Day 2: August 16

Module 5 - Service Design

* Service Design
  + Purpose: design IT services, together w/ governing IT practices/processes/policies, to realize the service provider’s strategy and to facilitate the introduction of these services into supported environments
* Objectives:
  + Design services so effectively minimal improvement will be required
  + Embed continual improvement in all aspects of design
* Scope:
  + Provides guidance for the design of appropriate and innovative IT services to meet current and future agreed business requirements
    - Planning a scalable solution for growth/decline
* Business value
  + Quality services
  + Cost-effective services
  + Ensure business requirements are met consistently
* The 4 P’s
  + **People**
  + **Products/Technology**
  + **Processes**
  + **Partners/Suppliers**
  + Balanced view: **Performance**
* Five aspects of service design
  + Service solution
    - Primarily app dev team - utility
  + Tech and management architectures
    - Primarily based on infrastructure - warranty
  + Measurements
  + Management info systems + tools
    - Includes ticketing, discovery, deployment
  + Processes
* Use of tech in the life cycle
  + Not just ticketing system, every technology
    - In the exam, most inclusive answer
* Service Design Processes
  + Service level management
    - Negotiation of services for price
  + Availability management
  + Capacity management
  + Security management
  + Continuity management
  + Supplier management
    - Working with other organizations who provide services (**contracts)**
  + Service catalogue management
    - Bookkeeping
  + Design coordination
    - Overseer of operations
* Service catalogue management
  + Purpose: provide + maintain a single source of consistent info on all operational services and those being prepared to run operationally, and to ensure that it’s widely available
  + Catalog should have active services, ready for production, only available service info published to customers
* Service catalogue elements
  + Services, supported levels of performance, policies, dependencies
* Service catalogue
  + Business processes
  + Customer-facing services
    - business/customer view
  + Supporting services
    - Technical view
* Service level management
  + Purpose: to ensure that all current + future IT Services are delivered to agreed achievable targets
* Service providers
  + Type 1: internal service provider
    - More dedicated focus
  + Type 2: shared services unit
    - More economy of scale
  + Type 3: external service provider
* Agreements
  + Underpinning contracts - only come into play during supplier management
  + Operating level agreements - for support services
  + ITS provider manages SLA
* SLA frameworks
  + Service specific SLA -> customer specific SLA -> corporate level SLA
  + corporate level: ex. school wide
  + Customer level/business unit level: ex. Computing faculty
  + Service specific
* Key definitions
  + Service Level requirements (SLRs)
    - Once these are approved, a service that meets these requirements will be built
  + SLA monitoring (SLAM) chart
    - About managing expectations and perception
    - Important to measure the right things
  + Service improvement plan (SIP)
  + Service review
* SLM activities
  + Complaints should be treated as an incident
    - Unsolicited feedback is valuable and feedback should be acted upon
* Sample interfaces
  + Interface: relationship between one process and another
  + Incident management gets goals from service level management
    - Reports stats back to service level management
* Relationship between SLM + BRM
  + BRM focuses on the transition from strategic activity to tactical
  + SLM focuses on tactical to operational transitions
* Availability Management
  + Purpose: ensure that level of availability delivered in all IT Services meets the agreed needs and/or service level targets
* Availability concepts
  + Service availability - SAM
    - Calculation of CAM - multiply the availability of all services
    - Will be lower than any single service’s availability
  + Component availability - CAM
  + MTBSI = MTBF + MTRS
  + Serviceability: ability to live up to terms of contract
* Vital business functions - VBF
  + Reflects the part of a business process that is critical to the success of the business
* Capacity Management
  + Purpose: ensure that the capacity of IT Services + infrastructure meets the agreed capacity + requirements in a cost-effective + timely manner
* Capacity Plan
  + Used to manage the resources required to deliver IT services, matched to PBAs
* Capacity management sub-processes
  + **Business capacity management**
  + **Service capacity management**
  + **Component capacity management**
* Information security policy
  + Purpose: to align IT security with business security and ensure that the confidentiality, integrity, and availability of the org’s assets, info, and data and it services always matches the agreed needs of the business
* ISM concepts
  + Confidentiality
    - Right people
  + Integrity
    - Right data
  + Availability
    - Right time
  + Non-repudiation
* IT Service continuity management
  + Purpose: support overall continuity management process by ensuring that, by managing the risks that could seriously affect IT services, the IT service provider can always provide minimum agreed business continuity related service levels
* Business Continuity Management
  + Process responsible for managing risks that could seriously affect the business
* Business Impact Analysis
  + Purpose: quantify the impact a loss of service would have
* Risk
  + Uncertainty of outcome, whether a positive opportunity or negative threat
  + Contains 2 components:
    - **Risk Assessment**
    - **Risk Management**
* Supplier Management
  + Purpose: obtain value for money from suppliers and provide seamless IT service
* Design Coordination
  + Process that’s accountable for coordinating goals and objectives of the service design stage
    - Responsible for service design package

Module 6 - Service Transition

* Purpose: ensure that new, modified, or retired services meet the expectations of the business as documented in the service strategy + design stages
* Objectives:
  + Plan + manage service changes effectively + efficiently
  + 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 + service assets
* Scope:
  + Managing complexity of changes to services + service management processes
  + Introducing new services
  + Changes to existing services
  + Decommissioning + discontinuation of services
  + Transferring services to and from other service providers
* Business value:
  + Align new or changed services with the business requirements
  + Maximize value to the business operations
* Service transition processes
  + Service asset + configuration management
  + Change management
  + Release + deployment management
  + Knowledge management
  + Transition planning + support
* Service asset + config management (SACM)
  + Purpose: ensure that assets required to deliver service are properly controlled, and that accurate and reliable info about those assets is available when + where it’s needed
  + Asset management: ex. Desktop purchase date, serial number
    - This desktop would be considered a CI
* Configuration Item
  + Service asset that needs to be managed in order to deliver an IT service
  + Info on CIs are **relationships** or **attributes**
    - Attributes: pieces of info about a CI
    - Relationships: links between CIs that identify a dependency/relationship between them
* Config management system
  + Data layer
  + Info integration layer
  + Knowledge processing layer
  + Presentation layer
* Definitive Media Library (DML)
  + Secure library in which the definitive authorized versions of all media CIs are stored + protected
    - Should also include licenses + master copies of controlled documentation
* Configuration Baseline
  + Config baseline vs snapshot
  + Config baseline: formally reviewed + agreed, changed only through formal process
  + Snapshot: current state of a config item or environment, may contain faults
* Change Management
  + Purpose: to control the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services
* Change
  + The addition, modification, or removal of anything that could have an effect on IT services
* Request for Change (RFC)
  + Formal proposal for a change to be made
* Change Proposal
  + For major changes that involve significant cost, risk, or org impact
    - Authorization simply allows service design activity to start
* Change models
  + Standard change
    - Goes through without needing approval from CAB
  + Emergency change
    - Change first, then document
* CAB / ECAB
  + Change advisory board
  + Emergency change advisory board
* Change types
  + Normal changes
    - Typical process
  + Standard changes
    - Very simple, ex. Service request for new PC
  + Emergency changes
* Change mgmt activities
  + Review
    - Sanity check, may involve 1-2 people
  + Assess
  + Evaluate
    - Change is now ready for decision
* Standard Change
  + Trigger defined
  + Well known documented + proven tasks
  + Approach is pre-authorized
  + If it fails, needs to go through normal change process again
* Emergency Change
  + Biggest difference: documented after the fact
* Remediation planning
  + #1 element is a backout plan
* Release + Deployment Management
  + Purpose: plan, schedule, + control the build, test, + deployment of releases and to deliver new functionality required by the business while protecting integrity of existing services
* Knowledge Management
  + Purpose: share perspectives, ideas, experience and info; to ensure that these are available in the right place at the right time to enable informed decisions; and to improve efficiency by reducing the need to rediscover knowledge
* Data to Wisdom
  + Data -> Info -> Knowledge -> Wisdom
* Service Knowledge Management System (SKMS)
  + Encompasses CMS which encompasses CMDB