evaluated, authorized, prioritized, planned, tested, implemented, shaken a stick at, whipped, fried, buttered basted.
	Strategic changes triggered in SS; Corrective changes in SO
Basic Concepts Within Change	 1.21. Strategic change if major change in service. RFC and Change Proposals Change Authority – provides formal authorization for each change. Roles include: 1.21. Change Advisory Board 1.22. Emergency Change Advisory Board <u>Back out plans</u> - Must be considered for all changes to revert to pre-change state; contingency plans must be created where BOP not possible <u>Change Schedule</u> – Lists all approved changes and planned dates. Important audit trail to support incident/problem mgmt among other processes
Three Types of Changes	 Emergency Normal – "I want a color printer." Standard – "I'm moving to another office and need my printer moved."
Chg Model	Repeatable process to deal with a particular category of change (steps, order, timescales, and escalation procedures)
Change Activity Steps	 Record RFC Review Assess/evaluate Authorize/schedule Coordinate change, implementation, plan, build, test, implement Review and close RFC

Exam Recap Service Transition (ST) Part 1: Change Management:

- Explain the high level objectives, scope, basic concepts, and process activities of Change Management.
- Define and explain the concept of service change and change types.
- Key terms and definitions.



Service Transition (Part 2: Release and Deployment Mgmt)

By the end of this lesson, you will be able to:

Overview & Objectives State the objectives, basic concepts, and roles of the Release and Deployment Management Processes.

Define and explain the concept of Release Policies, Release Package, Release Unit.

1.4 Release and Deployment Management		
Term/Theory	Definition/Point	
Outlines	 Manages release of service which was planned in design stage. Full arch broken into tech/non-technical deployments. Responsible for release & deployment activities. Focused on assessing technical/non-tech activities of release. Contains hardware software and documentation Cl's; all happen in transition. Responsible for planning scheduling controlling releases from test production environments. 	
Primary objective	Protect integrity of IT services and infrastructure by ensuring correct components are released.	
Other Objectives	 Ensure there is minimal unpredicted impact on the production services, operations, and support organization. Ensure there are clear and comprehensive release and deployment plans that enable the customer and business change projects to align their activities with these plans. Ensure Release Package can be built, installed, tested & deployed efficiently to a deployment group or target environment successfully and on schedule. Ensure a new or changed service and its enabling systems, technology, and organization are capable of delivering the agreed service requirements (i.e. utilities, warranties, and service levels). Ensure that there is knowledge transfer to enable the customers an users t 	
	 ensure that there is knowledge transfer to enable the customers an users to optimize their use of the service to support their business activities. Ensure that skills and knowledge are transferred to operations and support staff to enable them to effectively and efficiently deliver, support and maintain the service according to required warranties and service levels. Ensure customers, users, & service management staff satisfied with Service 	



1.4 Release and Deployment Management	
	Transaction practices and outputs (e.g. user documentation and training).
Concepts:	
Release Package	Release Package contains individual Configuration Items. Defining releases based on most appropriate release package for each asset/component.
4 Basic Phases	 Release and Deployment Planning Release Build and Test Deployment Review and Close
DML	 Definitive Media Library (DML) is defined and controlled in Service Asset and Configuration Management as a physical store for media CIs Fundamental to the success of Release and Deployment activities to ensure the correct media is deployed to the live environment
Terms	 1.31. <u>Release</u> – process responsible for planning, scheduling, controlling the movement of releases to test/production 1.32. <u>Deployment</u> – activity responsible for movement of new or changed hardware, software, documentation, process to production 1.33. <u>Rollout</u> – deliver install commission of new/changed Cl's across logical/physical parts of an organization

Exam Recap Service Transition (ST) Part 2: Release and Deployment Management:

- Objectives of this process
- Four phases
- Designing Release Packages
- Definitive Media Library
- Key terms and definitions.



Service Transition (Part 3: Service Asset and Configuration Management)

Overview & Objectives State the objectives, and basic conceptsof the Service Asset and Configuration Management Processes.

Define and explain the concepts of Configuration Item (CI), Service Knowledge Management System (SKMS), and Configuation Management System.

Define and explain the concept of Definitive Media Library (DML).

1.5 Service Asset and Configuration Management	
Term/Theory	Definition/Point
Outlines	 Both asset/c items are managed from acquisition to disposal SACM, change, release & deployment are critically interconnected
Objectives	 1.41. provide logical model of IT infrastructure 1.42. optimize costs 1.43. enable organization to comply with corporate governance requirements 1.44. manage change/release 1.45. resolve problems/incidents faster
Service Asset vs. Configuration Mgmt	 SA – tracking & reporting, value & ownership of IT assets CM – maintaining information about Cl's including their relationships; information in CMDB
Configuration Mgmt	 CMDB – stores configuration records about details of CI; holds relationship between all CI's; scope is a critical consideration CI – component of an item can vary in complexity, variety and type CMS – integration of other databases to the CMDB
Physical storage areas	 For authorized media and hardware spare parts: 1.31. DML (library in which media configuration items are stored/protected; physical area where master copies of media versions are placed; only sw from DML is acceptable for use in release) 1.32. Definitive spares (surplus hw) and physical storage areas for all authorized media and hardware spare parts

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Terms	• <u>Asset Mgmt</u> – Process for tracking & reporting value and ownership of
	financial assets throughout their lifecycle.
	<u>Attribute</u> – piece of info about a CI.
	Baseline – benchmark used as a reference point.
	• <u>Configuration Mgmt</u> – process responsible for maintaining info about Cl's
	required to deliver and IT service including their relationships.
	• <u>CMS</u> – set of tools/db's used to manage and IT service provider's C data.
	• <u>Configuration Baseline</u> – used as basis for future builds, releases, and
	changes.
	• <u>Service asset</u> – capability or resource of a service provider.
	• <u>Benchmark</u> – recorded state of something at a specific point in time.
	 <u>Snapshot</u> – current state of a CI as captured by a discovery tool
	<u>Configuration</u> – a db used to store c records through lifecycle
	• <u>CI</u> – component that needs to be managed in order to deliver and IT service.
	• <u>CMDB</u> is subset of CMS which is subset of SKMS.

Exam Recap Service Transition (ST) Part 3: Service Asset and Configuration Management:

- Objectives of the SACM process.
- Differences between Service Asset and Configuration Management.
- Define Configuration Mgmt database (CMDB), Configuration Item (CI), and Configuration Mgmt System.
- Define the Definitive Media Library (DML) and contents found within.
- Identify key terms and definitions.



Service Transition (Part 4: Knowledge Management)

Overview & Objectives State the objectives and basic concepts of Knowledge Management.

Define and explain the DIKW Model and the Service Knowledge Management System (SKMS) in relation to the CMS and CMDB.

1.6 Knowledge Management	
Term/Theory	Definition/Point
Objectives	 Structure and Reuse of Information Drives efficiency and effectiveness
DIKW	 Data-Information-Knowledge-Wisdom (DIKW) model that is commonly used to achieve Knowledge Management
SKMS	 Service Knowledge Management System (SKMS) sits on top of the Configuration Management Systems (CMS) which in turn sits on top of the Configuration Management Database (CMDB)

Exam Recap Service Transition (ST) Part 4: Knowledge Management:

- Objectives of Knowledge Management.
- Define elements of the Data-Information-Knowledge-Wisdom (DIKW) model.
- Define Service Knowledge Management System (SKMS).
- Identify key terms and definitions.



Service Operation Outline

Functions	Processes
1. Service Desk 1.1 Outline • What role it plays • Primary focus • Primary objective 1.2 Organizational Structure (3) 1.3 Terms: • SPOC • Service Desk (1) • Service Request • Resolution & Recovery	 Frocesses 1. Event Management 1.1 Outline Objective Manages 1.2 Events vs. Alerts 1.3 Monitoring 1.4 Two significant aspects of definition & generation Generate 3 types of events
2. Technical Management	2. Incident Management
 2.1 Outline Responsible for2 Balances 	 2.1 Outline Definition of an incident₃ Primary objective 2.2. Incidents vs. Service Request₄ 2.3 Incident Lifecycle Identification log categorization prioritization (based on[2]) initial diagnosis escalation (2 types) investigation and diagnosis resolution & recovery closure 2.4 Two challenges of Incident Mgmt
	2.5 Three Levels of Support

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3. Application Management	3. Request Fulfillment
3.1 Outline	3.1 Service Request definition
Responsible for	3.2 Promotes
Objectives (2)	3.3 Where detected
4. IT Operations	4. Access Management
4.1 Outline	4.1 Protects
Responsible for	4.2 Executed by (2) functions
Balances(2)	4.3 Terms
 4.2 Terms: Console Mgmt/Ops Bridge Tech service NOC 	 Rights Mgmt Rights Access₅ ID Confidentiality Integrity Availability
	5. Problem Management
6	5.1 Outline
	Definition of a problem
	Primary objective
	5.2 Two major processes
	5.3 Workaround
	5.4 Known error record + where entered + handled by
	5.5 Terms
	 Problem RCA Root cause Workaround KE₆
 ¹ Staffing training retention technology ² Right people, right skills, right places, right times 	 ³ Any event which disrupts or could disrupt service ⁴ Unplanned, deviation from actuality, potentially affecting SLA, could or actually disrupts service. ⁵ Level & extent of IT service functionality a user has ⁶ A problem with a documented root cause and workaround



Overview

& Objectives Identify the role, objectives, and organizational structures of the Service Desk function.

Identify the role and objectives of these functions:

Technical Mgmt

Application Mgmt

IT Operations Mgmt

Service Operation Functions

1.1. Outlines

- Value of IT is ultimately measured here; it's where things are executed, delivered, assessed
- Aimed at providing stable IT infrastructure; use process to leverage capability

Service Desk:

- 1.1...1 Outlines:
 - 1.1...1.1. SPOC for users
 - 1.1...1.2. SD is focused on end user experience, business and quality of service
 - 1.1...1.3. Primary objective: facilitate restoration of disrupted service by restoring normal service
- 1.1...2. FCR
- 1.1...3. Organizational structure
 - 1.1...3.1. Local SD
 - 1.1...3.2. Follow the sun service
 - 1.1...3.3. Specialized SD groups
 - 1.1...3.4. End result is that virtual SD is transparent, is SPOC, access 24x7

Terms:

- 1.1...1. Incident
- 1.1...3. Single Point of Contact (SPOC)
- 1.1...4. Service request
- 1.1...6. Resolution action taken to repair the root cause of an incident or implement a workaround
- 1.1...7. End user
- 1.1...8. SD SPOC between service provider and users
- 1.1...9. Recover returning a CI/IT services to working state
- 1.1...10.Customer
- Both tech mgmt and app mgmt can overlap into IT ops mgmt

Exam Recap Service Operation (SO) Functions – Service Desk:

- The role and objectives of the Service Desk function
- The various organizational structures of a Service Desk



- The different Service Desk Types
- Key terms and definitions

Technical Mgmt:

- 1.1...1 Outlines:
 - 1.1...1.1. responsible to ensure right people with right skills in right places at right times
 - 1.1...1.2. balances skill levels/costs for following roles:
 - 1.1...1.2.1. IT Infrastructure –identify, develop, refine technical knowledge & skills
 - 1.1...1.2.2. Technology HR custodian train/deploy people
 - 1.1...1.3. defines roles and support groups, including tools processes, and procedures

Application Mgmt:

- 1.1...1 Outlines:
 - 1.1...1.1. responsible to ensure that IT services are delivered and supported per SLA
 - 1.1...1.2. objectives:
 - 1.1...1.2.1. Identifying functional requirements
 - 1.1...1.2.2. assisting design/deployment
 - 1.1...1.2.3. balances skill level and cost of following roles:
 - 1.1...1.2.3.1.Application -identify develop refine application knowledge & skills
 - 1.1...1.2.3.2.Application HR custodian works with tech mgmt to deploy people
 - 1.1...1.3. Application Management and Application Development:
 - Application Management is most active during the Requirements, Deploy, Operate, and Optimize phases; thus ensuring mainly good Warranty of Services.
 - Software Development is most active during the Requirements, Design, Build and Test phases; thus ensuring mainly good Utility of Services

IT Operations:

- 1.1...1 Outlines:
 - 1.1...1.1. responsible to ensure IT services are delivered and supported per SLA's
 - 1.1...1.2. balances stability/consistency by maintaining status quo: adapting to business requirements

Terms:

- 1.1...1. Technical support synonym for tech mgmt
- 1.1...2. Support Group people with tech skills
- 1.1...3. Console Mgmt/Ops Bridge physical location that consolidates all critical observational points within IT so they can be monitored/managed from a centralized location
- 1.1...4. Tech service an IT service not used directly by the biz but required by the IT service provider
- 1.1...5. Application
- 1.1...6. NOC consolidates all critical observational points in IT infra relating to the network
- 1.1...7. IT infrastructure
- 1.1...8. App Lifecycle
- 1.1...9. SOP



Exam Recap Service Operation (SO) Functions – Technical Mgmt, Application Mgmt & IT Operations:

- The role of each function
- The objectives of each function
- The organizational overlap of each function
- Terms and definitions for the functions



Service Operation Processes

By the end of this lesson, you will be able to:



Define and explain the concept of a Service Request.

Event Management	
Term/Theory	Definition/Point
Outlines	 Focused on generating, detecting, and determination of meaningful notifications about status of IT infrastructure and IT servs in order to initiate appropriate event control actions Manages events and escalating into Inc, Problem, or Change Mgmt
Event vs. Alert	 <u>Event</u> – change of state in CI or IT service which has significance for mgmt thereof; not all are required to be managed <u>Alert</u> – notification that event has occurred, warning that a threshold has been reached, something has changed, or failure has occurred; requires a specific action to be taken
Monitoring	Tracks conditions to provide information and promote understanding (i.e. check status of device to make sure it's operating per limits, event if not generating events); an event must be detected and received before it's an event.

Exam Recap Service Operation (SO) Processes – Event Management:

- The objectives of each Event Management
- The concepts of an event and an alert
- Monitoring and event Management
- Terms and definitions



Incident Management		
Term/Theory	Definition/Point	
Outlines	 Process for dealing with all incidents (failures, questions, query) Any event which disrupts or could disrupt service; could be from monitoring or end user call 	
Objectives	 Primary objective: restore IT service to users ASAP Other objectives: Detect/resolve incidents Align real-time it activity to business priorities Identify potential improvements 	
Incident vs. Service Requests	 Both incidents/service requests are reported to Service Desk <u>Service Request -</u> planned, repeatable <u>Incident</u> - unplanned, deviation from normal, reduction in quality of agreed service, could lead to disruption or reduction in service <u>Incident models</u> – provided guidance to deal with incidents 	
Major Incidents	 Shorter timescale – separate procedures Should include: Steps to take Chronological order who should do what timescale escalation procedures evidence preservation activities 	
Incident Steps	 Incident ID – reported logging – ticket opened; documentation of ~ Categorization – hardware, software, infrastructure Prioritization – facilitate activities according to SLA/OLA/UC; priority given based on Urgency (timeframe which users required resolution) & impact Initial diagnosis – L1 support, resolving incidents based on knowledge/experience/kb's/diagnostic scripts; analysis may resolve on initial diagnosis and then close (FCR) Escalation – guided by SLA, will follow major incident procedure Functional escalation to tech teams Hierarchical escalation to SDS and Inc process mgr Investigation & Diagnosis – L3 support teams do their thing Resolution & recovery Incident closure; stays open until related problem mgmt activities are completed if a major incident 	



Exam Recap Service Operation (SO) Processes – Incident Management:

- The objectives of each Incident Management
- Definitions and concepts of Incidents, Service Requests, Priority, Urgency and Impact
- Major Incidents, Incident Models, Incident Management Activities
- Key terms and definitions

Request Fulfillment	
Term/Theory	Definition/Point
Outlines	 Service requests are frequently recurring Allow for efficient/consistent service fulfillment (i.e. how do I add items?) If cannot help, gets escalated to service desk, external vendors
Where originate?	Requests are detected in Inc Mgmt and transferred to Request fulfillment

Exam Recap Service Operation (SO) Processes – Request Fulfillment:

- The objectives of each Request Fulfillment
- Basic concepts of Request Fulfillment
- Terms and definitions

Access Management	
Term/Theory	Definition/Point
Outlines	 Allows to make use of IT service, data, assets Helps protect confide, integrity, available to only authorized users
Objectives	Objectives:
	Execute policies and actions defined in Info Security & Avail Mgmt
	 Protect confide, integrity, avail to only authorized users Enables users to access services within SC
	 Access – level/extent of service's functionality and data an end user
	can access
	 ID – information distinguishing end user
	 Rights – actual settings an end user has
Concepts	 Policies – primary guidelines in access
	 Info mgmt plays vital role in identifying unauthorized access
	Executed by tech/app mgmt functions



Access Management	
	PW reset No specific roles
Terms	 Rights/ID mgmt aka access mgmt Rights - entitlements Access – level and extent of a service's functionality or data a user can use ID – information about users which distinguish each other Service Group Confidentiality – data should only be accessed by authorized ppl Integrity – items are only modified by authorized activities and ppl Availability IS Policy

Exam Recap Service Operation (SO) Processes – Access Management:

- The objectives of Access Management •
- Basic concepts of Access Management •
- Terms and definitions

Problem Management	
Term/Theory	Definition/Point
Outlines	 Unknown cause of one or more incidents Manages lifecycle of all problems Diagnose root cause, determine resolution, move through change & release
Primary Objective	Prevent problems and resulting incidents, minimize impact of incidents
Major processes	 <u>Reactive</u> – where inc mgr requires more resources and techniques to resolve; investigate all major incidents <u>Proactive</u> – executed as part of CSI; tries to prevent future problems; focuses on identifying & preventing problems via incident/problem data
Terms	 <u>Problem</u> – cause of one or more incidents <u>Problem models</u> -used to handle known errors <u>Root Cause Analysis (RCA)</u> – solving problems in a structured/organized manner <u>Root cause</u> – underlying or original cause of I/P <u>Workaround</u> - temporary fix or implementation of alternate technique to avoid <u>Known Error (KE)</u> – problem with documented root cause and a workaround <u>Known Error Record</u> – allows quicker diagnosis and resolution when similar incidents occur; follow RCA activity. Entered into KEDB and forms larger SKMS <u>Status</u> – required field showing stage associated with CI, incident, problem, or



Problem Management	
	other record types
Concepts	Incident/Problem will use similar tools, impact, categorization and priority coding systems
-	

Exam Recap Service Operation (SO) Processes – Problem Management:

- The objectives of Problem Management
- Reactive and proactive Problem Management
- Known error database
- Workarounds
- Terms and definitions



Continual Service Improvement (CSI)

By the end of this lesson, you will be able to:

Overview & Objectives Identify the purpose, objectives, scope and basic concepts of the 7-Step Improvement process.

Identify the seven steps and how they integrate with the DIKW and PDCA cycles.

Event Management	
Term/Theory	Definition/Point
Outlines	The concept of measurement is fundamental to CSI, and is managed using the Seven-Step Improvement Process. The improvement process spans the management organization and the entire service lifecycle.
Purpose	 Define and manage the steps needed to identify, define, gather, process, analyze, present and implement improvements. Important to note that improvements in quality must be cost justified.
Objectives	 Identify opportunities for improving services, processes, and tools. Reduce the cost of providing services and ensuring that IT services enable the required business outcomes to be achieved.
Scope	 Services and Processes throughout the lifecycle, partners and technology Making best use of the Technology that the organization has The organizational structure, and the capabilities of the personnel
Seven Steps:	The integration of the PDCA and DIKW cycles is as follows:
DIKW & PDCA	PLAN 1. Identify the strategy for improvement (WISDOM) 2. Define what you will measure (DATA)
	DO 3. Gather the data (DATA) 4. Process the data (INFORMATION)
	CHECK 5. Analyze the information and data (KNOWLEDGE) 6. Present and use the information (KNOWLEDGE)
	ACT 7. Implement improvement (WISDOM)



Exam Recap Service Operation (SO) Processes – Event Management:

- The purpose, objectives, and scope of the 7-Step Improvement process
- The 7 steps and DIKW + PDCA cycles
- Terms and definitions

Thank you for studying for your ITIL 2011 Foundation exam with Thought Rock. Best of luck with the exam and please contact us if you have any questions. Info@ThoughtRock.net