ITIL 4 Foundation Notes

1. Concepts of service management

- **Service Management**
  - A set of specialized organizational capabilities for enabling value for customers in the form of services

- **Service**
  - Means of enabling **value** co-creation
  - by facilitating the **outcomes** that customer want to achieve
  - without customer managing **cost** and **risks**

- **Value**
  - **Utility**
    - Fit for purpose
    - Functionalities
    - Supports performance of consumer and remove constraints
  - **Warranty**
    - Fit for use
    - Availability, Capacity, Security, Continuity
    - Assurance that product or service will meet agreed requirements

- **Outcome**
  - Results desired by a stakeholder
  - Service providers help service consumers achieve outcomes
  - Can be enabled by more than one output

- **Cost**
  - Cost imposed vs Cost reduced
  - Removing costs from consumer can be part of value proposition

- **Risk**
  - Risk introduced vs Risk removed

- **Organization**
  - Varies in size and complexity
  - Uses function to achieve its objectives

- **Customer**
  - Define requirements
  - Responsible for outcomes

- **User**
  - Use the services, submit requests

- **Sponsor**
  - Authorize budget

- **Output**
  - Tangible or intangible deliverable created by carrying out an activity
  - Contribute to the achievement of outcomes

- **Service Offering**
  - A package that comes with products and services
    - Goods
      - E.g. Laptop, software, license
    - Access to resources
      - E.g. Login credentials
    - Service action
      - E.g. Support

- **Service Relationship Management**
  - Identify consumer roles
    - To provide value by removing constraints
  - Service provider and consumer works together to ensure continual value co-creation
  - Service provision
    - The management of resources configured to deliver the service

2. 4 Dimensions
- **Partner and Suppliers**
  - Understand the level of <u>integration</u> and formality involved in the relationships between organization

- **Value Stream and Processes**
  - Focus on activities/workflows and how these are coordinated

- **Organization and People**
  - Governance, management and communication
  - Roles and responsibilities
  - Organization structure, culture and leadership
    - Created from shared values based on how work is carried out
    - Based on the objectives of the organization

- **Information and Technology**
    - Information security compliance
        - Protect knowledge assets
    - Knowledge base
    - Management systems

3. Service Value System

All components of the Service Value System work together to facilitate and ensure continual value co-creation.

- Guiding Principles
- Governance
- Service Value Chain
- Practices
- Continual Improvement

4. Guiding principle

Guiding principles should be used and considered in ALL initiatives and circumstances. This helps an organization in decision making to adopt and adapt ITIL guidance.

- **Focus on value**
    - Focus on customer and user experience at every step of improvement
    - Concern about consumer's revenue and growth
    - First step is always to know who is your consumer

- **Start where you are**
    - The use of measurement should support, not replace what is observed (direct observation)
    - Use measurement data to assess the current state
    - Assess what can be reused based on data
    - Use existing services, processes and tools as much as possible

- **Progress iteratively with feedback**
    - The ability to discover failures and respond fast (Fail fast, learn fast, improve fast)
    - Organize work into small and manageable sections
    - Important to do work instead of spending too much time analyzing
    - Each improvement iteration should be continually re-evaluated based on feedback

- **Collaborate and promote visibility**
    - Increase collaboration and visibility for improvement
    - Better information is available for decision making
    - Understand flow of WIP, identify bottleneck, uncover waste

- **Think and work holistically**
  - Consider the 4 dimensions of service management and ensure their coordination for every initiative
  - Focus on the <u>end-to-end</u> service delivery

- **Keep it simple and practical**
  - First step is to understand how each element contributes to value creation
  - Use minimum number of steps to create value

- **Optimize and Automate**
  - Starting point is to understand company vision and objectives
  - Standardize before automating

5. Service Value Chain

An **operating model** which outlines the activities to respond to demand and facilitate value realization.

Each value chain **activity** uses a different **combination of practices** to convert **input to outputs**

Outputs helps to deliver an expected outcome which is business **VALUE REALIZATION**

- **Plan**
  - Ensure understanding of vision, current status and <u>direction</u> for all products and services through proper communication.

- **Engage**
  - Good relationship with stakeholders
  - Great understanding of stakeholder needs
  - Transparency between service provider with all stakeholders

- **Design and Transition**
  - Ensure services meet stakeholder expectation of stakeholders in terms of quality, time, budget and cost.

- **Obtain and Build**
  - Ensure components are ready for use with correct specifications and agreed level when needed

- **Deliver and Support**
  - Ensure delivery and support of services is according to agreed level and specifications

- **Improve**
  - Ensure continual improvement of the 4 dimensions

6. Practices
- **Continual Improvement**
  - Purpose
    - Continually improve alignment between business and IT
  - Continual Improvement Model
    A set of defined steps for implementing improvements
    - What is the vision?
    - Where are we now?
    - Where do we want to be?
    - How do we get there?
    - Take Action
    - Did we get there?
    - How to keep the momentum going?
  - Continual Improvement Register (CIR)
    - Identify and log opportunities in CIR
    - Improvement ideas are documented, assessed and prioritized here
    - Should be reprioritized as ideas are documented
  - An organization should always develop competencies in methodologies and techniques that will meet their needs
  - Making business cases for improvement action
  - Select a few key methods for the types of improvement that the organization handles
  - Improvement should be based on accurate and carefully analyzed data
  - Use balanced set of metrics to provide an outcome-based view of services
  - At least one team dedicated to leading continual improvement efforts
  - Responsibility for everyone in the organization
  - Balance Score Card (BSC) reviews and maturity assessment technique
    - SWOT analysis

- **Service Level Management**
  - Purpose
    - Set clear business based targets for service performance and assess, monitor and manage service delivery against target
  - Service level agreement
    - Define the required performance outcomes of a service
    - It should be simply written and easy to understand
  - Customer engagement
    - Ask customer about their work and how technology can help them
    - Identify metrics that reflect customer experience by asking customer open questions about the requirements
    - Capture information about the metrics and progress discussion
  - Customer feedback
    - Use of event-based surveys to gather feedback from customers
  - Key areas of competences

- Listening
- Business Analysis
- Commercial management

- **Supplier Management**
  - Purpose
    - Manage suppliers and their performance through contracts/agreements to ensure seamless provision of all products and services
  - Supplier strategy depends on corporate culture
  - Anything you want from supplier has to be included in contracts

- **Information Security Management**
  - Purpose
    - To protect information
  - Manage risks to CIA
    - **C**onfidentiality
    - **I**ntegrity
    - **A**vailability

- **Change Control**
  - Purpose
    - Ensure risks have been properly assessed for every change
  - Definition of change
    - Addition, modification, or removal of anything that could have an effect on services is assessed and authorized
  - Type of change
    - Normal change
      - Changes that need to be scheduled and assessed following a proce2ss
      - E.g. change a particular feature in an application
    - Emergency change
      - The assessment and authorization of emergency changes is expedited to ensure they can be implemented quickly
      - E.g. Security patch to a critical application
    - Standard change
      - A change that is normally implemented as a service request
      - A full risk assessment and authorization should be done when the procedure for the standard change is created
      - E.g. The installation of a software application in response to a service request

- **Release Management**
  - Purpose
    - Make new and changed services available for use

- **Monitoring and Event Management**
  - Purpose
    - Detect <u>change of state</u> that has a significance

- **Incident Management**
  - Purpose
    - Restore normal service operation as soon as possible
    - Incident is an unplanned interruption or reduction in quality
  - Log incident and collect initial information e.g. incident symptoms
  - Categorize
    - Direct incident to the correct support group
  - Prioritize based on business impact and urgency
    - Low impact incidents should be resolved efficiently so the resource required is reduced
    - High impact incidents should be resolved ASAP
      - Collaboration between teams helps solving incident quickly
      - Might trigger disaster recovery
  - Initial Diagnosis
    - Refer to problem and known errors for workarounds to enable quick and efficient diagnosis of incidents
    - Use scripts for simple incidents
  - Escalation
    - Incident category helps assign to the correct group
  - Resolution
    - Target resolution time should be agreed, documented and communicated to set user expectation
  - Provide good quality updates when expected
  - Automation (Tools)
    - Automate the matching of incidents to problems/known errors

- **Problem Management**
  - Purpose
    - Management of vulnerabilities that were not identified before the service went live
    - Identify the underlying cause of incidents
    - Reducing the likelihood of incidents
  - 3 phases of problem management
    - Problem Identification
    - Problem Control
    - Error Control
  - Proactive problem management
    - Trend analysis
  - Problem Prioritization
    - Based on risks (impact x probability)

- o Problem
    - A cause or a potential cause of one or more incidents
- o Workaround
    - Documented after the problem has been analyzed
    - Reassessed whenever a workaround is used
- o Known error
    - A problem has been analyzed and has not been resolved
    - When a workaround becomes permanent, problem stays at known error status
- o Key characteristics of problem teams
    - Understand complex systems
    - Creative
    - Good analytical skills
- o Interact with Incident Management (Reactive), Continual Improvement(Proactive) and Change Control (Permanent fix)

- **Service Request Management**
    - o Purpose
        - Manage the lifecycle of service requests
    - o Depends on predefined processes and procedures to maximize efficiency
    - o Set user expectations by communicating the time needed to realistically deliver the service
    - o Should be well known and proven and part of normal service delivery like the following:
        - Info, query, advice
        - Standard change
        - Access to standard services
        - Feedback, compliments and complaints
    - o Leverage existing workflows whenever possible for new type of service requests

- **Service Desk**
    - o Purpose
        - Capture demand for incident and service requests
        - Single point of contact for service consumers and all users
    - o Coordinates the following for all incidents and service requests
        - Classification
        - Ownership
        - Acknowledgement
        - Communication
    - o Detect recurring issues and help identify problems
    - o Work closely with support and development teams

- o Key skill areas
  - Incident analysis skills
  - Understand business
- o Automation tools
  - Allows service desk to focus more on customer experience when personal contact is needed.
    - Example of tools – Chatbot (automated service desk for FAQs)

- **Relationship Management**
  - o Purpose
    - Establish and nurture the links between the organization and its stakeholder at strategic and tactical level

- **IT Asset Management**
  - o Purpose
    - Manage lifecycle of all IT assets
    - Optimize cost, manage risks and maximize value
  - o **IT Asset**
    - Anything that is financially valuable

- **Service Configuration Management**
  - o Purpose
    - Accurate and reliable information is available about configuration items and relationship between them
  - o **Configuration Item**
    - any components that need to be managed in order to deliver an IT Service

- **Deployment Management**
  - o Purpose
    - Move components into live environments