### **ITIL V4 Foundation**

ITIL V4 Foundation Service Management Understand the key concepts of Service Management Definitions: Section 1.1 (2 points) Key concepts: Section 1.2 (2 points) **Understand ITIL Guiding Principles** Explain: Section 2.2 (5 points) Four Dimensions of Service Management Describe: Section 3.1 (2 points) ITIL Know the Purpose and Key Terms (15 practices) Recall: Section 6.1 (5 points) ITIL Key Terms (7 practices) Recall: Section 6.2 (2 points) Understand ITIL (7 Practices) Explain: Section 7.1 (17 Points) Understand Service Value Chain (SVC) 1 Point

### **Service Management**

ITIL 4 defines a service as:

A means of enabling value co-creation by facilitating outcomes that customers want to achieve, without the customer having to manage specific costs and risks

# **Understand the key concepts of Service Management**

#### **Definitions: Section 1.1 (2 points)**

- Service: A means of enabling value co-creation by facilitating outcomes that customers want to achieve, without the customer having to manage specific costs and risks
- Utility: The functionality offered by a product or service to meet a particular need. To have utility, a service must either support the consumer and / or remove constraints from the consumer.
- Warranty: Assurance that a product or service will meet agreed requirements. Warranty often relates to service levels aligned with the needs of service consumers.
- Customer: The role that defines the requirements for a service and takes responsibility for the outcomes of service consumption
- User: The role that uses services
- Service Management: A set of specialized organizational capabilities for enabling value for customers in the form of services
- Sponsor: The role that authorizes budget for service consumption

#### **Key concepts: Section 1.2 (2 points)**

- Cost: The amount of money spent on a specific activity or resource
  - Costs removed from a consumer
  - Costs imposed on a consumer

- Costs can be expressed in non-monetary terms such as time spent, people allocated, etc.
- Value: The perceived benefits, usefulness and importance of something co-created through an active collaboration between providers, consumers and other organizations
- Organisation: A person or a group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives
- Outcome: A result for a stakeholder enabled by one of more outputs
- Output: A tangible or intangible deliverable of an activity
- Risk: A possible event that could cause harm or loss, or make it more difficult to achieve objectives.
  - Risks removed from a consumer
  - Risks imposed on a consumer
- Utility: The functionality offered by a product or service to meet a particular need. To have utility, a service must either support the consumer and / or remove constraints from the consumer.
- Warranty: Assurance that a product or service will meet agreed requirements. Warranty often relates to service levels aligned with the needs of service consumers. (SLA)

## **Understand ITIL Guiding Principles**

### **Explain: Section 2.2 (5 points)**

- Focus on value:
  - Everything should link to value
  - Value is defined by the consumer's needs
  - Value is achieved through the support of intended outcomes and optimization of the service consumer's costs and risks
  - Value changes over time and in different circumstances
  - Who is the consumer and what is the customer's perception of value?
  - Why does the consumer use the services and what do the services help them to do?
  - How does the services help the consumer meet their goals?
  - What are the cost/financial consequences and risk for the service consumer?
- Start where you are:
  - Assess where you are
  - Role of measurement
  - Look at what exists as objectively as possible, using the customer, or the desired outcome, as the starting point
  - When examples of successful practices or services are found in the current state, determine if and how these can be replicated or expanded upon to achieve the desired state
    - Apply your risk management skills
    - Recognize that sometimes nothing from the current state can be reused
- Progress iteratively with feedback:
  - Try not to do all at once
  - Start small building into large improvement
  - Feedback will help understand:
    - End user and customer perception of the value created

- The efficiency and effectiveness of value chain activities
- The effectiveness of service governance as well as management controls
- The interfaces between the organization and partner / supplier network
- The demand for products and services
- Collaborate and promote visibility:
  - Involve the right people
  - Inclusion better than exclusion
  - Cooperation / collaboration better than 'silo'
  - With whom to collaborate stakeholders
  - Communication for improvement
  - Increase urgency through visibility
- Think and work holistically:
  - How does it all work together?
  - Nothing stands alone
  - End to end visibility
  - Altering one element can impact others
- Keep it simple and practical:
  - Minimum number of steps
  - Outcome based thinking
  - Eliminate things of no value
  - Handle exceptions generally not individually
  - Judging what to keep
  - Start with an uncomplicated approach
  - Agree on objectives
- Optimise and automate:
  - o Optimization means to make something as effective and useful as it needs to be
  - Automation typically refers to the use of technology to perform a step or series of steps correctly and consistently with limited or no human intervention

# **Four Dimensions of Service Management**

### **Describe: Section 3.1 (2 points)**

- Organisations and People
  - Roles and responsibilities
  - Organizational structure
  - o Culture
  - Staffing and competences
- Information and Technology
  - What information is managed by the services?
  - What supporting information and knowledge is needed to deliver and manage the services?
  - How will the information and knowledge assets be protected, managed, archived and disposed of?
  - Compatibility with the current architecture and customer(s)
  - Regulatory / compliance issues with the organization's policies and information security controls or those of its customers
  - Viability in the future
  - Alignment with our strategy or our service consumers
  - Skillsets to support and maintain the technology

- Automation and / or other enhancing features
- Introduction of new risks / constraints
- Partners and Suppliers
  - Encompasses the relationships with other organizations that are involved in the design, development, deployment, delivery, support and / or continual improvement of services
  - Influencing factors:
    - Strategic focus
    - Corporate culture
    - Resource scarcity
    - Cost
    - Subject matter expertise
    - External constraints
    - Demand patterns
- Value Streams and Processes
  - Process a set of interrelated or interacting activities that transform inputs into outputs. Processes define the sequence of actions and their dependencies
  - Value stream a series of steps an organization undertakes to create and deliver products and services to consumers

Each area affected by multiple factors - PESTLE

- Political
- Economic
- Social
- Technological
- Legal
- Environmental

# ITIL Know the Purpose and Key Terms (15 practices)

### Recall: Section 6.1 (5 points)

- Information security management: To protect the information needed by the organization to conduct its business
- Relationship management: To establish and nurture the links between the organization and
  its stakeholders at strategic and tactical levels. It includes the identification, analysis,
  monitoring and continual improvement of relationships with and between stakeholders
- Supplier Management: To ensure that the organization's suppliers and their performance are managed appropriately to support the provision of seamless, quality products and services
- IT asset management: To plan and manage the full lifecycle of all IT assets, to help the organization: maximize value, control costs, manage risks, support decision-making about purchase, reuse and retirement of assets, meet regulatory and contractual requirements
- Monitoring and event management: To systematically observe services and service components, and record and report selected changes of state identified as events
- Release management: To make new and changed services and features available for use
- Service configuration management: To ensure that accurate and reliable information about the configuration of services and the CIs that support them, is available when and where it is needed. This includes information on how Cis are configured and the relationships between them
- Deployment management: The purpose of the deployment management practice is to move new or changed hardware, software, documentation, processes, or any other component to

- live environments (it may also be involved in deploying components to other environments for testing or staging)
- Continual improvement: To align the organization's practices and services with changing business needs through the ongoing identification and improvement of services, service components, practices or any element involved in the efficient and effective management of products and services
- Change enablement: To maximize the number of successful IT changes by ensuring that risks have been properly assessed, authorizing changes to proceed, and managing a change schedule
- Incident management: To minimize the negative impact of incidents by restoring normal service operation as quickly as possible
- Problem management: To reduce the likelihood and impact of incidents by identifying actual and potential causes of incidents, and managing workarounds and known errors
- Service request management: To support the agreed quality of a service by handling all predefined, user-initiated service requests in an effective and user-friendly manner
- Service Desk: To provide a clear path for users to report issues, queries and requests, and have them acknowledged, classified, owned and actioned. Also to capture demand for incident resolution and srvice requests. It should also be the entry point and single point of contact for the service provider with all of its users
- Service Level management: To set clear business-based targets for service performance so that the delivery of a service can be properly assessed, monitored and managed against these targets

### **ITIL Key Terms (7 practices)**

### **Recall: Section 6.2 (2 points)**

- IT asset: Any financially valuable component that can contribute to the delivery of an IT product or service
- Event: Can be defined as any change of state that has significance for the management of a configuration item (CI) or IT service
- Configuration item: Any component that needs to be managed in order to deliver an IT service
- Change: The addition, modification, or removal of anything that could have a direct or indirect effect on services
- Incident: Unplanned interuption to a service, or reduction in the quality of a service
- Problem: A cause, or potential cause, of one or more incidents
- Known error: A problem that has been analysed and has not been resolved

# **Understand ITIL (7 Practices)**

#### **Explain: Section 7.1 (17 Points)**

- Continual Improvement (including the model):
  - Must be embedded into every fibre of the organization
  - Developing improvement related methods and techniques
  - Continual improvement register (CIR)
  - Encouraging continual improvement across the organization
  - Securing time and budget for continual improvement
  - Identifying and logging improvement opportunities
  - Assessing and prioritizing improvement opportunities
  - Making business cases for improvement action
  - Planning and implementing improvements

- Measuring and evaluating improvement results
- Coordinating improvement activities across the organization
- Change enablement
  - Change The addition, modification, or removal of anything that could have a direct or indirect effect on services
  - Essential that the correct change authority is assigned to each type of change
  - Standard changes low risk, pre-authorized, well understood, fully documented
  - Normal changes need to be scheduled, assessed and authorized following a standard process
  - Emergency changes must be implemented as soon as possible, e.g. to resolve an incident or implement a security patch
  - Change schedule used to help plan changes, assist in communication, avoid conflicts and assign resources
  - Change authority A person or group responsible for authorising a change
  - Change model A repeatable approach to the management of a particular type of change
    - Change models can be defined based on factors such as:
      - systems/technologies to change
      - scale of change
      - locations/territories
      - customers
      - regulartory requirements affecting the change
- Incident management
  - o Incident An unplanned interruption to a service, or reduction in the quality of a service
  - Log and manage incidents
  - o Prioritized based on business impact
  - Escalation
  - Resolution and Closure
  - Managed through toolsets to give access to service level, configuration and knowledge data
  - May use self help
  - May be closed by the service desk or automatic scripting
  - May involve escalation to:
    - Support groups (technical, horizontal, functional)
    - Management (managerial, vertical, hierarchical)
    - Suppliers
  - Major incidents may involve dedicated or temporary teams
  - Service continuity may need to be invoked for extreme cases
- Problem management:
  - o Problem: A cause, or potential cause, of one or more incidents
  - Known error: A problem that has been analysed and has not been resolved
  - Workaround A solution that reduces or eliminates the impact of an incident or problem for which a full resolution is not yet available. Some workarounds reduce the likelihood of incidents

- o Closely linked to incident management
- Interfaces with risk management, change enablement, knowledge management and continual improvement
- Many problem management activities rely on the knowledge and experience of staff,
   rather than on following detailed procedures
- Service request management:
  - Service request A request from a user or user's authorized representative that initiates
    a service action that has been agreed as a normal part of service delivery
  - Standardise and automate as much as possible
  - Policies should be established regarding what approval / authorisation is required
  - o Expectations of users should be clearly set
  - o Opportunities for improvement should be identified and implemented
  - o Difference between requests and incidents should be defined
  - May require different workflow models
- Service desk:
  - To capture demand for incident resolution and service requests
  - Single point of contact for the IT or service organization
  - Focus of the service desk is to provide support for 'people and business' rather than simply technical issues
  - o Empathetic and informed link between provider and user
  - Self service
  - Phone calls
  - Service portals and mobile applications
  - Chat, through live chat and chatbots
  - Email can be used for logging and updating
  - Walk-in service desks
  - Text and social media messaging
  - Public or corporate social media and discussion forums
  - Types:
    - Local
    - Centralized
    - Virtual
  - o Training:
    - Empathy
    - Incident analysis
    - Prioritization
    - Communications
    - Diagnosis
- Service level management:
  - The definition, documentation and active management of service levels.
  - Skills include:
    - Relationship management
    - Business liaison
    - Business analysis
    - Commercial / supplier management
    - Customer engagement

- Customer feedback
- Surveys
- Key business related measures
- Operational metrics Business metrics
- Service level agreements (SLAs):
  - Must be related to a defined 'service' in the service catalogue
  - Should relate to defined outcomes and not simply operational metrics.
  - Should reflect an 'agreement' between all stakeholders
  - Must be simply written / easy to understand and use, for all parties

#### **Understand Service Value Chain (SVC)**

#### 1 Point

- Plan: to ensure a shared understanding of the vision, current status and improvement direction for all four dimensions and all products and services across the organization
- Engage: to provide a good understanding of stakeholder needs, transparency, and continual engagement and good relationships with all stakeholders
- Design and Transition: to ensure that products and services continually meet stakeholder expectations for quality, costs and time-to-market
- Obtain and Build: to ensure that products and services continually meet stakeholder expectations for quality, costs and time-to-market
- Deliver and Support: to ensure that services are delivered and supported according to agreed specifications and stakeholders' expectations