ITIL Notes (Day 2)

❖ **Service Level Management (SLM)**
  o SLM focuses on defining, negotiating, documenting, & managing service level agreements (SLAs) with customers & stakeholders.
  o The primary objective of SLM is to ensure that IT services meet agrees-upon service levels & performance targets.
  o SLM involves activities such as identifying service requirements, defining SLAs, monitoring service performance, & reporting on service level achievements.
  o By establishing clear SLAs & continuously monitoring service performance, organizations can ensure that IT services align with business needs & customer expectations.
  o **SLM – Pizza Delivery**
    1. Defining the service level agreement (SLA)
       a) Delivery time   :   30min
       b) Pizza Quality   :   Hot, Fresh
       c) Customer Service   :   Polite, Helpful
    2. Monitoring Service Performance
       a) Delivery time   :   Track the time for preparing, cooking & delivering the food
       b) Customer Feedback   :   Take feedback from customer, to access the satisfaction level & identify the areas for improvements.
       c) Quality inspection   :   Regular check
    3. Responding to service issues
       a) Late Delivery   :   Discounts & Coupons
       b) Quality Issues   :   Replacement or refund
       c) Customer Complaints :   Address & resolve the problems
   4. Continual Improvements
       a) Process optimization :   Bottleneck Situation
       b) Training & Development: Training for the staff members to improve skills
       c) Technology upgrade   :   Precise GPS technology
    5. Reporting & Review
       a) Performance reports :   Delivery time, Customer feedback, quality of service
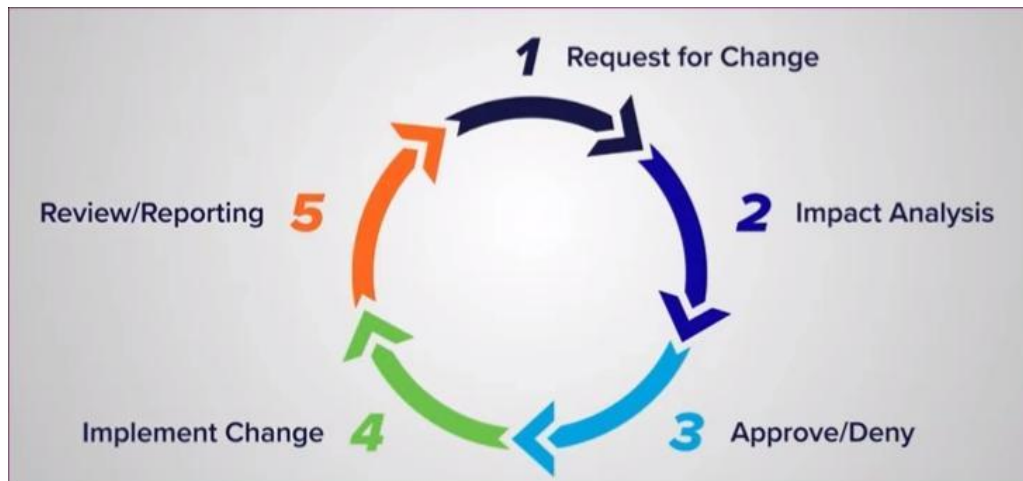
❖ **Change Management**
  o Change management in ITIL is a structures approach to managing changes to
    1. IT services
    2. Systems
    3. Processes
    4. Infrastructure in a controlled and systematic manner.
  o The primary objective of change Management is to minimize the risk of disruptions & negative impacts on service quality & stability while facilitating beneficial changes that support business objectives.
  o **Key aspects of change management in ITIL**
    1. Change control process
       a) Change most involves establishing a formal process for
          o Requesting
          o Evaluating
          o Approving
          o Implementing
          o Reviewing changes
    2. Change Type:
       a) Standard change
          o Pre-authorized routine change
       b) Normal change
          o Moderate risk & complexity
       c) Emergency change
          o Urgent & high-priority changes.

3. Change Advisory Board (CAB)
    a) Key component of change management
    b) It's a responsibility is to assessing. Evaluating proponed changes, making recommendations for Approval/rejection.
4. Change Models and Templates
    a) It helps in ensuring consistency and efficiency in handling changes.
5. Risk assessment & Impact Analysis
    a) It helps in identifying potential issues and plan appropriate mitigation strategies
6. Change authorization & approval
    a) Changes are authorization & approved based on criteria like risk level, business impact, compliance Requirements.
    b) Authorization & approval are obtained from CAB, stakeholders, senior mgmt.
7. Change implementation & review:
    a) Approved changes are implemented according to pre-defined procedures.
8. Post-implementation Review (PIR)
    a) After the changes are implemented.
    b) This helps in enhancing the process & optimizing future changes.

- **Change Management Flow/Process**
    1. Request for Change (RFC)
    2. Initial Assessment
    3. Change Evaluation
    4. Change Approval
    5. Change Planning
    6. Change Implementation
    7. Change Review and Closure
    8. Change Communication and Documentation
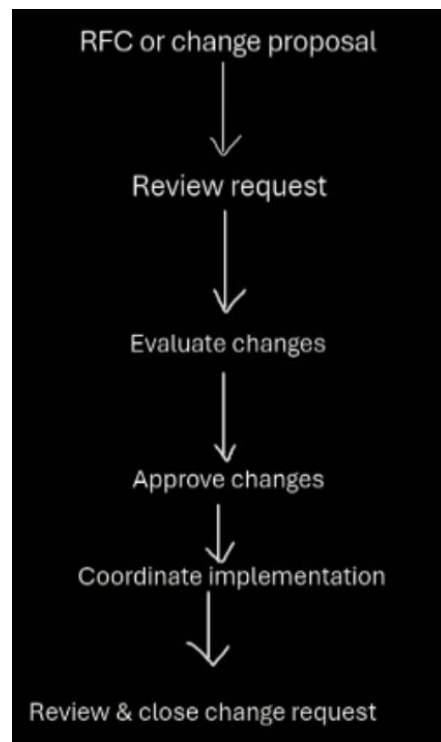
- Change Management Flow/Process:
    1. Request for change (RFC)
    2. the beginning of the change management process
    3. its a formal request to implement the changes.
    4. it can be originated by
        a) users
        b) customer
        c) IT staff,
        d) automated monitoring system

- o Initial assessment
    1. then change management team will conduct initial assessment to gather information about the proposed changes.
- o . Change evaluation:
    1. this assessment includes evaluating the nature of changes, its impact, urgency, risk level & dependencies. I
- o Change Approval:
    1. CAB or stakeholders reviews & then make decision for approval/rejection.
- o Change planning:
    1. once changes are approved, the change management team plans for activities, resources, and timeline.
- o Change Implementation:
    1. Only the approved changes are to be implemented here.
    2. This includes coordinating with stakeholders, conducting tests and following approved procedures.
- o Change Review and closure:
    1. After the changes are implemented, change management team conducts the post-implementation review (PIR) to assess the effectiveness of the changes, identifying lession learned and then documenting it. Once everything is successful, then change id closed.
- o Change communication & documentation:
    1. Informing the stakeholders & others that the problem is resolved.

- ❖ **Service Management**
    - o It refers to the set of practices, processes and capabilities used to design, deliver, manage and improve IT services to meet the needs of customers and support business objectives effectively.
    - o It encompasses the entire lifecycle of IT services from initial planning and design to ongoing operations, support and optimization.
    - o Key aspects of Service management includes:
        1. Service strategy
        2. Service design
        3. Service transition
        4. Service Operation
        5. Continual Service Improvements (CSI)
    - o **Service Management – Service Strategy**
        1. Service Strategy in ITIL is the phase where an organization defines its approach to delivering value to its customers and stakeholders through IT services.
        2. It's about aligning IT service management with business objectives and ensuring that IT resources are utilized effectively to support business goals.
        3. Examples:
            a) Defining service offerings
            b) Defining Service Level Agreements (SLAs)
            c) Assessing Market Demands
            d) Identifying Strategic Assets

e) Establishing Service Portfolios

f) Financial Management for IT Services

4. Defining service offerings.

   a) Identifying & defining the type of service that will be offered to customer.

   b) This includes determining which service will be provided internally, which will be outsourced & which will be delivered through partnership.

   c) Ex: a bank offering online banking, mortgage service, investment advisory & customer support.

5. Assessing Market Demands

   a) organizations need to understand the market demand & customer needs for developing improved services

   b) we require

      o Market research

      o Analyzing customer feedback

      o identifying emergency trends

   c) Establishing Service Portfolios

      o This involves strategic importance, values & lifecycle stages.

   d) Defining Service Level Agreements (SLAs)

      o defines service quality matrix, response times and availability of targets

6. Identifying strategic assets

   a) organizations identify the strategic assets, resources & capabilities that are needed for delivering the IT services.

   b) this includes accessing internal strengths & weaknesses

   c) Financial Management for IT Services

      o This includes budgeting, cost optimization & financial analysis

o **Service Management – Service Design**

   1. Service Design in ITIL is the phase where organizations translate their strategic objectives and customer requirements into actionable plans for delivering IT services.

   2. It focuses on designing new or modified services that meet business needs, are cost-effective, and align with service strategy.

   3. Service catalogue Management

      a) It involves creating & maintaining a service catalog that provides a brief list of available IT services.

   4. Service Level Management

      a) It ensures that the service levels are clearly defines & agreed upon.

   5. Capacity Management

      a) It includes analyzing usage patterns, forecasting demands & optimizing resource allocation.

   6. Availability Management

      a) It includes identifying potential sources of downtime, implementing measures to minimize disruption & designing resilient IT architecture.

   7. IT Service Continuity Management

      a) It includes developing IT service continuity plans, performing risk assessment & implementing disaster recovery measures.

   8. Information Security Management

      a) It includes implementing the security controls, conducting risk assessments & complying with regulatory requirements.

o **Service Management – Service Transition**

   1. Service Transition in ITIL is the phase where organizations plan and manage the transition of new or modified IT services into operation while ensuring that changes are implemented effectively and efficiently.

   2. It focuses on minimizing the risk of disruptions to IT services and maximizing the value delivered to customers and stakeholders.

   3. Examples:

      a) Change Management

      b) Release and Deployment Management

      c) Service Validation and Testing

d) Knowledge Management
e) Configuration Management
f) Transition Planning and Support

1. Change Management
   a. this includes evaluating proposed changes, assessing impact, obtaining approval & coordinating implementation activities.
2. Release & deployment management:
   a. This includes defining release packages, coordinating deployment activities & verifying that the changes are successful.
3. Service Validation and Testing
   a. functional testing, performance testing & User Acceptance Test (UAT)
4. Knowledge Management
   a. this ensure that the stakeholders have access to accurate & up to date information to support the transition
5. Configuration Management
   a. It includes maintaining configuration records, tracking changes & ensuring that the configuration baseline is updated as changes are implemented.
6. Transition Planning and Support
   a. This includes developing transition plans, defining roles & responsibilities & providing training & support to stakeholders.

- **Service Management Service Operation:**
  1. Incident Management
     - It includes managing incidents, unplanned interruptions, reduction in QoS.
     - Incident management is used for restoring services normally & quickly.
  2. Request Fulfillment
     - It includes fulfilling of requests, all formals requests from user or customer.
  3. Problem Management
     - It includes identifying & resolving the issues.
     - Analyzing of data, identifying the trends & implement correct actions.
  4. Access Management
     - This involves defining the access policies, granting permissions & monitoring user activities.
  5. Event Management
     - It includes event data, correlated events, finding meaningful patterns & initiating appropriate actions.
  6. Continuous Monitoring and Reporting
   - it helps in improving the values of IT services to the business.
- **Service Management – Continual Service Improvements**
  1. CSI in ITIL is a phase focused on systematically identifying and implementing improvements to IT services, processes, and capabilities to enhance service quality, efficiency, and alignment with business objectives.
  2. CSI emphasizes the importance of ongoing evaluation, feedback, and learning to drive continuous improvement across the IT organization.
  3. Example:
     - Define CSI Approach
       - Establishing goals, object & KPI (Key Performance Indicator) to measure progress & success
     - Identify Opportunities for Improvement
       - This includes identifying opportunities for improvements through various means such as analyzing service performance data, conducting customer surveys & taking feedback from stakeholders.
     - Assess Current State
       - This includes accessing the current state of IT services, processes, & capabilities to identify strengths & weaknesses.

- Define Improvement Initiatives
  - This includes developing actions, assigning responsibilities & setting timelines for implementation.
- Implement Improvements
  - This includes coordinating cross functional teams, communicating changes to stakeholder & providing training as needed.
- Measure and Monitor Progress
  - This includes tracking performance matrix, analyzing trends
- Review and Learn

❖ **Event Management**
  - Event Management in ITIL is a process focused on monitoring and managing events that occur within an IT infrastructure or service environment.
  - An event is defined as any detectable occurrence that has significance for the management of IT services or infrastructure.
  - Examples:
    - Detection of Events
    - Categorization and Prioritization
    - Event Filtering and Correlation
    - Incident Identification and Resolution
    - Proactive Management and Root Cause Analysis
    - Reporting and Analysis
    - Notification and Escalation

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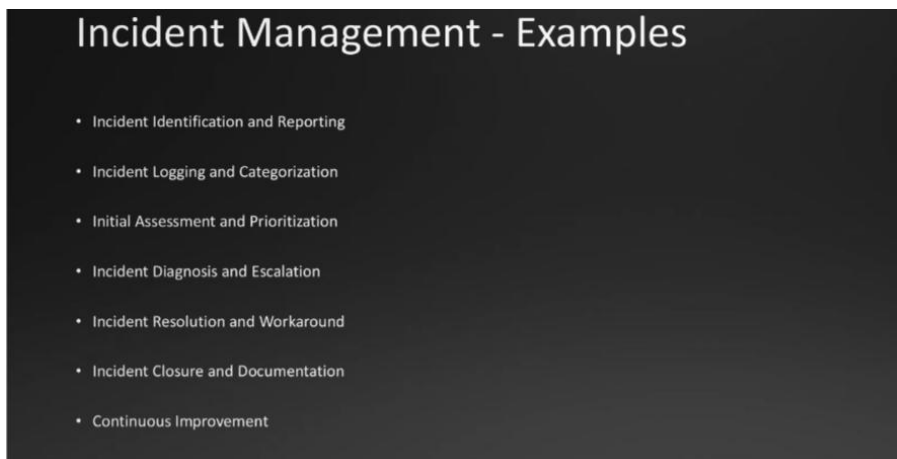
  - Imagine you're driving a car, and suddenly it starts making a strange noise and slows down. That's an incident – something unexpected that affects your journey (like an IT service being disrupted).
  - Reporting the Incident:
    - You notice the problem and tell someone – maybe a mechanic (like reporting to IT support).
  - Noting Down the Details:
    - The mechanic logs the issue and figures out what's wrong (like IT support categorizing and understanding the problem).
  - Deciding How Urgent It Is:
    - They decide if it's a quick fix or if it needs immediate attention (like determining the severity of an IT issue).

❖ **Prioritization**
  - Incident Prioritization
  - Change Prioritization
  - Service Request Prioritization
  - Problem Prioritization
  - Task Prioritization
  - Resource Allocation

❖ **Problem Management**

- o Identification of Problems
- o Logging and Categorization
- o Investigation and Diagnosis
- o Workarounds and Temporary Fixes
- o Resolution and Closure
- o Knowledge Sharing and Documentation
- o Continuous Improvement

❖ **Service Request**
  - o Service Request refers to a formal request from a user or a customer for access to an IT service or for some specific action to be taken by the IT service provider.
  - o Unlike incidents, which represent unplanned disruptions to IT services, service requests are typically routine, pre- approved, and do not require troubleshooting or resolution.
  - o Breakdown of Service Requests in ITIL:
    - ▪ Definition
    - ▪ Examples
    - ▪ Characteristics
    - ▪ Fulfilment Process
    - ▪ Service Level Agreements (SLAs)