

PeopleCert

Official Training Materials



Introduction

The ITIL® 4 Foundation qualification is intended to introduce candidates to the management of modern IT-enabled services, to provide them with an understanding of the common language and key concepts, and to show them how they can improve their work and the work of their organization with ITIL® 4 guidance.

Furthermore, the qualification will provide the candidate with an understanding of the ITIL® 4 service management framework and how it has evolved to integrate new technologies and ways of working.

The ITIL® 4 Foundation examination is intended to assess whether the candidate can demonstrate sufficient recall and understanding of the ITIL® 4 service management framework, as described in the syllabus below, to be awarded the ITIL® 4 Foundation qualification.

What you will learn

- > Key concepts of service management
- How the ITIL guiding principles can be used to guide an organization in all circumstances
- > Four dimensions of service management
- The service value system (SVS), its purpose, and components
- The service value chain (SVC), its activities, and how they interconnect
- The purpose and key terms of 15 ITIL practices, and details for 7 of those practices

The ITIL® 4 Foundation exam is a 40 multiple choice question exam and requires a candidate to obtain 65% (26 questions) correct or more to pass.

This Quick Reference Guide may be used by learners to assist in preparing for the ITIL® 4 Foundation certification test. PeopleCert does not warrant that use of this guide will ensure passing of the exam.

1. Key concepts of service management

1.1 Key concepts of services and service management:

- **a. 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.
- b. Service management: A set of specialized organizational capabilities for enabling value for customers in the form of services.
- c. Customer: The role that defines the requirements for a service and takes responsibility for the outcomes of service consumption.
- d. User: The role that uses services.
- e. Sponsor: The role that authorizes budget for service consumption. Can also be used to describe an organization or individual that provides financial or other support for an initiative.
- f. Utility: The functionality offered by a product or service to meet a particular need. Utility can be summarized as 'what the service does' and can be used to determine whether a service is 'fit for purpose'. To have utility, a service must either support the performance of the consumer or remove constraints from the consumer. Many services do both.
- g. Warranty: Assurance that a product or service will meet agreed requirements. Warranty can be summarized as 'how the service performs' and can be used to determine whether a service is 'fit for use'. Warranty often relates to service levels aligned with the needs of service consumers. This may be based on a formal agreement, or it may be a marketing message or brand image. Warranty typically addresses such areas as the availability of the service, its capacity, levels of security, and continuity. A service may be said to provide acceptable assurance, or 'warranty', if all defined and agreed conditions are met.



1.2 Key concepts of creating value with services:

- **a.** Value: The perceived benefits, usefulness, and importance of something.
- **b.** Output: A tangible or intangible deliverable of an activity.
- c. Outcome: A result for a stakeholder enabled by one or more outputs.
- **d.** Cost: The amount of money spent on a specific activity or resource.
- **e. Risk:** A possible event that could cause harm or loss, or make it more difficult to achieve objectives. Can also be defined as uncertainty of outcome, and can be used in the context of measuring the probability of positive outcomes as well as negative outcomes.
- **f. Organization:** A person or a group of people that has its own functions with responsibilities, authorities, and relationships to achieve its objectives.

1.3 Key concepts of service relationships:

- **a. Service offering:** A formal description of one or more services, designed to address the needs of a target consumer group. A service offering may include goods, access to resources, and service actions.
- **b. Service relationship management:** Joint activities performed by a service provider and a service consumer to ensure continual value co-creation based on agreed and available service offerings.
- **c. Service provision:** Activities performed by an organization to provide services. It includes management of the provider's resources, configured to deliver the service; ensuring access to these resources for users; fulfillment of the agreed service actions; service level management; and continual improvement. It may also include the supply of goods.
- **d. Service consumption:** Activities performed by an organization to consume services. It includes the management of the consumer's resources needed to use the service, service actions performed by users, and the receiving (acquiring) of goods (if required).

2. The ITIL guiding principles

The ITIL guiding principles are recommendations that can guide an organization in all circumstances, regardless of changes in its goals, strategies, type of work, or management structure. They are:



- **Start where you are:** Do not start from scratch and build something new without considering what is already available to be leveraged. There is likely to be a great deal in the current services, processes, programmes, projects, and people that can be used to create the desired outcome. The current state should be investigated and observed directly to make sure it is fully understood.
- **Progress iteratively with feedback:** Do not attempt to do everything at once. Even huge initiatives must be accomplished iteratively. By organizing work into smaller, manageable sections that can be executed and completed in a timely manner, it is easier to maintain a sharper focus on each effort. Using feedback before, throughout, and after each iteration will ensure that actions are focused and appropriate, even if circumstances change.
- Collaborate and promote visibility: Working together across boundaries produces results that have greater buy-in, more relevance to objectives, and increased likelihood of long-term success. Achieving objectives requires information, understanding, and trust. Work and consequences should be made visible, hidden agenda avoided, and information shared to the greatest degree possible.
- Think and work holistically: No service, or element used to provide a service, stands alone. The outcomes achieved by the service provider and service consumer will suffer unless the organization works on the service as a whole, not just on its parts. Results are delivered to internal and external customers through the effective and efficient management and dynamic integration of information, technology, organization, people, practices, partners, and agreements, which should all be coordinated to provide a defined value.
- **Keep it simple and practical:** If a process, service, action, or metric fails to provide value or produce a useful outcome, eliminate it. In a process or procedure, use the minimum number of steps necessary to accomplish the objective(s). Always use outcome-based thinking to produce practical solutions that deliver results.
- **Optimize and automate:** Resources of all types, particularly HR, should be used to their best effect. Eliminate anything that is truly wasteful and use technology to achieve whatever it is capable of. Human intervention should only happen where it really contributes value.



3. The four dimensions of service management

3.1 Describe the four dimensions of service management:

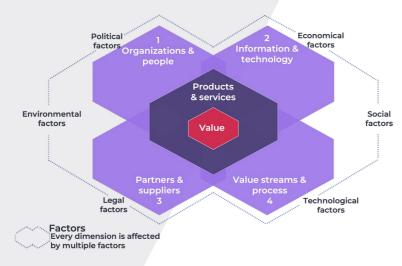


Figure 3.1 The four dimensions of service management

- a. Organizations and people: This dimension ensures that the way an organization is structured and managed, as well as its roles, responsibilities, and systems of authority and communication, is well defined and supports its overall strategy and operating model.
- b. Information and technology: This dimension includes the information and knowledge used to deliver services, and the information and technologies used to manage all aspects of the service value system.
- c. Partners and suppliers: This dimension encompasses the relationships an organization has with other organizations that are involved in the design, development, deployment, delivery, support, and/or continual improvement of services. It also incorporates contracts and other agreements between the organization and its partners or suppliers.
- d. Value streams and processes: This dimension defines the activities, workflows, controls, and procedures needed to achieve the agreed objectives.

4. The ITIL service value system (SVS)

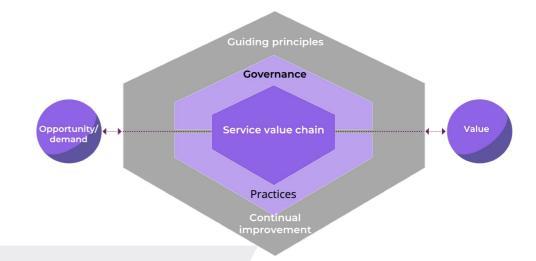
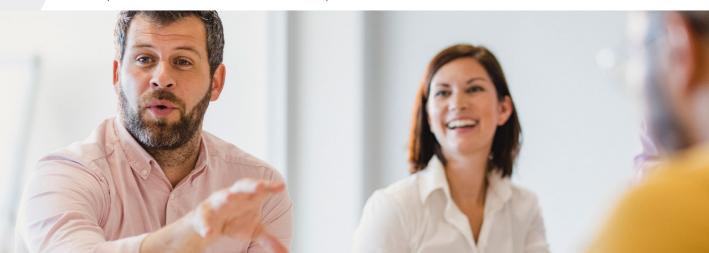


Figure 4.1 The ITIL service value system

The ITIL SVS describes how all the components and activities of the organization work together as a system to enable value creation. Each organization's SVS has interfaces with other organizations, forming an ecosystem that can in turn facilitate value for those organizations, their customers, and other stakeholders.

- a. Opportunity: The possibility to add value for stakeholders or to improve the organization.
- **b. Demand:** The need or desire for products and services from internal and external customers.
- c. Value: The perceived benefits, usefulness and importance of something.
- d. Guiding principles: Recommendations that guide an organization in all circumstances, regardless of changes in its goals, strategies, type of work, or management structure.
- e. Governance: The means by which an organization is directed and controlled.
- f. Service value chain: A set of interconnected activities that an organization performs to deliver a valuable product or service to its consumers and to facilitate value realization.
- g. Practices: Sets of organizational resources designed for performing work or accomplishing an
- h. Continual improvement: A recurring organizational activity performed at all levels to ensure that an organization's performance continually meets stakeholders' expectations. ITIL 4 supports continual improvement with the ITIL continual improvement model.



5. The service value chain (SVC) and value chain activities

5.1 Describe the ITIL service value chain:

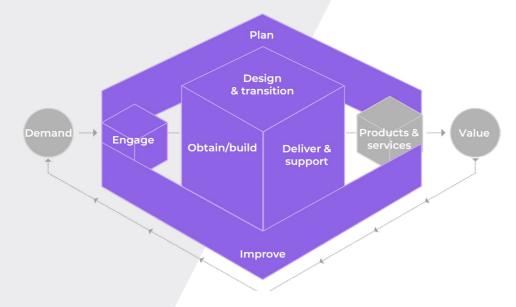


Figure 4.2 The ITIL service value chain

5.2 Describe the purpose of each value chain activity:

- **a. Plan:** The purpose of the plan value chain activity is to ensure a shared understanding of the vision, current status, and improvement direction for all four dimensions and all products and services across an organization.
- **b. Improve:** The purpose of the improve value chain activity is to ensure continual improvement of products, services, and practices across all value chain activities and the four dimensions of service management.
- **c. Engage:** The purpose of the engage value chain activity is to provide a good understanding of stakeholder needs, transparency, continual engagement, and good relationships with all stakeholders.
- **d. Design & transition:** The purpose of the design & transition value chain activity is to ensure products and services continually meet stakeholder expectations for quality, costs, and time to market.
- **e. Obtain/build:** The purpose of the obtain/build value chain activity is to ensure that service components are available when and where they are needed, and that they meet agreed specifications.
- **f. Deliver & support:** The purpose of the deliver and support value chain activity is to ensure that services are delivered and supported according to agreed specifications and stakeholder's expectations.

6. ITIL practice details and purpose statements

This section covers both Learning Outcome 6. Know the purpose and key terms of 15 ITIL practices and Learning Outcome 7. Understand 7 ITIL® practices, and their respective Assessment Criteria, as presented in the ITIL® 4 Foundation syllabus.

- **a. Information security management:** The purpose of this practice is to protect the information needed by the organization to conduct its business. This includes understanding and managing risks to the confidentiality, integrity, and availability of information, as well as other aspects of information security such as authentication (ensuring someone is who they claim to be) and non-repudiation (ensuring that someone can't deny that they took an action). Security objectives include:
 - **Confidentiality:** A security objective that ensures information is not made available or disclosed to unauthorized entities.
 - **Integrity:** A security objective that ensures information is only modified by authorized personnel and activities.
 - **Availability:** A security objective that ensures information is always accessible to authorized personnel whenever required.
- **b. Relationship management:** The purpose of this practice is 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.
- **c. Supplier management:** The purpose of this practice is to ensure that the organization's suppliers and their performances are managed appropriately to support the seamless provision of quality products and services. This includes creating closer, more collaborative relationships with key suppliers to uncover and realize new value and reduce the risk of failure. Key terms include:
 - **Sourcing:** The activity of planning and obtaining resources from a particular source type, which could be internal or external, centralized or distributed, and open or proprietary.
- **d. IT asset management:** The purpose of this practice is to plan and manage the full life cycle of all IT assets, to help the organization maximize value; control costs; manage risks; support decision-making about purchase, re-use, and retirement of assets; and meet regulatory and contractual requirements. Key terms include:
 - **IT asset:** Any financially valuable component that can contribute to the delivery of an IT product or service.



- e. Monitoring and event management: The purpose of this practice is to systematically observe services and service components, and record and report selected changes of state identified as events. This practice identifies and prioritizes infrastructure, services, business processes, and information security events, and establishes the appropriate response to those events, including responding to conditions that could lead to potential faults or incidents. Key terms include: The purpose of this practice is to make new and changed services and features available for use.
 - Monitoring: The repeated observation of a system, practice, process, service, or other entity to detect events and ensure that the current status is known.
 - Event: Any change of state that has significance for the management of a service or other configuration item. The three event types are:
 - i. Informational events, which do not require action at the time they are identified, but analysing the data gathered from them at a later date may uncover desirable, proactive steps that can be beneficial to the service.
 - ii. Warning events, which allow action to be taken before any negative impact is actually experienced by the business.
 - iii. Exception events, which indicate that a breach to an established norm has been identified, and require action, even though business impact may not yet have been experienced.
 - Event management: Recording and managing those monitored changes of state that are defined by the organization as an event, determining their significance, and identifying and initiating the correct control action to manage them.
- f. Release management: The purpose of this practice is to make new and changed services and features available for use.
- g. Service configuration management: The purpose of this practice is to ensure that accurate and reliable information about the configuration of services, and the configuration items (CIs) that support them, is available when and where it is needed. This includes information on how Cls are configured and the relationships between them. Key terms include:
 - Configuration item (CI): Any component that needs to be managed in order to deliver an IT service.
- h. Deployment management: The purpose of this 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.
- i. Continual improvement: The purpose of this practice is to align the organization's practices and services with changing business needs through the ongoing improvement of products, services, and practices, or any element involved in the management of products and services. Key terms include:
 - The continual improvement model: A structured approach to implementing improvements. Use of the model increases the likelihood that ITSM initiatives will be successful, puts a strong focus on customer value, and ensures that improvement efforts can be linked back to the organization's vision. The model supports an iterative approach to improvement, dividing

work into manageable pieces with separate goals that can be achieved incrementally.

• Continual improvement register (CIR): database or structured document to track and manage improvement ideas from identification through to final action.

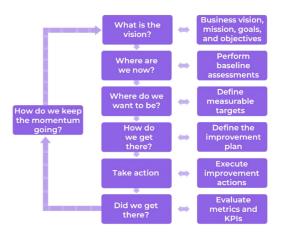


Figure 4.3 The continual improvement model

- j. Change enablement: The purpose of this practice is to maximize the number of successful service and product changes by ensuring that risks have been properly assessed, authorizing changes to proceed, and managing the change schedule. Key terms include:
 - Change: The addition, modification, or removal of anything that could have a direct or indirect effect on services.
 - Request for change (RFC): A description of a proposed change used to initiate change enablement.
 - Change authority: A person or group responsible for authorizing a change.
 - Standard change: A low-risk, pre-authorized change that is well understood and fully documented, and which can be implemented without needing additional authorization.
 - Normal change: A change that must be scheduled, assessed, and authorized following a process.
 - **Emergency change:** A change that must be introduced as soon as possible.
 - Change schedule: A calendar that shows planned and historical changes.
 - Change model: A repeatable approach to the management of a particular type of
 - Post-implementation review (PIR): A review after the implementation of a change, to evaluate success and identify opportunities for improvement.
- k. Incident management: The purpose of this practice is to minimize the negative impact of incidents by restoring normal service operation as quickly as possible. Key terms include:



- Incident: An unplanned interruption to a service or reduction in the quality of a service.
- Major incident: An incident with significant business impact, requiring an immediate coordinated resolution.
- **Swarming:** A technique to help manage incidents, which involves many different stakeholders working together initially, until it becomes clear which of them is best placed to continue and which can move on to other tasks.
- **Problem management:** The purpose of this practice is to reduce the likelihood and impact of incidents by identifying actual and potential causes of incidents, and managing workarounds and known errors.
 - **Problem:** A cause, or potential cause, of one or more incidents.
 - Known error: A problem that has been analyzed but 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.
 - Problem identification: Activities that identify and log problems. These include performing trend analysis of incident records; detection of duplicate and recurring issues by users, service desk, and technical support staff; during major incident management, identifying a risk that an incident could recur; analysing information received from suppliers and partners; and analysing information received from internal software developers, test teams, and project teams.
 - Problem control: Problem control activities include problem analysis, and documenting workarounds and known errors.
 - Error control: manage known errors, which are problems where initial analysis has been completed; it usually means that faulty components have been identified. Error control also includes identification of potential permanent solutions which may result in a change request for implementation of a solution, but only if this can be justified in terms of cost, risks, and benefits.
- m. Service request management: The purpose of this practice is to support the agreed quality of a service by handling all pre-defined, user-initiated service requests in an effective and userfriendly manner.
 - Service request: A request from a user or a user's authorized representative that initiates a service action which has been agreed as a normal part of service delivery.
- **n. Service desk:** The purpose of this practice is to capture demand for incident resolution and service requests. It should also be the entry point and single point of contact for the service provider with all of its users.

- Escalation: The act of sharing awareness or transferring ownership of an issue or work
- Service level management: The purpose of this practice is to set clear business-based targets for service levels, and to ensure that delivery of services is properly assessed, monitored, and managed against these targets.

Service level: One or more metrics that define expected or achieved service quality. Metric: A measurement or calculation that is monitored or reported for management and improvement.

Service level agreement (SLA): A documented agreement between a service provider and a customer that identifies both services required and the expected level of service.

Watermelon effect: Like a watermelon the SLA may appear green on the outside but is actually red inside. For instance, a system may have been unavailable for an amount of time that is acceptable according to the SLA, but if the unavailability occurred when there was an important process happening, customer/user satisfaction will be low, even though the SLA was met.



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Thank you for completing the ITIL® 4 Foundation course.

Please take a few minutes to give us your feedback on your experiences and learning from the course by completing the online course evaluation survey here.



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