Course 1197

Achieving ITIL® Foundation Certification

by

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Introduction and Overview

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Course Objectives and Content

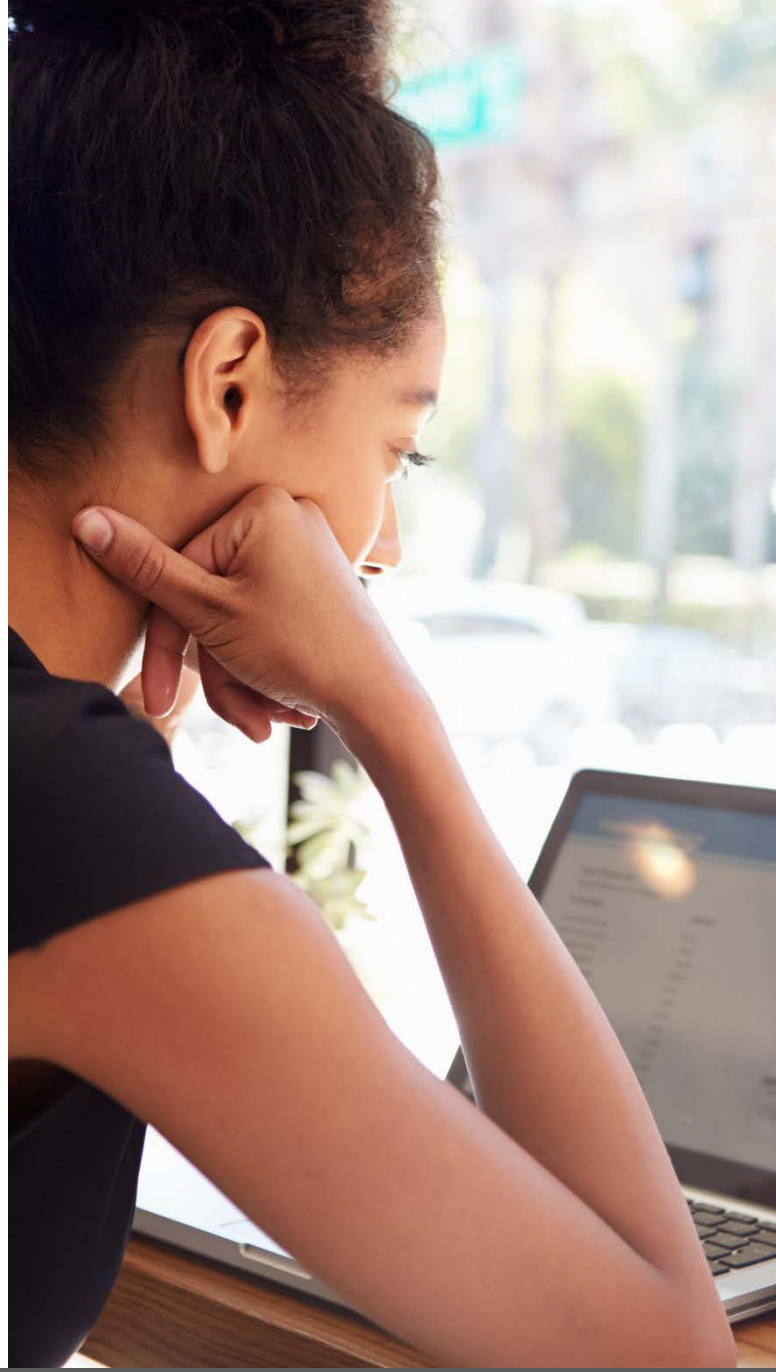
- **Provide knowledge of ITIL terminology, structure, and basic concepts and comprehension of the core principles of ITIL practices for service management**
- **Enable students to take the examination for the ITIL Foundation Certificate in IT Service Management**
- **The course is for**
  - Anyone who requires a basic understanding of the ITIL framework and how it may be used to enhance the quality of IT service management
  - IT professionals who are working within an organization that has adopted and adapted ITIL and who need to understand and contribute to an ongoing service improvement program

Course Contents

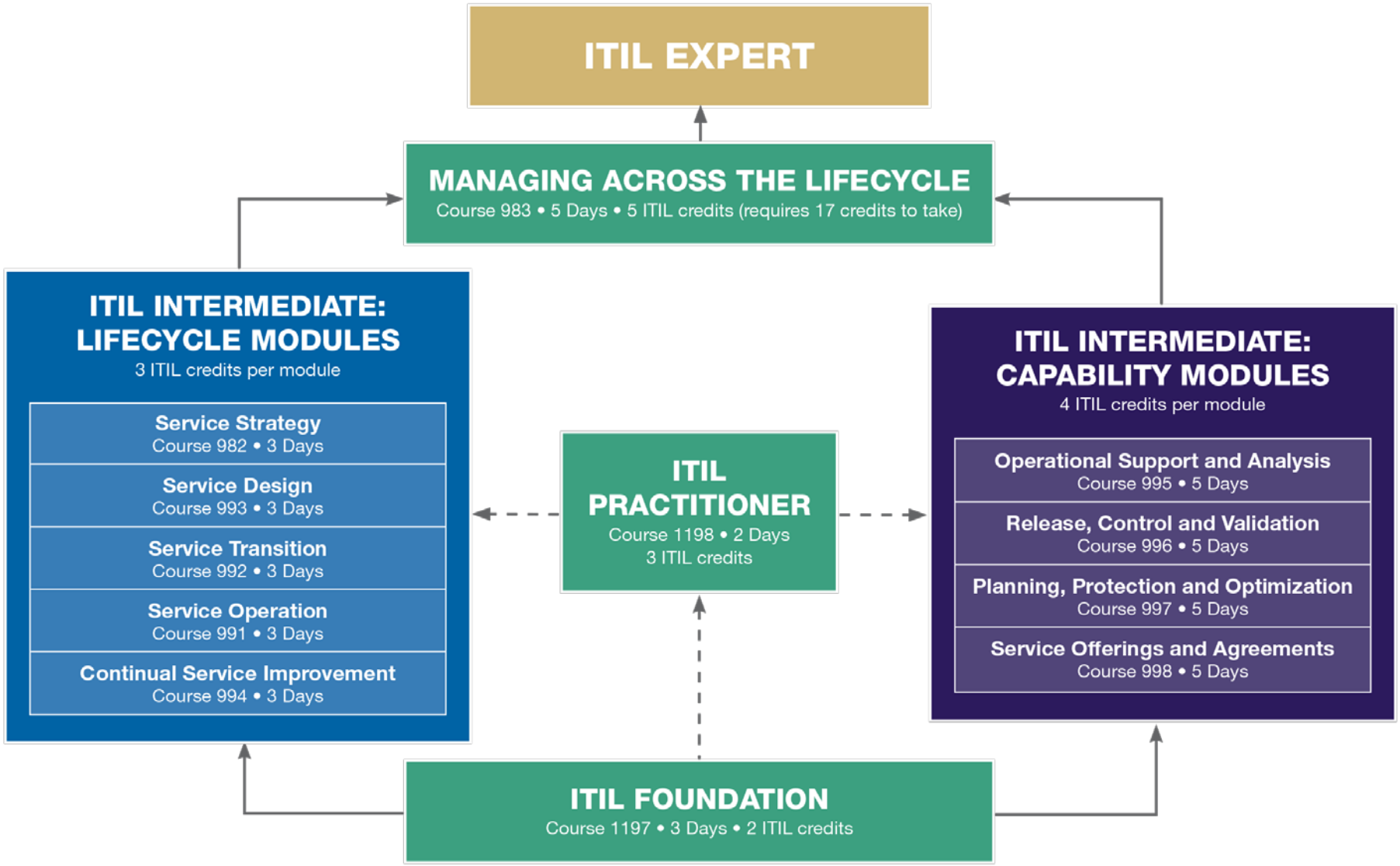
Course Contents

ITIL Foundation Certificate Examination

- Closed-book, multiple-choice examination
- One hour to complete
- 65 percent required to pass (26 out of 40)
- Prerequisite for further ITIL qualifications



The Structure of ITIL Qualifications



Chapter 1

Service Management as a Practice

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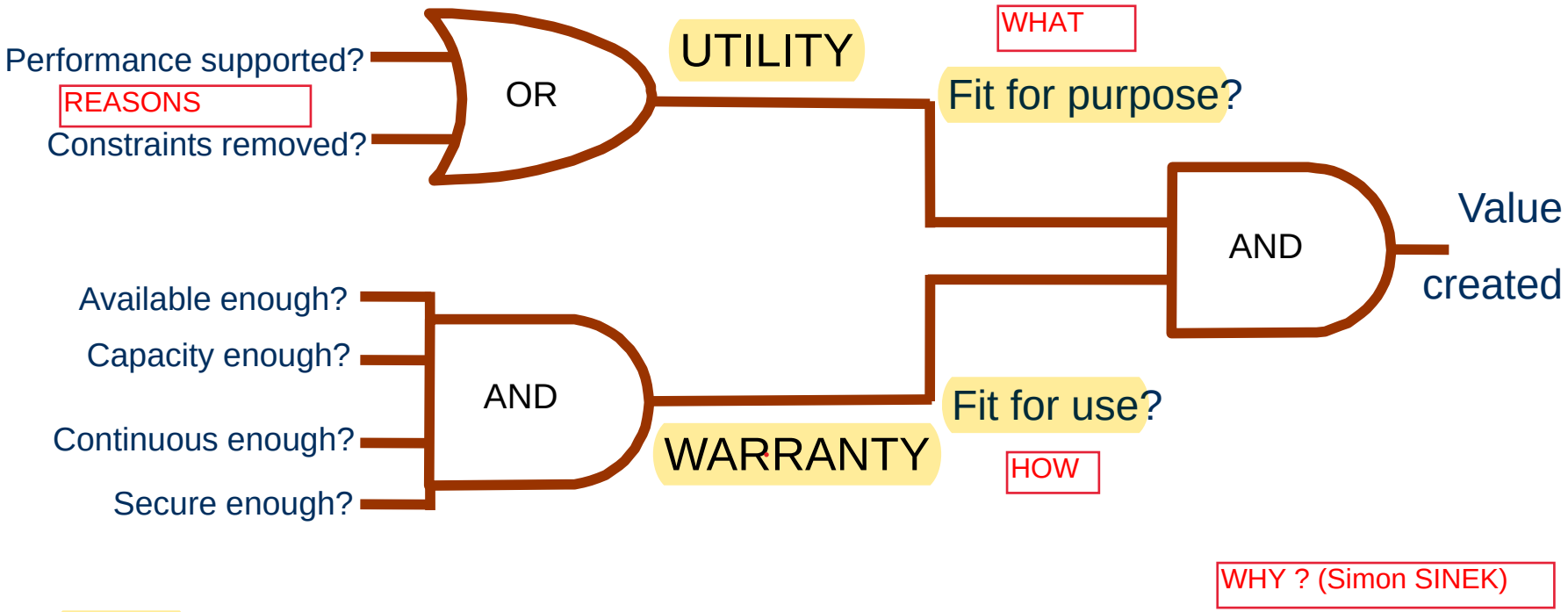
Chapter Objectives

- **Learn key concepts of services and service management across the service lifecycle:**
  - Service definition
  - Value (utility and warranty)
  - Customer types
  - Service provider types
  - Service management definition
  - Functions and processes
  - Roles and RACI

Services

"A service is a means of delivering value to customers by facilitating outcomes that customers want to achieve, without the ownership of specific costs and risks"

Warranty and Utility

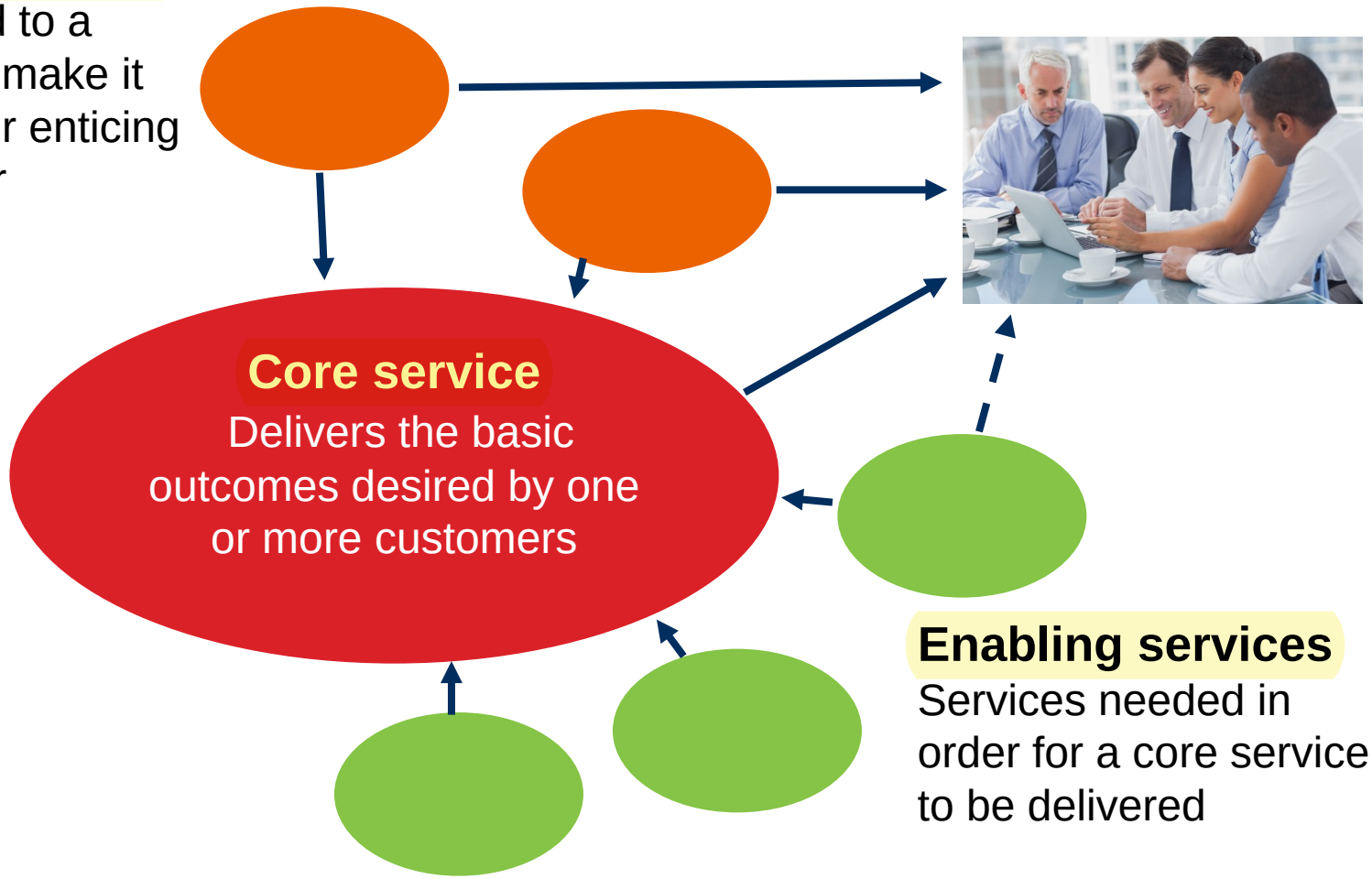


- **Utility**
  - Supporting business outcomes in terms of enhancing or enabling the performance of customer assets
- **Warranty**
  - Providing assurance in terms of availability, capacity, security, and continuity

Types of Services

Enhancing services

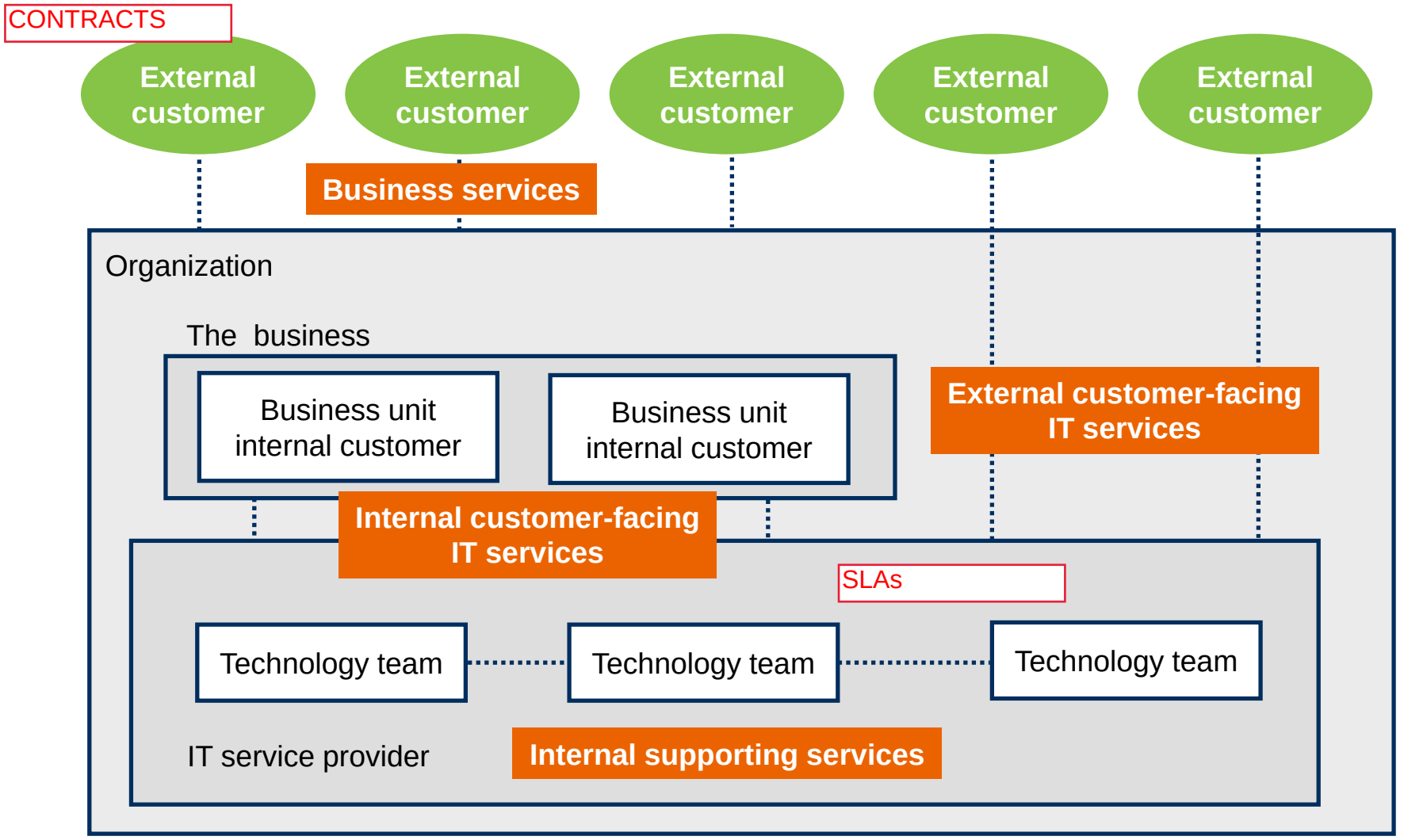
Services added to a core service to make it more exciting or enticing to the customer



Enabling services

Services needed in order for a core service to be delivered

Internal and External Customers and Services



Types of Service Providers

- **Type I – internal service provider**
  - A service provider that is embedded within the business unit that they serve
  - There may be several of these within an organization
- **Type II – shared services unit**
  - An internal service provider that provides shared IT services to more than one business unit
- **Type III – external service provider**
  - A service provider that provides IT services to external customers

what are the SP types? (internal, shared, external)

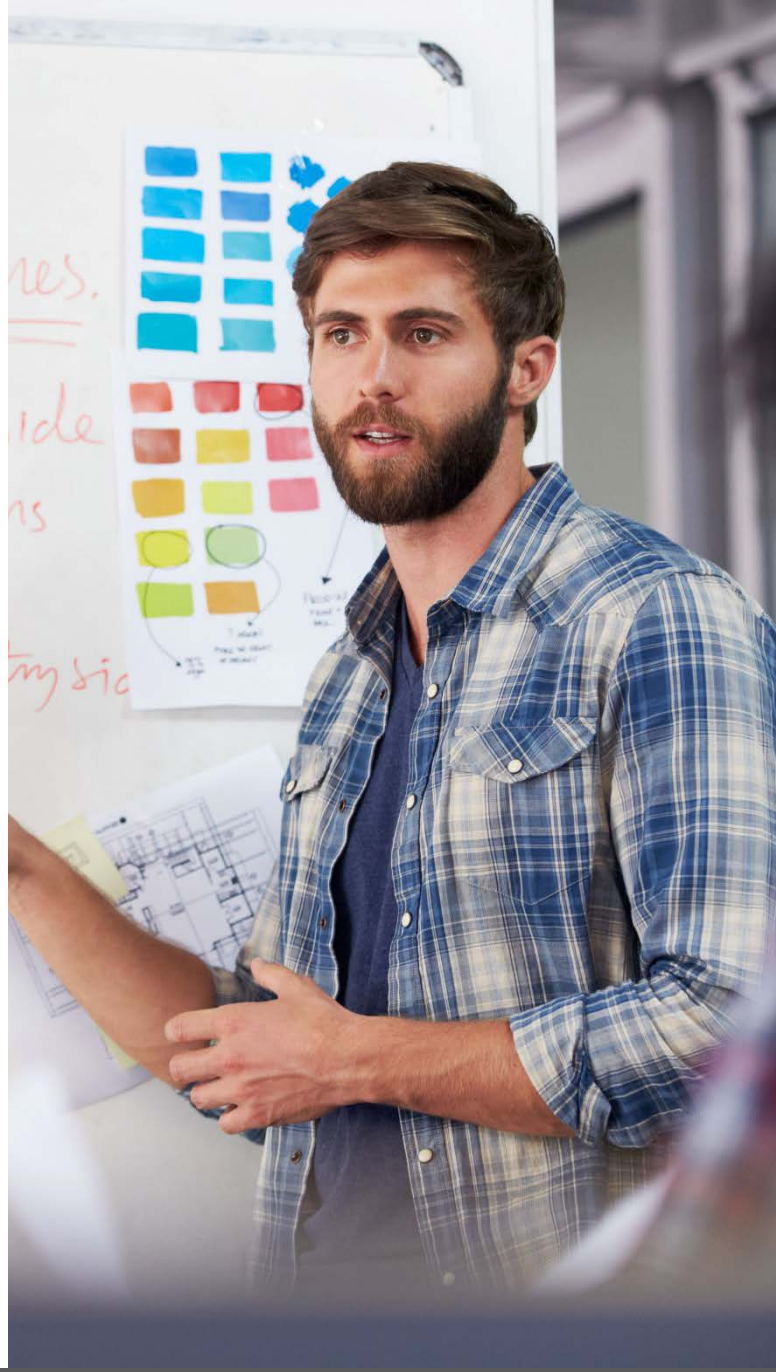
Key Stakeholders in Service Management

- **Service provider**
  - An organization supplying services to one or more internal or external customers
- **Customers**
  - Someone who buys goods or services
  - Defines and agrees the service level targets for an IT service
  - A customer could be “internal” or “external”
- **Users**
  - A person who uses the service on a day-to-day basis
  - The “consumer” of the IT service
- **Suppliers**
  - Third parties who supply goods or services that are required to deliver IT services
    - Hardware and software vendors

Service Management

Service management is a set of specialized organizational capabilities for providing value to customers in the form of services

Question of definition

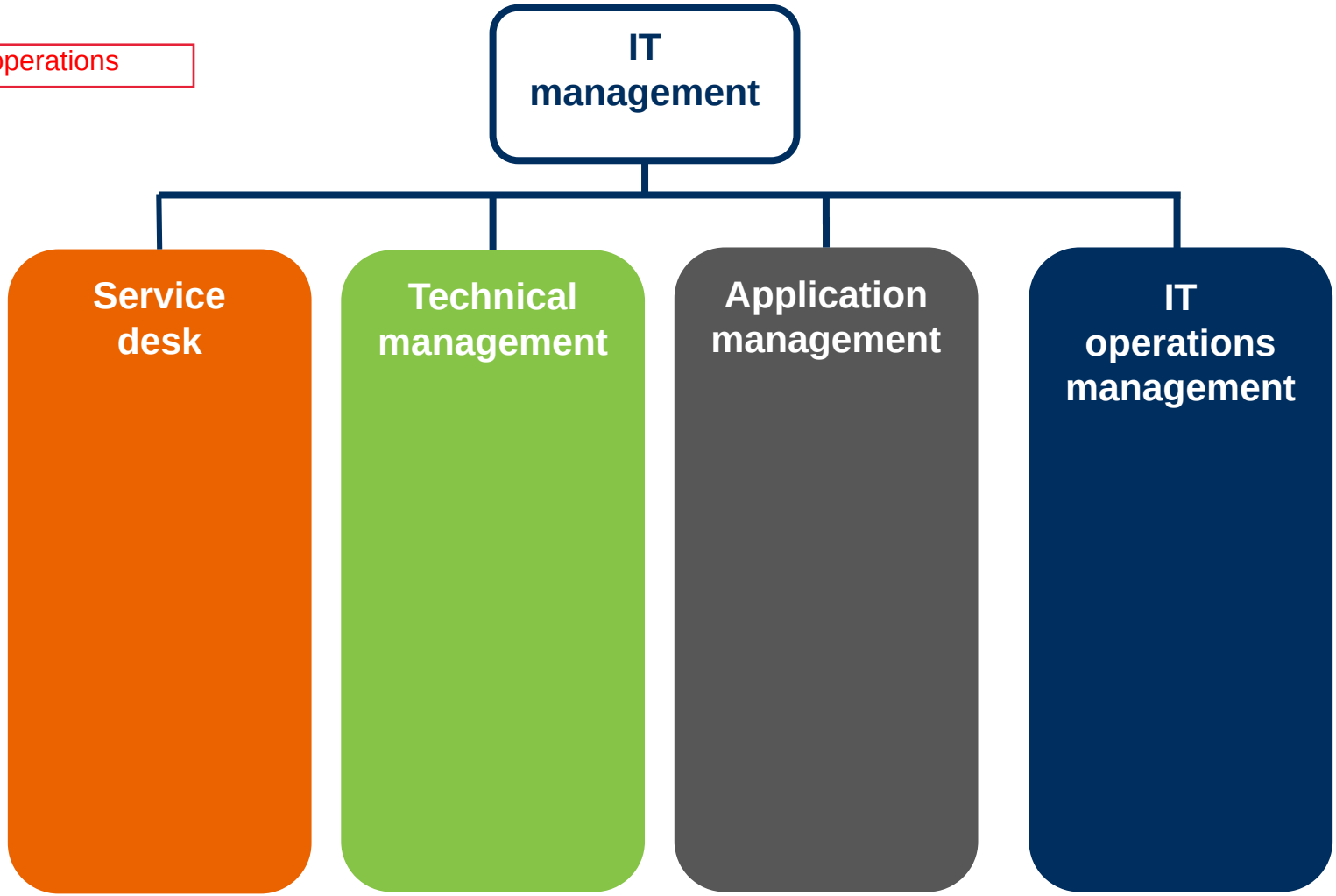


Functions, Processes, and Roles

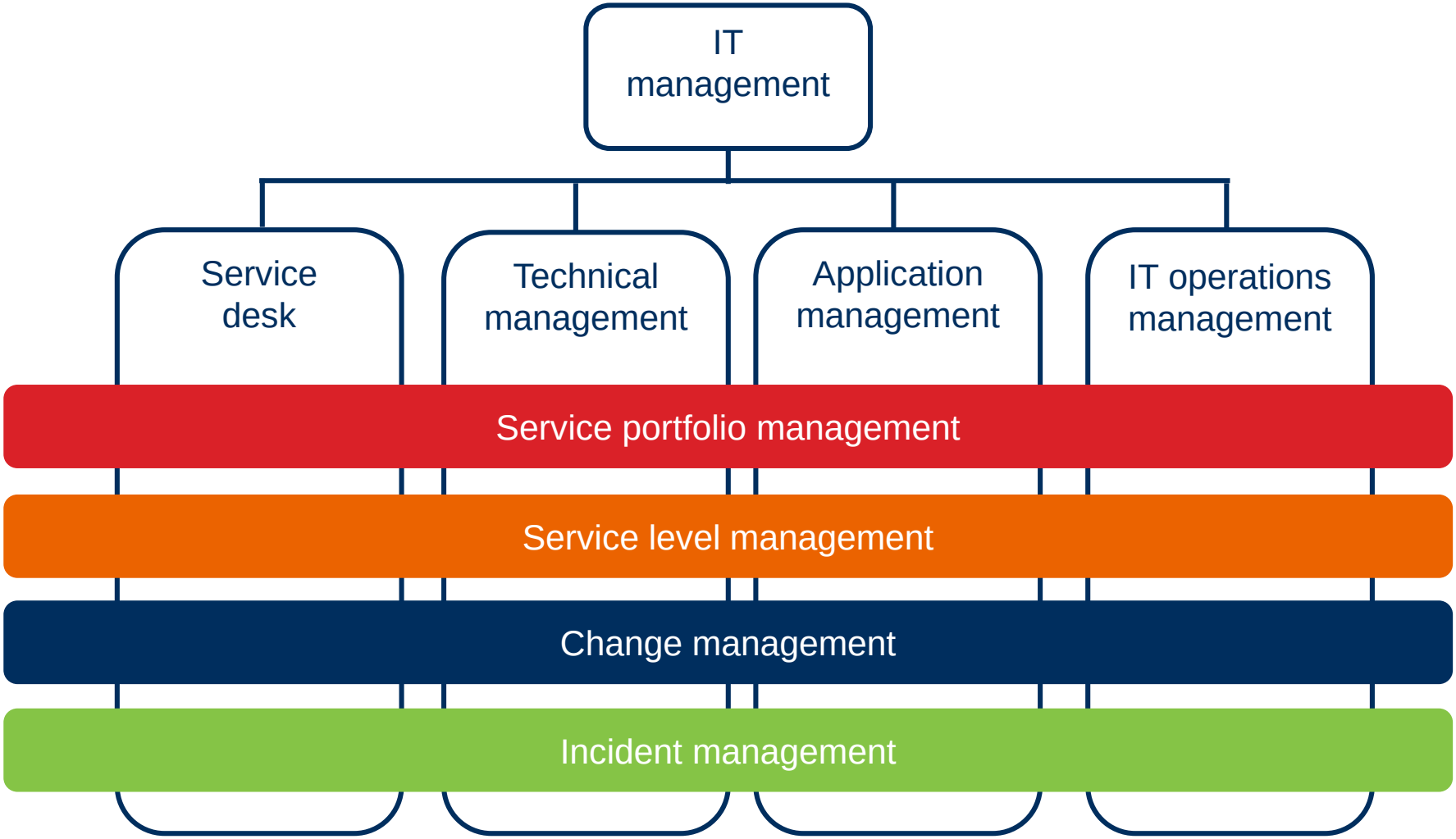
- **Function**
  - A team or group of people and the tools or other resources they use to carry out one or more processes and activities
  - Provides structure and stability to organizations
- **Process**
  - A structured set of activities that achieve a specific objective
- **Role**
  - Defined in a process or function
  - Comprises a set of responsibilities, activities, and authorities granted to a person or team

Functions

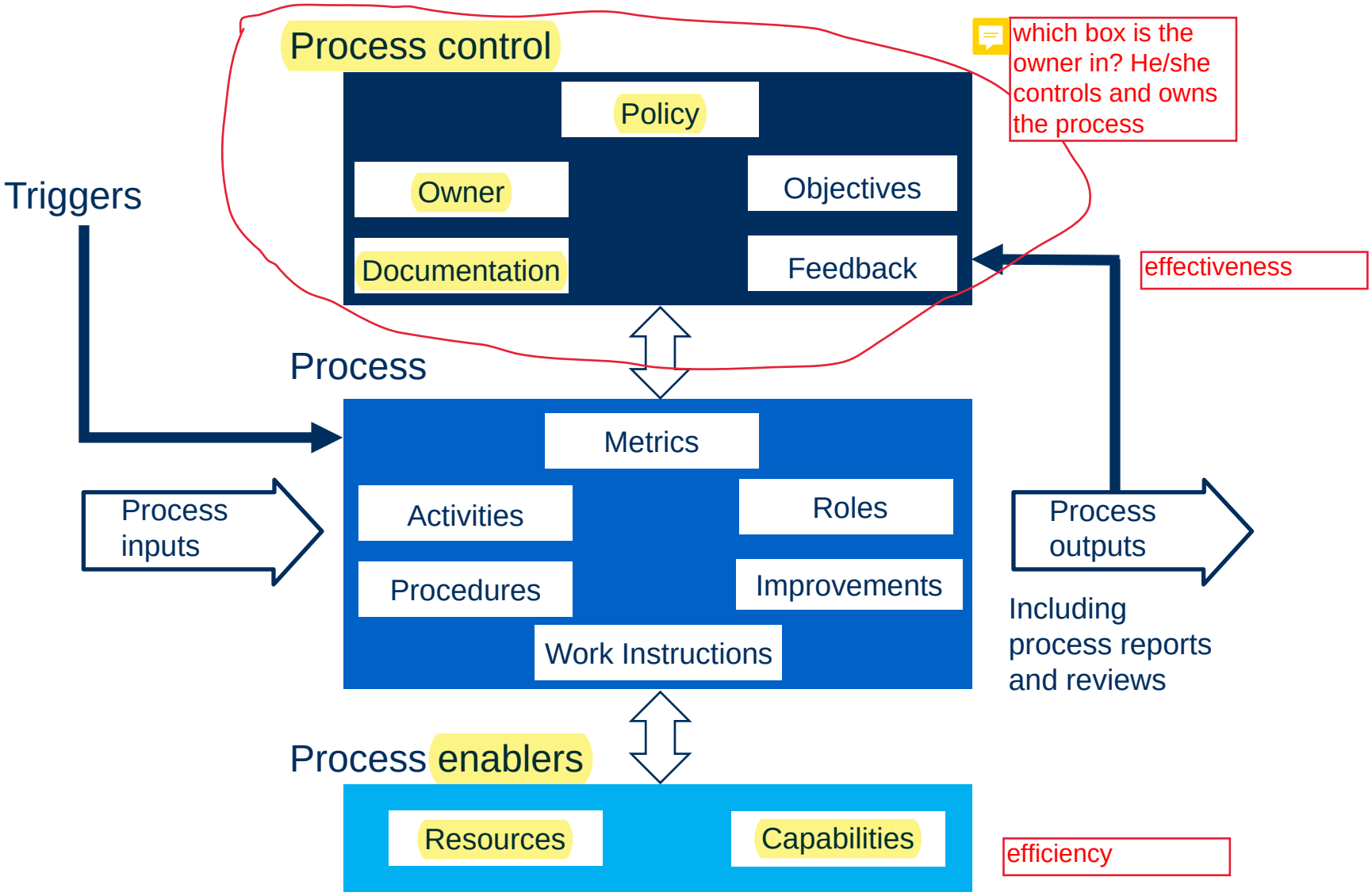
service operations



Process



The Generic Process Model



Characteristics of a Process

Q: Which is not a characteristic of a process?

- **Can be measured**
  - Metrics should allow efficiency and effectiveness to be measured
- **Delivers specific results**
  - A process exists to deliver an outcome
  - The outcome must be identifiable and quantifiable
- **Has a customer or stakeholder**
  - A process delivers the outcome to a customer or stakeholder who must be happy with the outcome
- **Responds to specific events**
  - A process may be ongoing or iterative
  - It should be initiated by a specific trigger

Process Relationships

- There are many relationships and interfaces between the IT service management processes
- The effectiveness of each process depends a great deal on the quality and timeliness of the information exchanged between other processes
- To understand process relationships at this Foundation level, the key processes are:
  - Service level management
  - Change management
  - Incident management
  - Problem management

Key Role Definitions

- **Service owner**
  - Responsible to the customer and accountable to IT management for a specific IT service
  - Represents the service across the organization and responsible for identifying opportunities for service improvement
- **Process owner**
  - Accountable for ensuring the process is fit for purpose, is performed as documented and is subject to continual improvement
- **Process manager**
  - Accountable for the operational management of a process which includes coordination of activities, monitoring, reporting, and identifying improvement opportunities
- **Process practitioner**
  - Responsible for carrying out one or more process activities
  - May be many process practitioners in one organization

Organizational Context

- **When designing a service or process, it is essential that all roles are clearly defined to enable fast and effective decision making**
- **This can be done using a RACI authority matrix to:**
  - Clarify operational roles, responsibilities and relationships
  - Define levels of accountability
  - Coordinate participation in every business activity
- **This will help to:**
  - Agree what activities need to be done
  - Define and agree accountabilities
  - Improve communication
  - Avoid duplication of effort
  - Get jobs done properly and on time
  - Avoid blame culture

Example RACI Matrix for Incident Management

	IT user	Service desk operator	Service desk manager	Support technician	Support manager	Process owner
Identify	R	I				A
Log	C	R				A
Classify	C	R	I	I		A
Investigate and diagnose	C	I		R	I	A
Resolve/recover	I	I/R		R		A
Close	C	R				A
Monitor, track & communicate	I	R	I			A
Process improvement	I/C	I/C	I/C	I/C	I/C	A/R

Key: R = Responsible A = Accountable C = Consulted I = Informed

Accountable is single, others may be plural

Competence and Skills

- **The specific roles within ITIL service management all require specific skills, attributes, and competences**
- **Generic attributes include:**
  - Awareness of the business priorities, objectives, and business drivers
  - Awareness of the role IT plays in enabling the business objectives to be met
  - Customer service skills
  - Awareness of what IT can deliver to the business, including latest capabilities
  - The competence, knowledge, and information necessary for IT to complete its role
  - The ability to use, understand, and interpret the best practice, policies, and procedures to ensure adherence
- **The Skills Framework for the Information Age (SFIA) provides a common reference model for the identification of the skills needed to develop effective IT services, information systems, and technology**

Summary of Service Management as a Practice

- **Key concepts**
  - Service
  - Value (warranty, utility)
  - Types of customers
  - Types of service providers
  - Types of stakeholders
  - Service management
  - Functions
  - Processes
    - Characteristics of a process
  - Roles and RACI matrix

Chapter Objectives

- **Learn key concepts of services and service management across the service lifecycle:**
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Chapter 2

ITIL and the Service Lifecycle

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Chapter Objectives

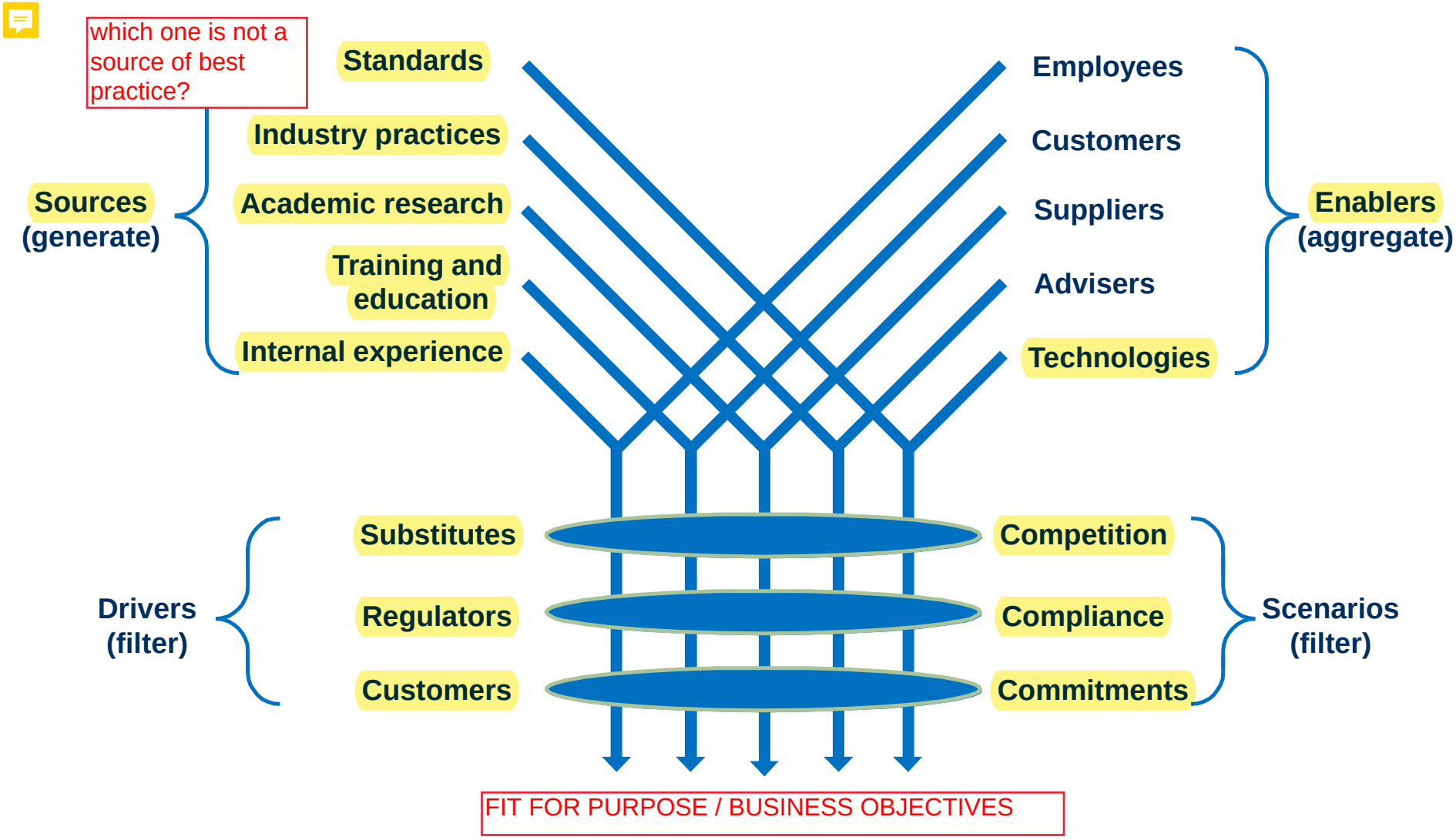
- **List best practices in IT service management**
- **Understand what ITIL is**
- **Learn how ITIL is organized into a service lifecycle**
- **Know the purpose and processes within each phase of the service lifecycle**
  - Service strategy
  - Service design
  - Service transition
  - Service operation
  - Continual service improvement

Best Practice in IT Service Management

- Customers and service providers are both subject to mismatch of expectations and capabilities
- Adopting best practice can help to "close the gap" between the capability of the provider and the expectations of the customer
- ITIL is the most widely recognized and trusted source of best practice for IT service management applicable to all types of IT service providers
- ITIL describes a framework of processes, activities, organization and roles to form a lifecycle approach to IT service management

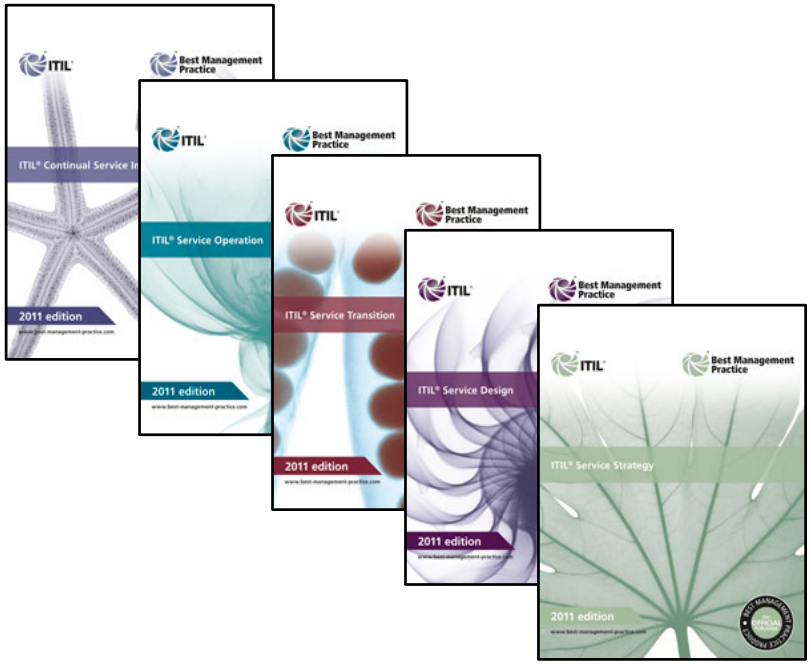
Sources of Service Management Best Practice

which one is not a source of best practice?



ITIL

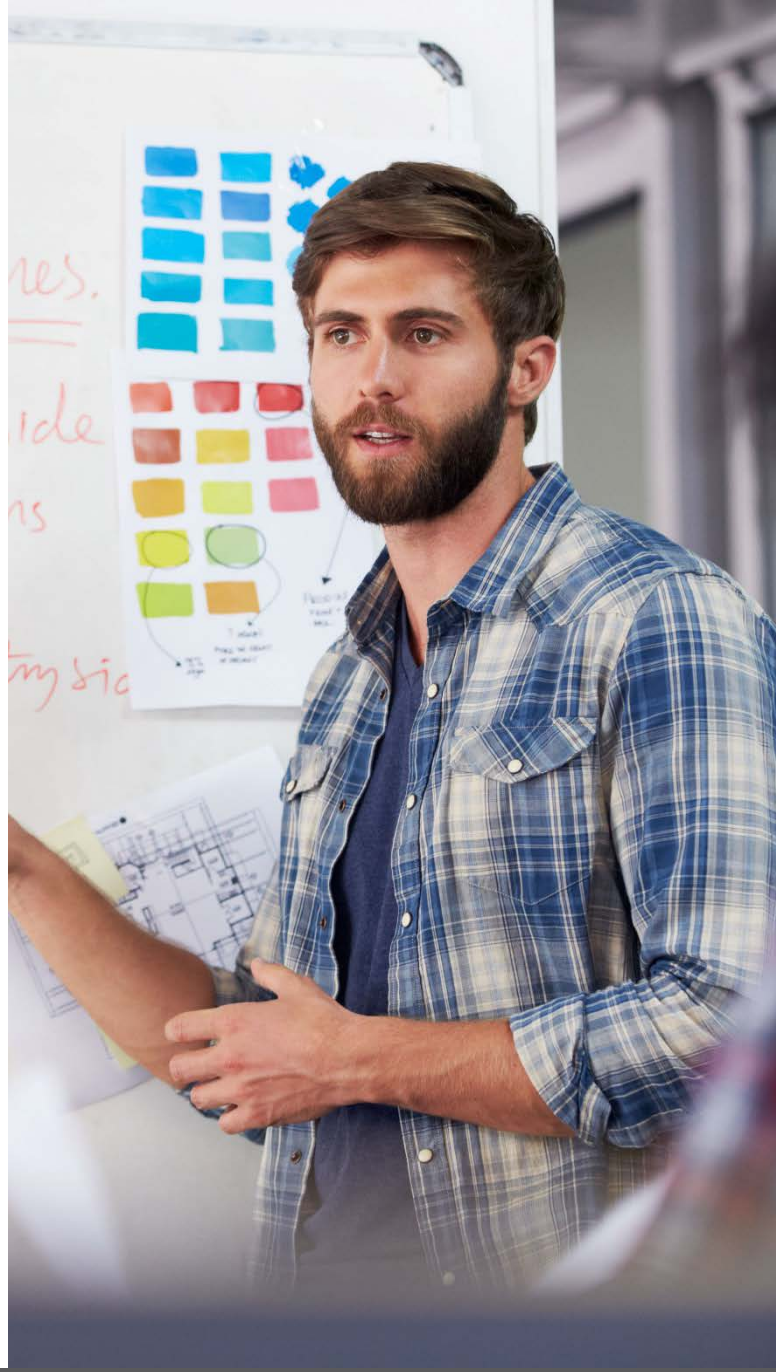
- **A series of books describing a best practice framework for the provision of quality IT services**
- **First written during 1986–1993**
  - Revised during 1999–2002, 2007, and 2011
- **Produced in the U.K. by AXELOS, published by TSO**
- **Basis for International Standard ISO/IEC 20000**
- **Aimed at implementing, maintaining and improving high-quality, cost-effective IT services**



Why ITIL Is Successful

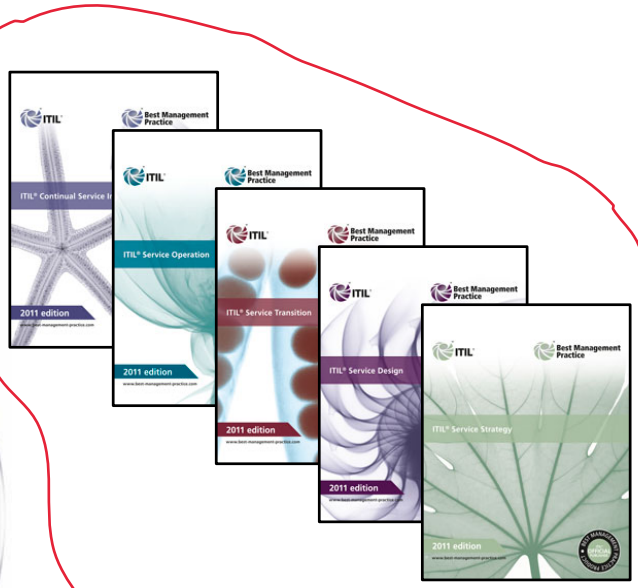
- **Non-proprietary**
  - Owned by Axelos, a joint venture including the U.K. government and not tied to any commercial proprietary practice, solution, or technology platform
- **Non-prescriptive**
  - Offers robust, mature, and time-tested practices that can be adapted to all types of service organizations (public, private, internal, or external), regardless of size or technical environment
- **Best practice**
  - Represents the learning experiences and thought leadership of the world's best-in-class service providers

IT'S NOT A STANDARD, IT'S A FRAMEWORK



ITIL and IT Service Management

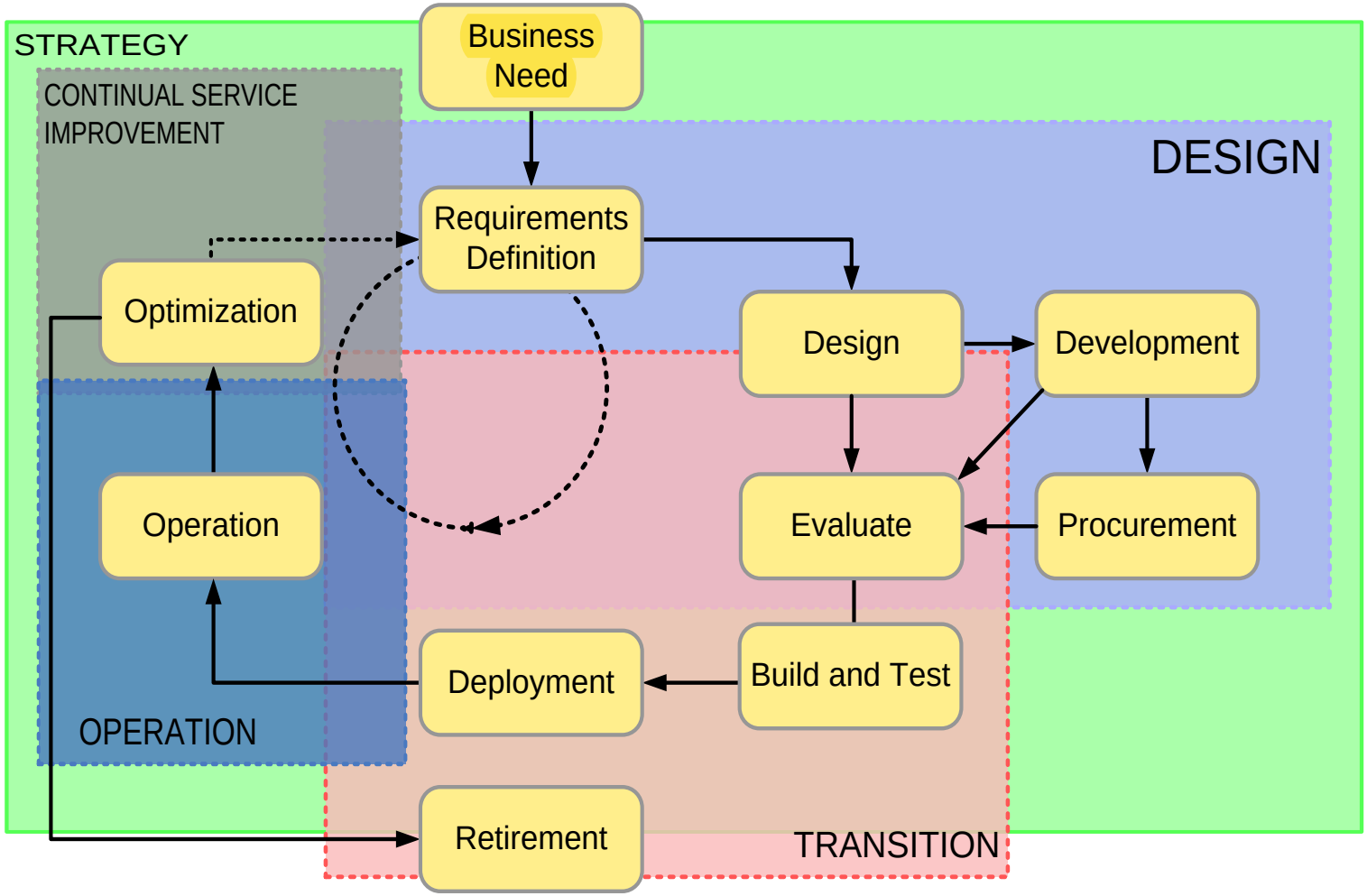
Support for a market sector or technology



Core publications

Supporting products including process maps, templates, training

The Lifecycle Approach to Service Management



ITIL Service Strategy Publication

- **ITIL Service Strategy provides guidance on:**
  - Defining a strategy whereby a service provider will deliver services to meet a customer's requirements
  - Defining a strategy for managing those services
  - Value creation begins here with understanding organizational objectives and customer needs

- **Processes:**
  - Service portfolio management
  - Financial management for IT services
  - Business relationship management

ITIL Service Design Publication

- ***ITIL Service Design* provides guidance on:**
  - Design IT services together with the governing IT practices, processes, and policies
  - Realize the service provider's strategy
- **Processes:**
  - Design coordination
  - Service catalog management
  - Service level management
  - Supplier management
  - Availability management
  - Capacity management
  - IT service continuity management
  - Information security management

ITIL Service Transition Publication

- ***ITIL Service Transition* provides guidance on:**
  - Managing the introduction of new, modified, or retired services to meet the expectations of the business
  - Managing risk to minimize any adverse impact on the business
- **Processes:**
  - Transition planning and support
  - Change management
  - Release and deployment management
  - Service asset and configuration management
  - Knowledge management

ITIL Service Operation Publication

- ***ITIL Service Operation* provides guidance on:**
  - Managing the activities and processes required to deliver and manage services at agreed levels to business users
  - Ensuring value for the customer, user, and the service provider
- **Processes:**
  - Incident management
  - Problem management
  - Request fulfillment
  - Access management
  - Event management
- **Service operation functions:**
  - The service desk
  - Technical management
  - Application management
  - IT operations management

ITIL Continual Service Improvement Publication

- ***ITIL Continual Service Improvement* provides guidance on:**
  - Creating and maintaining value for customers through better strategy, design, transition, and operation of services
  - Aligning IT services with changing business needs
- **Process:**
  - The seven-step improvement process

IDENTIFY
DEFINE
ANALYZE
.....

Assignment 1: ITIL and the Service Lifecycle

Workbook

At this time, your instructor will direct you to your Workbook

You should complete Assignment 1: ITIL and the Service Lifecycle

This assignment is an individual assignment and should take no more than 10 minutes

IT Service Management Sample Question 1

Quiz

1. **What is the *best* description of service management?**
   A. The result of carrying out an activity, performing a process, or delivering an IT service
   B. A means of delivering value to customers
   C. A set of specialized organizational capabilities for providing value to customers in the form of services
   D. A structured set of activities that turns defined inputs into defined outputs

IT Service Management Sample Question 2

Quiz

2. A service owner is responsible for which of the following?

A. Identifying opportunities for service improvement
B. Designing and documenting a service
C. Carrying out the service operation activities needed to support a service
D. Producing a balanced scorecard showing the overall status of all services

IT Service Management Sample Question 3

Quiz

3. **Which of the following can be described as "a team or group of people and the tools or other resources they use to carry out one or more processes and activities"?**
   A. Role
   B. Function
   C. Service
   D. Procedure

Chapter Objectives

- **List best practices in IT service management**
- **Understand what ITIL is**
- **Learn how ITIL is organized into a service lifecycle**
- **Know the purpose and processes within each phase of the service lifecycle**
  - Service strategy
  - Service design
  - Service transition
  - Service operation
  - Continual service improvement

Chapter 3

Service Strategy

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Chapter Objectives

- **Understand the purpose and objectives of the service strategy lifecycle phase**
- **Define key concepts of service strategy**
- **Learn about key processes within the service strategy lifecycle phase**
  - Purpose and objectives
  - Key concepts

ITIL Service Strategy Publication

- ***ITIL Service Strategy* provides guidance on:**
  - Defining a strategy whereby a service provider will deliver services to meet a customer's requirements **OUTCOMEs**
  - Defining a strategy for managing those services
  - Value creation begins here with understanding organizational objectives and customer needs

- **Processes:**
  - Service portfolio management
  - Financial management for IT services
  - Business relationship management

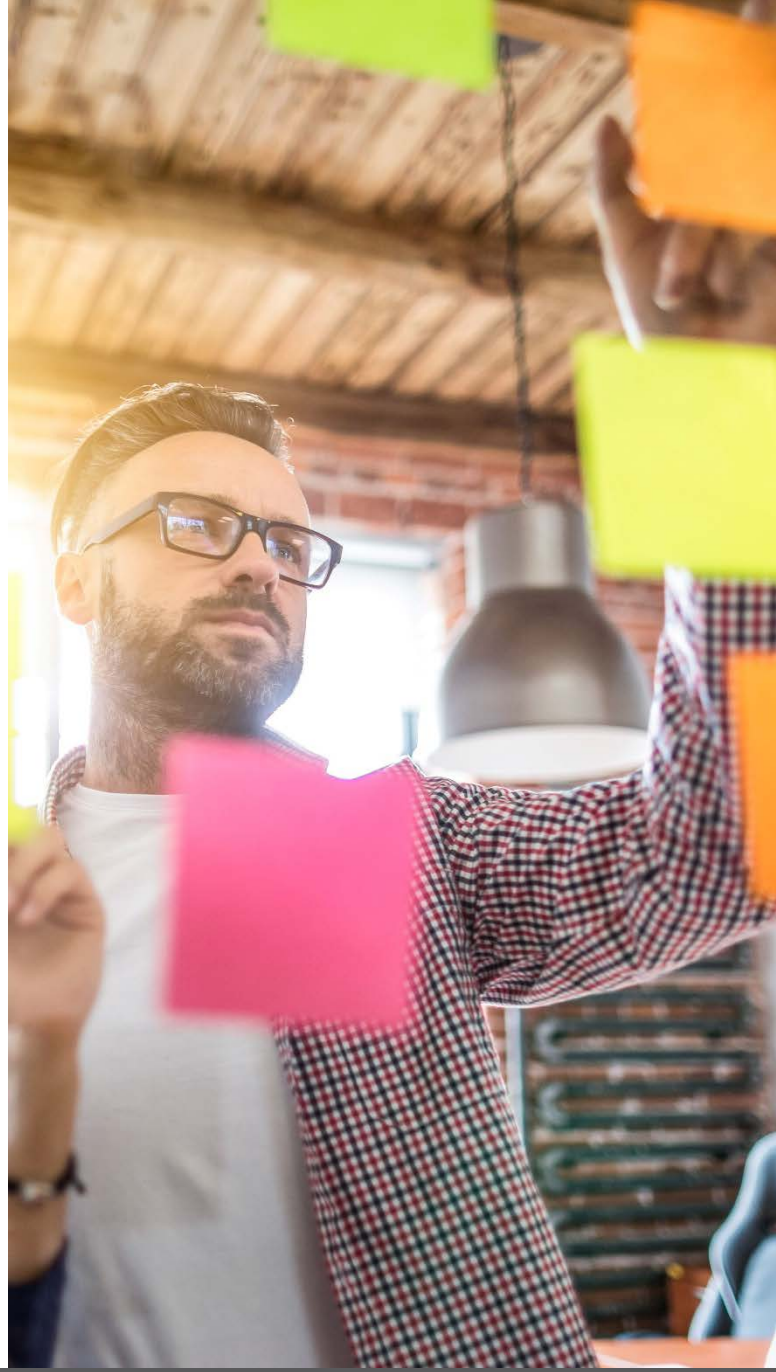
Chapter Contents

Service Strategy Introduction

- Service Portfolio Management
- Financial Management for IT Services
- Business Relationship Management
- Service Strategy Summary

Service Strategy

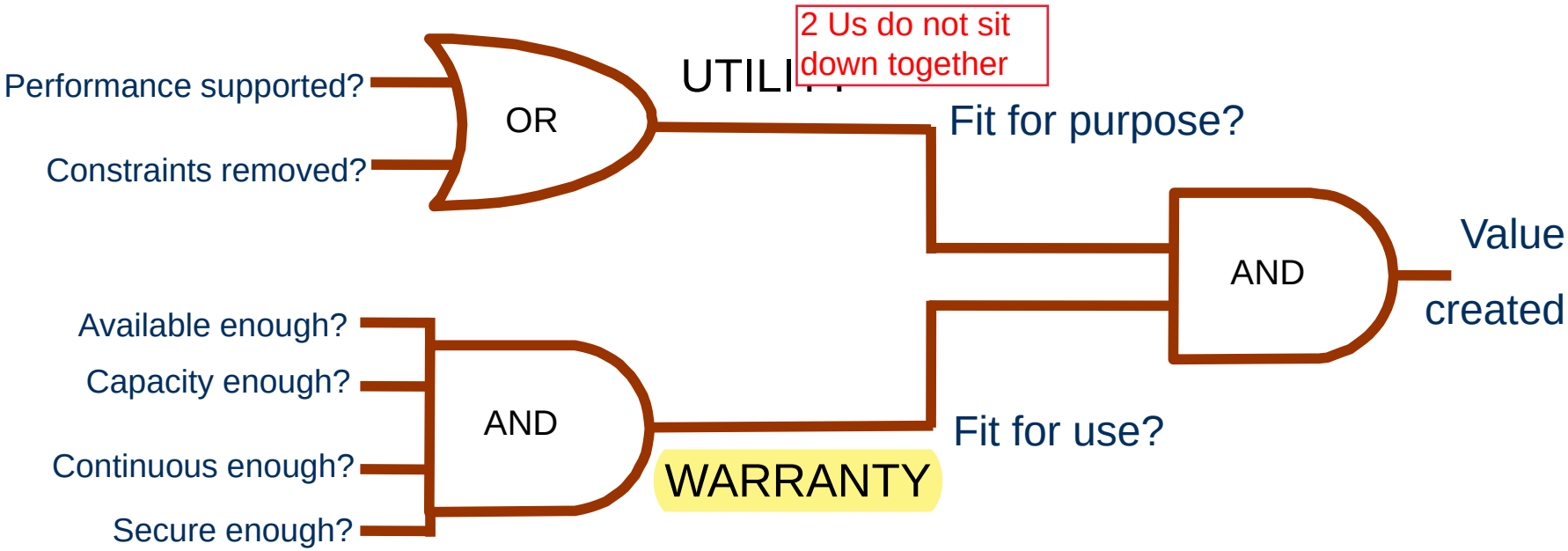
- **Purpose:**
  - To define the perspective, position, plans, and patterns that a service provider needs to be able to execute to meet an organization's business outcomes
- **The objectives include providing:**
  - An understanding of what strategy is
  - A clear identification of the definition of services and the customers who use them
  - The ability to define how value is created and delivered
  - A means to identify and exploit opportunities to provide services
  - A clear service provision model that articulates how services will be delivered and funded, to whom they will be delivered and for what purpose



Value to the Business

- Enables the service provider to contribute to the value and not just the costs of the organization
- Enables the service provider to have a clear understanding of the types and levels of service that make its customers successful
- Ensures competitive advantage for the provider and for its customers
- Enables business customers to achieve a positive return on their service investments ROI
- Facilitates functional and transparent communication between the service provider and its customers BRM

Warranty and Utility



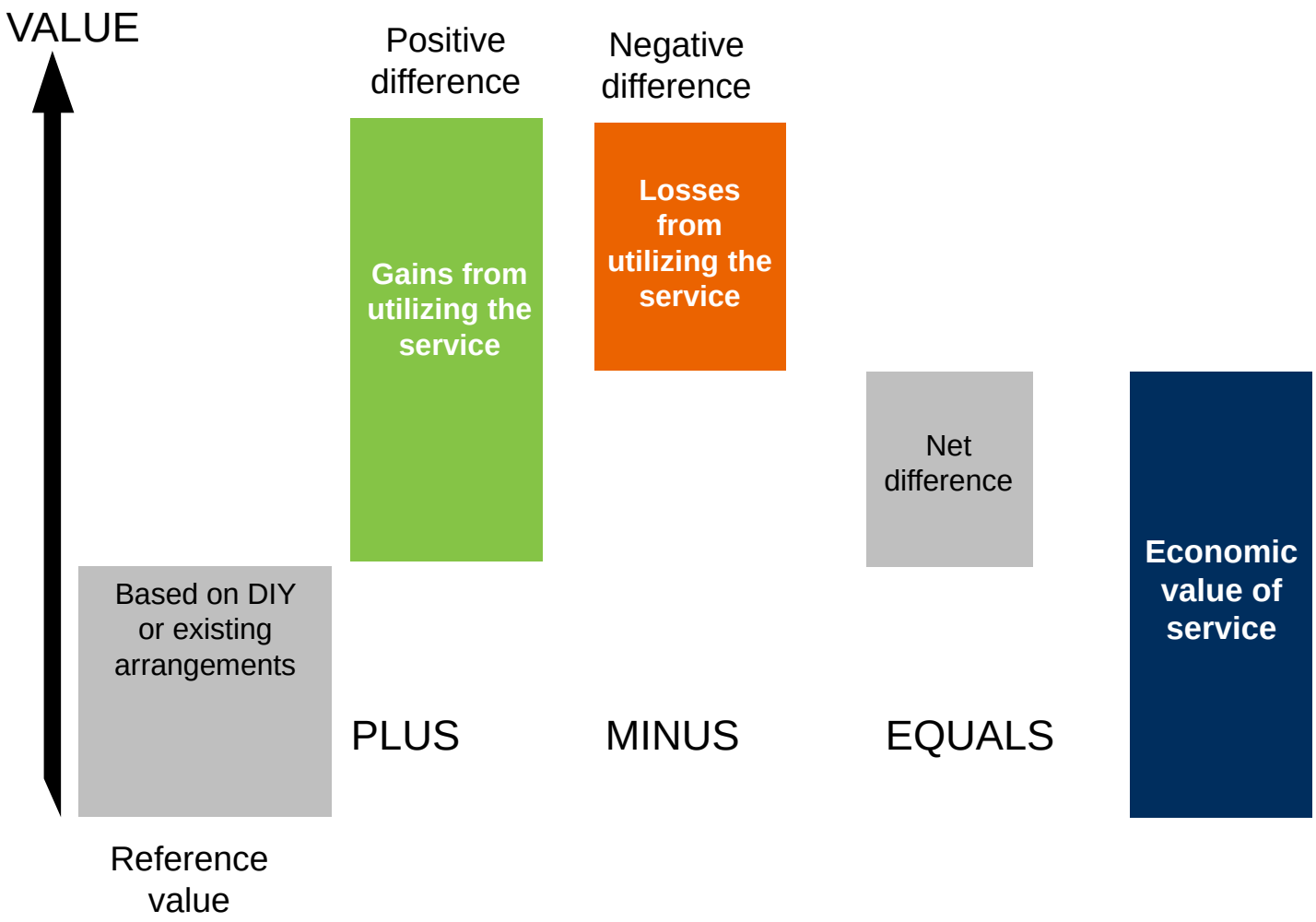
- **Utility**
  - Supporting business outcomes in terms of enhancing or enabling the performance of customer assets
- **Warranty** Q: WHAT IS THE BEST DEFINITION OF WARRANTY?
  - Providing assurance in terms of availability, capacity, security, and continuity

Value

- **Service value is measured by the extent to which the service meets customer expectations**
  - The perceived value should be higher than the cost of obtaining the service
- **Value characteristics are:**
  - Value is defined by customers who will make the final choice, based on a service that represents the best mix of features at the right price
  - Value is not only measured in financial terms **VOI - Value of Investment**
  - Value changes over time and circumstance
- **Value components are the business outcomes of customers and their preferences and perceptions**

question related to value

Value Creation

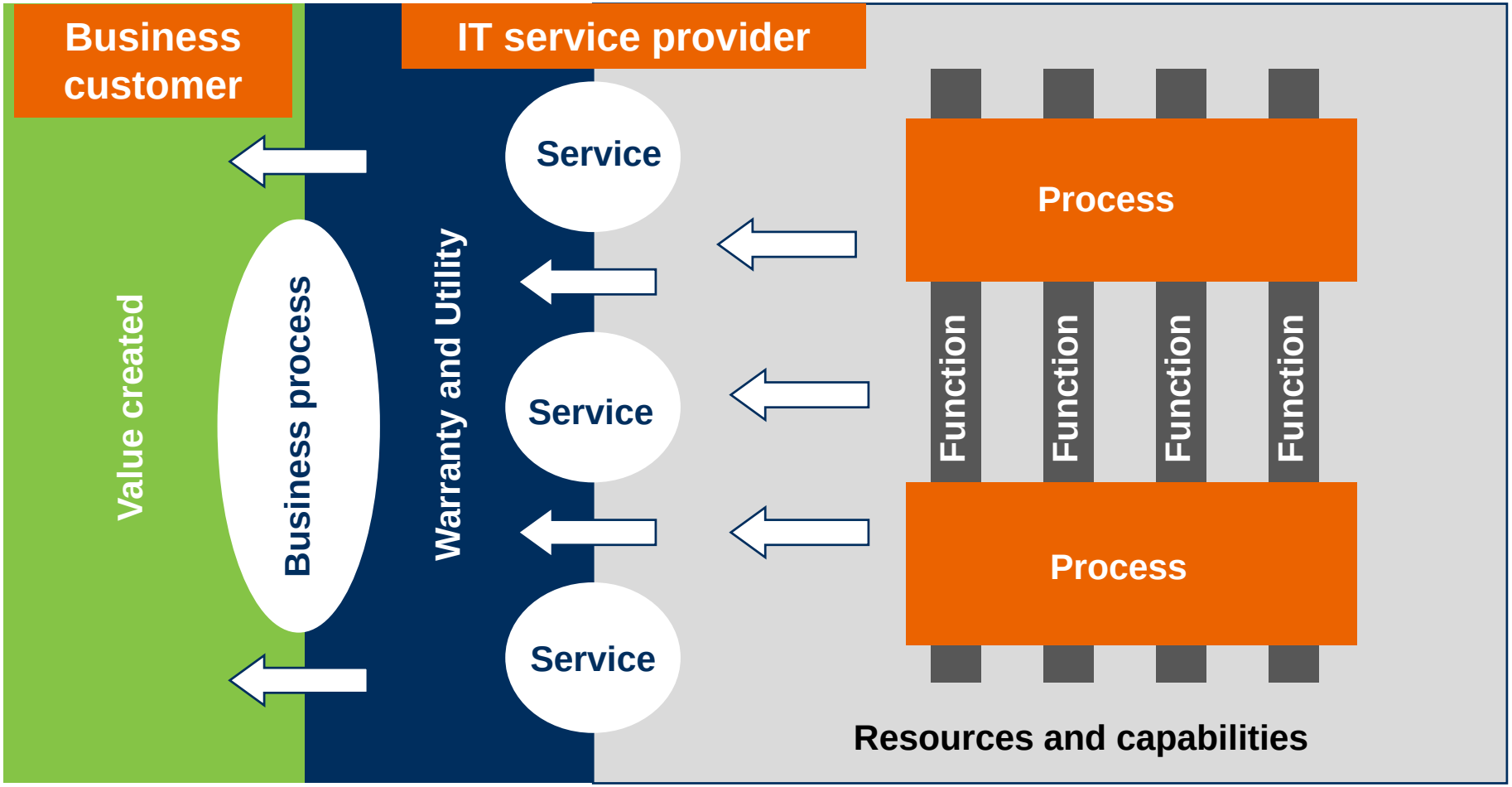


Resources, Capabilities, and Service Assets

- **Resources:** direct inputs for production
  - Financial capital
  - Infrastructure
  - Applications
  - Information
  - Numbers of people
- **Capabilities:** the ability to use resources to produce value
  - Management
  - Organization
  - Processes
  - Knowledge
  - The skill and experience of people

- **Resources and capabilities are both service assets used to create value in the form of goods and services**
- **Resources need capabilities to use the available resources to develop distinctive value-adding services to customers**
- **Capabilities cannot produce value without adequate resources**
- **It is usually easier to acquire resources than capabilities**

The Overall Picture



Governance

Q: policy + strategy = governance

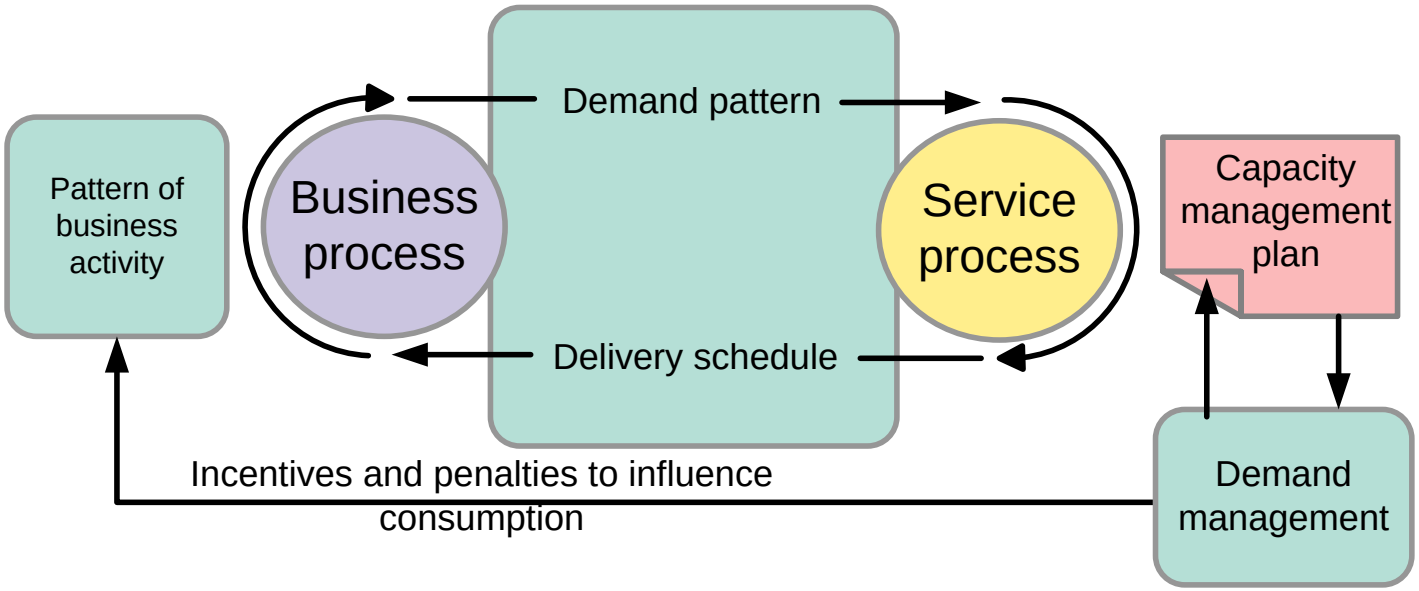
- **Governance ties the IT service provider and the business customer together by defining common directions, policies, and rules**
- **Governance ensures that:**
  - Policies and strategy are actually implemented
  - Required processes are correctly followed
  - Roles and responsibilities for measuring, reporting, and taking actions to resolve any issues identified are defined
- **Many ITSM strategies fail because they try to build a structure or processes according to how they would like the organization to work instead of working within the existing governance structures**

Patterns of Business Activity

- A pattern of business activity (PBA) is a workload profile of one or more business activities

Q: Which one is not a business activity? Keyword -> Business vs. IT

- Demand management can analyze, track, monitor and document PBAs to predict the current and future demand for services.
- This will enable the appropriate capacity to be delivered at the right cost and at the right time



Risk Management

Risk

A possible event that could cause harm or loss, or affect the ability to achieve objectives

- **Risk management is carried out throughout the service lifecycle**
- **Executing a service strategy should include a plan to deal with risks:**
  - Identifying risks – naming and documenting
  - Analyzing risks – quantifying impact and probability
  - Managing risks – agree, implement and review the action plan

Chapter Contents

Service Portfolio Management

► Purpose:

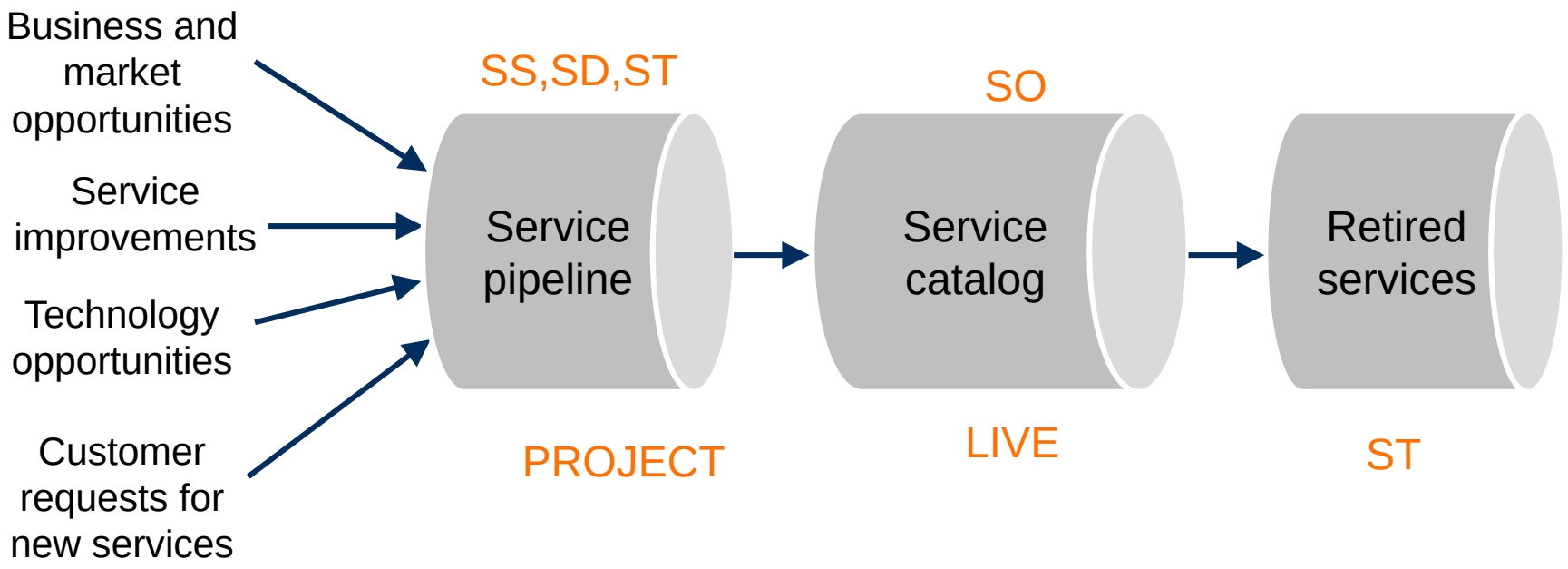
- To ensure that the service provider has the right mix of services to balance the investment in IT with the ability to meet business outcomes

► Objectives:

- Investigate and decide which services to provide, based on an analysis of the potential return and acceptable level of risk
- Maintain the definitive portfolio of services provided
- Evaluate how services enable the service provider to achieve their strategy and respond to changes in their internal or external environments
- Control which services are offered, under what conditions, and at what level of investment
- Track the investment in services throughout their lifecycle
- Determine which services are no longer viable and when they should be retired

The Service Portfolio

- **Represents commitments and investments made by a service provider across all customers and market spaces**



Chapter Contents

Financial Management for IT Services

- **Purpose:**
  - To secure the appropriate level of funding to design, develop and deliver services that meet the strategy of the organization
- **Objectives include:**
  - Evaluating the financial impact of new or changed strategies
  - Securing funding to manage the provision of services
  - Understanding and balancing the relationship between expenses and income
  - Accounting for money spent on the creation, delivery and support of services
  - Forecasting the financial requirements to meet service commitments and comply with regulatory and legislative requirements
  - Where appropriate, defining a framework to recover the costs of service provision from the customer

Scope of Financial Management for IT Services

Q: Pedicting and controlling the income and expenditure -> Budgeting

- **Budgeting**
  - Predicting and controlling income and expenditure MANDATORY
  - Involves periodic cycles of negotiation and more frequent monitoring of income and expenditure
- **Accounting** MANDATORY
  - Enables the IT service provider to fully account for expenditure
  - Provides the ability to identify costs by customer, by service and by activity
- **Charging** OPTIONAL
  - The process required to bill customers for the services supplied to them
  - Requires sound IT accounting practices and systems
  - Charging is optional in some organizations

Business Case

QUESTION

Business Case Structure

A. Introduction
Presents the business objectives addressed by the service management initiative

B. Methods and assumptions
Defines the boundaries of the business case, whose costs, whose benefits.

C. Business impacts
The financial and non-financial business case results

D. Risks and contingencies
The probability that alternative results will emerge

E. Recommendations
Specific recommendations

- **A business case is a decision support and planning tool that projects the likely consequences of a business action**
- **The emphasis should be on the financial case**

Chapter Contents

- Service Strategy Introduction
- Service Portfolio Management
- Financial Management for IT Services

Business Relationship Management

- Service Strategy Summary

Business Relationship Management

- **Purpose:**
  - To establish and maintain a business relationship between the service provider and the customer based on understanding the customer and their business needs
- **Objectives:**
  - Ensure that the service provider understands the customer's perspective of service, and is, therefore, able to prioritize its services and service assets appropriately
  - Ensure high levels of customer satisfaction, indicating that the service provider is meeting the customer's requirements
  - Establish and maintain a constructive relationship between the service provider and the customer based on understanding the customer and their business drivers
  - Identify changes to the customer environment that could potentially impact the type, level or utilization of services provided
  - Establish and articulate business requirements for new services or changes to existing services

Scope of Business Relationship Management

- **Internal service providers may have a senior IT manager to represent them**
- **External service providers may have a separate function of business relationship managers or account managers**
  - These may be dedicated to a customer or group of customers
- **Business relationship management focuses on:**
  - Business outcomes that the customer wants to achieve
  - Services that are currently offered to the customer, the way they are offered and the way in which they are used by the customer
  - Technology trends that could impact current services and customers
  - Levels of customer satisfaction
  - How to optimize services for the future
  - How the service provider is represented to the customer

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- Service Strategy Introduction
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Service Strategy Summary

Summary of Service Strategy

- **Purpose**
  - To define the perspective, position, plans, and patterns that a service provider needs to be able to execute to meet an organization's business outcomes
- **Key concepts**
  - Warranty, utility, and value
  - Resources, capabilities, and service assets
  - Governance and risk management
  - Patterns of business activity
- **Key processes**
  - Service portfolio management
    - The service portfolio
  - Financial management for IT services
    - Business case
  - Business relationship management

Assignment 2: Service Strategy Key Concepts

Workbook

At this time, your instructor will direct you to your Workbook

You should complete Assignment 2: Service Strategy Key Concepts

This assignment is an individual assignment and should take no more than 10 minutes

Service Strategy Sample Question 1

Quiz

1. **Which of the following identifies two service portfolio components within the service lifecycle?**
   A. Service pipeline and service catalog
   B. Service knowledge management system and service catalog
   C. Service knowledge management system and requirements portfolio
   D. Requirements portfolio and configuration management system

Service Strategy Sample Question 2

Quiz

2. Which statement about the value of a service is correct?

A. Service value is defined by the customer who receives the service

B. Service value is only measured in financial terms so comparisons between service providers can be made

C. The ability of customers to achieve their objectives is not relevant to defining service value

D. Service value is defined by the service provider as they know all the costs involved

Service Strategy Sample Question 3

Quiz

3. What does “utility of a service” mean?

A. The service is fit for use

B. There will be no failures in applications and infrastructure associated with the service

C. Enhancing the performance of customer assets or reducing their constraints

D. The power supplies on which the technical infrastructure of services depend

Chapter Objectives

- **Understand the purpose and objectives of the service strategy lifecycle phase**
- **Define key concepts of service strategy**
- **Learn about key processes within the service strategy lifecycle phase**
  - Purpose and objectives
  - Key concepts

Chapter 4

Service Design

Learning Tree® International

Chapter Objectives

- **Understand the purpose and objectives of the service design lifecycle phase**
- **List key concepts of service design**
- **Learn key processes within the service design lifecycle phase**
  - Purpose and objectives
  - Key concepts

ITIL Service Design Publication

- ***ITIL Service Design* provides guidance on:**
  - Design IT services together with the governing IT practices, processes, and policies
  - Realize the service provider's strategy
- **Processes:**
  - Design coordination
  - Service catalog management
  - Service level management
  - Supplier management
  - Availability management
  - Capacity management
  - IT service continuity management
  - Information security management

HOLISTIC VIEW OF A SERVICE

Chapter Contents

Service Design Introduction

- Design Coordination
- Service Catalog Management
- Service Level Management
- Supplier Management
- Availability Management
- Capacity Management
- IT Service Continuity Management
- Information Security Management
- Service Design Summary

Service Design

- **The purpose:**
  - Design IT services together with the governing IT practices, processes, and policies
  - Realize the service provider's strategy
  - Facilitate the introduction of services into supported environments ensuring quality service delivery, customer satisfaction, and cost-effective service provision
- **The objectives:**
  - Design IT services so effectively that minimal improvement during their lifecycle will be required

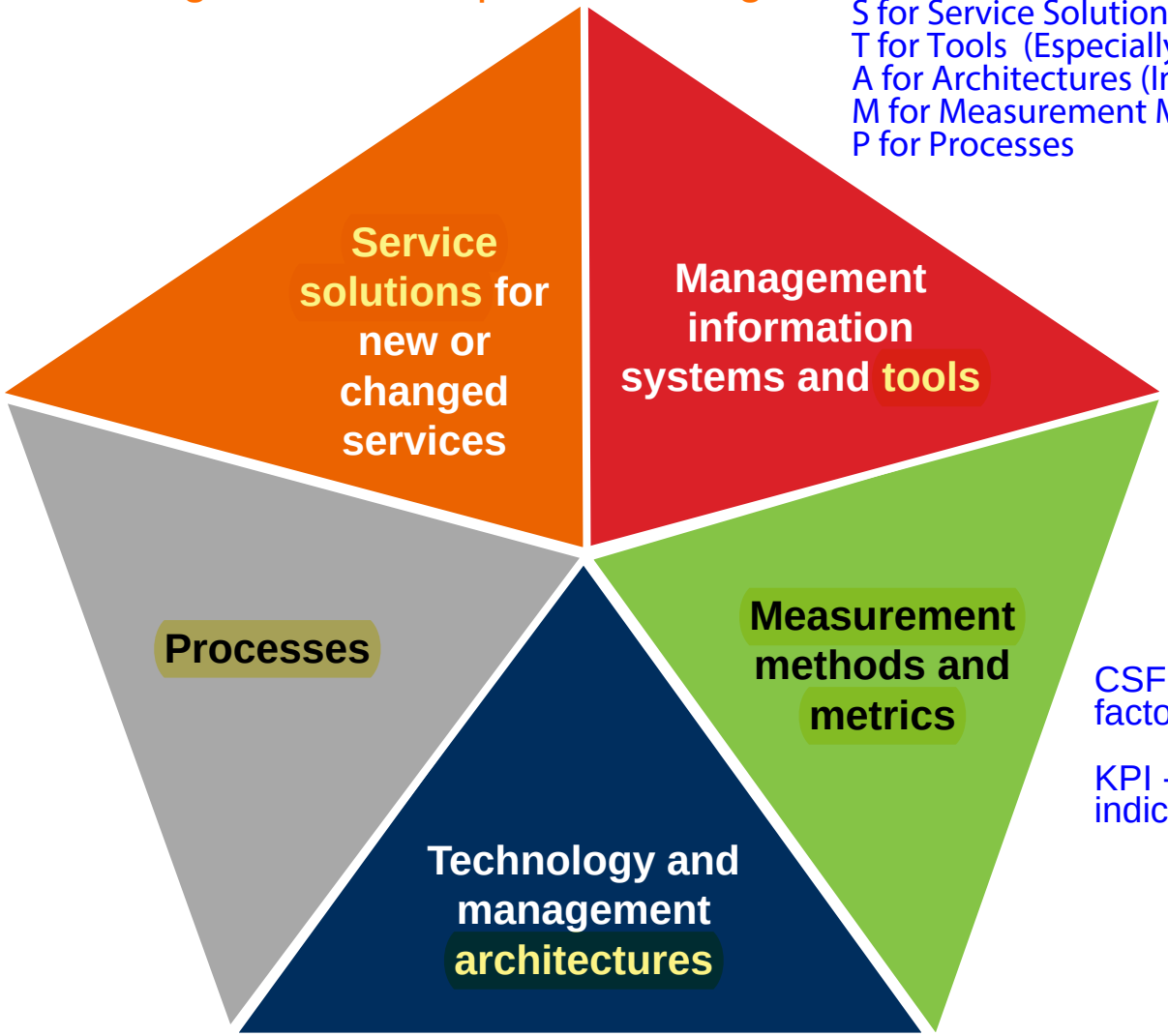
Value to the Business

- Reduced total cost of ownership (TCO)
- Improved quality and consistency of service
- Easier implementation of new or changed services
- Improved service alignment, performance and IT governance
- Improve effectiveness of service management and IT processes
- Improve information and decision-making
- Improve alignment with customer values and strategies

The Five Aspects of Service Design

Q: Which of the following are in the aspects of design?

STAMP ->
S for Service Solutions
T for Tools (Especially S.P.)
A for Architectures (Infra/App)
M for Measurement Methods
P for Processes

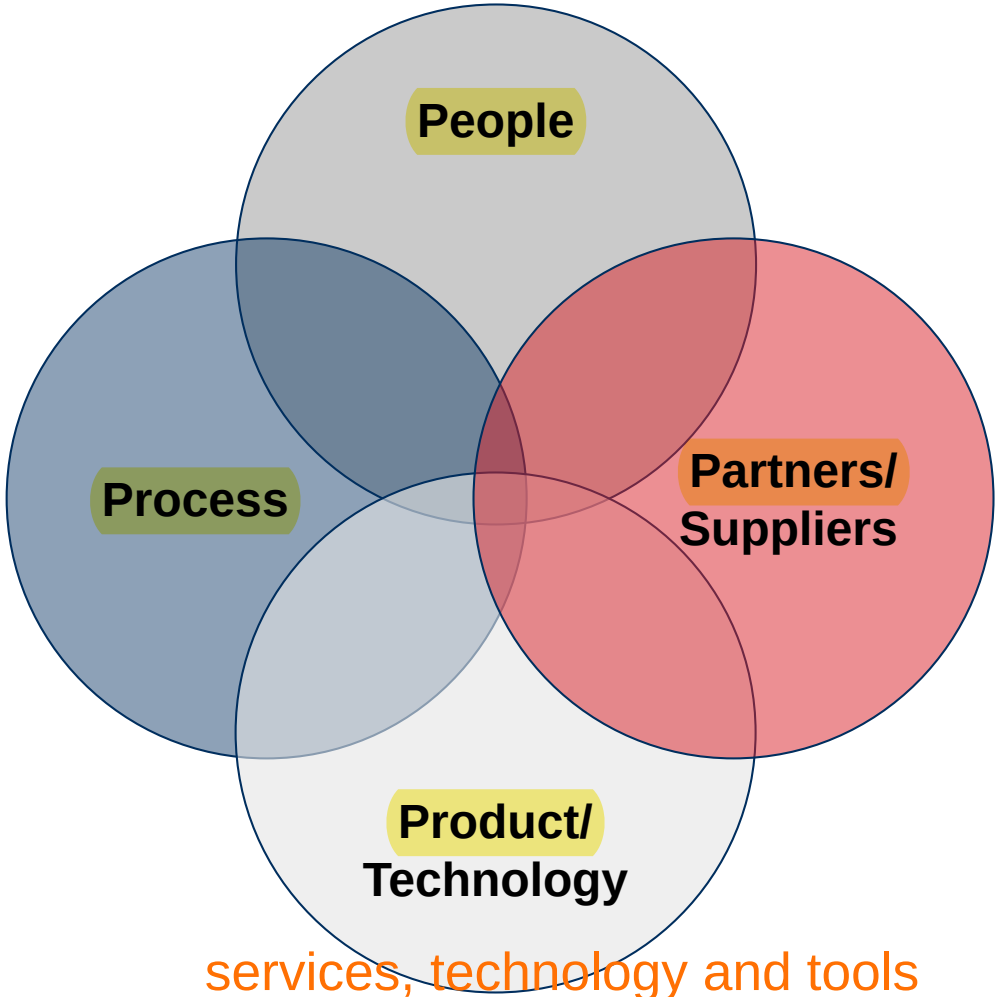


CSF - critical success factors

KPI - key performance indicators

Designing Service Management: The Four Ps

Question



services, technology and tools

Service Design Package (SDP)

- **Should be produced during the service design stage for:**
  - A new service
  - A major change to an existing service
  - The removal of a service
- **Provides the "blueprint" required by the service transition stage**

Service Design Package (SDP)

SDP goes to Service Transition

- **Requirements**
  - Business requirements
  - Service applicability
  - Service contacts
- **Service design**
  - Service functional requirements
  - Service level requirements
  - Operational management requirements
  - Design topology
- **Organizational readiness assessment**
- **Service lifecycle plan**
  - Service program
  - Service transition plan
  - Service operational plan
  - Service acceptance criteria

and etc.

Chapter Contents

- Service Design Introduction

Design Coordination

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Design Coordination

- **Purpose:**
  - To ensure the goals and objectives of the service design stage are met by providing and maintaining a single point of coordination and control for all activities and processes within this stage of the service lifecycle
- **Objectives:**
  - Ensure the consistency of all aspects of service design
  - Coordinate all design activities across projects, changes, suppliers and support teams
  - Plan and coordinate the resources and capabilities required to design new or changed services
  - Produce service design packages (SDPs) when required and ensure they are handed over to service transition

Scope of Design Coordination

- **The scope includes all design activities that lead to service transition:**
  - New services
  - Major changes to services
  - Service retirement
- **The level of design coordination required will vary depending on:**
  - The complexity of the design activities
  - The extent to which design coordination provides a benefit

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Service Catalog Management

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- Information Security Management
- Service Design Summary

Service Catalog Management

- **Purpose:**
  - To provide and maintain a single source of consistent information on all operational services and those being prepared to be run operationally
  - And to ensure that it is widely available to those who are authorized to access it
- **Objectives:**
  - Manage the information contained within the service catalog
  - Ensure that the service catalog accurately reflects details of all services that are being run, or being prepared to run, in the live environment
  - Ensure that the service catalog is made available to those approved to access it in a manner that supports their effective and efficient use of service catalog information
  - Ensure that the service catalog supports the evolving needs of all other service management processes

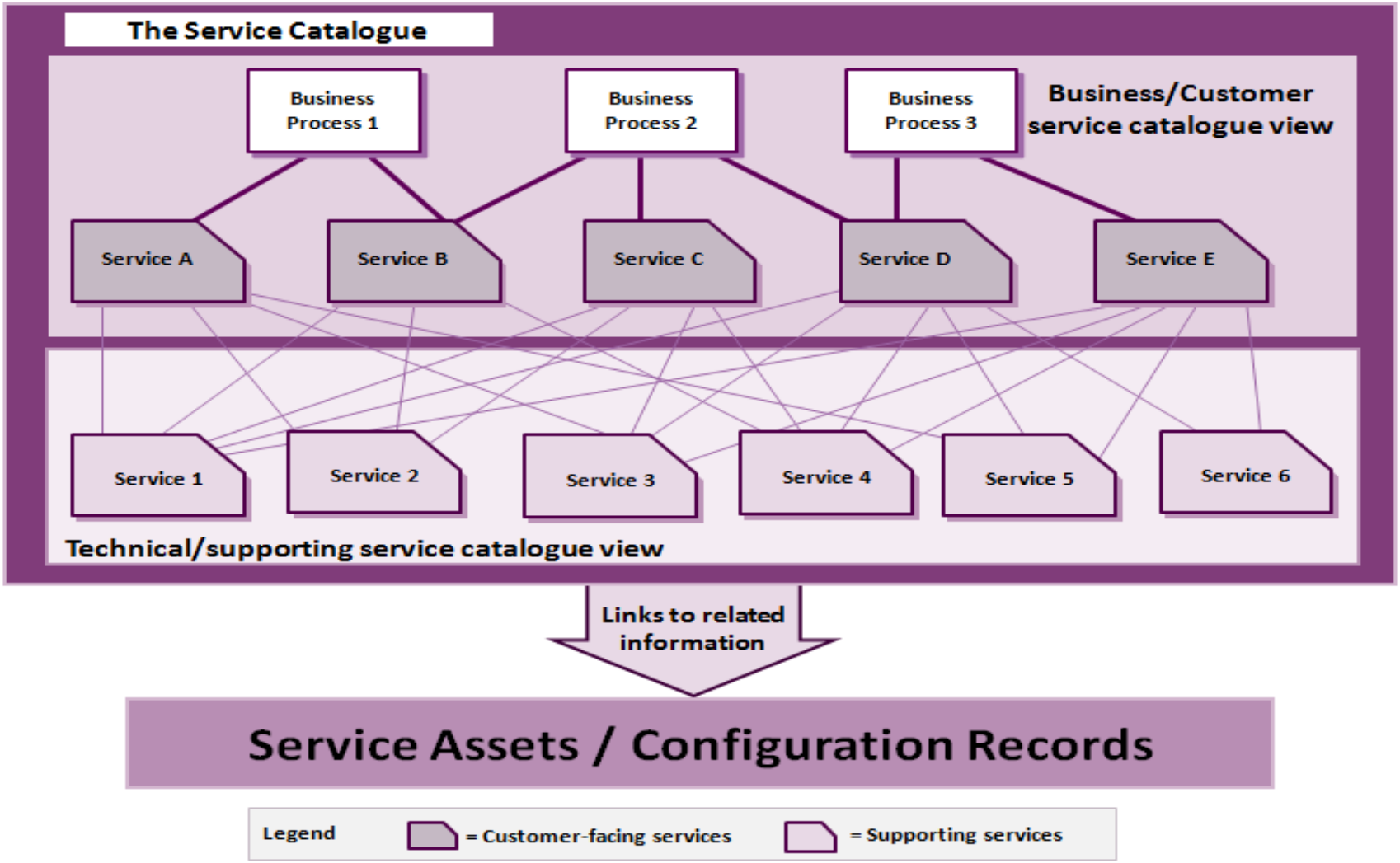
Service Catalog

- A database or structured document with information about all live IT services, including those available for deployment
- A component of the service portfolio and the only part of the service portfolio published to customers
- Used to support the sale and delivery of IT services and includes information about:
  - Deliverables
  - Prices
  - Contact points
  - Ordering and request processes

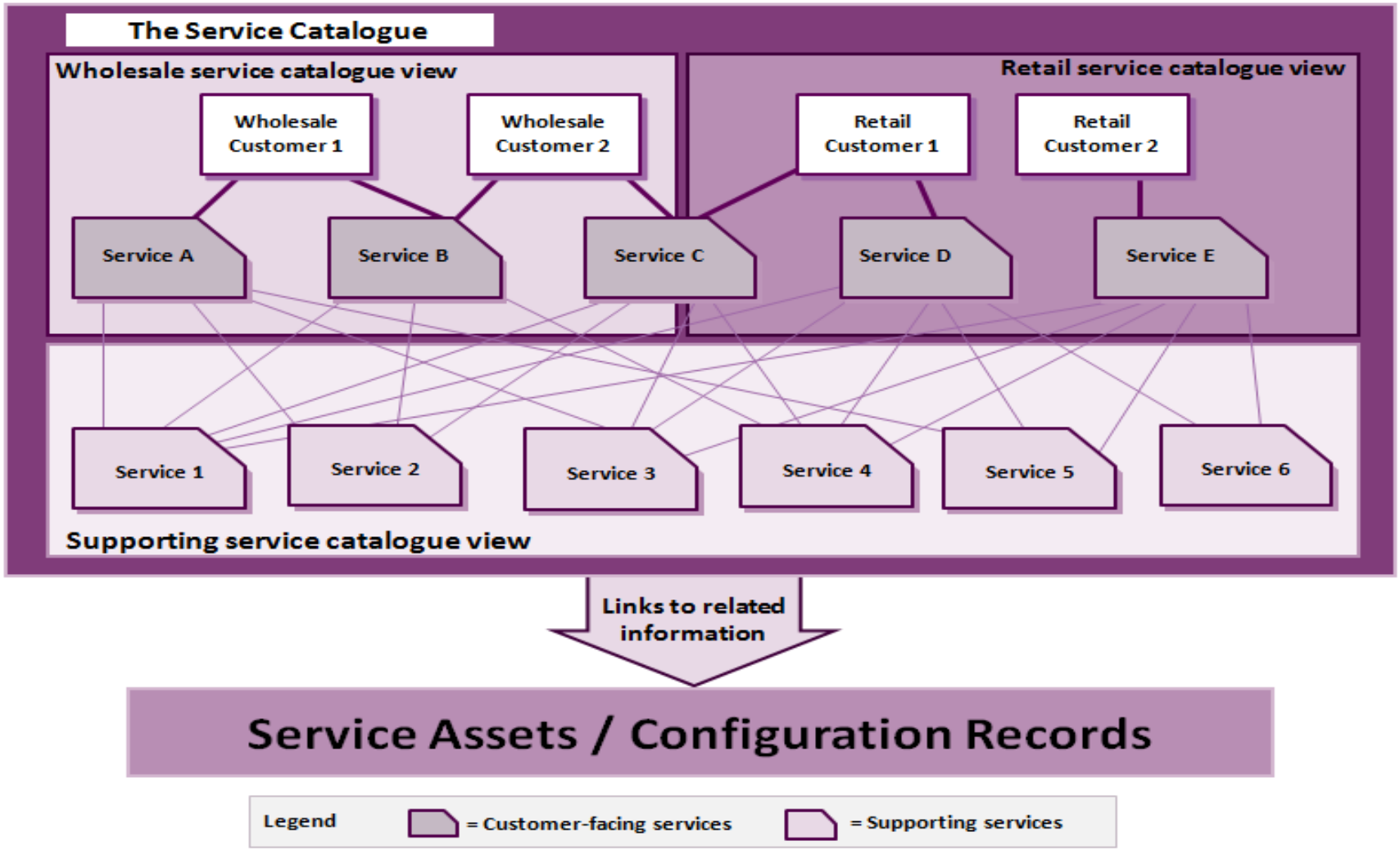
Different Categories of Services

- **Customer-facing services**
  - Services that support the customer's business directly by facilitating outcomes desired by the customer
  - IT services that are seen by the customer in the business service catalog view
- **Supporting services**
  - IT services that support or "underpin" the customer-facing services
    - Normally invisible to the customer, but essential to the delivery of customer-facing services
  - Typical examples include network services and application services
  - Depicted in the technical or supporting service catalog view

A Two-View Service Catalog Presentation



A Three-View Service Catalog Presentation



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Service Level Management

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- Service Design Summary

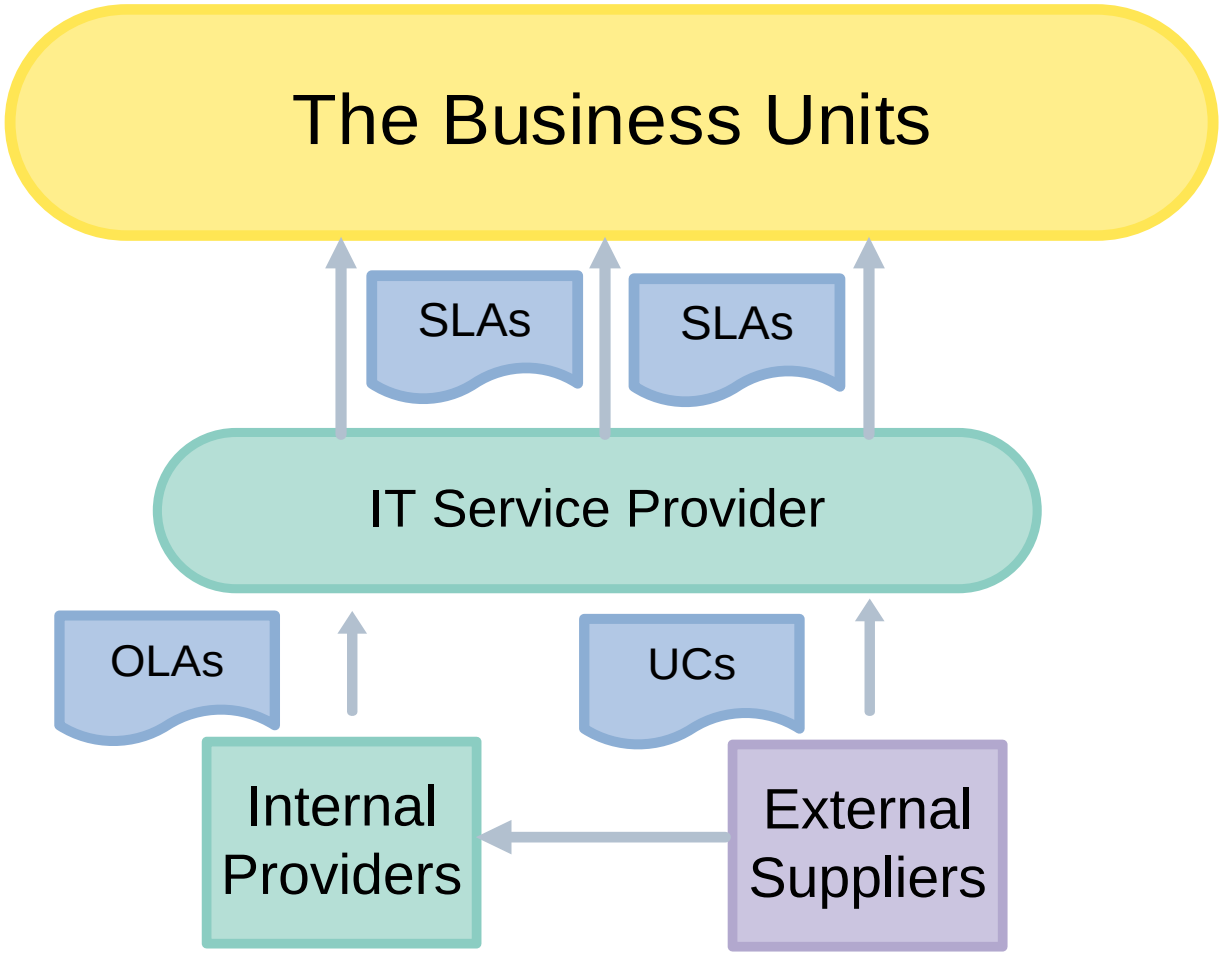
Service Level Management (SLM)

- **Purpose:**
  - To ensure that all current and planned IT services are delivered to agreed achievable targets
- **Objectives:**
  - Define, document, agree, monitor, measure, report, and review the level of IT services provided and instigate corrective measures whenever appropriate
  - Provide and improve the relationship and communication with the business and customers in conjunction with business relationship management
  - Ensure that specific and measurable targets are developed for all IT services
  - Monitor and improve customer satisfaction with the quality of service delivered
  - Ensure that IT and the customers have a clear and unambiguous expectation of the level of service to be delivered
  - Ensure that even when all agreed targets are met, the levels of service delivered are subject to proactive, cost-effective, continual improvement

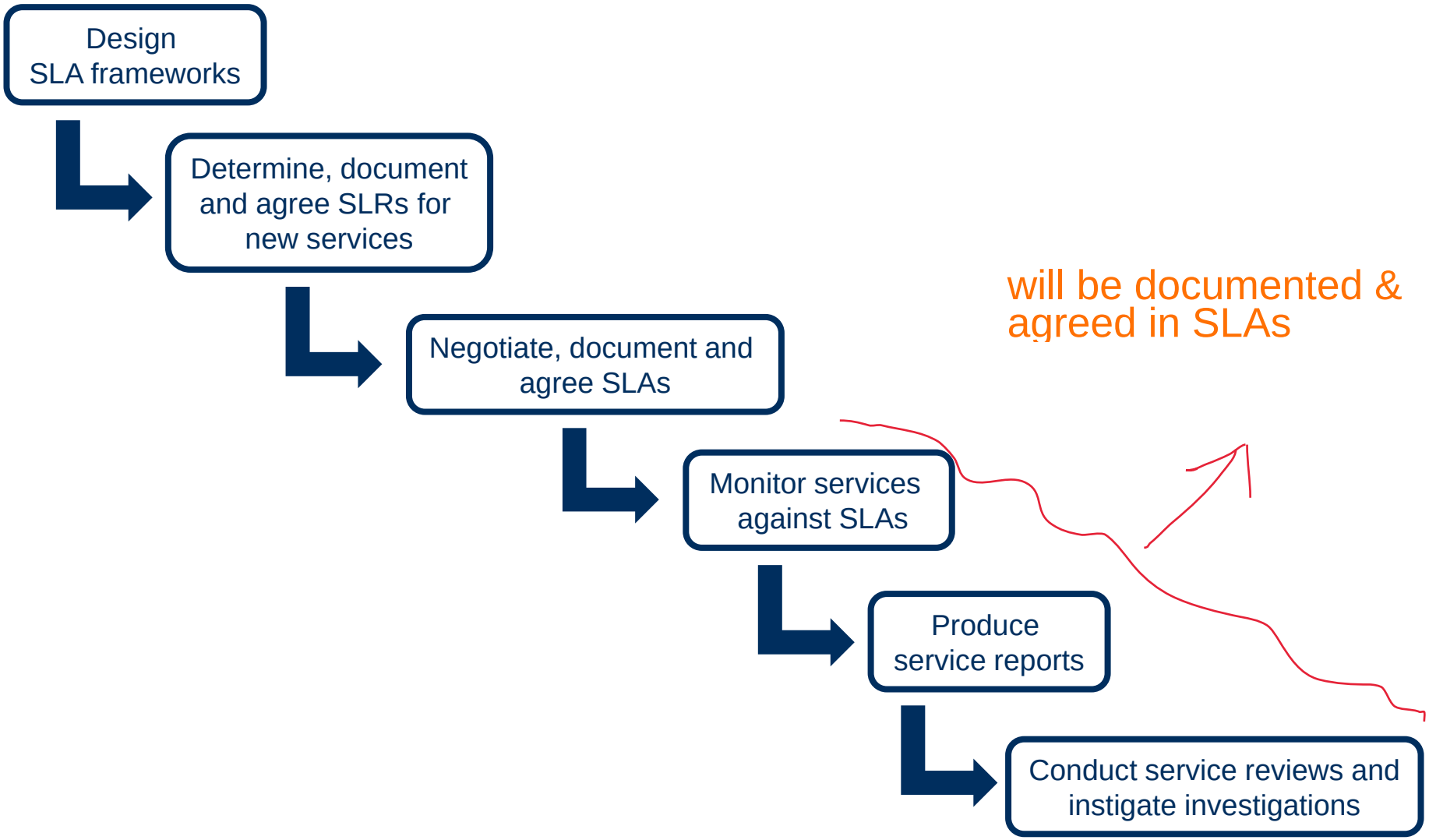
Service Level Management Concepts

- **Service level agreement (SLA)**
  - A written agreement between an IT service provider and a customer defining key service targets and responsibilities of both parties
- **Operational level agreement (OLA)**
  - An agreement between an IT service provider and an internal support group that assists with the provision of services
- **Underpinning contract (UC)**
  - A contract between an IT service provider and a external supplier that defines targets and responsibilities that are required to meet targets in an SLA

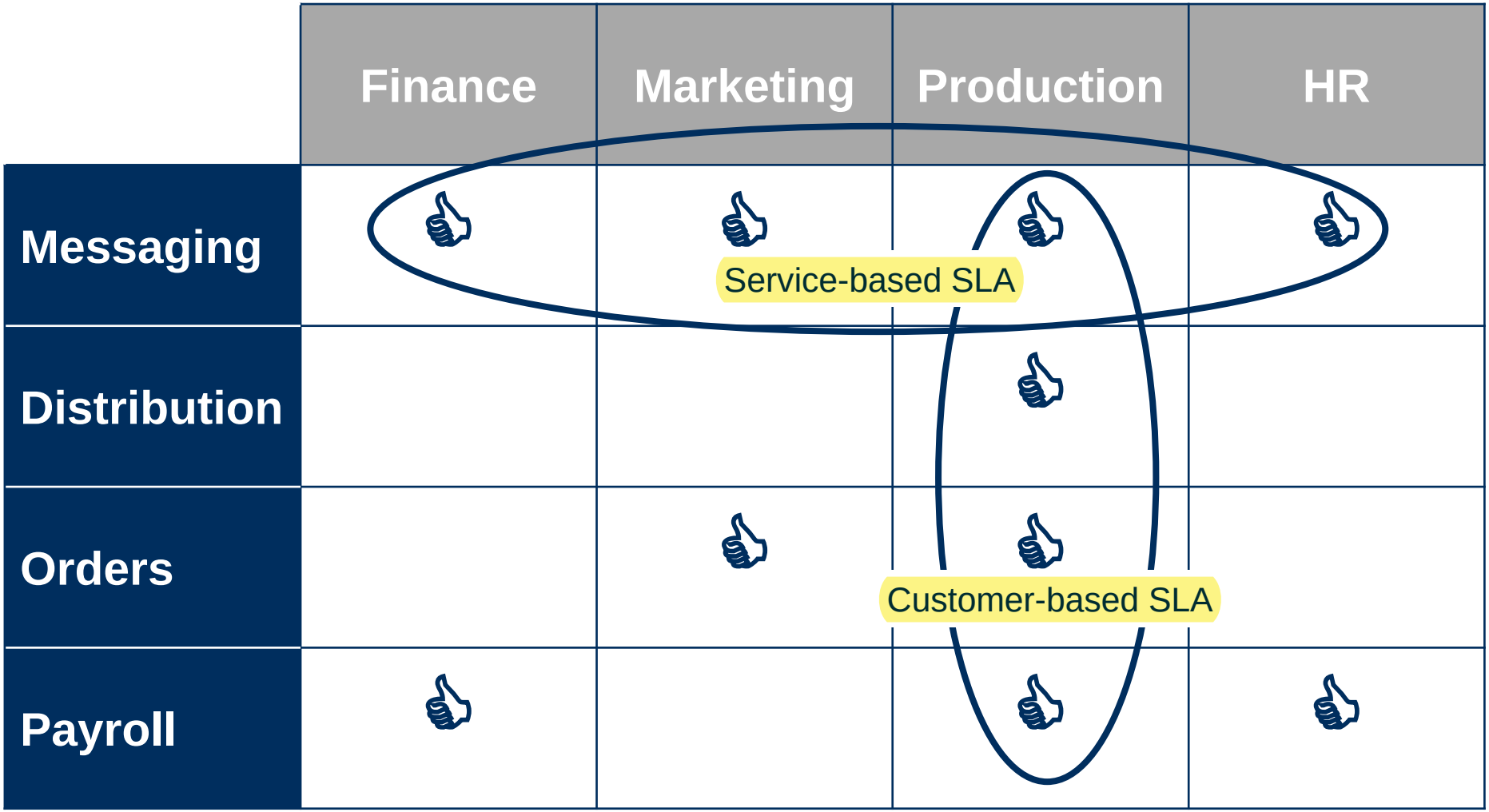
Business and IT Relationship



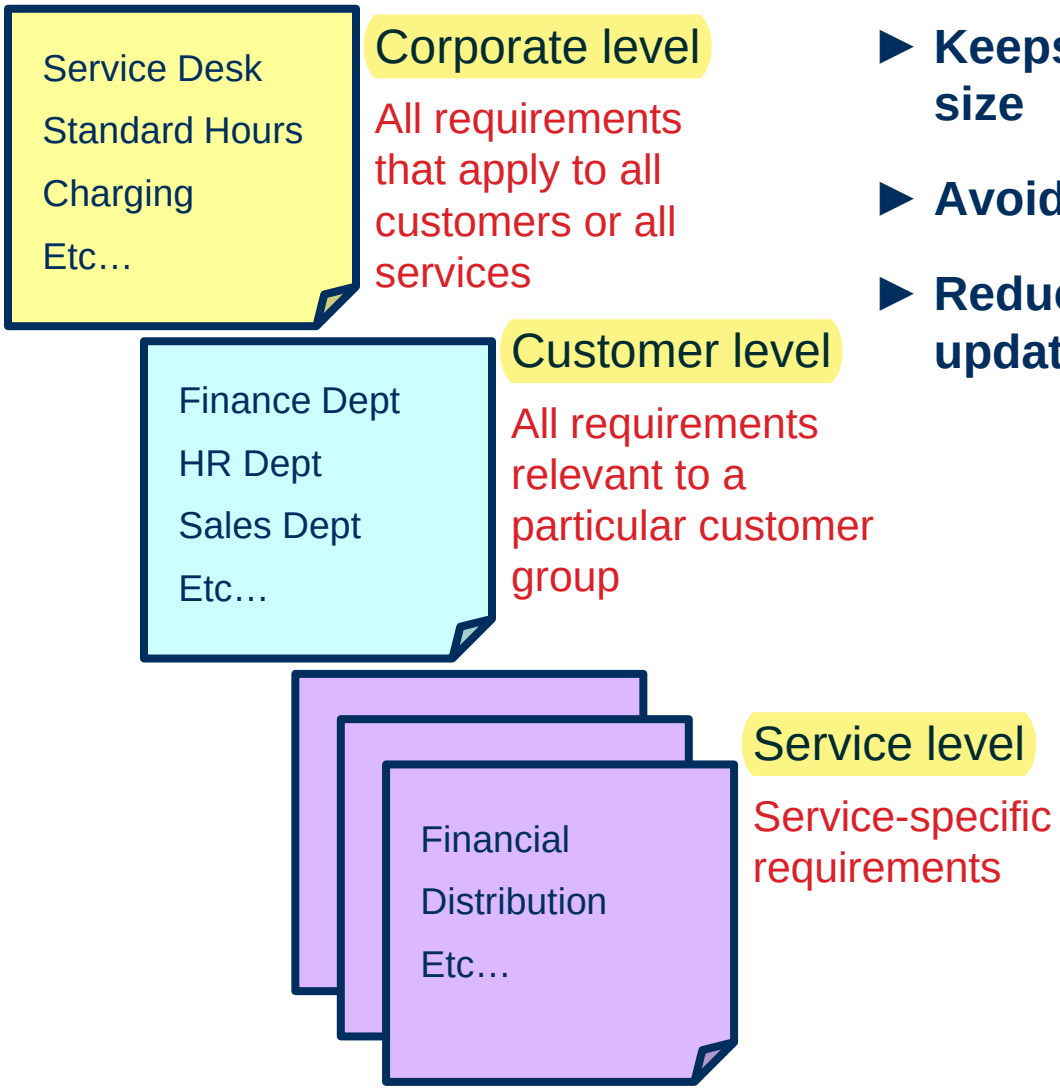
Process Activities



SLA Frameworks



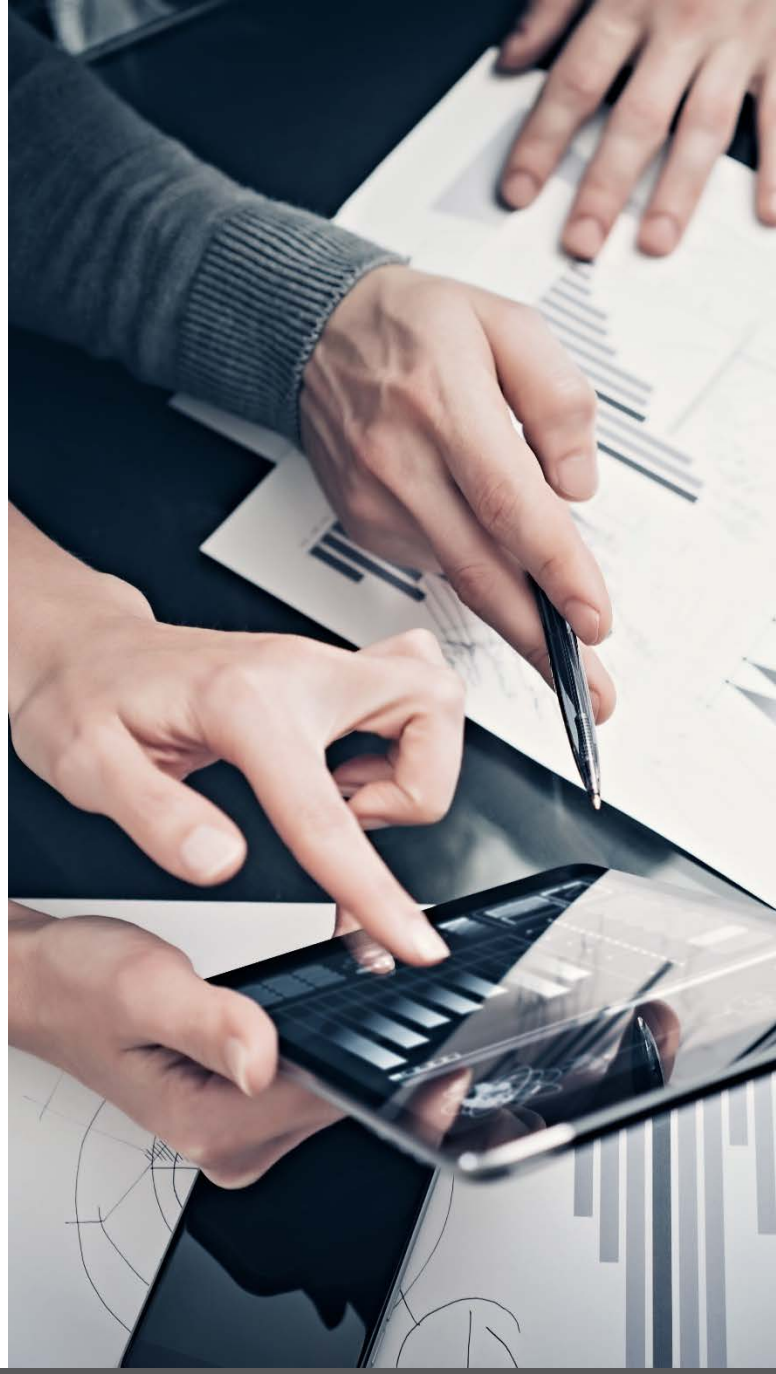
SLA Frameworks: Multilevel



- **Keeps SLAs to a manageable size**
- **Avoids unnecessary duplication**
- **Reduces the need for frequent updates**

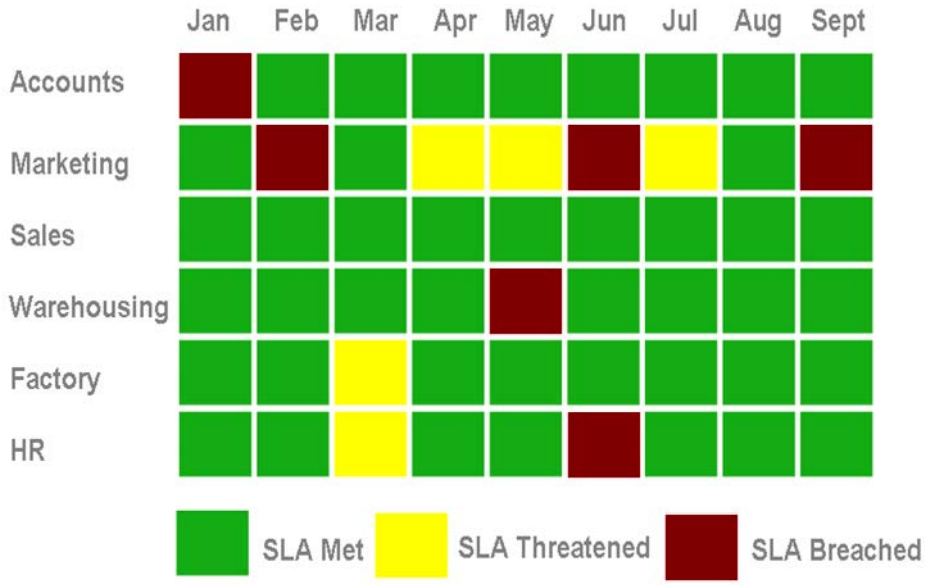
Service Level Requirements (SLRs)

- An SLR is a customer requirement for an aspect of an IT service
- High-level business-oriented requirements will be captured during the service strategy stage
- Service portfolio management and business relationship management will be involved at this stage
- Service level management continues to determine and refine SLRs when the service design stage is launched



Service Reporting

- **Periodic reports should be circulated in advance of service review meetings**
- **Reports should:**
  - Document actual achievements against targets
  - Highlight service breaches
  - Illustrate any discernible trends in service performance
  - Detail specific actions to improve service quality



SLA monitoring (SLAM) chart

Q: what is a SLAM chart?

Service Review Meetings

- Held regularly (typically every 1 to 3 months)
- Review any service-related problems over last period
- Preview any impending issues for the future
- Focus on service level breaches
  - What was the root cause?
  - How do we prevent reoccurrence?
- Agree, record, assign new actions to correct problems or input to service improvement plan (SIP)
- Review progress on existing actions
- Review targets for appropriateness

Service Improvement Plan

- **Service level management is normally the starting point for a service improvement plan (SIP)**
- **The SIP can cover all areas including:**
  - User training
  - System testing
  - Documentation
- **Service reviews will instigate improvements**
- **Normally delivered in conjunction with problem and availability management**
- **A separate budget may be required to fund improvements**
- **The SIP should be embedded in the contract for outsourced services**

SLM and Business Relationship Management

- **Business relationship management is focused on strategic perspectives:**
  - The identification of high-level business goals
  - The overall capability and desire of the service provider to meet those needs
  - Ensures that customers are appropriately involved/represented in the work of service level management
  - Customer satisfaction
- **Service level management is focused on the tactical and operational perspectives:**
  - Agreeing to and documenting specific service requirements during service design
  - Monitoring and reviewing service performance during service operation
  - Achieving agreed levels of service (which leads to customer satisfaction)

SLM Interfaces

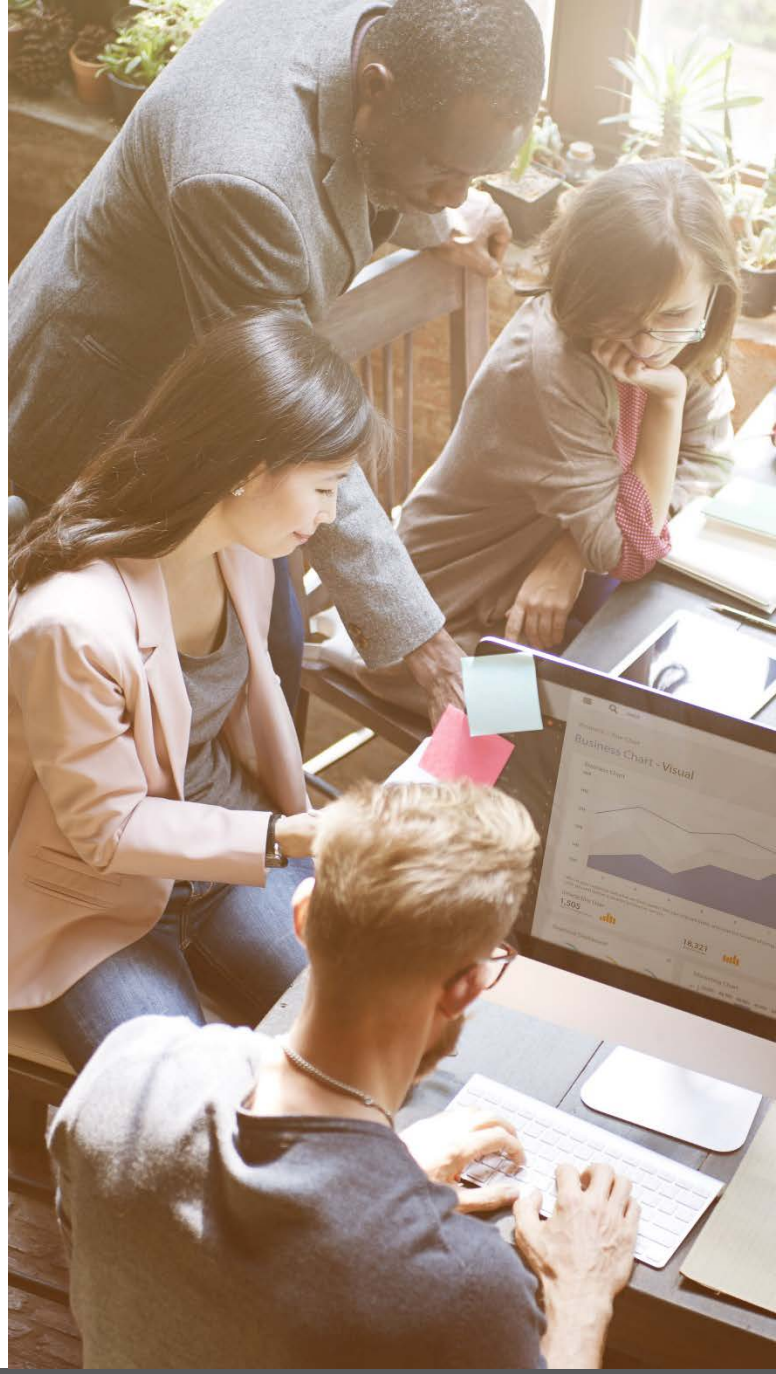
- **In addition to business relationship management, service level management has numerous other process interfaces:**
  - Service catalog management
    - Provides accurate information about services and their interfaces and dependencies

SLM Interfaces

- Incident management
  - Provides critical data to SLM to demonstrate performance against many SLA targets
  - Operates with the fulfillment of SLA targets as a critical success factor
- Supplier management
  - Works collaboratively with SLM to define, negotiate, document and agree terms of service with suppliers to support the commitments made by the service provider in SLAs
- Availability management, capacity management, IT service continuity management and information security management
  - Contribute to SLM by helping to define service level targets that relate to their area of responsibility and to validate that the targets are realistic
- Financial management
  - Works with SLM to validate the predicted cost of delivering the service levels required by the customer

Summary of Service Level Management

- **The purpose of the SLM process is to ensure that all current and planned IT services are delivered to agreed achievable targets**
- **Key concepts include:**
  - Service level agreements (SLAs)
    - Service based, customer based, multi-level
  - Operational level agreements (OLAs) and underpinning contracts (with supplier management)
  - SLA monitoring and reporting
  - Service reviews and the service improvement plans (SIPs)



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- Service Level Management

Supplier Management

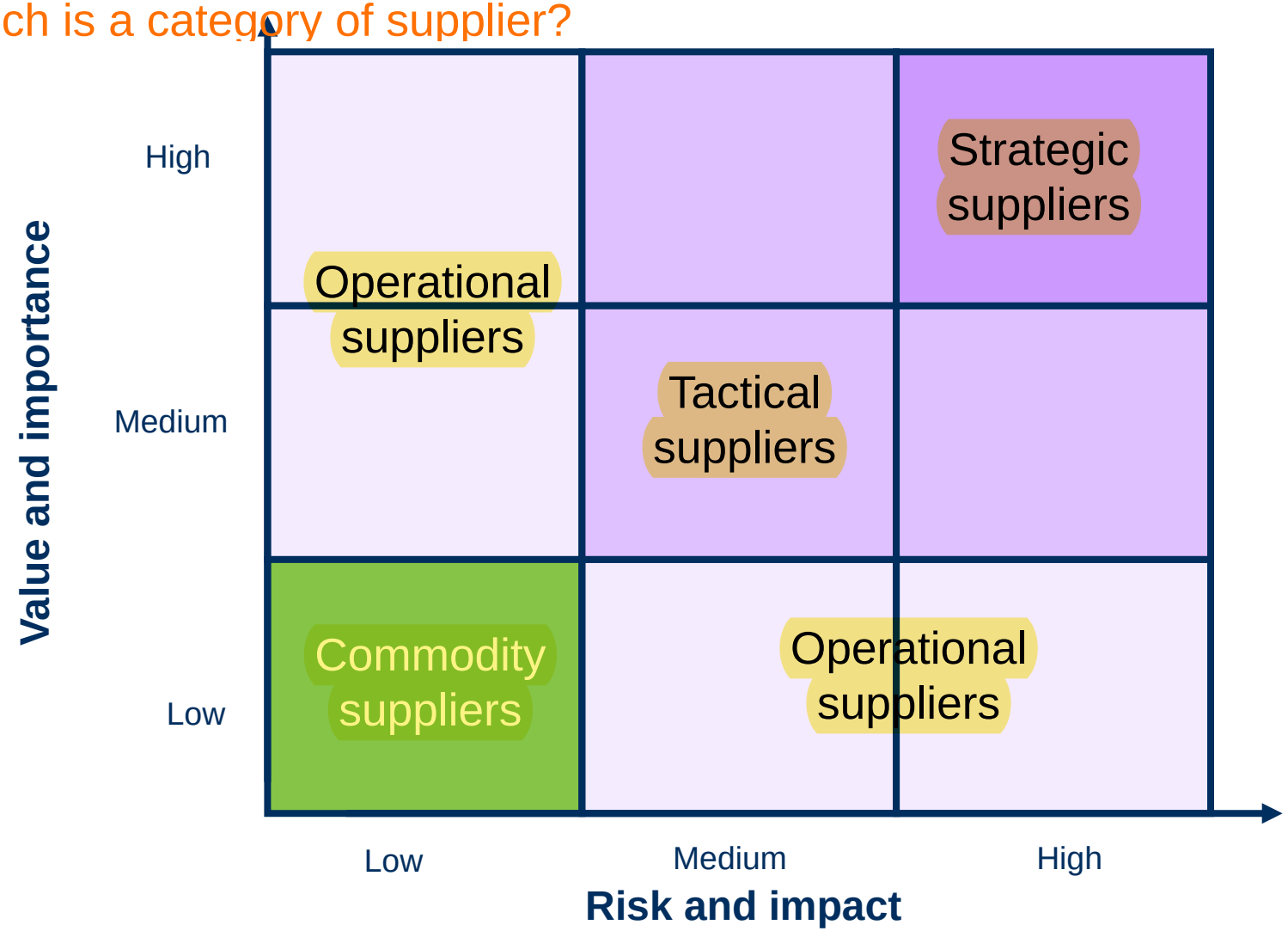
- Availability Management
- Capacity Management
- IT Service Continuity Management
- Information Security Management
- Service Design Summary

Supplier Management

- **Purpose:**
  - To obtain value for money from suppliers and ensure all contracts with suppliers meet business needs
- **Objectives:**
  - Negotiating and agreeing contracts with suppliers and managing them through their lifecycle
  - In conjunction with service level management, ensuring that agreements with suppliers are aligned to business needs and supporting agreed SLA targets
  - Ensuring value for money is obtained from suppliers and contracts
  - Maintaining a supplier policy and a supporting supplier and contract management information system (SCMIS)

Supplier Categorization

Q: Which is a category of supplier?



Learn the wording from the Handouts...

Chapter Contents

- Service Design Introduction
- Design Coordination
- Service Catalog Management
- Service Level Management
- Supplier Management

Availability Management

- Capacity Management
- IT Service Continuity Management
- Information Security Management
- Service Design Summary

Availability Management

- **Purpose:**
  - To ensure that the level of availability delivered in all IT services meets the agreed availability needs and/or service level targets in a cost-effective and timely manner
- **Objectives:**
  - Produce and maintain the availability plan and assess the impact of changes on the plan
  - Provide advice and guidance on all availability issues and assist with the diagnosis and resolution of availability related incidents and problems
  - Ensure that service availability achievements meet or exceed all of their agreed targets
  - Seek proactive ways of improving availability

Scope of Availability Management

- **The scope includes:**
  - Service availability
    - Ensure availability of end-to-end services
  - Component availability
    - Ensure availability of each component used to deliver services
    - Particularly those services and components that support vital business functions (VBFs)

- **Availability management has two elements:**
  - Reactive activities — SO activities
    - Monitoring, analyzing and managing incidents, events and problems involving unavailability
  - Proactive activities — SD & CSI activities
    - Planning, designing and improving availability

Availability Management Concepts

- **Availability** Page 109 : perform its agreed function when required
  - Percentage of uptime/downtime of service or component % in SLA
    - ((agreed service time – downtime) / agreed service time) x 100
- **Reliability**
  - Length of time between service or component failures
    - Mean time between failures (MTBF)
- **Maintainability**
  - Length of time to restore service or component
    - Mean time to restore service (MTRS)

OLA

- **Serviceability**
  - The ability of third-party suppliers to meet the terms of their contract regarding availability, reliability and maintainability

UCs

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- Supplier Management
- Availability Management

Capacity Management

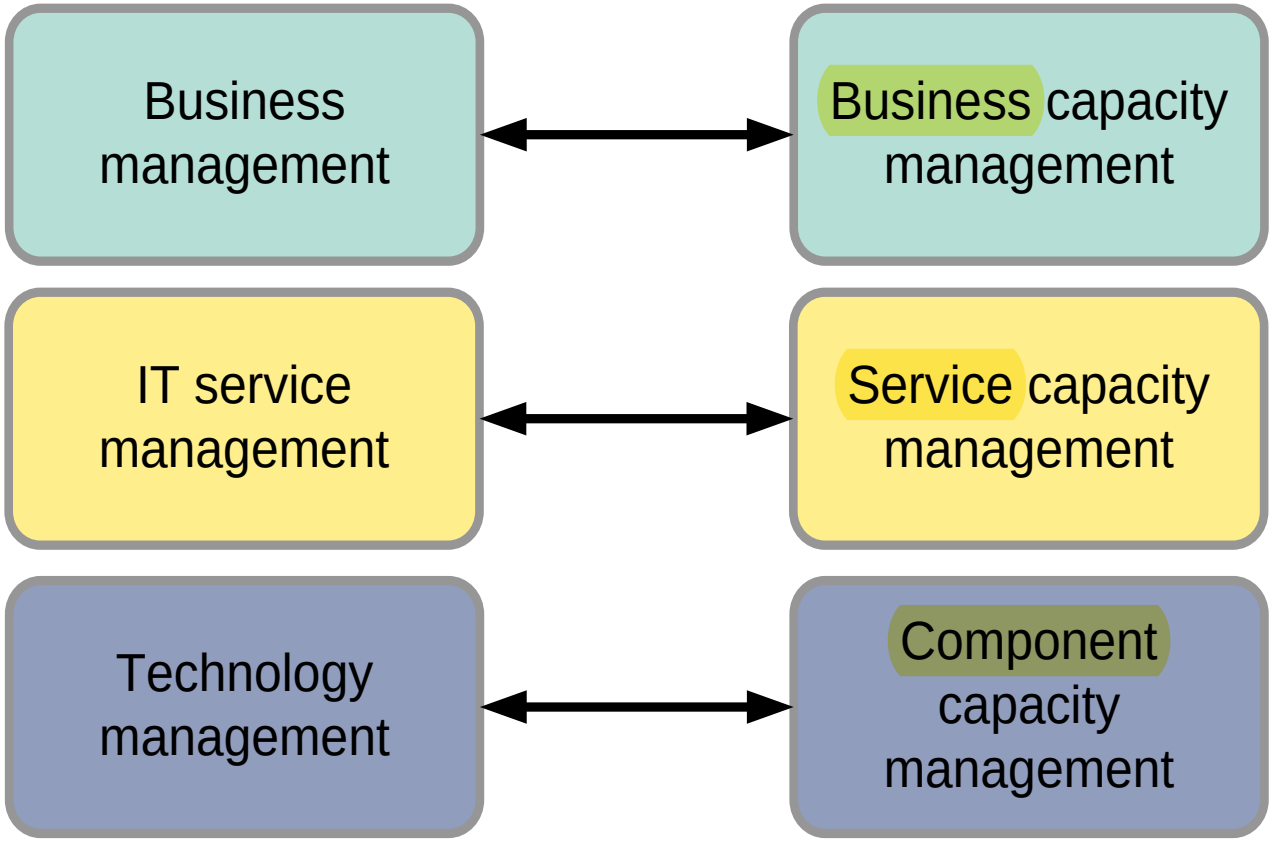
- IT Service Continuity Management
- Information Security Management
- Service Design Summary

Capacity Management

- **Purpose:**
  - To ensure that the capacity of IT services and the IT infrastructure meet the agreed capacity and performance-related requirements in a cost-effective and timely manner
- **Objectives and scope:**
  - To produce and maintain the capacity plan
  - To provide advice and guidance on all capacity related issues
  - To assist the business in determining its current and future capacity requirements
  - To ensure that service performance matches or exceeds agreed performance targets
  - To seek to proactively manage capacity
  - Should be applied to all components of IT services including hardware, software, environmental systems, processes, and even human resources

Capacity Management Subprocesses

what are the sub-processes of capacity?



Capacity Plan

- **Published in line with budgetary cycle**
  - At least annually
  - Where necessary, update more frequently
  - Volatile business plans and services may require a quarterly reissue
- **Documents the current levels of resource utilization and service performance**
- **Forecasts the future requirements for resource to support the proposed IT services**
  - Based upon consideration of the business strategy and plans

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- Capacity Management

IT Service Continuity Management

- Information Security Management
- Service Design Summary

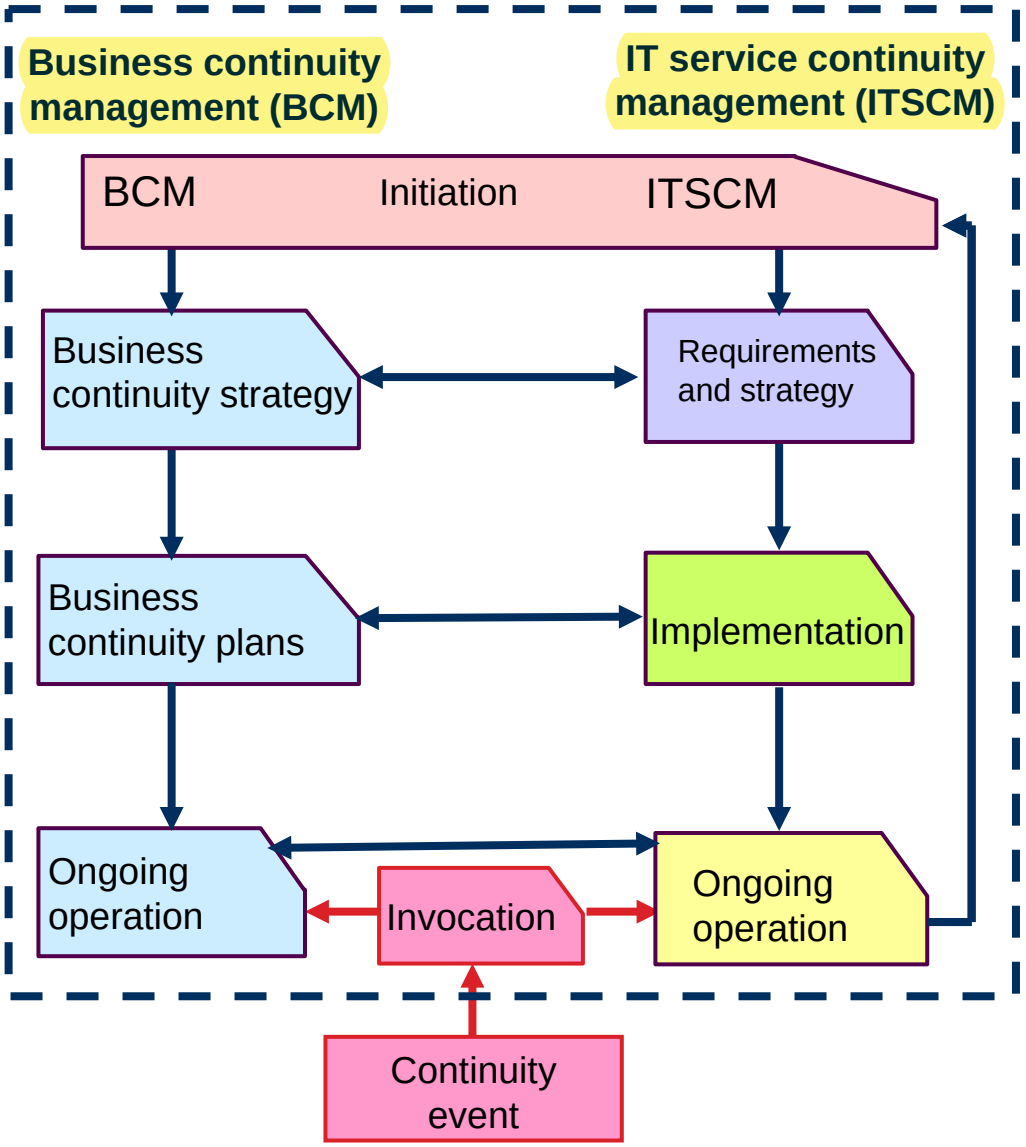
IT Service Continuity Management (ITSCM)

- **Purpose:**
  - To reduce risks to IT services to agreed acceptable levels and to plan and prepare for the recovery of IT services
- **Objectives:**
  - To maintain IT continuity and recovery plans that support business continuity plans (BCPs)
  - To conduct regular business impact analysis (BIA) exercises and risk analysis and management exercises
  - To implement the appropriate recovery mechanisms
  - To assess the impact of all changes on the IT service continuity plans and IT recovery plans
  - In conjunction with supplier management, to negotiate and agree contracts with suppliers for the provision of recovery capabilities

Q: what supports business continuity? IT Service Continuity

RTO -> Recovery Time Objective
RPO -> Recovery Point Objective

Scope of ITSCM



Key Activities

- Policy setting
- Scope
- Initiate a project

- Business impact analysis
- Risk assessment
- IT service continuity strategy

- Develop IT service continuity plans
- Develop IT plans, recovery plans and procedures
- Organization planning
- Risk reduction and recovery implementation
- Initial testing

- Education, awareness and training
- Testing
- Change management
- Review and audit

Business Impact Analysis

- **Business impact analysis (BIA) answers the following questions:**
  - How much could the organization lose by a service disruption or disaster?
  - How quickly would the losses mount up?
  - How long before the business was unable to operate?
  - When and how should services be recovered (based on a cost/benefit analysis)?

Risk Assessment

- **Risk is defined as uncertainty of outcome**
- **A threat is anything that might exploit a vulnerability**
- **Two quantifiable components:**
  - Impact – the extent to which an organization is vulnerable to a threat
  - Probability – the likelihood of a threat materializing
- **Two distinct phases:**
  - Risk assessment (identifying and understanding the risk)
  - Risk management (selecting and implementing appropriate counter-measures)
- **All organizations need to understand and assess the balance between cost of managing risks and the benefits of taking risks**

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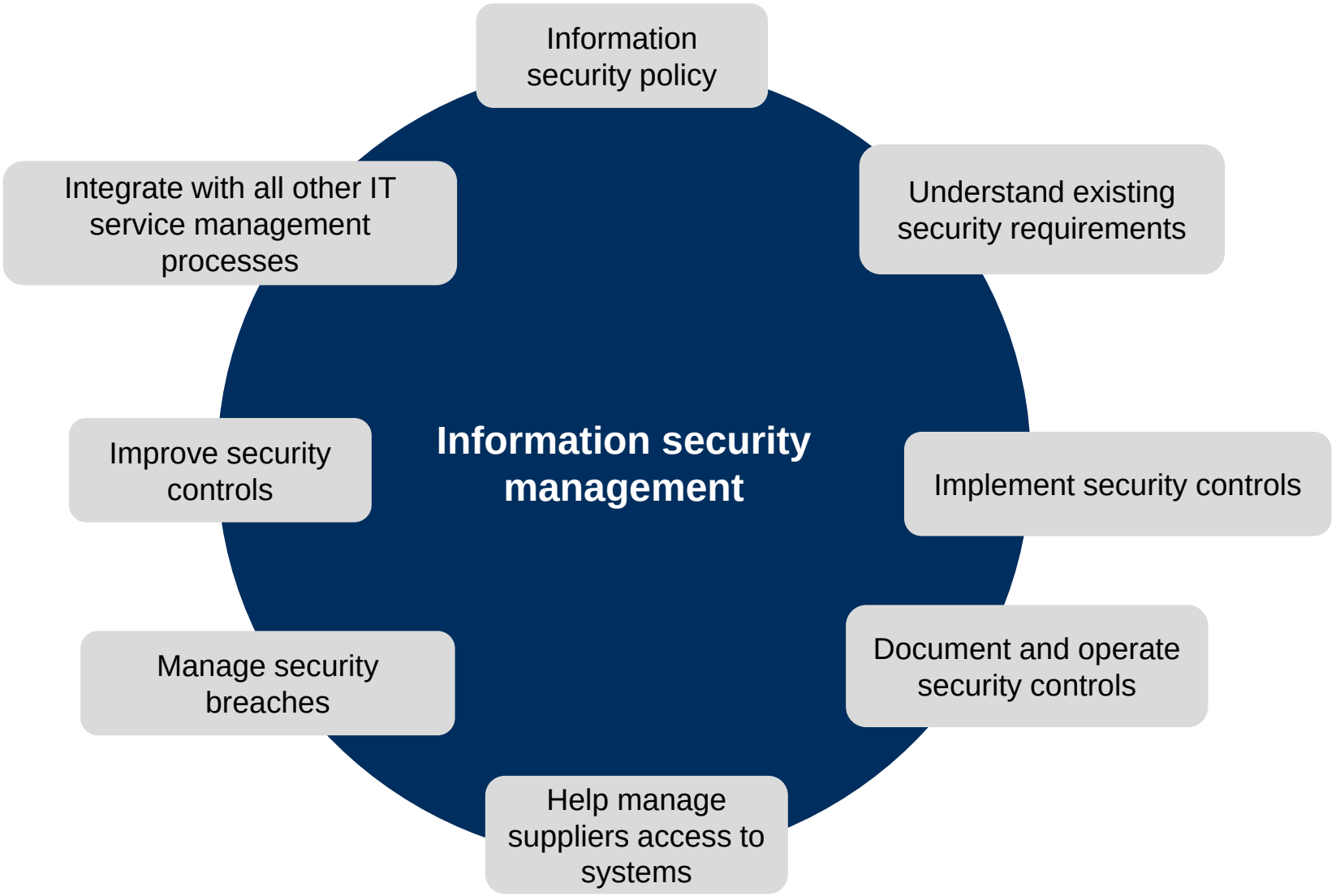
- IT Service Continuity Management
- **Information Security Management**
- Service Design Summary

Information Security Management

- **Purpose:**
  - To align IT security with business security and ensure that the confidentiality, integrity and availability of the organization's assets, information, data and IT services always matches the agreed needs of the business → SLA
- **Objectives:**
  - Be responsible for production, maintenance and enforcement of information security policy (ISP)
  - Protect the interests on those relying on information from failures relating to lack of confidentiality, integrity and availability
  - Ensure that information exchanges between various parties can be trusted

Scope of Information Security Management



Information Security Policy (ISP)

- Use and misuse of IT assets policy
- An access control policy
- A password control policy
- An e-mail policy
- An Internet policy
- An anti-virus policy
- An information classification policy
- A document classification policy
- A remote access policy
- A policy with regard to supplier access to IT service, information and components
- A copyright infringement policy for electronic material
- An asset disposal policy
- A records retention policy

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- Information Security Management

Service Design Summary

Summary of Service Design

- **Purpose:**
  - Design IT services together with governing IT practices, processes, and policies
- **Key concepts:**
  - People, processes, products and partners
  - The five aspects of service design
  - The service design package
- **Key processes:**
  - Design coordination
  - Service catalog management
  - Service level management
  - Supplier management
  - Availability management
  - Capacity management
  - IT service continuity management
  - Information security management

Assignment 3: Service Design Key Concepts

Workbook

At this time, your instructor will direct you to your Workbook

You should complete Assignment 3: Service Design Key Concepts

This assignment is an individual assignment and should take no more than 10 minutes

Service Design Sample Question 1

Quiz

1. **Which of the following statements about the service catalog is correct?**
   A. The service catalog contains a service pipeline
   B. The organizational structure of the company is recorded in the service catalog
   C. The service catalog has a business/customer view and a technical view
   D. The service catalog contains information about all the service assets

Service Design
Sample Question 2

Quiz

2. Which of the following processes would ensure that third-party vendor responsibilities are aligned to service level agreements?

1. Supplier management
2. Service level management
3. Business relationship management
4. Service catalog management

A. 2 only
B. 1 and 2
C. 1, 2, and 3
D. All the above

Service Design
Sample Question 3

Quiz

3. What is the main purpose of capacity management?

A. To monitor and report on capacity of IT services and their components

B. To ensure that all targets in service level agreements (SLAs) are met

C. To guarantee capacity levels for services and components to business customers

D. To ensure that the capacity of IT services and infrastructure meets agreed capacity and performance-related requirements

Chapter Objectives

- **Understand the purpose and objectives of the service design lifecycle phase**
- **List key concepts of service design**
- **Learn key processes within the service design lifecycle phase**
  - Purpose and objectives
  - Key concepts

Chapter 5

Service Transition

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Chapter Objectives

- **Understand the purpose and objectives of the service transition lifecycle phase**
- **List key concepts of service transition**
- **Know key processes within the service transition lifecycle phase**
  - Purpose and objectives
  - Key concepts

ITIL Service Transition Publication

- ***ITIL Service Transition*** **provides guidance on:**
  - Managing the introduction of new, modified, or retired services to meet the expectations of the business
  - Manage risk to minimize any adverse impact
  - on the business

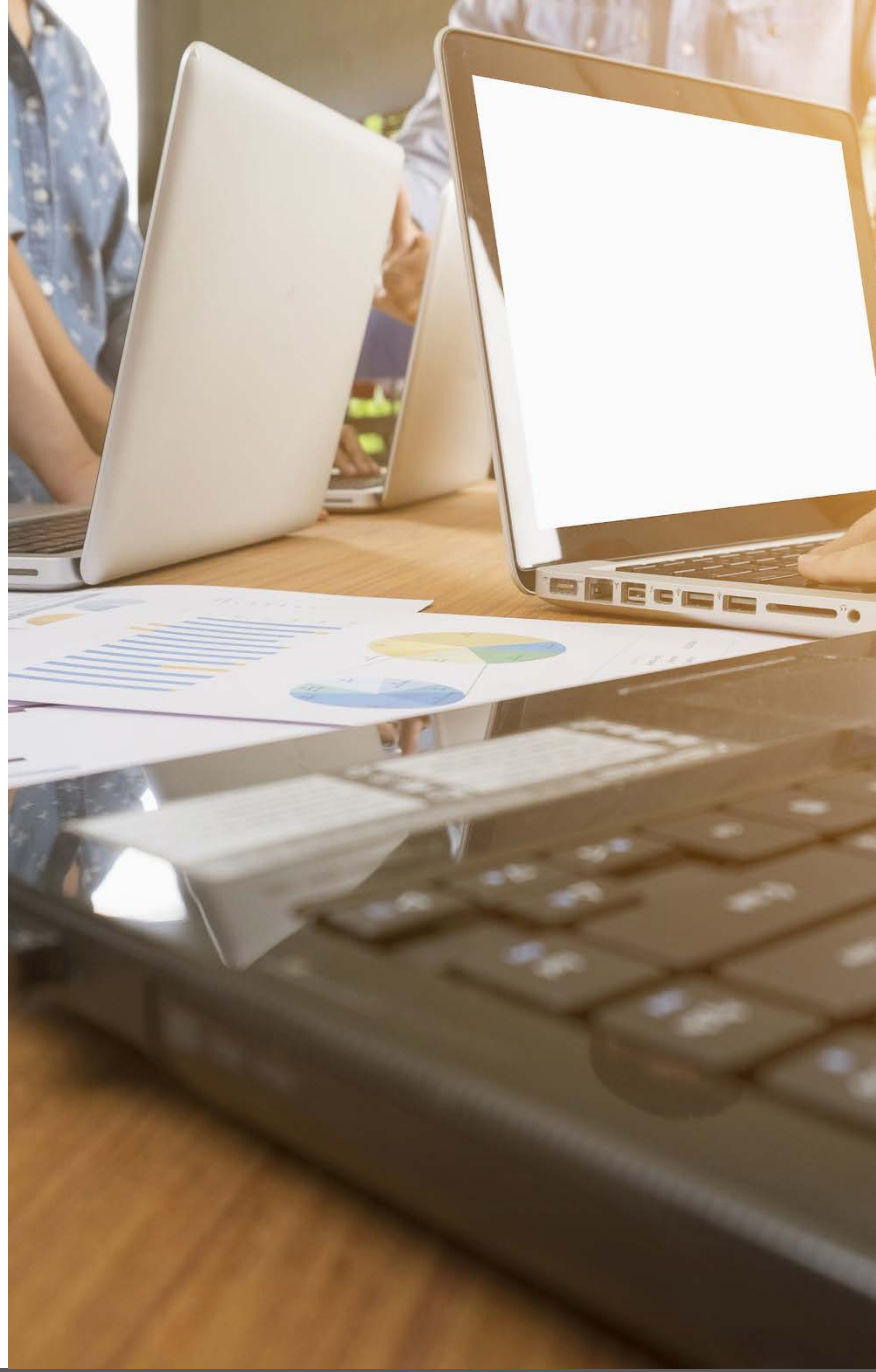
- **Processes:**
  - Transition planning and support
  - Change management
  - Release and deployment management
  - Service asset and configuration management
  - Knowledge management

SERVICE VALIDATION AND TESTING
CHANGE EVALUATION

Chapter Contents

Service Transition Introduction

- Transition Planning and Support
- Change Management
- Service Asset and Configuration Management
- Release and Deployment Management
- Knowledge Management
- Service Transition Summary



Service Transition

- **Purpose:**
  - To ensure that new, modified, or retired services meet the expectations of the business as documented in the service strategy and service design stages of the lifecycle
- **Objectives:**
  - Plan and manage service changes efficiently and effectively
  - Manage risks relating to new, changed or retired services
  - Successfully deploy service releases into supported environments
  - 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 and information about services and service assets

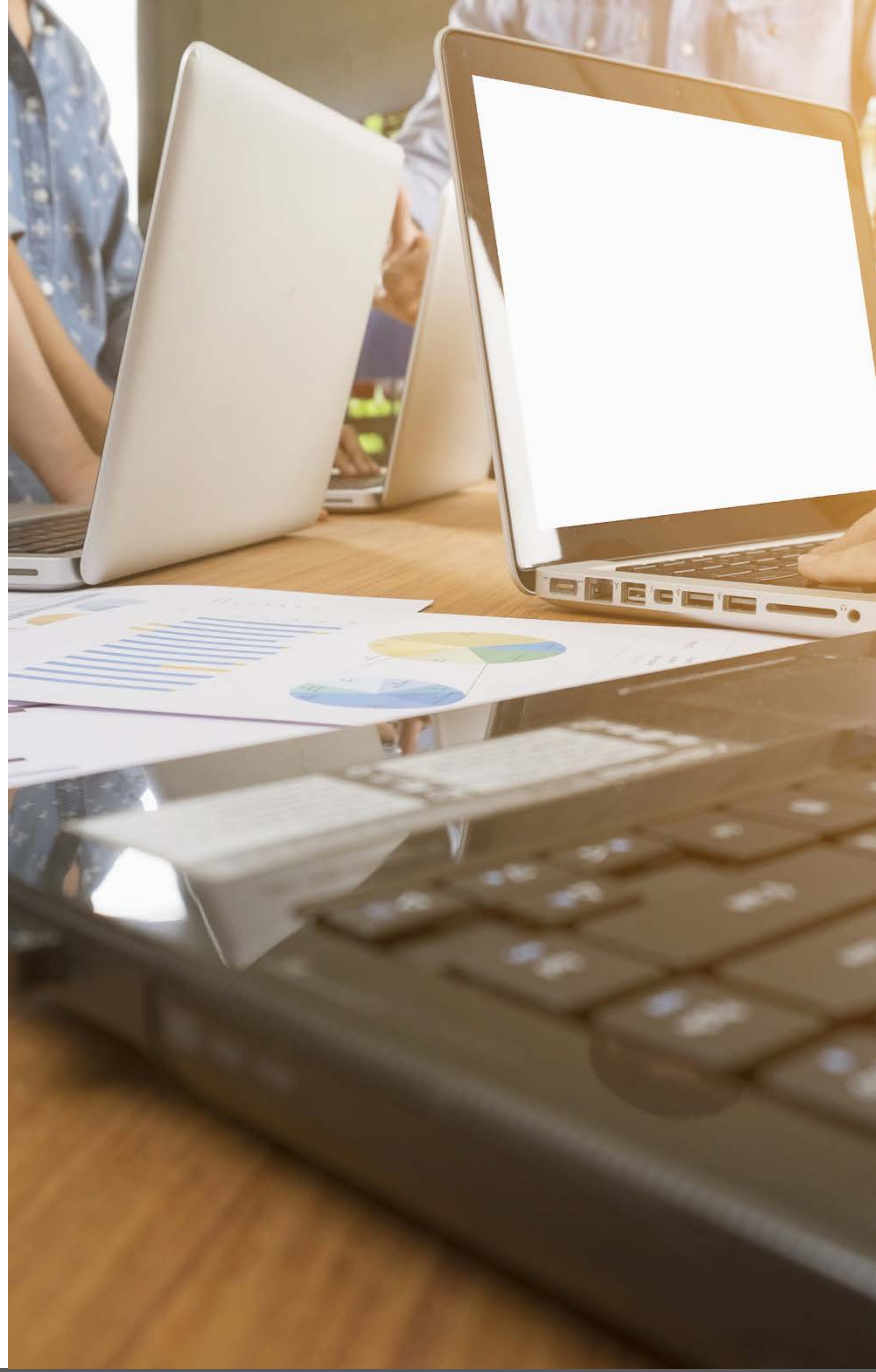
Scope of Service Transition

- **Introducing new services**
- **Changing existing services**
- **Decommissioning and discontinuing services, applications or other service components**
- **Transferring services to and from other service providers because of:**
  - Outsourcing, in-sourcing and co-sourcing decisions
  - Joint ventures
  - Down-sizing, up-sizing (right-sizing) and off-shoring
  - Merger and acquisition
- **The scope also includes the transition of changes in the service provider's service management capabilities**

Value to the Business

- **Higher volumes of successful change and an improved ability to absorb change**
- **Reduced costs by:**
  - Sharing service transition knowledge and assets
  - Better management of test and pilot environments
  - Improved control of service assets and configurations
  - Reduced delays from unexpected clashes and dependencies
- **Improved project resource estimates associated with service transition**
- **Improved setting of stakeholder expectations leading to increased confidence**

Chapter Contents



Service Transition Planning and Support

- **Purpose:**
  - To provide overall planning for service transition and to coordinate the resources that they require
- **Objectives:**
  - Plan and coordinate the resources to ensure that the requirements of service strategy encoded in service design are effectively realized in service operation
  - Coordinate activities across projects, suppliers and service teams where required
  - Establish new or changed services into supported environments within the predicted cost, quality and time estimates
  - Identify, manage and control risks to minimize the chance of failure and disruption across transition activities
  - Monitor and improve the performance of the service transition lifecycle stage

Scope of Service Transition Planning and Support

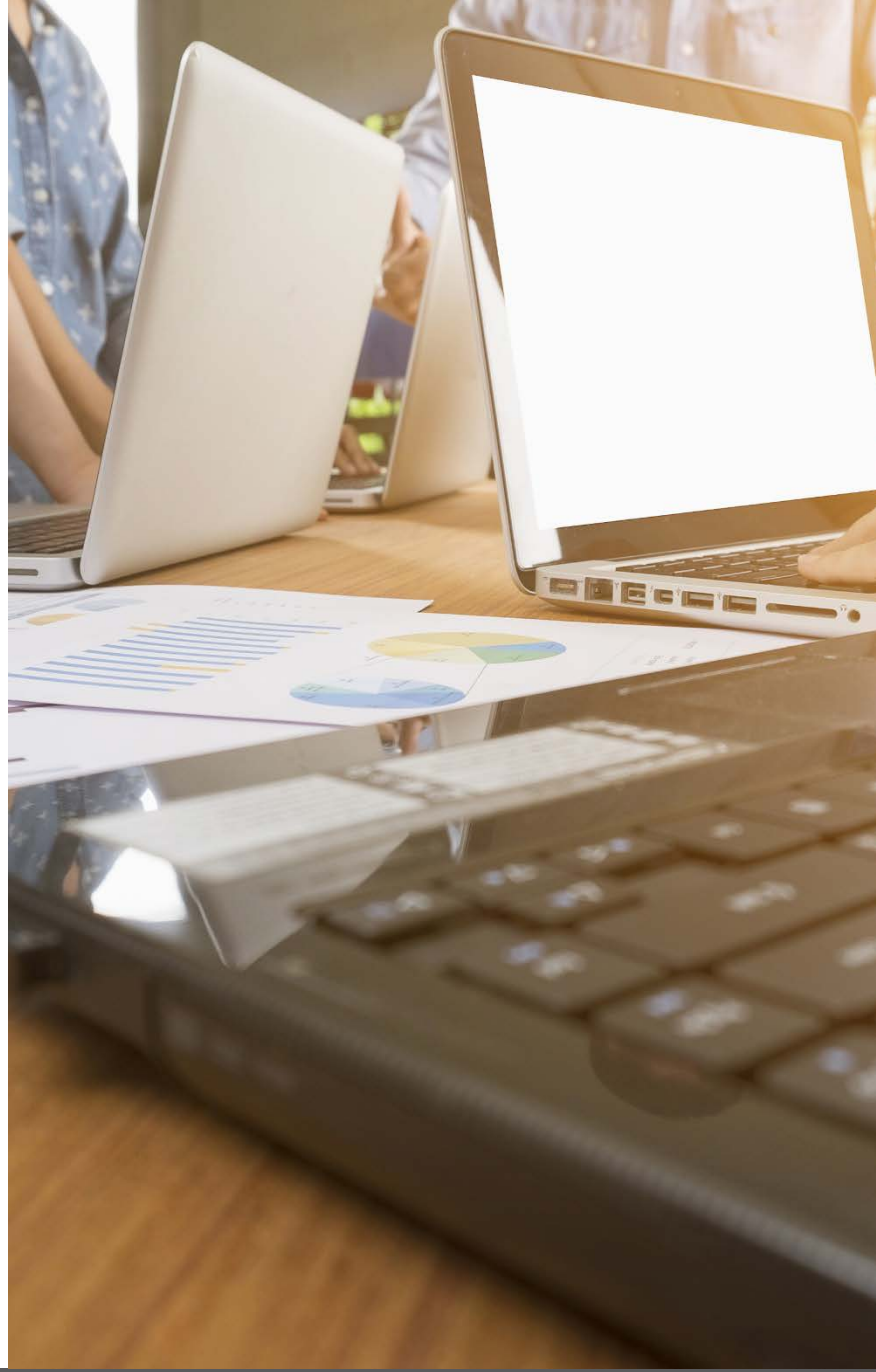
- Maintaining policies, standards and models for service transition activities and processes
- Coordinating the efforts needed to enable multiple transitions to be managed at the same time
- Reviewing and improving the performance of transition planning and support activities
- Ensuring that service transition is coordinated with program and project management, service design, and service development activities

Chapter Contents

- Service Transition Introduction
- Transition Planning and Support

Change Management

- Service Asset and Configuration Management
- Release and Deployment Management
- Knowledge Management
- Service Transition Summary



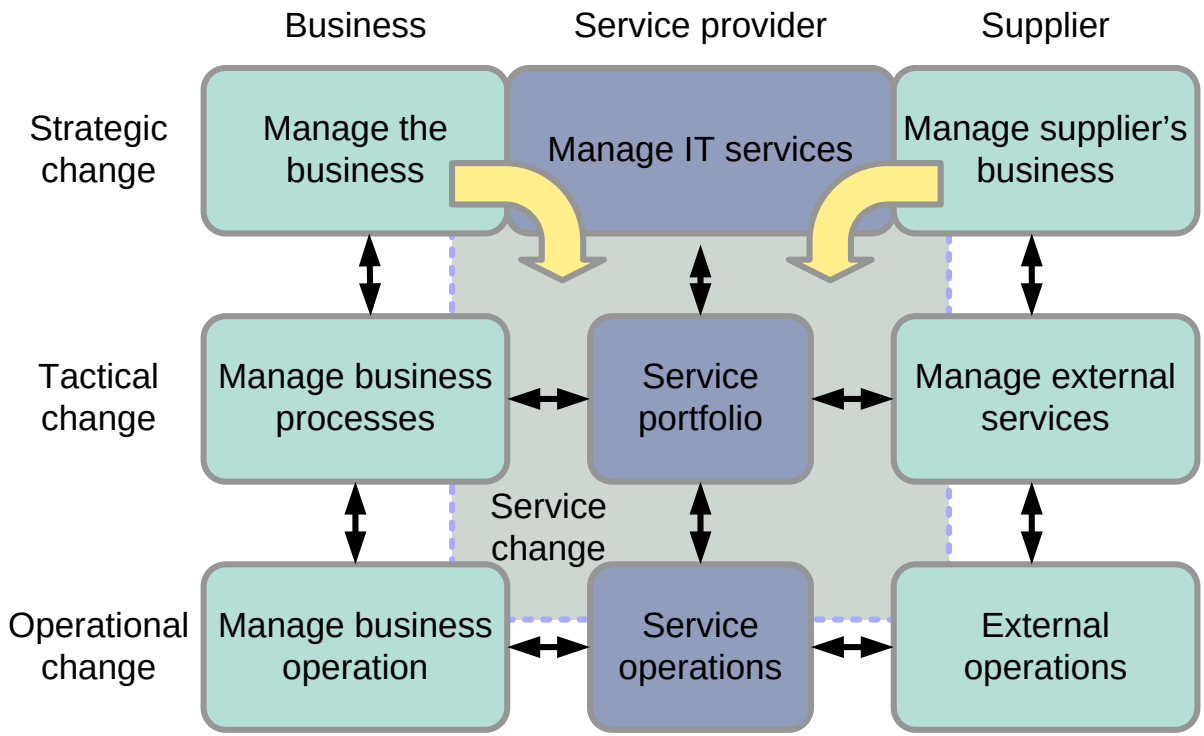
Change Management

- **Purpose:**
  - To control the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services
- **Objectives:**
  - Respond to the customer's changing business requirements while maximizing value and reducing incidents, disruption and re-work
  - Respond to the business and IT requests for change that will align the services with the business needs
  - Ensure that all changes to configuration items are recorded in the configuration management system
  - Optimize overall business risk

Scope of Change Management

Service change

- The addition, modification, or removal of anything that could have an effect on IT services



Change Requests

- **A change request is a formal communication seeking an alteration to one or more configuration items**
- **Change requests can take several forms:**
  - A request for change (RFC) document
  - A service desk call
  - A project initiation document
  - A change proposal for a strategic change
- **Change record**
  - Contains the details of a change and documentation of the lifecycle of a single change
  - Created for every request for change that is received, even those that are subsequently rejected
  - Should reference the configuration items that are affected by the change and may be stored in the CMS or elsewhere in the SKMS

Config. Mgmt. Sys.

Service Knowledge Management Sys.

Change Proposals

- **Major changes may require a change proposal, created as part of the service portfolio management process**
- **Prior to being authorized, these should be reviewed for potential impact on other services, on shared resources and the change schedule**
- **The proposal should include:**
  - A high-level description, including business outcomes and levels of warranty and utility required
  - A full business case
  - An outline schedule
- **Specific requests for change (RFCs) associated with the proposal will then be raised and authorized in the normal way**

Three Types of Service Change

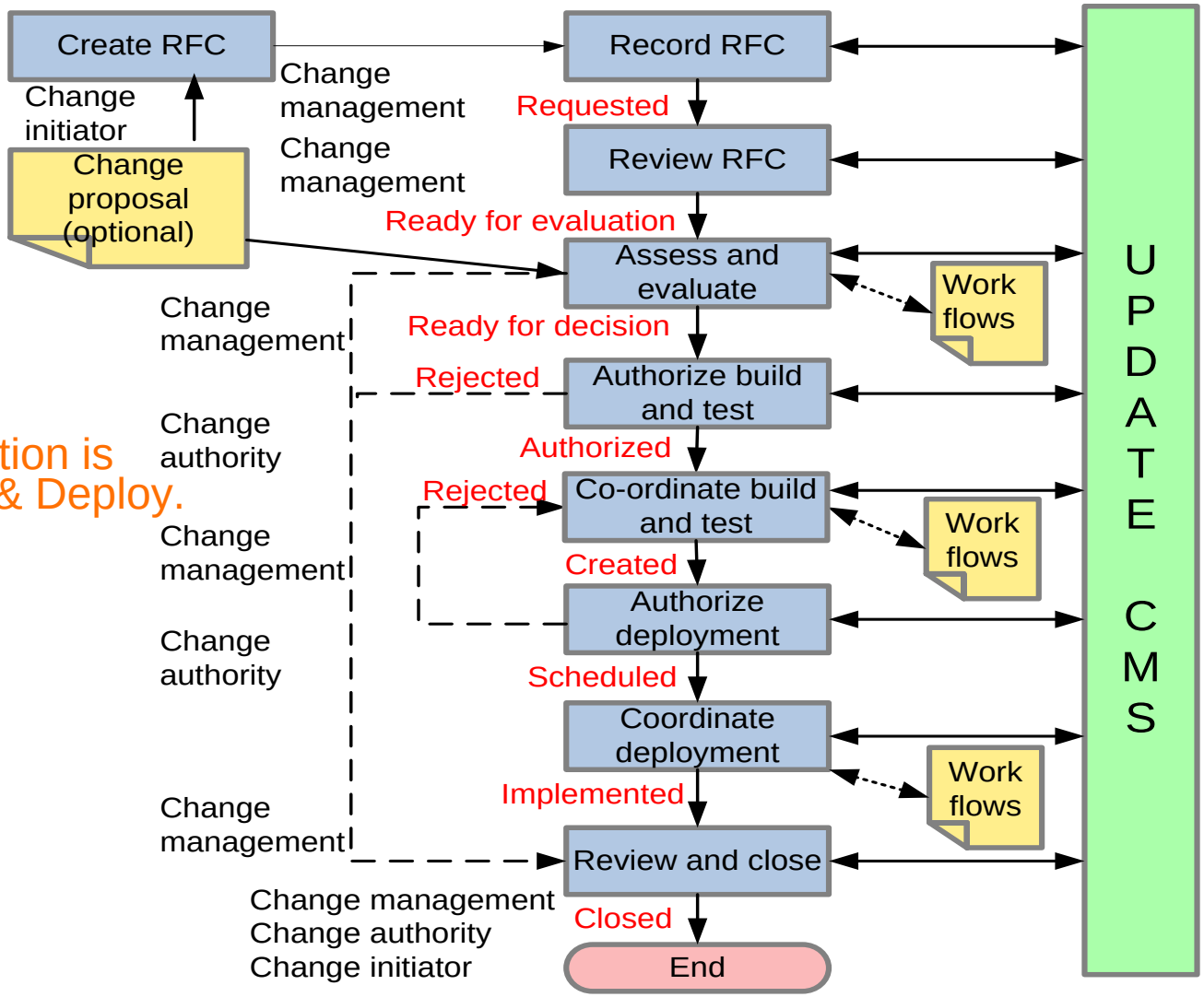
- **Normal change**
  - A service change that is unique and needs to be assessed to determine appropriate levels of risk and implementation procedures
- **Standard change**
  - A pre-authorized change that is low risk, relatively common and follows a procedure or work instruction
- **Emergency change**
  - One that must be implemented as soon as possible
    - For example, to resolve a major incident or implement a security patch

if a change is not standard or emergency, it is a normal change...

Business as Usual

Q: Types of Change?

Normal Change Process



Q: Co-ordination is done by Rel & Deploy.

Change Advisory Board (CAB)

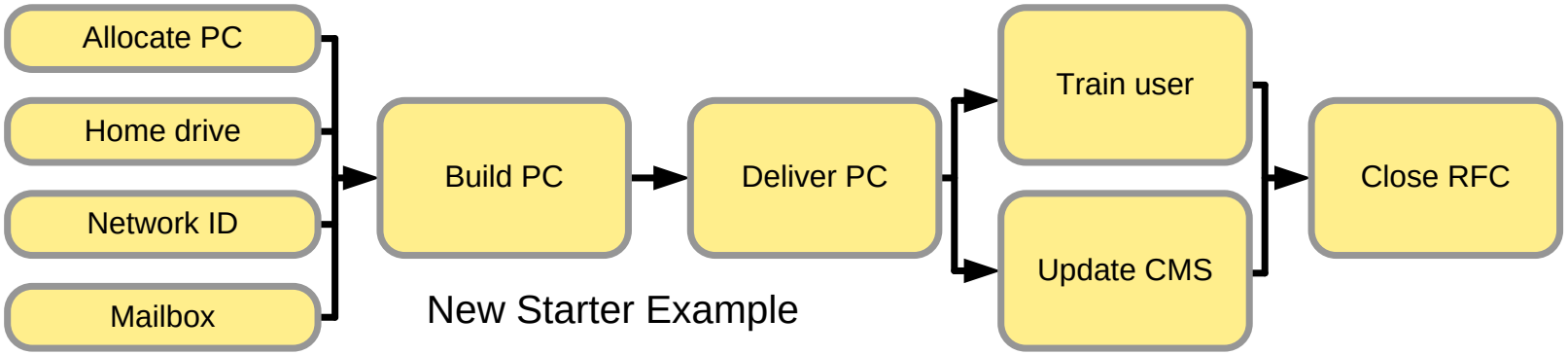
- **A body that exists to:**
  - Support the authorization of changes
  - Assist change management to assess, evaluate, and prioritize changes
- **Members of the CAB are chosen so that relevant changes can be assessed from both a business and technical viewpoint**
- **It is important to emphasize that the CAB:**
  - Will be composed according to the changes being discussed
  - May vary in make-up
    - Even at a single meeting
  - Is likely to include other service management process owners
  - Should involve suppliers when it would be useful
  - Should reflect both user and customer views
  - Would not be involved in every change request

Q: Who will review Emergency changes ? -> CAB

ECAB advises urgently and then CAB does the review...

Standard Changes

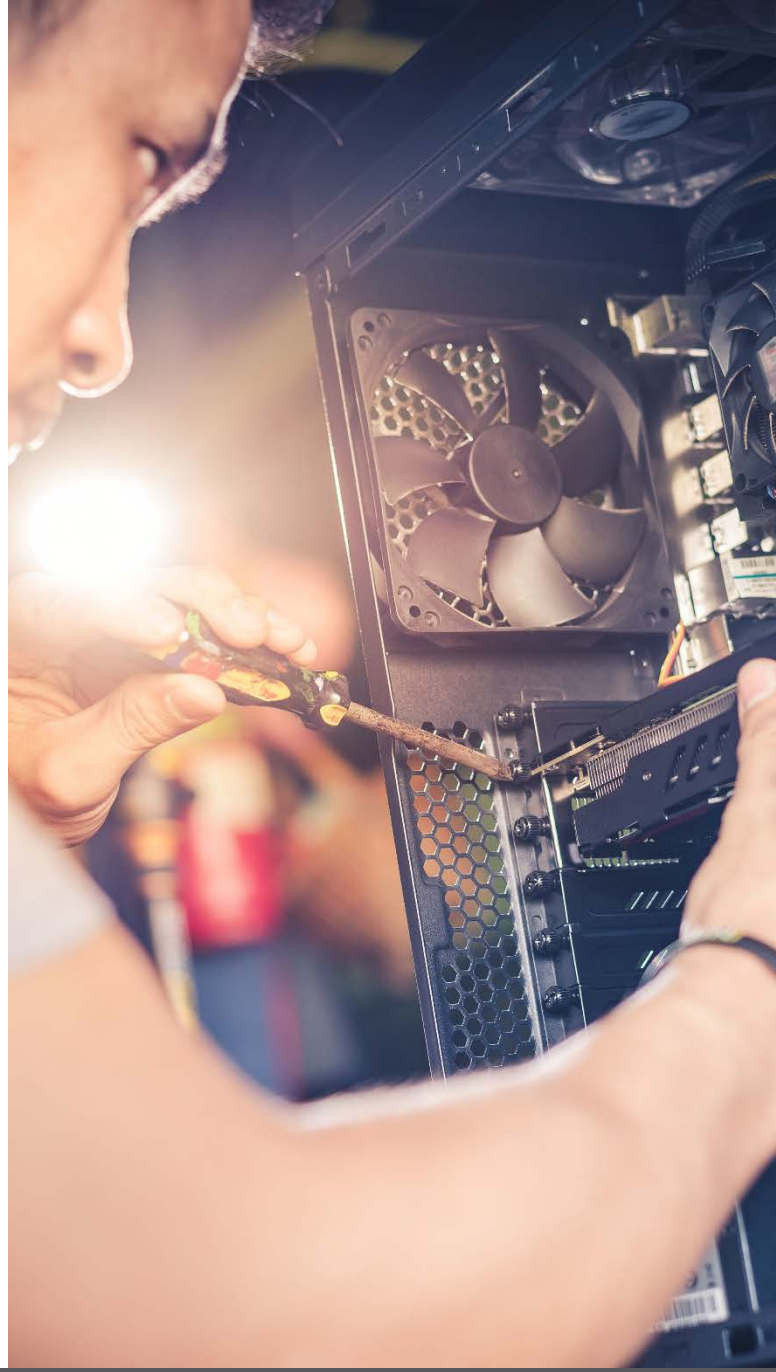
- **The characteristics of a standard change include:**
  - There is a defined trigger to initiate the RFC
  - The tasks are well known, documented and proven
  - Pre-authorized by change management
  - Budgetary approval will be given or in the control of the requester
  - Usually low risk, and always well-understood risk
  - Often built around change models predefined set of steps in chrono order and an escalation path.



Q: There is NO complaints procedure in a change model !!!

Emergency Changes

- Reserved for changes intended to repair an error in an IT service that is negatively impacting the business to a high degree
- Disruptive and error-prone so they should be kept to the absolute minimum
- Emergency change procedures must ensure that management control is not sacrificed
- Documentation may be done retrospectively
- The emergency change advisory board (ECAB) assists in the evaluation and approval of emergency changes



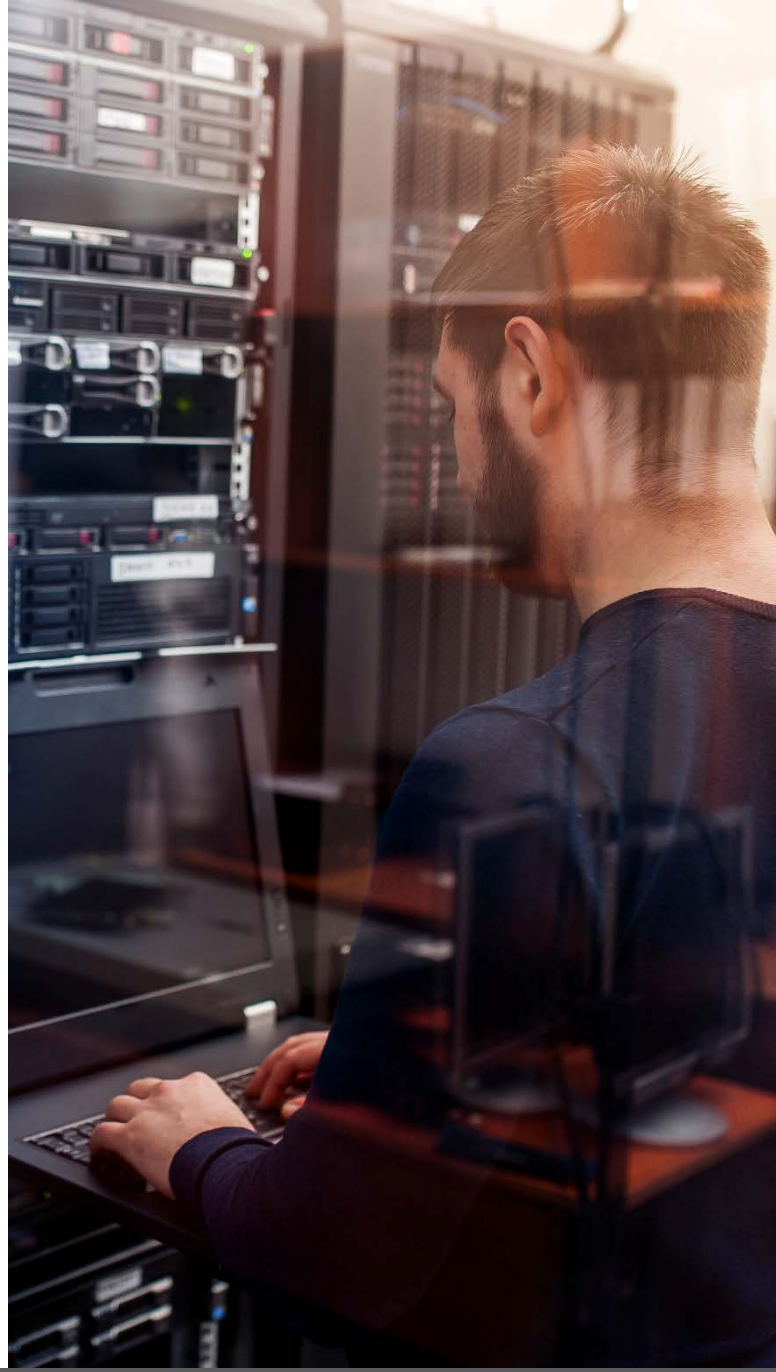
Change Model

- **A predefined way to deal with particular types of changes such as:**
  - Standard changes
  - Emergency changes
  - Changes that have specific requirements
    - Such as testing
- **A model will typically include:**
  - Steps that should be taken to handle the change, including handling issues and unexpected events
  - The chronological order in which these steps should be taken, with any dependences or co-processing defined
  - Responsibilities
    - Who should do what
  - Timescales and thresholds for completion of the actions
  - Escalation procedures, contacts, and timescales

Change Remediation

- **Actions taken to recover after a failed change or release**
- **Changes should not be authorized until the appropriate remediation options have been identified, agreed, tested and documented**
- **Options include:**
  - Reversion to a baselined state using a back-out plan
  - Reworking the change or applying another one if the original change is irreversible
  - In severe conditions, it may be necessary to invoke the business continuity plan
- **If remediation occurs, the change review should then consider the next course of action** → CAB

  Remediation plans are assessed prior to Change Approval



Change Management Interfaces

- **Service asset and configuration management**
- **Release and deployment management**
  - Ensure successful implementation of changes into the live environment
- **Transition planning and support**
  - To ensure that there is a coordinated overall approach to managing service transitions
- **Problem management**
  - Changes are often required to implement workarounds and to fix known errors
- **IT service continuity management**
  - Plans should be updated via change management and all changes must be assessed for their potential impact on continuity plans
- **Information security management**
  - Every significant change will be assessed for its potential impact on the security plan

Change Management Interfaces With Other Areas

- **Business program and business project management teams**
  - To ensure that change issues, aims, impacts, and developments are exchanged and cascaded throughout the organization
- **Project management**
  - Must work in partnership to align all the processes and people involved in service change initiatives
- **External suppliers**
  - In collaboration with supplier management

Summary of Change Management

- **The purpose of change management is to control the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services**
- **Change management includes the concepts of:**
  - Types of change request and change proposals
  - Service change types and change models
  - The change advisory board and emergency change advisory board
  - Remediation planning
- **Change management must also ensure that changes are recorded and evaluated, and that authorized changes are prioritized, planned, tested, implemented, documented and reviewed in a controlled manner**

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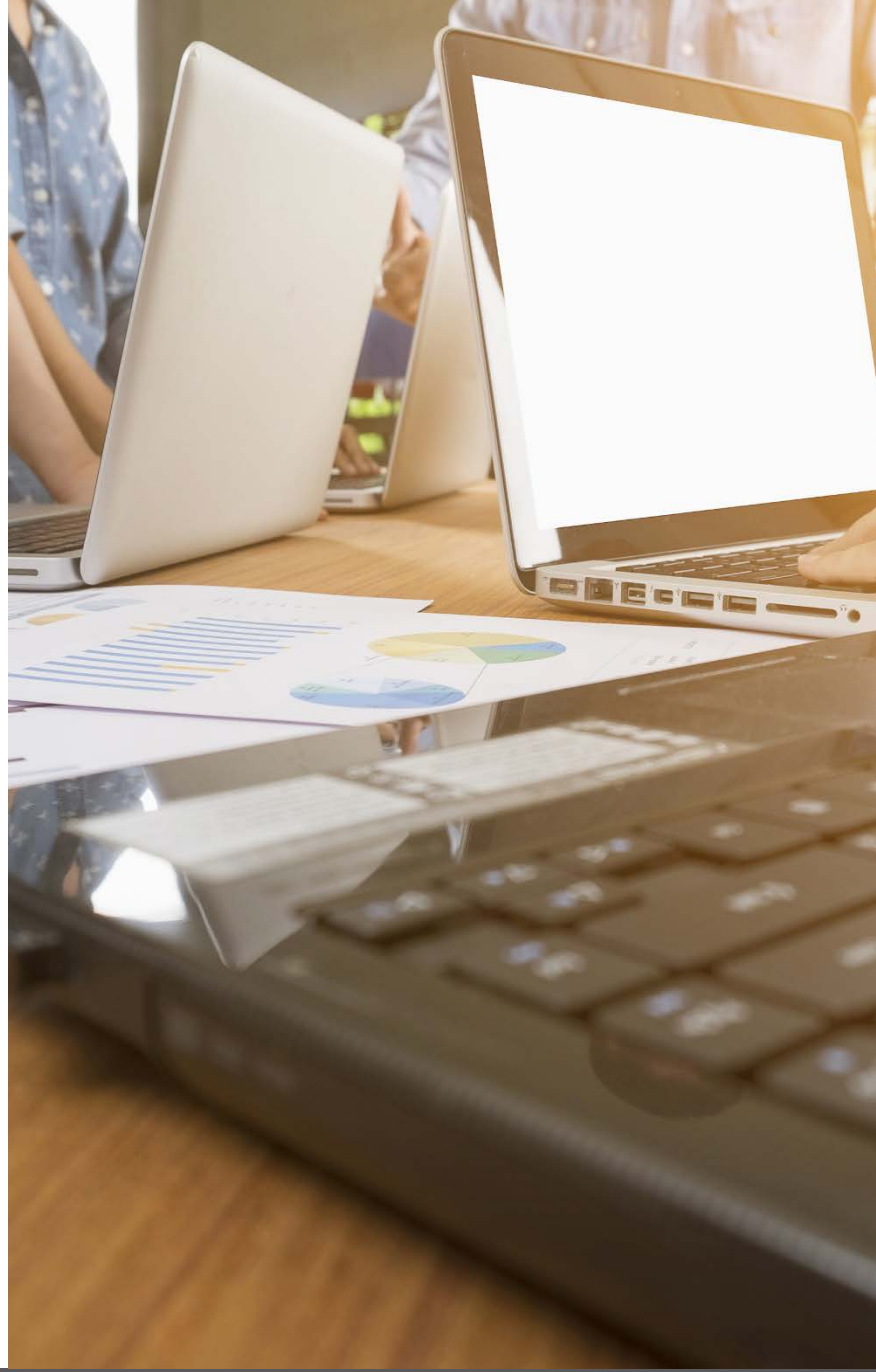


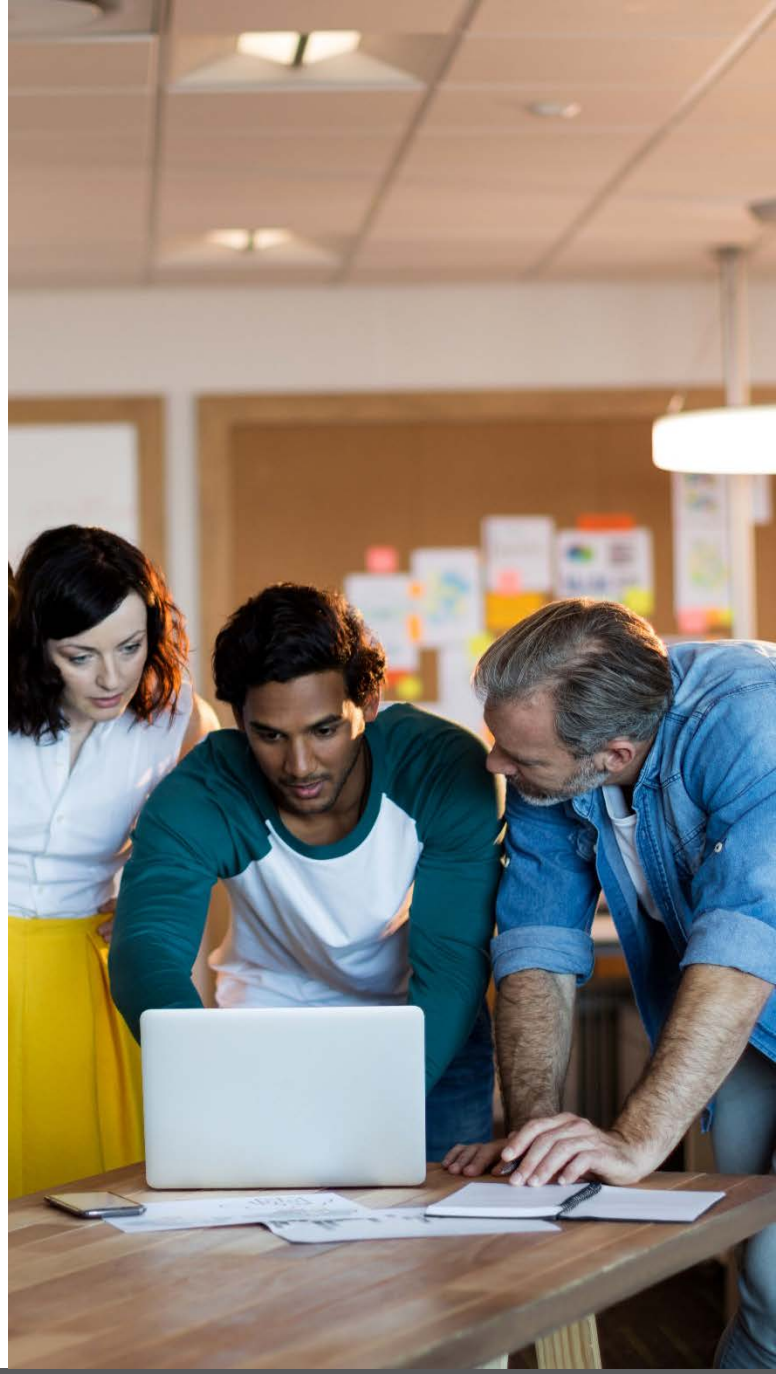
Service Asset and Configuration Management

- **Purpose:**
  - To ensure that assets required to deliver services are properly controlled and accurate and reliable information about those assets is available when and where it is needed
- **Objectives:**
  - Ensure that assets under the control of the IT organization are identified, controlled and properly cared for throughout their lifecycle
  - Account for, manage and protect the integrity of the assets through the service lifecycle in conjunction with change management and by maintaining an accurate and complete configuration management system (CMS)
  - Support efficient and effective service management processes by providing accurate configuration information to enable people to make decisions at the right time

Scope of Service Asset and Configuration Management

- **The complete lifecycle of every service asset that can be managed, ensuring they are identified, baselined and changes to them are controlled**
- **Interfaces to internal and external service providers where there are assets and configuration items that need to be controlled**
  - For example, shared assets
- **Providing a configuration model of services by recording the relationships between services and service assets**
- **May also include an interface to the asset register normally under the control of financial management**

shape or form of what it looks like...



Configuration Item (CI)

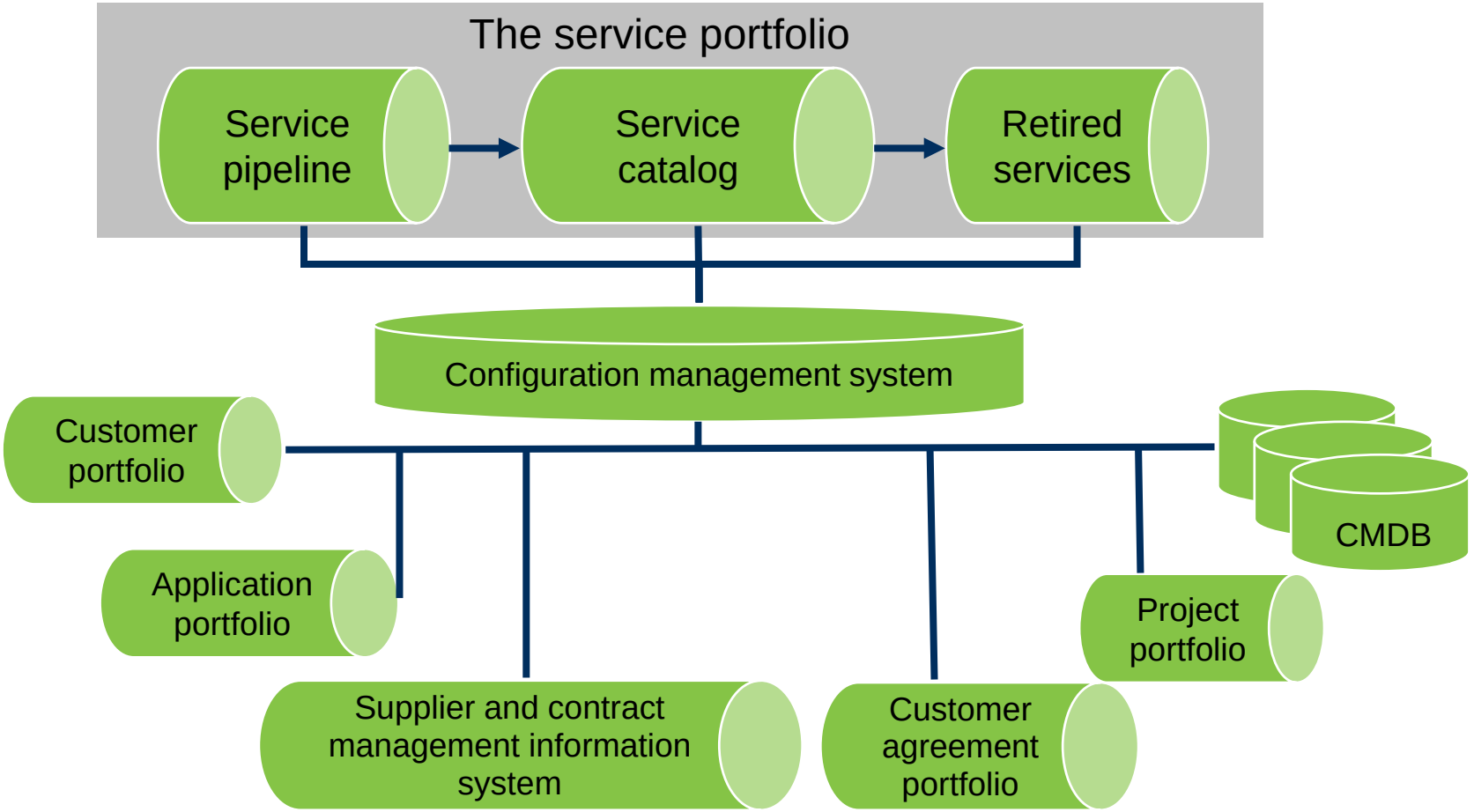
- **Any component or other service asset that needs to be managed in order to deliver an IT service**
- **Types of CIs include:**
  - IT services
  - Hardware
  - Software
  - Buildings
  - People
  - Formal documentation such as SLAs and process documentation
- **Relevant details about CIs are called attributes**

Configuration Management System (CMS)

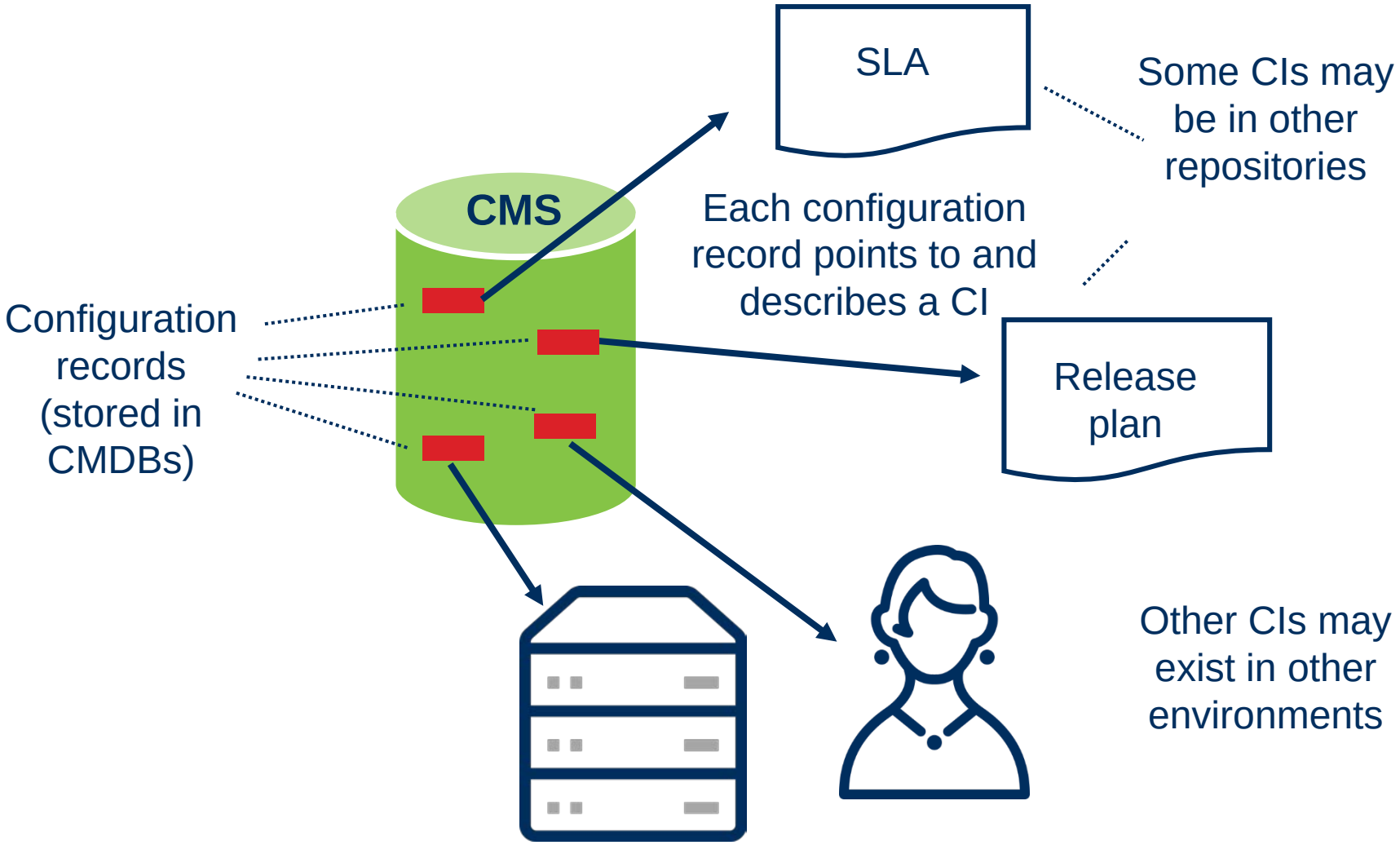
- **A set of tools and databases used to manage all of the IT service provider's configuration data**
- **May contain information about incidents, problems, known errors, changes, and releases**
- **Configuration management database (CMDB)**
  - Stores configuration records containing attributes of CIs and their relationships
  - The CMS may be composed of one or more CMDBs
- **Configuration baseline**
  - Configuration of a service, product, or infrastructure that has been formally reviewed and agreed
  - Serves as the basis for future activities
  - Can only be changed through formal change procedures

Configuration Management System (CMS)

- Business portfolio is not the part of CMS / or link with the Service Portfolio.
- **CMS also has an interface to the service portfolio to allow visibility between services and the service assets.**

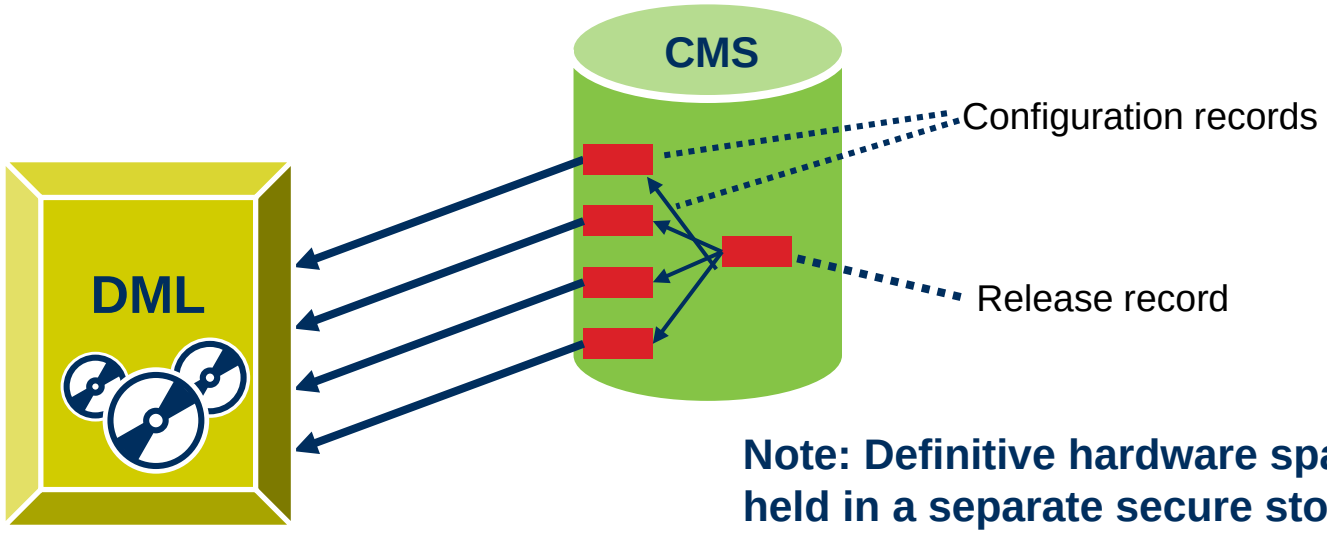


Configuration Management System (CMS)



Definitive Media Library (DML)

- **A secure library in which the definitive authorized versions of all media CIs are stored and protected**
- **Contents include:**
  - Definitive copies of all controlled software and license information
  - Definitive copies of all controlled documentation



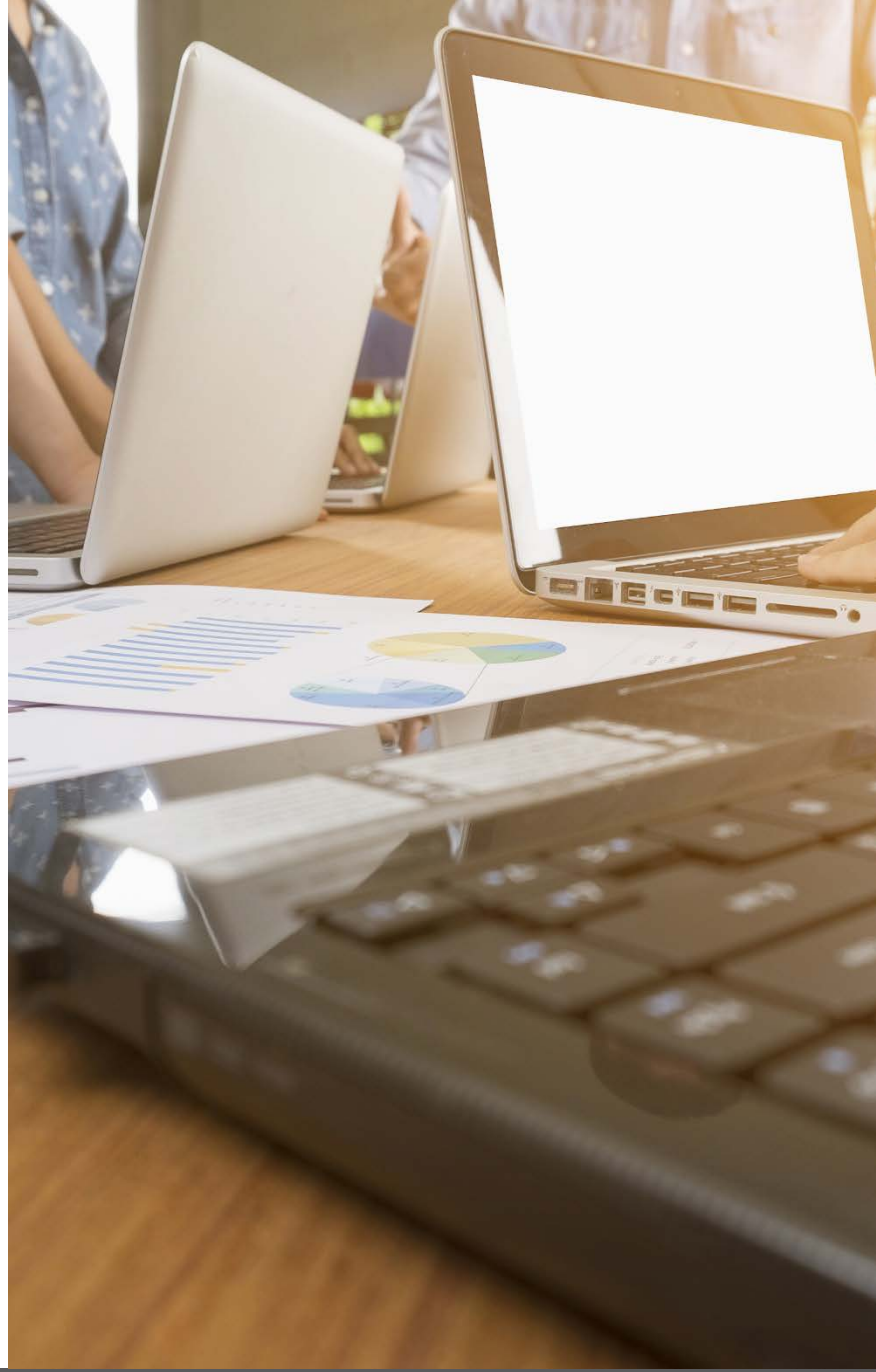
Note: Definitive hardware spares should be held in a separate secure storage area and details recorded in the CMS

Chapter Contents

- Service Transition Introduction
- Transition Planning and Support
- Change Management
- Service Asset and Configuration Management

Release and Deployment Management

- Knowledge Management
- Service Transition Summary



Release and Deployment Management

- **Purpose:**
  - To plan, schedule and control the build, test and deployment of releases and to deliver new functionality required by the business while protecting the integrity of existing services
- **Objectives:**
  - Define and agree release and deployment management plans with customers and stakeholders
  - Create test release packages ensuring that the new or changed service is capable of delivering the agreed utility and warranty
  - Deploy release packages following an agreed plan and schedule
  - Record and manage deviations, risks and issues related to the new or changed service and take necessary corrective action
  - Ensure that knowledge transfer takes place
    - To customers and users
    - To operations and support staff

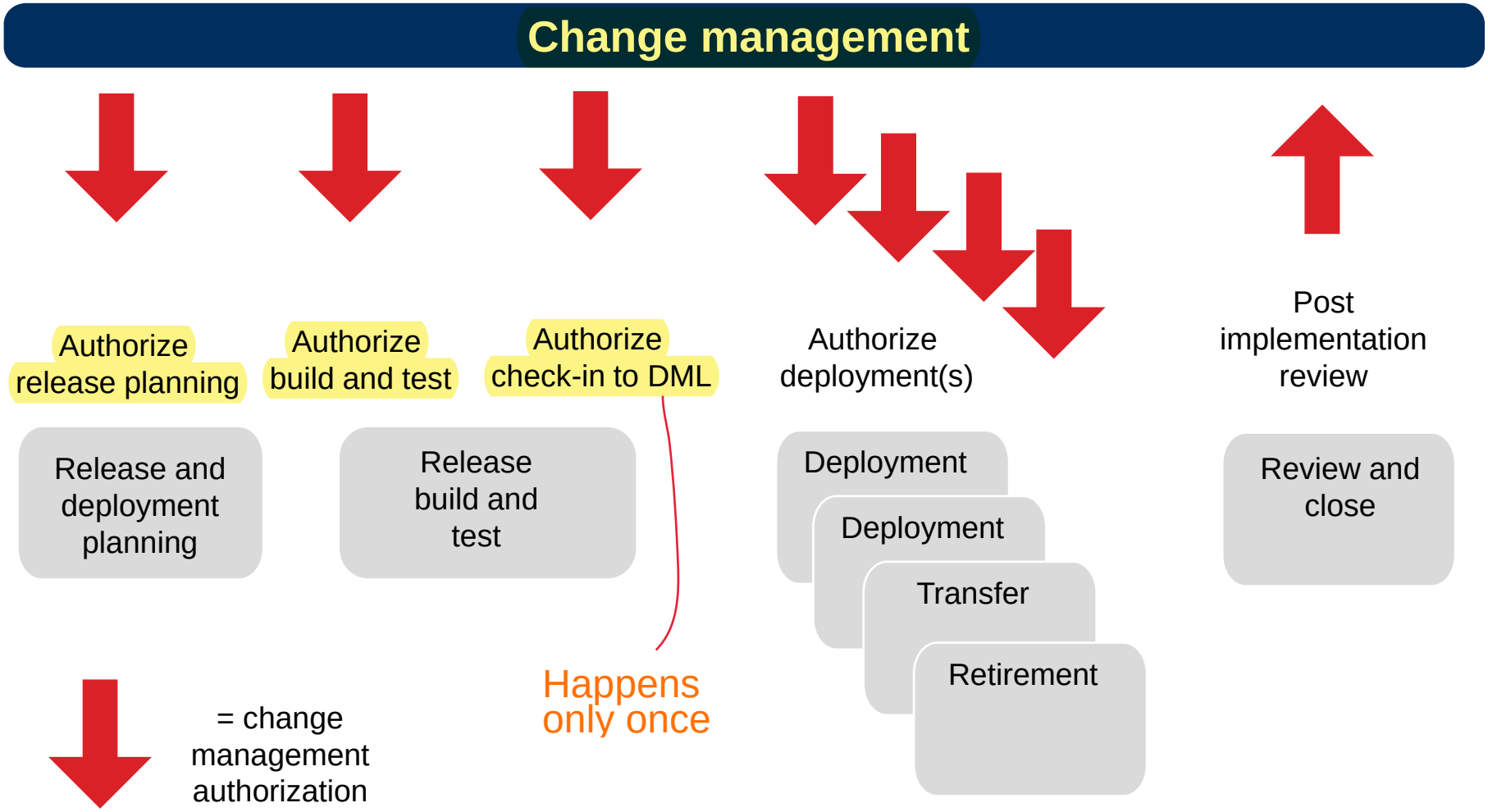
Scope of Release and Deployment Management

- **The processes, systems and functions to package, build, test, and deploy a release into live use**
- **Establishing the service specified in the service design package**
- **Formally handing the service over to the service operation functions**
- **Also included are all CIs required to implement a release**
  - Physical assets
    - Servers or networks
  - Virtual assets
    - Virtual servers or virtual storage
  - Applications and software
  - Training for users and IT staff
  - Services, including all related contracts and agreements

Release Policy

- **Establish the rules around a release:**
  - Unique identification
  - Roles and responsibilities
  - Frequency of types of releases
    - Major
    - Minor
    - Emergency
  - Approach to accepting and grouping changes into a release
  - The requirement to only use software assets from the DML
  - Mechanisms for effective and efficient handling of release stages
  - Use and maintenance of configuration management database
  - Entry and exit criteria leading to authorization of a release
  - Handover to operations and early life support

The Four Phases of Release and Deployment



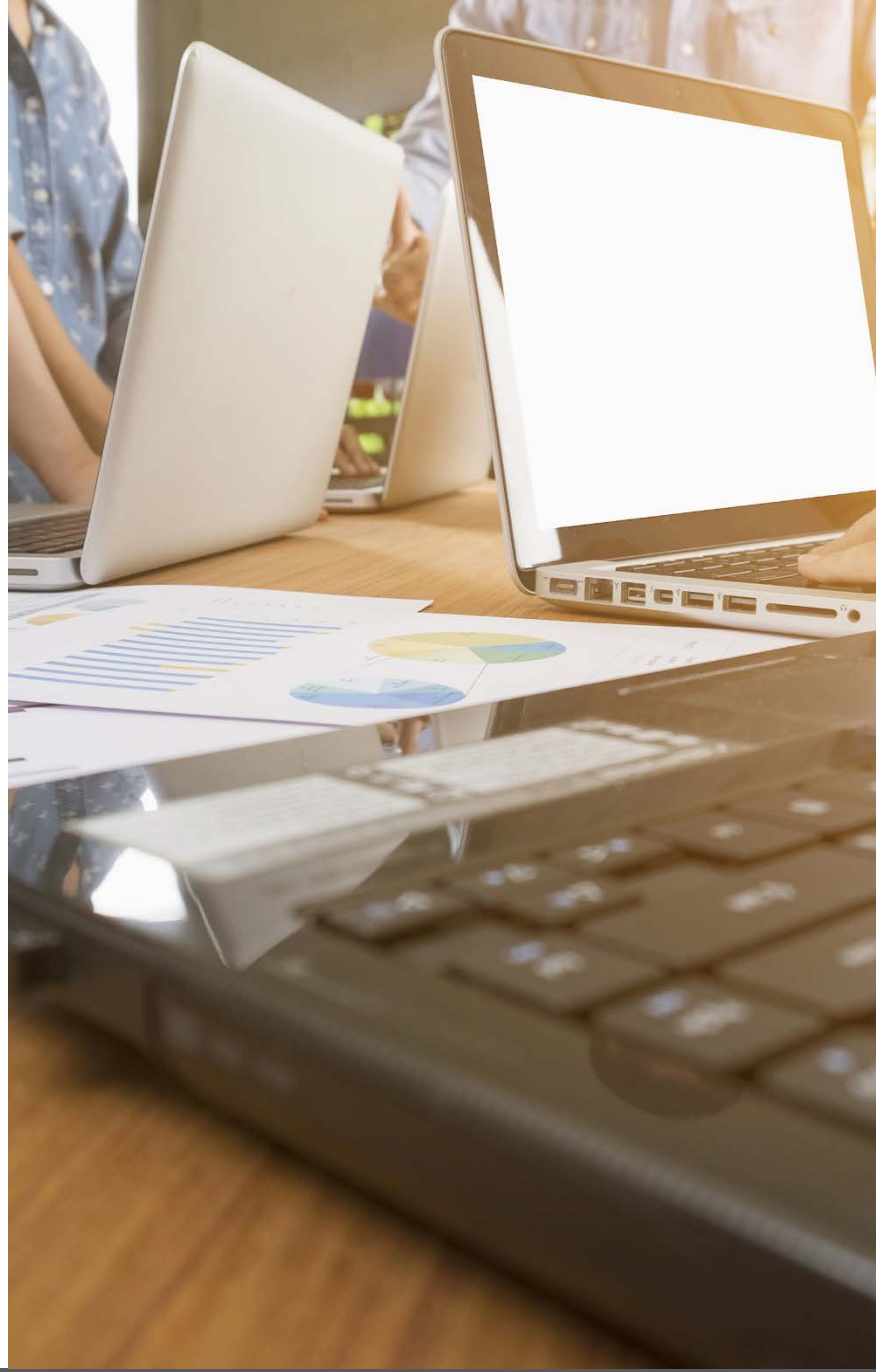
Q: Order steps

Chapter Contents

- Service Transition Introduction
- Transition Planning and Support
- Change Management
- Service Asset and Configuration Management
- Release and Deployment Management

Knowledge Management

- Service Transition Summary

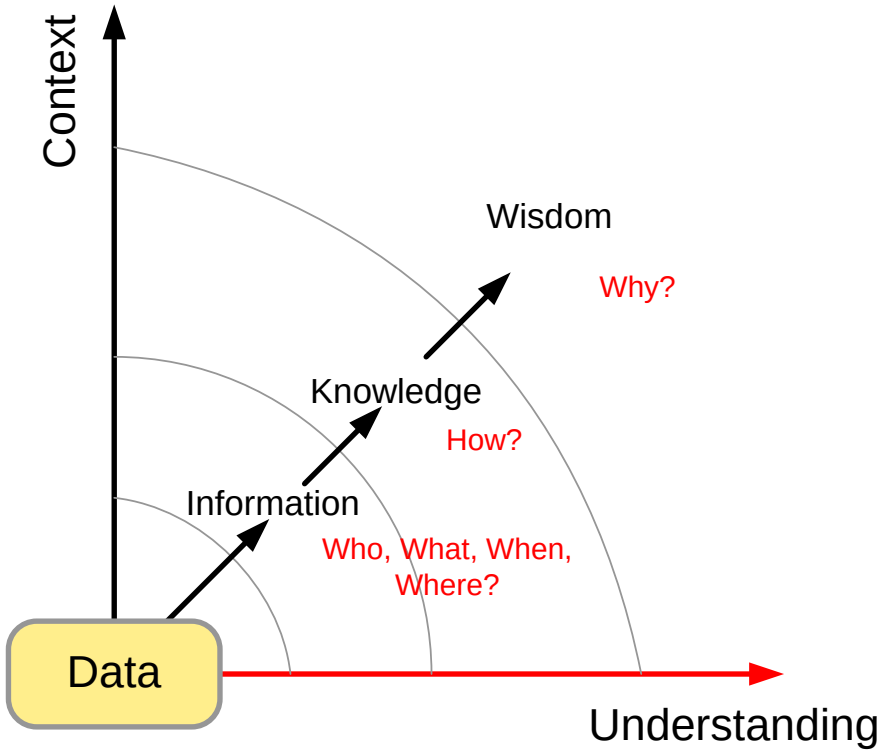


Knowledge Management

- **Purpose:**
  - To share perspectives, ideas, experience and information
  - To ensure that these are available in the right place at the right time to enable informed decision
  - To improve efficiency by reducing the need to rediscover knowledge
- **Objectives:**
  - Improve the quality of management decision-making by ensuring that reliable and secure knowledge, information and data is available throughout the service lifecycle
  - Maintain a service knowledge management system (SKMS) that provides controlled access to knowledge, information, and data that is appropriate for each audience

Knowledge Management: DIKW

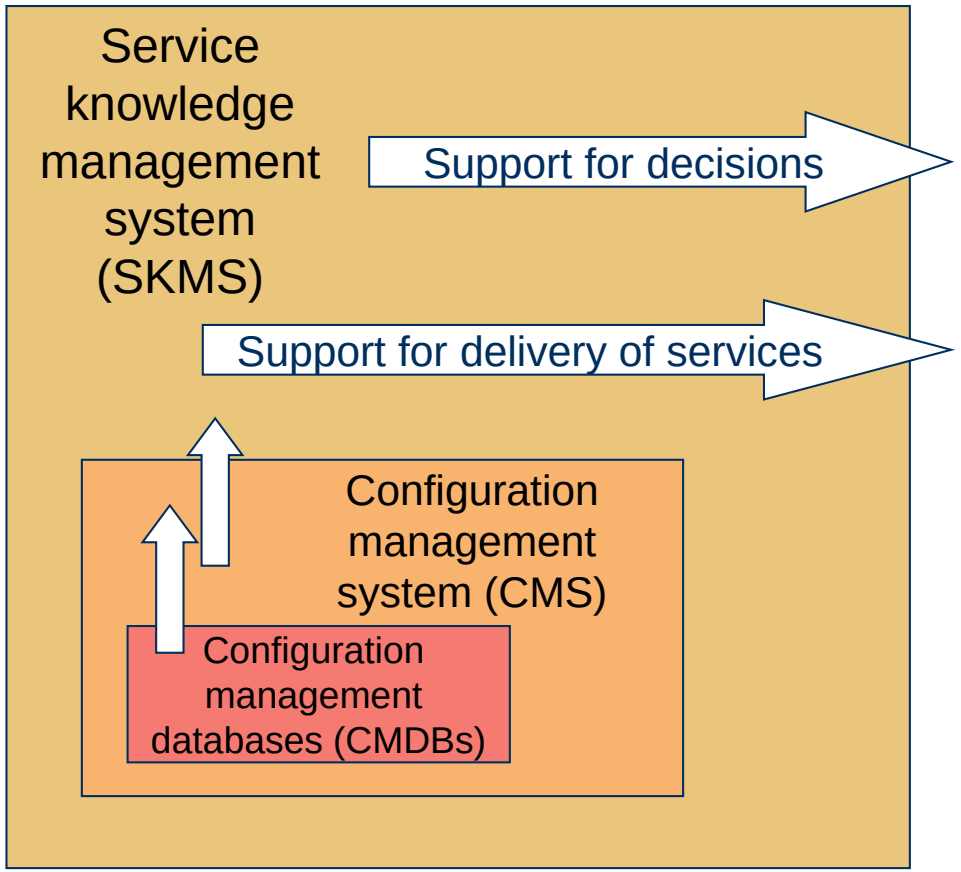
- **Data**
  - A set of discrete facts about events
- **Information**
  - Comes from providing context to data
    - Documents, e-mails
- **Knowledge**
  - Experience, ideas, analysis of information
  - Dynamic and context based
  - Facilitates decision-making
- **Wisdom**
  - Having the application and contextual awareness to provide a strong common sense judgment



questions: # of order in the flow

Service Knowledge Management System (SKMS)

- **The SKMS is a broader concept than the CMS as it also includes:**
  - The experience of staff
  - Peripheral matters:
    - Weather
    - Organizational performance
    - User numbers and behavior
  - Supplier and partner abilities and expectations
  - Typical and anticipated user skill levels



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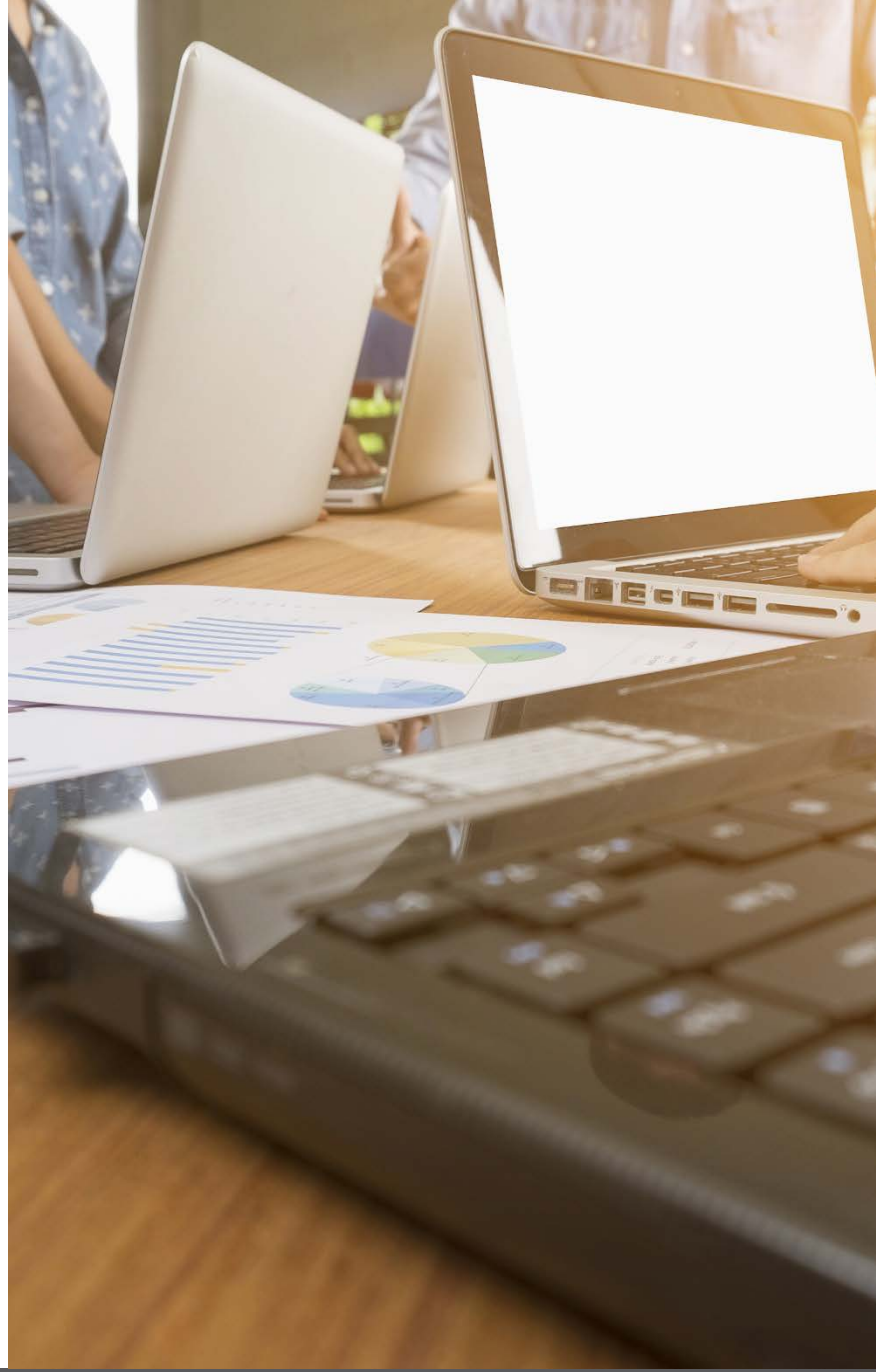


Summary of Service Transition

- **Purpose:**
  - To ensure that new, modified, or retired services meet the expectations of the business as documented in the service strategy and service design stages of the lifecycle
- **Key concepts:**
  - Types of change request and change proposals
  - Change models
  - Remediation planning
  - Change advisory board and emergency change advisory board
  - The normal change lifecycle
- **Key processes:**
  - Change management
  - Release and deployment management
  - Service asset and configuration management
  - Knowledge management
  - Transition planning and support

Assignment 4: Service Transition Key Concepts

Workbook

At this time, your instructor will direct you to your Workbook

You should complete Assignment 4: Service Transition Key Concepts

This assignment is an individual assignment and should take no more than 10 minutes

Service Transition Sample Question 1

Quiz

1. **Which statement about the change advisory board (CAB) is correct?**
   A. All changes should be approved by the CAB
   B. The same CAB members should attend every CAB meeting to ensure consistency
   C. The CAB assists the change manager in evaluating certain types of changes and deciding whether they should be approved
   D. The CAB assists the change manager in ensuring that no changes are made during particularly volatile business periods

Service Transition Sample Question 2

Quiz

2. Which of the following statements about a configuration management system (CMS) is correct?

A. The CMS is a single database of information about all configuration items (CIs)

B. The CMS includes tools for gathering and reporting information about all configuration items (CIs)

C. The service knowledge management system (SKMS) is part of the CMS

D. The CMS is used by all service management processes except supplier management which uses the supplier and contract management information system (SCMIS)

Service Transition Sample Question 3

Quiz

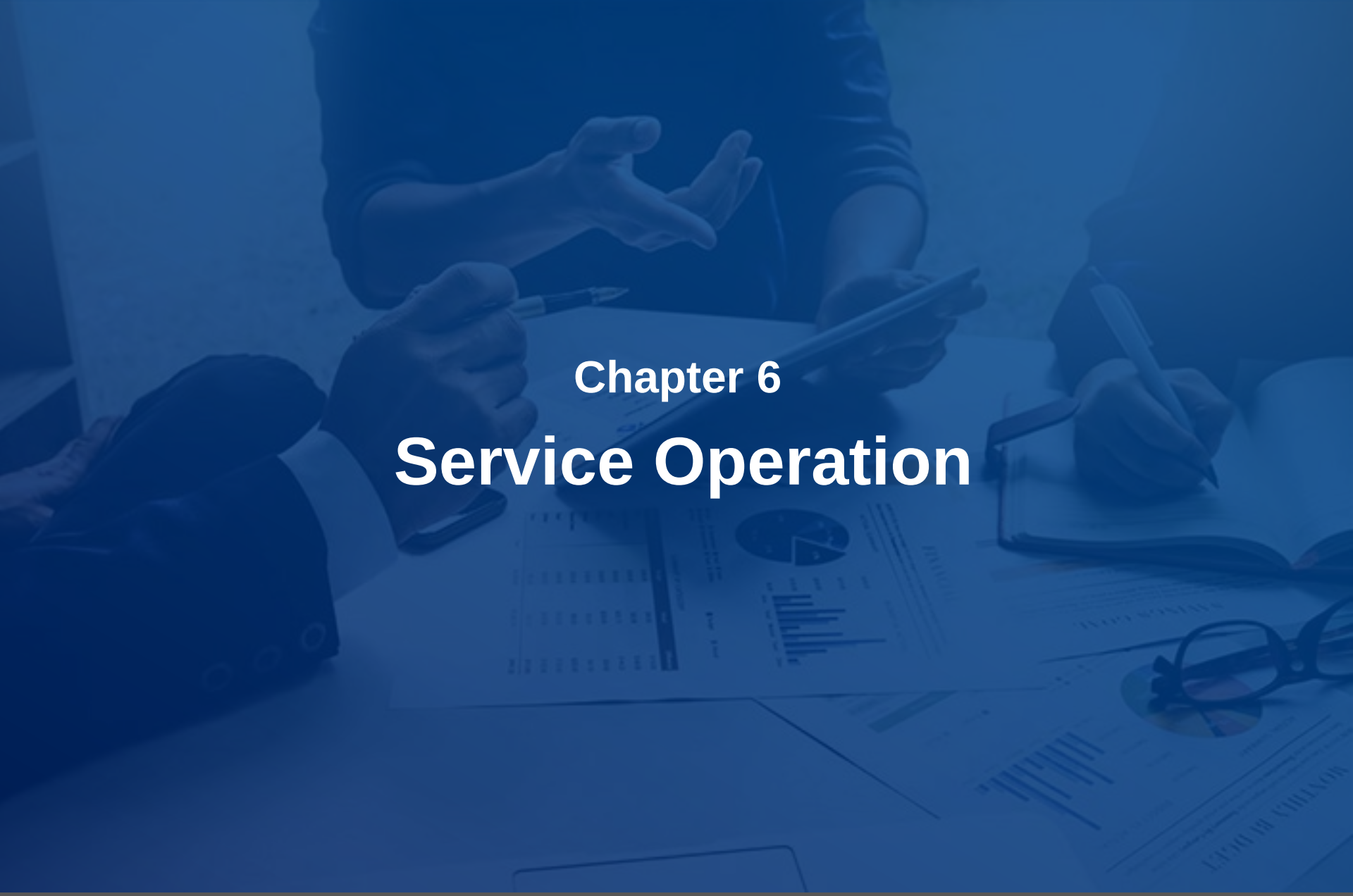
3. Which of the following could be a configuration item (CI) within the configuration management system (CMS)?

1. A software application written by internal developers
2. A hardware component procured from an external supplier
3. A service level agreement
4. A data center

A. 1 and 2 only
B. 1, 2 and 3 only
C. All of the above
D. 2, 3 and 4 only

Chapter Objectives

- **Understand the purpose and objectives of the service transition lifecycle phase**
- **List key concepts of service transition**
- **Know key processes within the service transition lifecycle phase**
  - Purpose and objectives
  - Key concepts



Chapter 6

Service Operation

Learning Tree® International

Chapter Objectives

- **Understand the purpose and objectives of the service operation lifecycle phase**
- **Define key concepts of service operation**
- **Learn about key processes within the service operation lifecycle phase**
  - Purpose and objectives
  - Key concepts

ITIL Service Operation Publication

- ***ITIL Service Operation* provides guidance on:**
  - Managing the activities and processes required to deliver and manage services at agreed levels to business users
  - Ensuring value for the customer, user, and the service provider
- **Processes:**
  - Incident management
  - Problem management
  - Request fulfillment
  - Access management
  - Event management
- **Service operation functions:**
  - The service desk
  - Technical management
  - Application management
  - IT operations management

Chapter Contents

Service Operation Introduction

- Incident Management
- Problem Management
- Request Fulfillment
- Access Management
- Event Management
- Service Operation Functions
- Service Operation Summary

Purpose and Objectives of Service Operation

- **Purpose:**
  - To coordinate and carry out the activities and processes required to deliver and manage services at agreed levels to business users and customers
- **The objectives are to:**
  - Maintain business satisfaction and confidence in IT through effective and efficient delivery and support of agreed IT services
  - Minimize the impact of service outages on day-to-day business activities
  - Ensure that access to agreed IT services is only provided to those authorized to receive those services
- **The scope of service operation includes the services themselves, service management processes, technology, and people**

Value to the Business

- Reducing unplanned labor and costs for both the business and IT
- Allowing business customers to take full advantage of the value created by the services they are receiving
- Allowing other ITIL processes to continually improve services and provide justification for investing in ongoing service improvement activities
- Meeting the goals and objectives of the organization's security policy
- Improving the productivity of business staff or the quality of business services and products
- Increasing efficiencies and allowing expensive human resources to be used for more innovative work

Automation

access mgmt

The Importance of Good Communication

- **Service operation relies on:**
  - Routine operational communication
  - Communication between shifts
  - Performance reporting
  - Communication related to projects, changes, exceptions and emergencies
  - Training on new or customized processes and service design
  - Global communication
  - Communication with customers and users
- **There should be a communication policy that ensures consistency and effectiveness of all communications**

Chapter Contents

Incident Management

- **Purpose:**
  - To restore normal service operation as quickly as possible and minimize the adverse impact on business operations, thus ensuring that agreed levels of service quality and availability are maintained

- **Objectives:**
  - To ensure that standardized methods and procedures are used for efficient and prompt response, analysis, documentation, ongoing management, and reporting of incidents
  - Increase visibility and communication of incidents to business and IT support staff
  - Enhance business perception of IT through use of a professional approach in quickly resolving and communicating incidents when they occur
  - Align incident management activities and priorities with those of the business
  - Maintain user satisfaction with the quality of IT services

Q: All comm should have an intended purpose or a resultant action

Scope of Incident Management

- **Incident management includes any event that disrupts, or could disrupt, a service**
- **Incidents can be:**
  - Communicated directly by users via the service desk
  - Notified through an interface from event management to incident management tools
  - Reported and/or logged by technical staff

Incident Management Concepts

- **An incident is:**
  - An unplanned interruption to an IT service or reduction in the quality of an IT service or
  - A failure of a CI that has not yet impacted a service
- **Timescales**
  - Must be agreed for all stages of incident handling depending on the priority of the incident
  - Priority should reflect the urgency and impact of the incident and be referenced within SLAs
  - Based upon targets within SLAs and used to set targets in OLAs and underpinning contracts

priority = impact & urgency

Incident Management Concepts

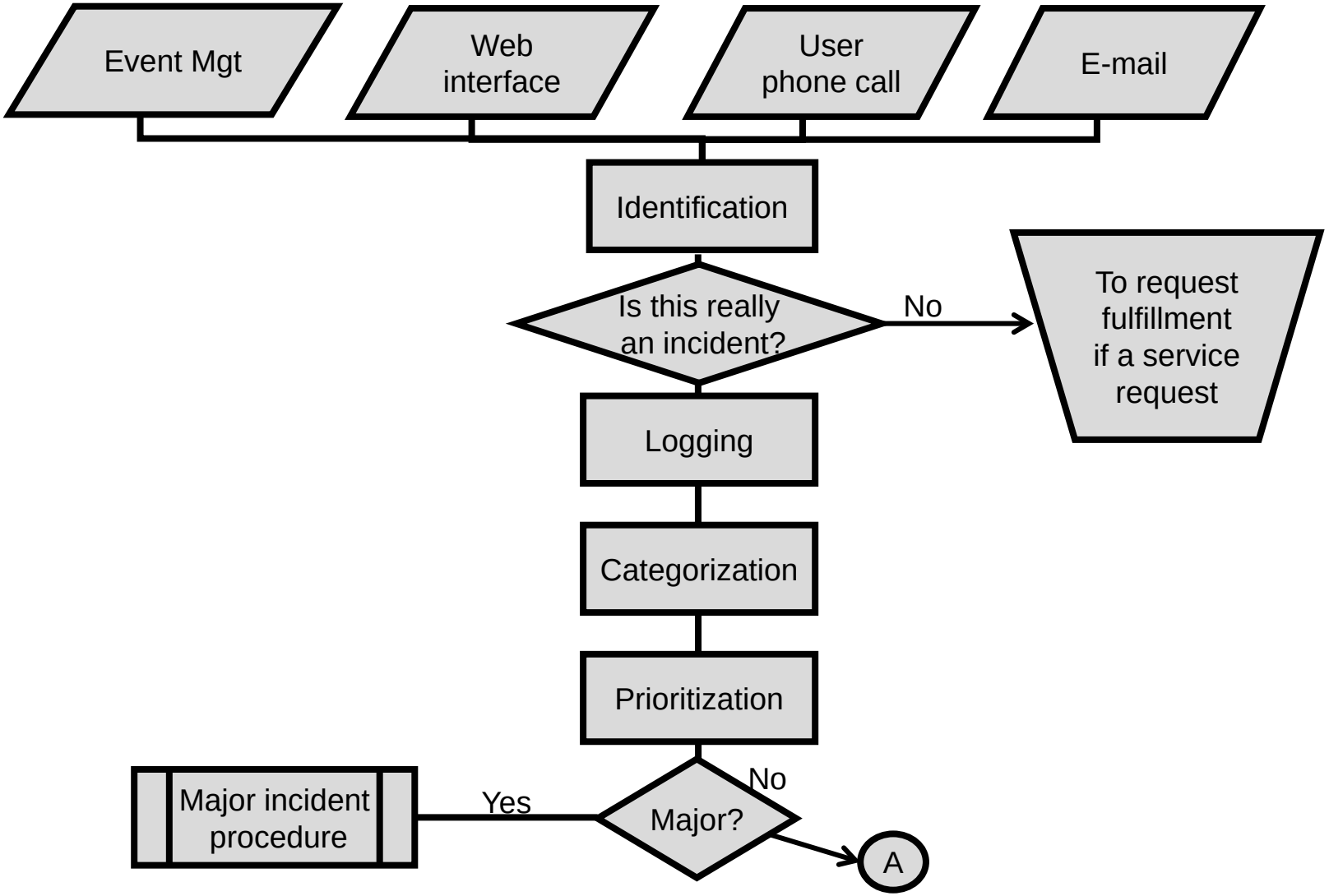
- **Incident models**
  - A standard, pre-defined way of dealing with types of incidents
  - Help to ensure consistency and can facilitate automation of the response
- **Incident status tracking**
  - Within the incident management system, status codes may be linked to incidents to indicate where they are in relation to the lifecycle
    - Examples of status codes are:
      - Open, in progress, resolved, closed
- **Major incidents**

Q: needs a separate process/procedure

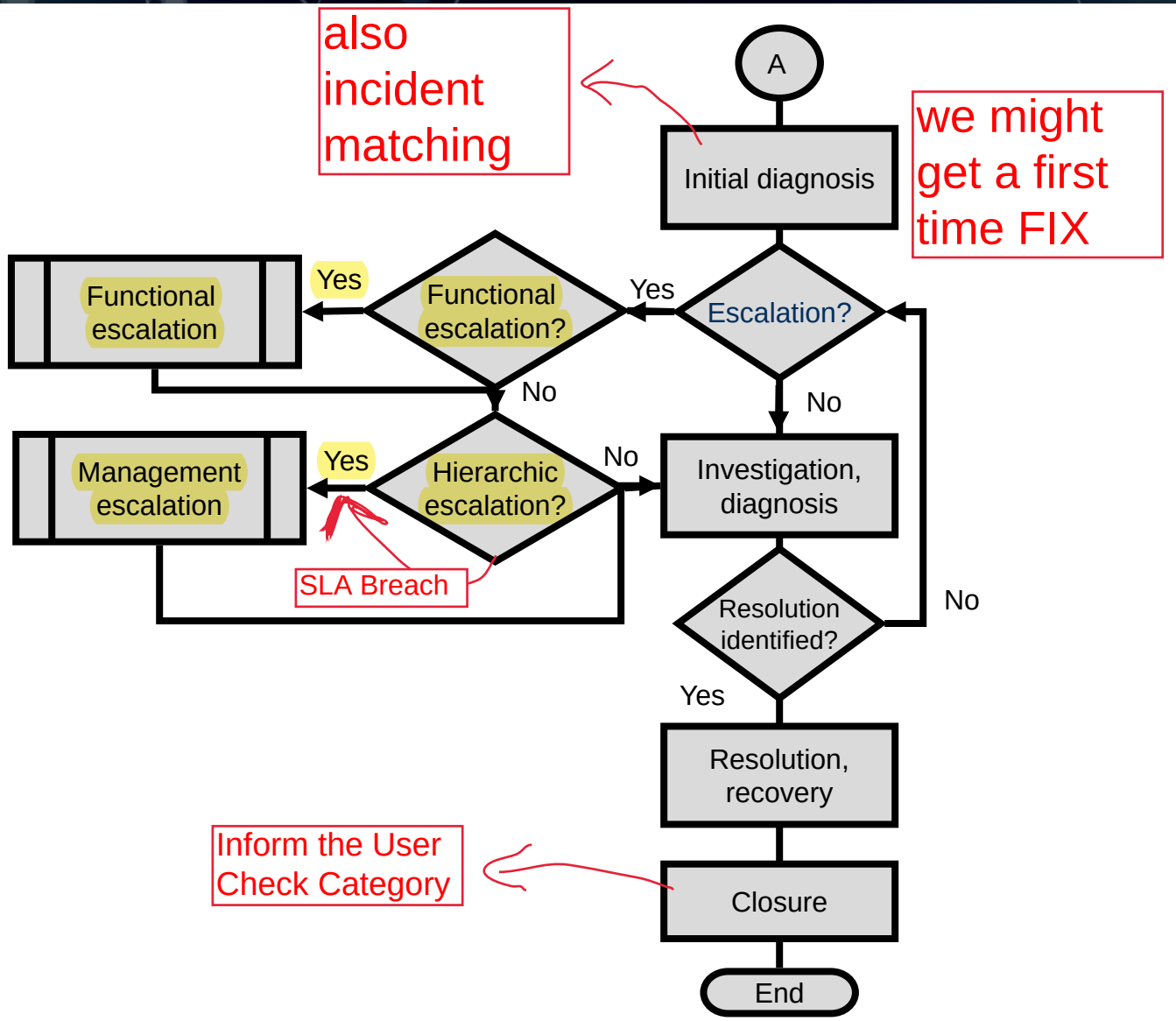
  - Incidents requiring shorter resolution timescales and greater urgency
  - Definition of what is “major” must be agreed and mapped onto the overall incident-prioritization process
  - May require a major incident team under the leadership of the incident manager
  - Should not divert the attention of the service desk manager

PROBLEM MANAGER TRIES TO INVESTIGATE THE ROOT CAUSE

Incident Management Process



Incident Management Process



Question

Incident Management Interfaces

- **In addition to problem management, the key interfaces include:**
  - Service level management
    - The ability to resolve incidents in a specified time is a key part of delivering an agreed level of service
  - Information security management
    - Providing security-related incident information as needed
  - Capacity management
    - Incident management provides a trigger for performance monitoring where there appears to be a performance problem
  - Availability management
    - Will use incident management data to determine the availability of IT services and look for improvement opportunities
  - Service asset and configuration management
    - Provides data used to identify and progress incidents
  - Change management
    - To detect and resolve incidents that arise from failed changes

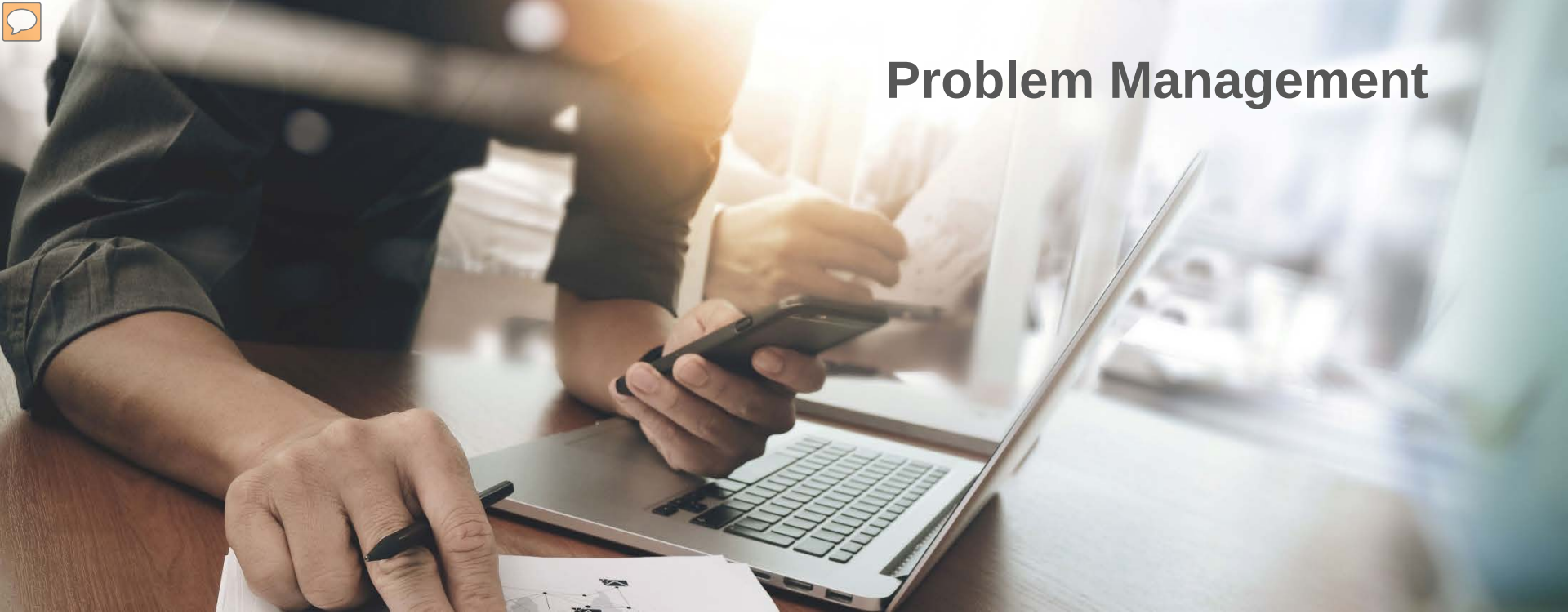
Q: CMS gives you the SHAPE AND FORM of the affected CMS items

Chapter Contents

- Service Operation Introduction
- Incident Management

Problem Management

- Request Fulfillment
- Access Management
- Event Management
- Service Operation Functions
- Service Operation Summary

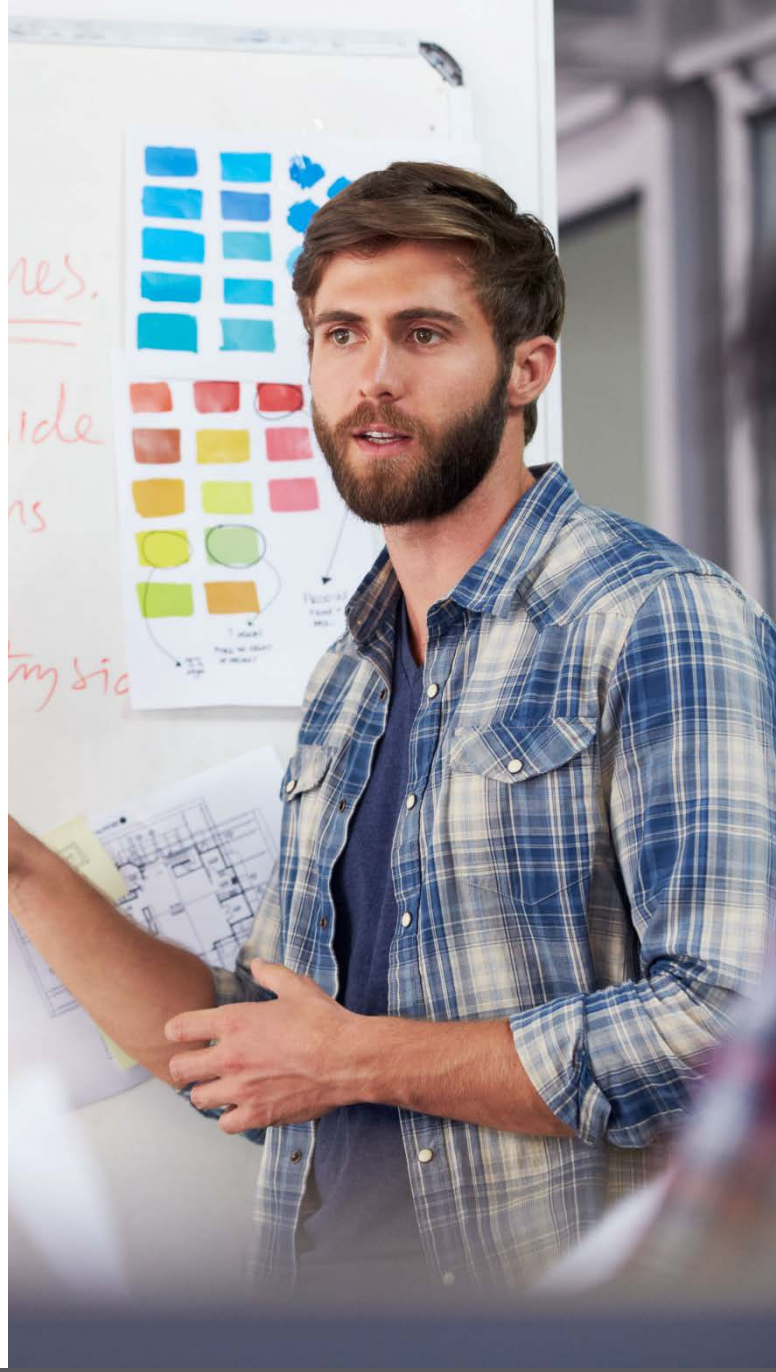


Problem Management

- **Purpose:**
  - To manage the lifecycle of all problems from first identification through further investigation, documentation and eventual removal
- **Objectives :**
  - Prevent the occurrence of problems and resulting incidents
  - Eliminate recurring incidents
  - Minimize the adverse impact of unavoidable incidents

Scope of Problem Management

- **Problem management includes:**
  - Diagnosing the root cause of incidents
  - Ensuring resolutions are implemented using appropriate control processes
    - Change management
    - Release and deployment management
  - Maintaining and making available information about problems, workarounds and resolutions using a known error database
  - Close integration with incident management, although incident and problem management are separate processes

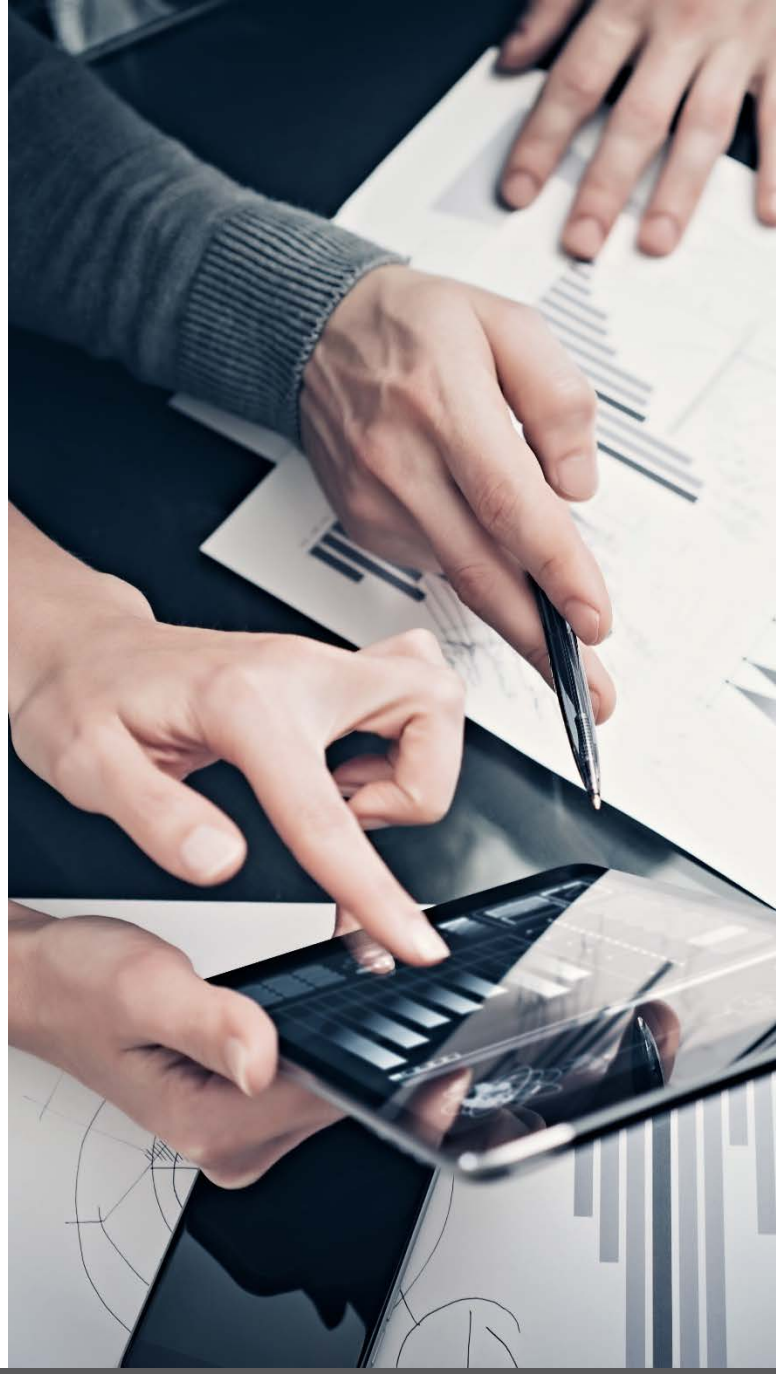


Concepts of Problem Management

- **A problem is the underlying cause of one or more incidents**
- **Problem model:**
  - A standard, pre-defined way of dealing with types of problems
- **Workaround:**
  - A temporary, predefined way of overcoming incidents caused by a problem before a full resolution is available
  - Workaround details should be documented in the problem record, which remains open
- **Known error:**
  - A problem with a documented root cause and a workaround
- **Known error record:** Q: when prudent to do so...
  - Must be created when problem diagnosis is complete
  - Could be created when a workaround is identified and before a permanent resolution is found
  - Can be created at any time it is convenient

The Known Error Database (KEDB)

- **Allows central storage of known errors**
  - The resolutions of incidents and problems
- **Should contain exact details of the fault and the symptoms as well as an incident count to assist in problem prioritization**
- **The problem manager should have control over the content and all proposed entries should be analyzed before being entered**
- **The KEDB should be compatible with the configuration management system (CMS) and form part of a larger service knowledge management system (SKMS), described within service transition**

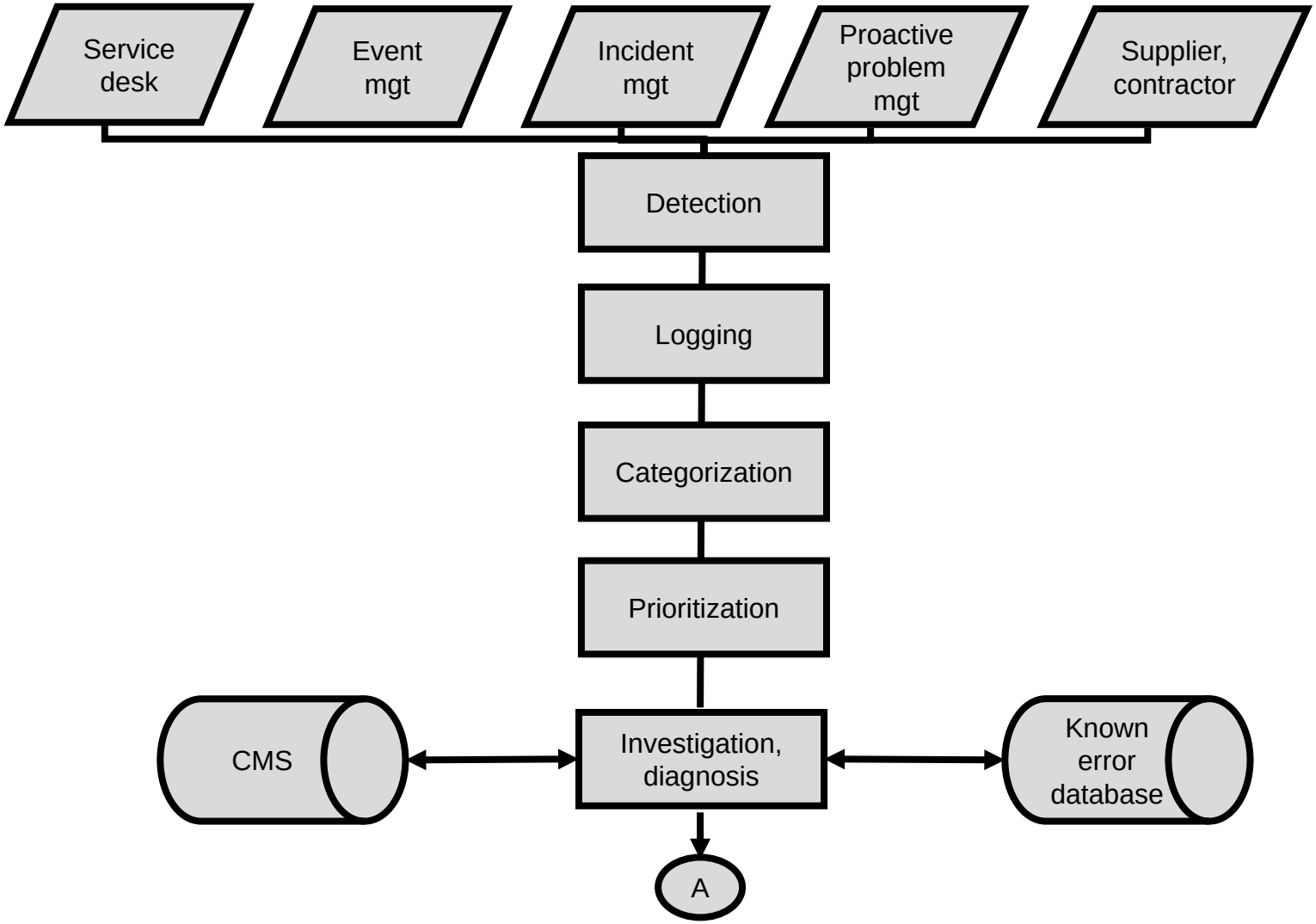


Reactive and Proactive Problem Management

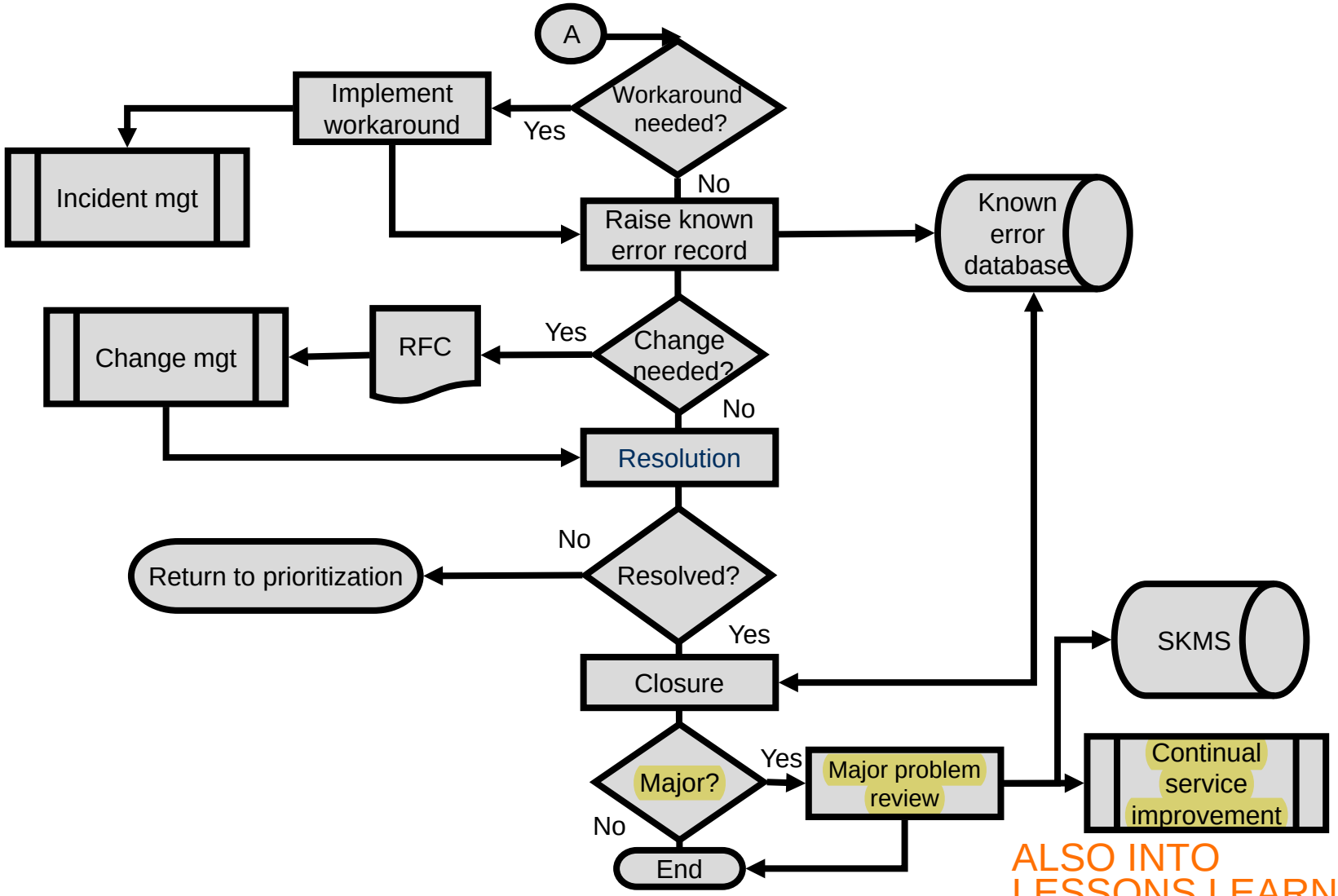
- **Reactive problem management is concerned with solving problems in response to one or more specific incidents** SO
- **Proactive problem management is concerned with identifying and solving problems and known errors before further incidents related to them can occur again**
  - Conducting periodic scheduled reviews of incident records, event logs, and operational logs to find patterns and trends
  - Conducting major incident reviews asking, “How can we prevent the recurrence?”
  - Conducting brainstorming sessions
  - Using check sheets to proactively collect data on service or operational quality issues

SD, ST, CSI

Problem Management Process



Problem Management Process



Problem Management Interfaces

- **In addition to incident management, the key interfaces include:**
  - Financial management
    - Problem management provides management information about the cost of resolving and preventing problems
  - Service level management
    - The occurrence of incidents and problems affects the level of service delivery measured by SLM
    - Problem management contributes to improvements in service levels
      - Its management information is used as the basis for some of the SLA review components
  - Change management
    - Problem management ensures that all resolutions or workarounds that require a change to a CI are submitted through change management
  - Seven-step improvement process
    - The occurrence of incidents and problems provides a basis for identifying opportunities for service improvements

Summary of Incident and Problem Management

- The purpose of incident management is to restore service as quickly as possible
- The service desk plays a major role in incident management
- Incident handling may involve both functional and hierarchic escalation
- Problem management aims to resolve the underlying causes of incidents
- Problem management is responsible for the known error database
- Dealing effectively with incidents and problems relies on close integration between the two processes

Chapter Contents

- Service Operation Introduction
- Incident Management
- Problem Management

Request Fulfillment

- Access Management
- Event Management
- Service Operation Functions
- Service Operation Summary

Request Fulfillment

- **Purpose:**
  - To manage the lifecycle of all service requests from users
- **Objectives:**
  - Provide a channel for users to request and receive standard pre-defined and approved services
  - To provide information to users relating to the availability of standard services
  - To source components required to deliver standard services
  - To assist with general information, queries, and complaints

Service Requests

- A generic term for the many types of demands or requests made by users
- Does not include incidents which are dealt with by incident management
- May be linked to standard change requests as part of their fulfillment
- Service requests are normally handled and owned by the service desk
- Request model
  - A pre-defined procedure for dealing with frequent service requests consistently

Chapter Contents

- Service Operation Introduction
- Incident Management
- Problem Management
- Request Fulfillment

Access Management

- Event Management
- Service Operation Functions
- Service Operation Summary

Purpose and Objectives of Access Management

- **Purpose:**
  - To provide the right for users to be able to use a service or group of services, executing policies and actions defined in information security management
- **Objectives:**
  - Manage access to services based on policies and actions defined in information security management (see service design)
  - Efficiently respond to requests for granting access to services, changing access rights, or restricting access ensuring that the rights being provided or changed are properly granted
  - Oversee access to services and ensure rights being provided are not improperly used

Scope of Access Management

- **Enables the organization to manage the confidentiality, availability and integrity of the organization's data and intellectual property**
  - Information security management defines the policy
- **Ensures that users are given the right to use a service at agreed times**
  - Availability management ensures service availability
- **Executed by all technical and application management functions**
  - Access management can be initiated by a service request
  - The service desk or IT operations management can provide a single point of coordination

Chapter Contents

- Service Operation Introduction
- Incident Management
- Problem Management
- Request Fulfillment
- Access Management

Event Management

- Service Operation Functions
- Service Operation Summary

Event Management

► Purpose:

- To manage events throughout their lifecycle by detecting events, making sense of them, and determining the appropriate control action

► Objectives:

- Detect all changes of state that have significance for the management of a configuration item or IT service Q: Description of an event
- Determine the appropriate control action for events and ensure these are communicated to the appropriate functions
- Provide the trigger for many service operation processes and operations management activities
- Provide the means to compare actual operating performance and behavior against design standards and SLAs
- Event management is the basis for operational monitoring and control

Events and Alerts

- **An event is defined as any change of state that has significance for the management of a configuration item or service**
- **Events can be categorized as:**
  - Informational
  - Warning
  - Exception

  if not handled, creates incidents
- **Events also include alerts or notifications created by an IT service, CI or monitoring tool**
- **An alert is a notification that threshold has been reached, something has changed, or a failure has occurred**
  - Alerts are often created and managed by system management tools

Scope of Event Management

- **The scope of event management includes any aspect of service management that needs to be controlled and which can be automated such as:**
  - Configuration items (CIs)
  - Environmental conditions
    - Fire and smoke detection
  - Software license monitoring
    - Tracking license usage
  - Security
  - Intrusion detection
  - Normal activity
  - CI performance

Chapter Contents

- Service Operation Introduction
- Incident Management
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- Request Fulfillment
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- Event Management

Service Operation Functions

Service Desk

- Technical Management
- Application Management
- IT Operations Management

- Service Operation Summary

Role of the Service Desk

- A **functional unit** using dedicated staff
- **A single point of contact** for users on a day-to-day basis
- Responsible for the efficient handling of **all incidents and service requests**
- Interfaces to many other activities
- Captures and reports on meaningful management information

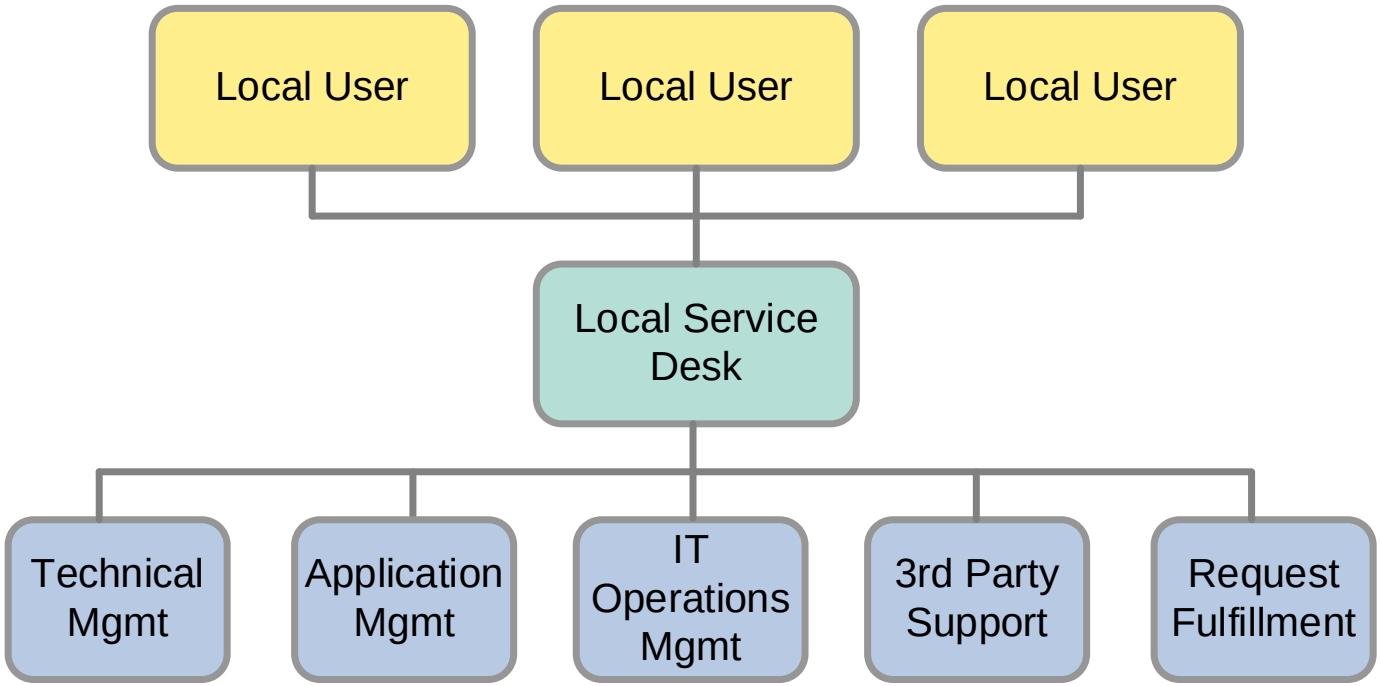
Objectives of the Service Desk

- Log all incidents and service requests and allocate category and priority codes
- Provide first line support and resolution when possible
- Escalate incidents and service requests when required
- Close all resolved incidents and service requests

inform user
check category

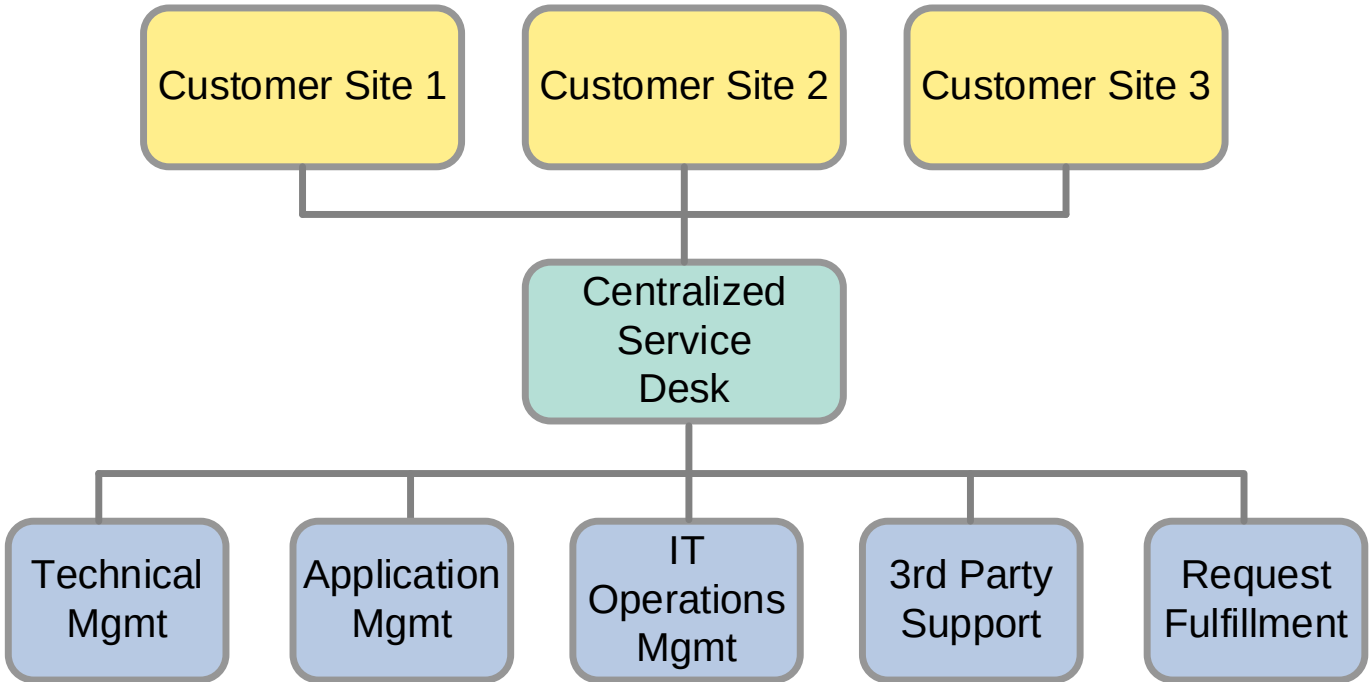
- Notify users of impending changes, planned outages, and progress on incidents and service requests
- Carry out customer satisfaction surveys as required
- Update the CMS under service asset and configuration management control

Local Service Desk Structure



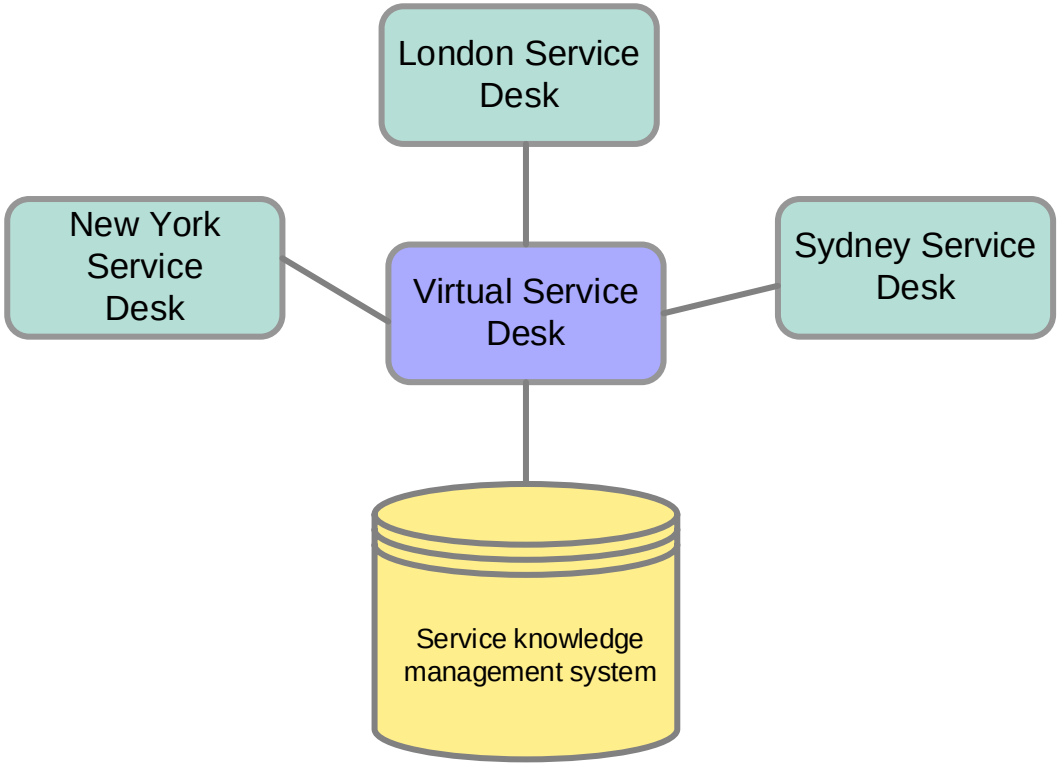
- **Good for:**
  - Single locations
  - Where there are strong language, cultural, or political differences
  - Supporting specialized or critical user groups (VIPs)
  - Concentrating specialist technical skills

Centralized Service Desk Structure



- **Good for:**
  - Improved resource usage leading to reduced operational costs
  - Consistency of service and comprehensive metrics
- **A local presence may still be required for hands-on support**

Virtual Service Desk Structure



- **Good for:**
  - Organizations with multiple locations
  - Supports a "follow-the-sun" solution
- **Requires shared database and well-controlled escalation and hand-over procedures**

Chapter Contents

- Service Operation Introduction
- Incident Management
- Problem Management
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- Access Management
- Event Management

Service Operation Functions

- Service Desk

Technical Management

- Application Management
- IT Operations Management

- Service Operation Summary

Technical Management

- **Refers to the groups, departments, and teams that provide technical expertise and management of the IT infrastructure**
- **Technical management role:**
  - To be the custodian of technical expertise and provide the actual resources necessary to design, build, transition, and operate technology throughout the IT service management lifecycle
  - To provide guidance to IT operations on operational activities related to technology

Chapter Contents

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- Event Management

Service Operation Functions

- Service Desk
- Technical Management

Application Management

- IT Operations Management

- Service Operation Summary

Application Management

- **Refers to the groups, departments and teams that are involved in managing and supporting operational applications**
- **Application management role:**
  - To be the custodian of expertise and provide the actual resources necessary to manage applications throughout the IT service management lifecycle
  - To provide guidance to IT operations on operational activities related to applications
- **Application management differs from application development**

Application Management vs. Application Development

Aspect	Application management	Application development
Nature of activities	Ongoing	One-time
Scope	In-house and bought-in applications	Mostly in-house applications
Primary focus	Utility and warranty	Utility
Management mode	Repeatable ongoing processes	Projects
Measurement	Operational stability	Timely completion of project
Cost	Indirect	Direct
Lifecycles	Operation and improvement phases	Software development

Chapter Contents

- Service Operation Introduction
- Incident Management
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- Request Fulfillment
- Access Management
- Event Management

Service Operation Functions

- Service Desk
- Technical Management
- Application Management

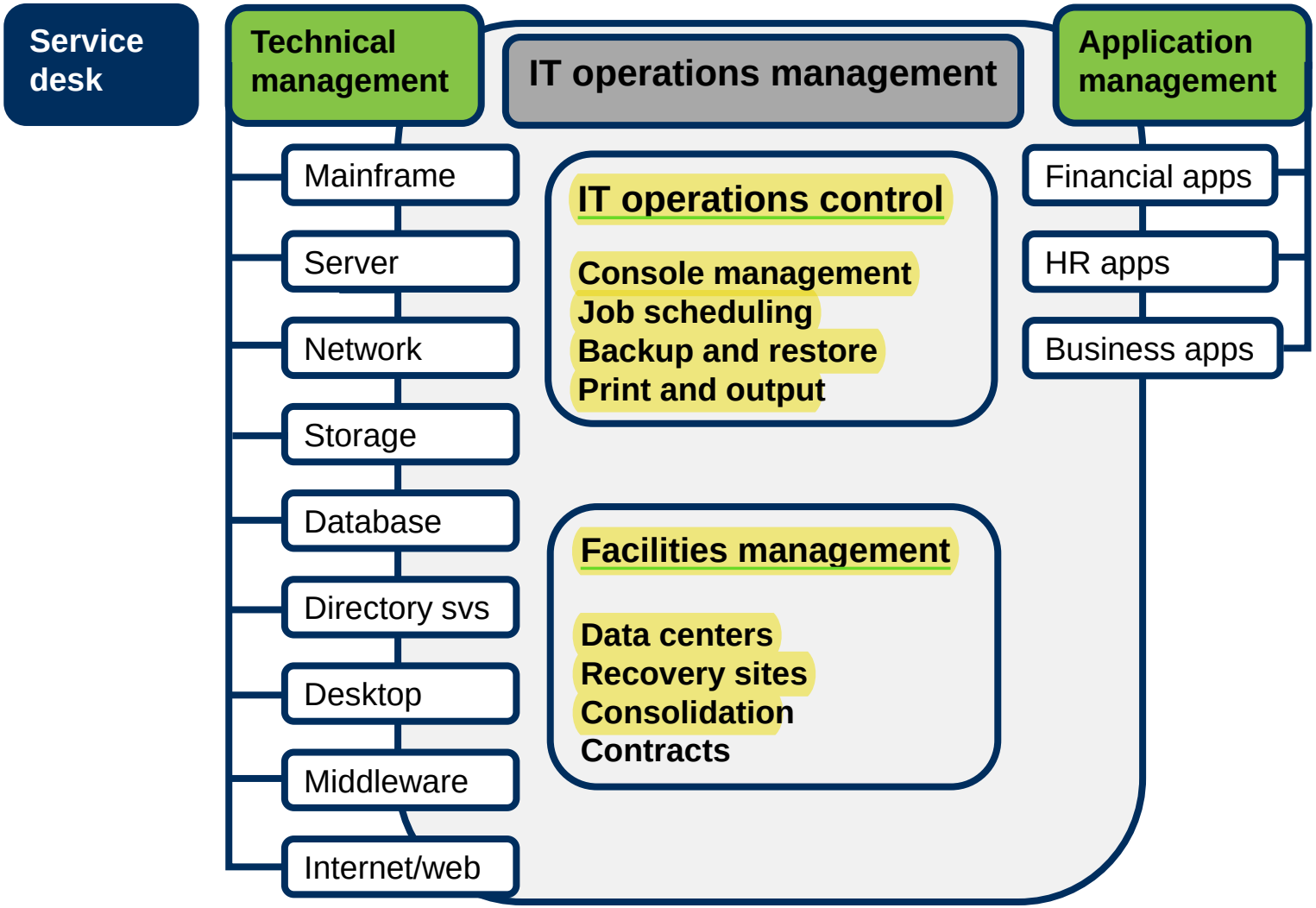
IT Operations Management

- Service Operation Summary

IT Operations Management

- **Operations control**
  - Oversees the execution and monitoring of operational activities and events
  - May use an operations bridge or network operations center
- **Facilities management**
  - Physical environment
    - Data centers
    - Recovery sites
    - Power and cooling equipment
  - If outsourced, facilities management refers to the management of the contract

Function Interactions



Chapter Contents

- Service Operation Introduction
- Incident Management
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- Request Fulfillment
- Access Management
- Event Management
- Service Operation Functions

Service Operation Summary

Summary of Service Operation

- **Purpose:**
  - To coordinate and carry out the activities and processes required to deliver and manage services at agreed levels to business users and customers
- **Key concept:**
  - The role of communication
- **Processes:**
  - Incident management
  - Problem management
  - Request fulfillment
  - Access management
  - Event management
- **Functions:**
  - Service desk
  - Technical management
  - Application management
  - IT operations management

Assignment 5: Service Operation Key Concepts

Workbook

At this time, your instructor will direct you to your Workbook

You should complete Assignment 5: Service Operation Key Concepts

This assignment is an individual assignment and should take no more than 10 minutes

Service Operation Sample Question 1

Quiz

1. **To what does the term “technical management” refer?**
   A. The tools that monitor the technical infrastructure
   B. The custodian of technical knowledge and expertise about the technical infrastructure
   C. The process that builds, tests, deploys and supports the technical infrastructure
   D. An operations bridge that allows operations staff to monitor the status of the technical infrastructure

Service Operation Sample Question 2

Quiz

2. Which of the following is an objective of request fulfilment?

A. To provide the trigger for many operations management activities

B. To implement all change requests raised by users

C. To ensure all user-reported faults are rectified as quickly as possible

D. To provide a channel for users to request pre-authorized standard services

Service Operation Sample Question 3

Quiz

3. Which statement *best* describes the purpose of problem management?

A. To detect problems, diagnose them and restore normal service as soon as possible

B. To detect problems, diagnose them and determine the appropriate action to resolve them

C. To provide the technical expertise to carry out root cause analysis on problems affecting the infrastructure

D. To monitor service quality by reporting on the impact of incidents and problems

Chapter Objectives

- **Understand the purpose and objectives of the service operation lifecycle phase**
- **Define key concepts of service operation**
- **Learn about key processes within the service operation lifecycle phase**
  - Purpose and objectives
  - Key concepts

Chapter 7

Continual Service Improvement

Learning Tree® International

Chapter Objectives

- **Understand the purpose and objectives of the continual service improvement lifecycle phase**
- **Define key concepts of continual service improvement**
- **Learn about key processes within the continual service improvement lifecycle phase**
  - Purpose and objectives
  - Key concepts

ITIL Continual Service Improvement Publication

- ***ITIL Continual Service Improvement* provides guidance on:**
  - Creating and maintaining value for customers through better strategy, design, transition and operation of services
  - Aligning IT services with changing business needs
- **Process:**
  - The seven-step improvement process

Chapter Contents

Continual Service Improvement Introduction

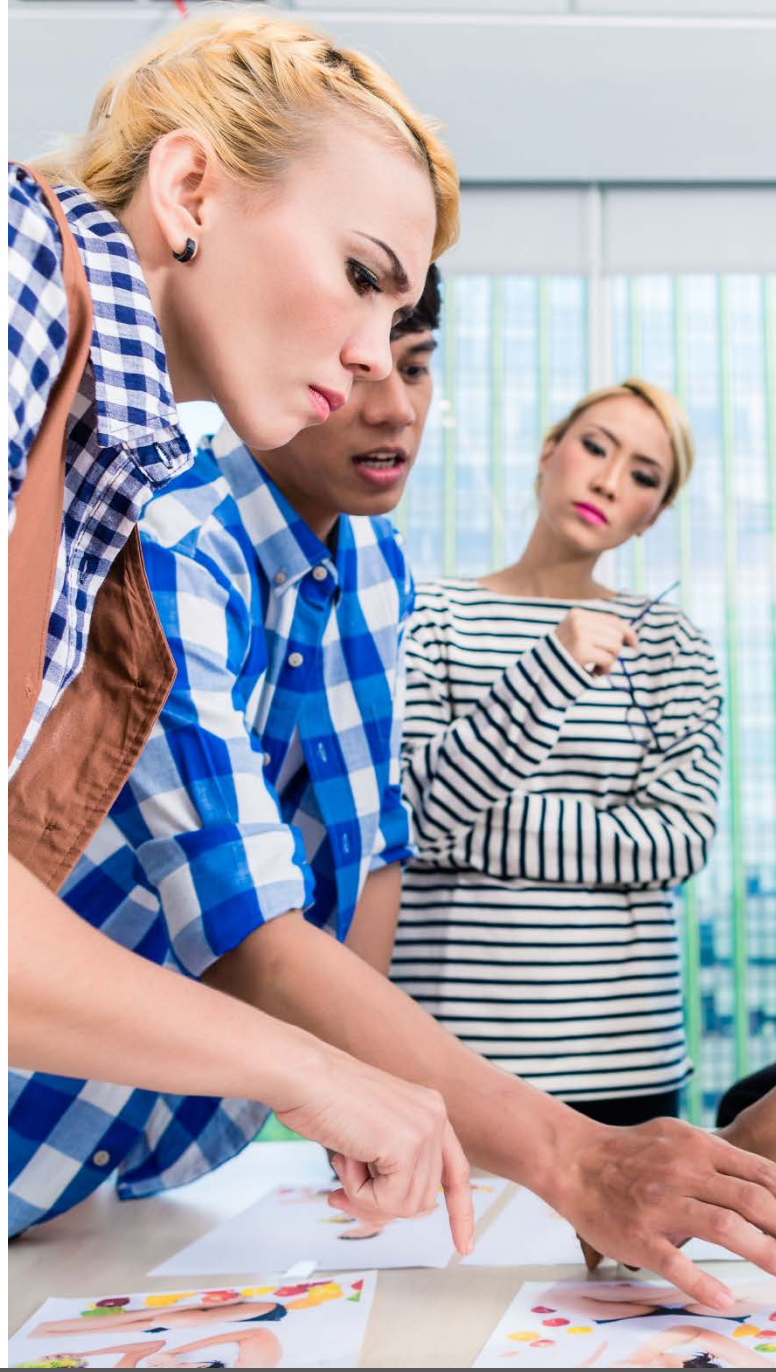
- The Seven-Step Improvement Process
- Continual Service Improvement Summary

Continual Service Improvement (CSI)

- **The purpose:**
  - To align IT services with changing business needs by identifying and implementing improvements to IT services that support business processes
- **Objectives of CSI include:**
  - To review, analyze, prioritize and make recommendations on improvement opportunities in each lifecycle stage
  - Review and analyze service level achievement
  - Identify and implement specific activities to improve IT service quality and improve the efficiency and effectiveness of the enabling processes
  - Improve cost effectiveness of delivering IT services without sacrificing customer satisfaction

Value to the Business

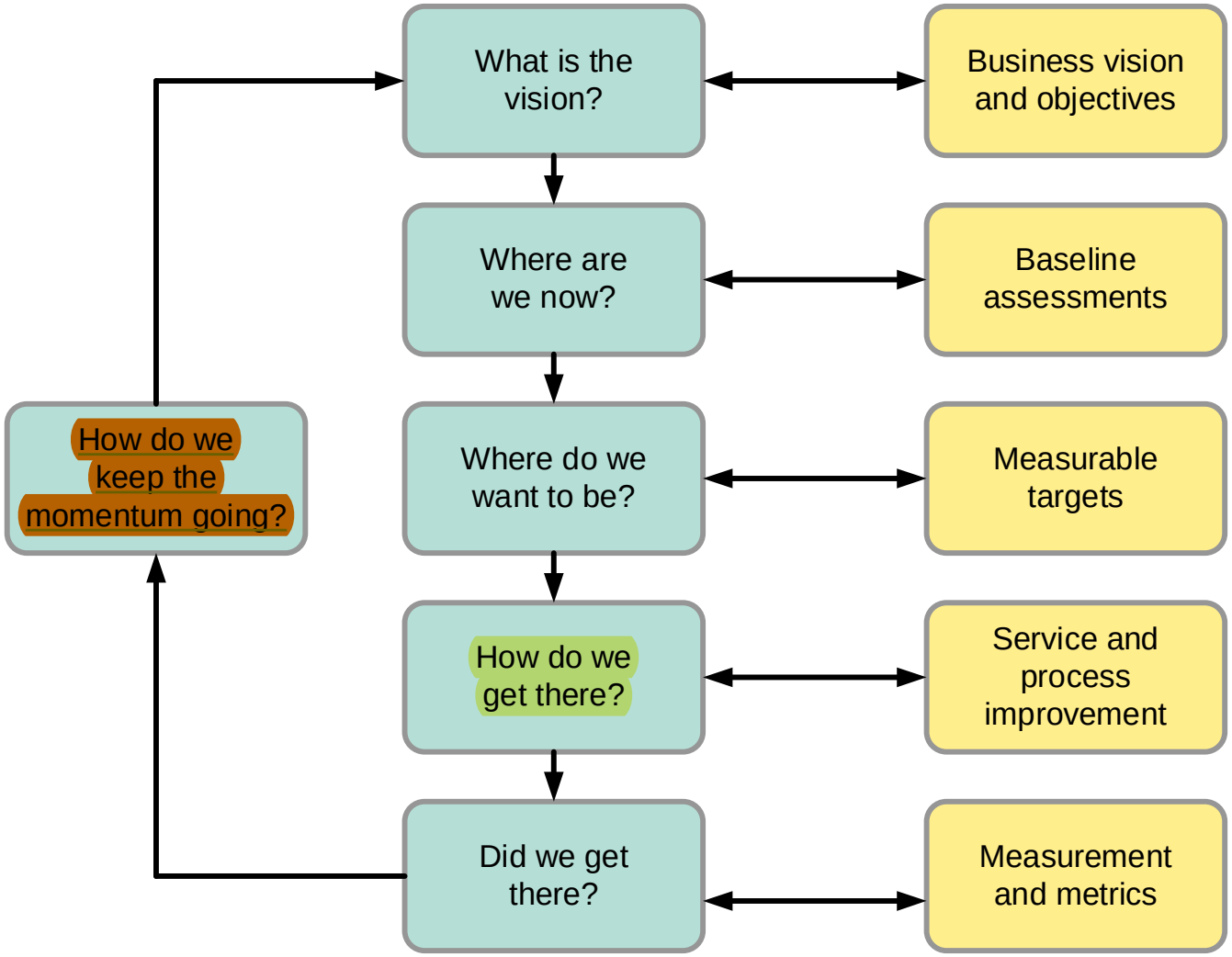
- **Adopting and implementing standard and consistent approaches for CSI will:**
  - Lead to a justifiable, gradual and continual improvement in service quality
  - Ensure that IT services remain continuously aligned to business requirements
  - Result in gradual improvements in cost effectiveness through a reduction in costs and/or the capability to handle more work at the same cost
  - Use monitoring and reporting to identify opportunities for improvement in all lifecycle stages and in all processes



The CSI Register

- **Should be kept to record all the improvement opportunities and should be regarded as part of the service knowledge management system (SKMS)**
- **Each improvement initiative should be:**
  - Categorized into small, medium or large undertakings and also by whether they can be achieved quickly, or in the medium term or longer term
  - Justified by showing the benefits that will be achieved by implementation
  - Prioritized by the value of the benefits
- **The CSI register will introduce a structure and visibility to CSI**
- **The CSI manager should have accountability and responsibility for the production and maintenance of the CSI register**

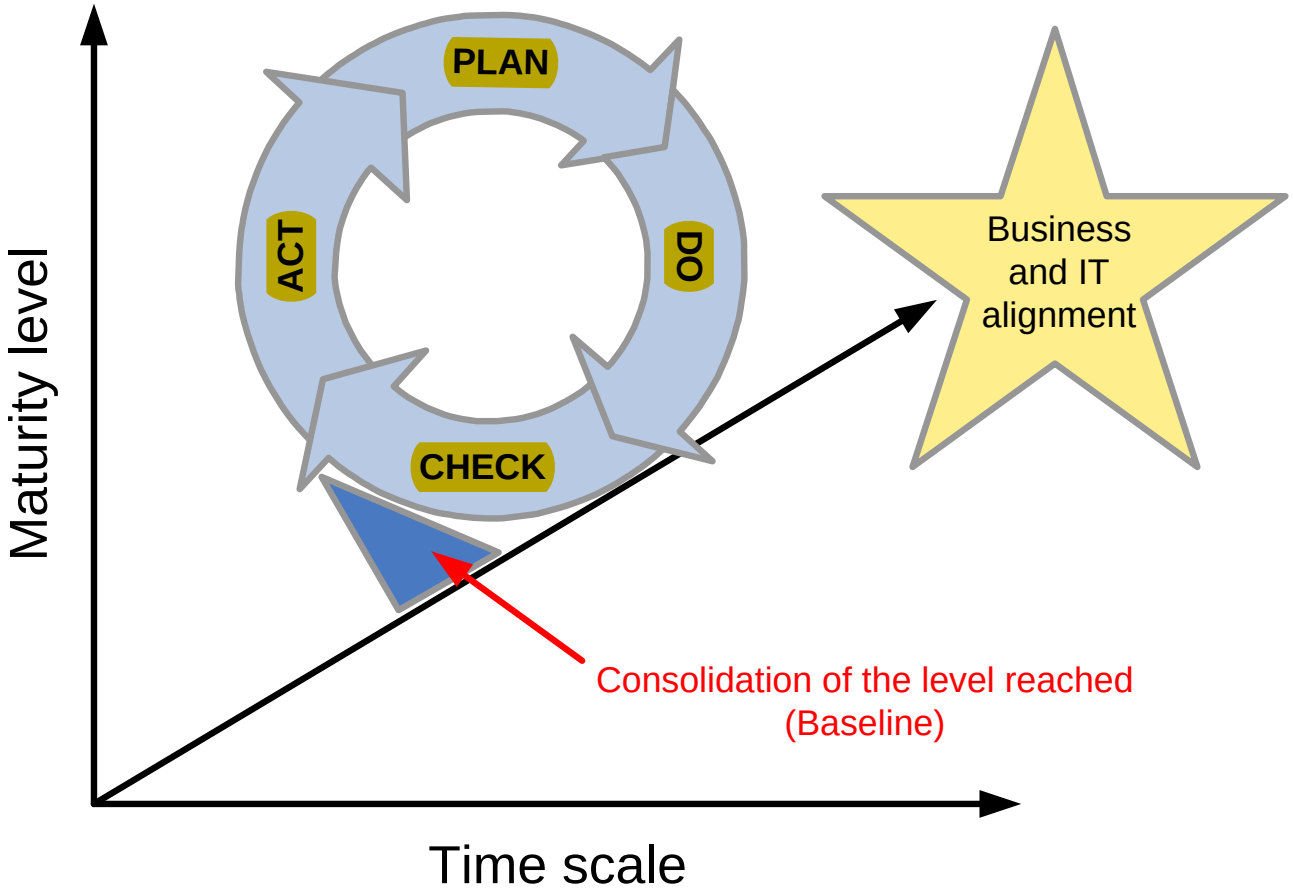
The Continual Service Improvement Approach



The Deming Cycle

Continuous quality control and consolidation

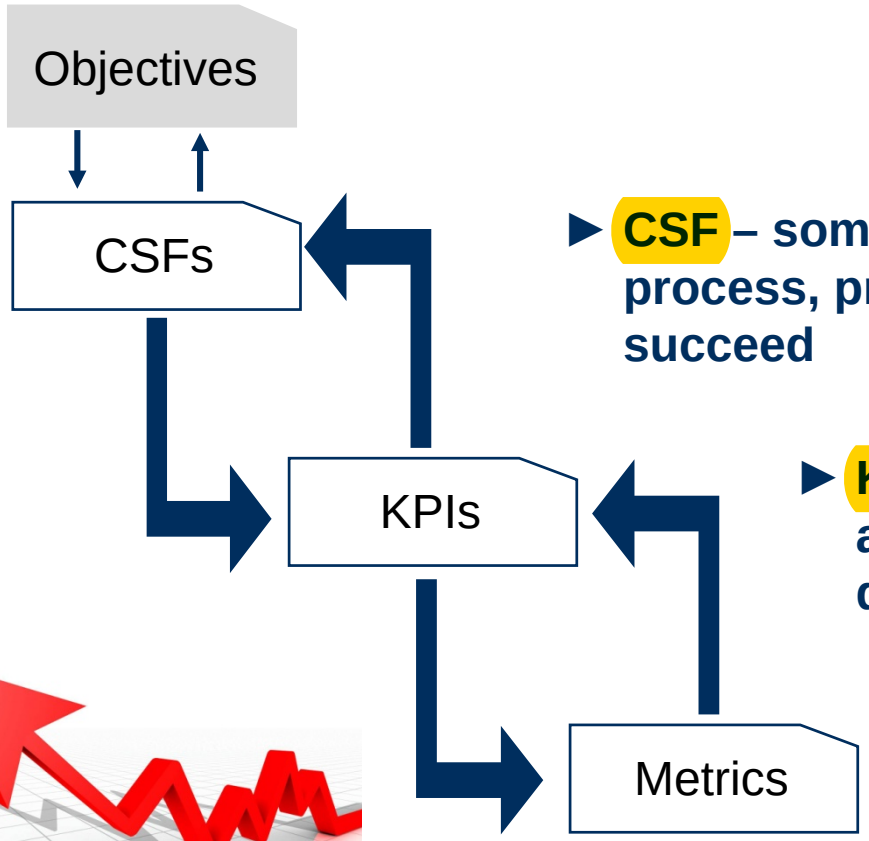
Quality Management Method



Baselines

- Important starters or marker points that allow later comparisons to be made
- Initial data points from where it can be determined if a service or process needs improvement
- It is important to document baselines and ensure they are recognized and accepted
- Baselines must be established at the following levels:
  - Strategic
    - Goals and objectives
  - Tactical
    - Process maturity CMMI
  - Operational
    - Metrics and KPIs

Critical Success Factors / Key Performance Indicators



- **CSF** – something that must happen if a process, project, plan or IT service is to succeed
- **KPI** – used to measure the achievement of a CSF – can be qualitative or quantitative
- **Metric** – something that is measured and reported to help manage a process, IT service or activity

Types of Metrics

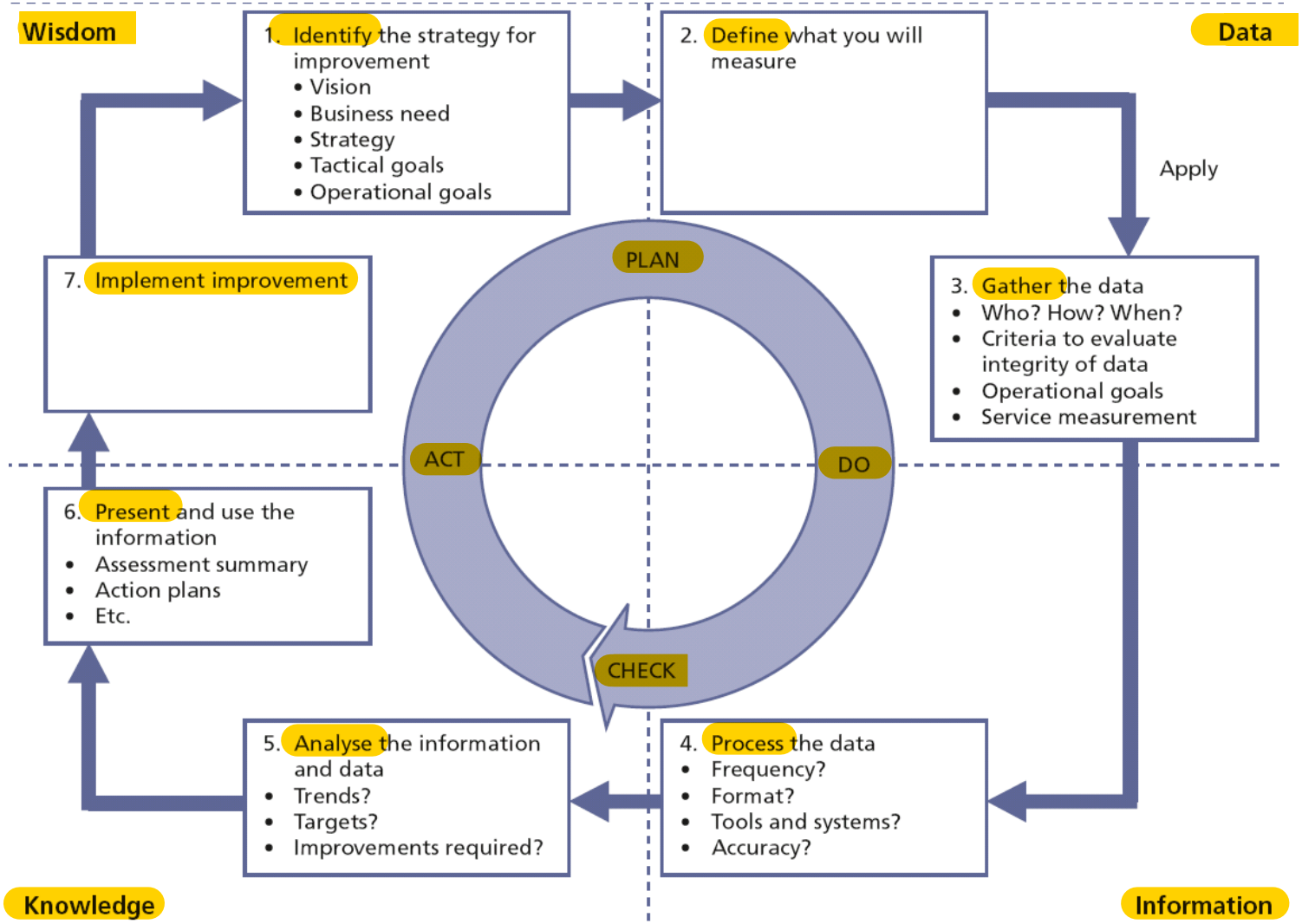
- **There are three types of metrics that an organization will need to collect:**
  - Technology metrics
    - Component- and application-based metrics
      - Application performance
      - Server availability
  - Process metrics
    - Help determine the overall health of a process
      - Quality
      - Performance
      - Value
      - Compliance
  - Service metrics
    - Related to the end-to-end service
      - Service availability
      - Transaction response time

Chapter Contents

The Seven-Step Improvement Process

- **Purpose:**
  - To define and manage the steps needed to identify, define, gather, process, analyze, present and implement improvements
- **Objectives:**
  - Identify opportunities for improving services, processes, tools, etc.
  - Reduce the cost of providing services and ensuring that IT services enable the required business outcomes to be achieved
  - Identify what needs to be measured, analyzed and reported to establish improvement opportunities
  - Continually review service achievements to ensure they remain matched to business requirements
  - Understand what to measure, why it is being measured and carefully define the successful outcome

The Seven-Step Improvement Process



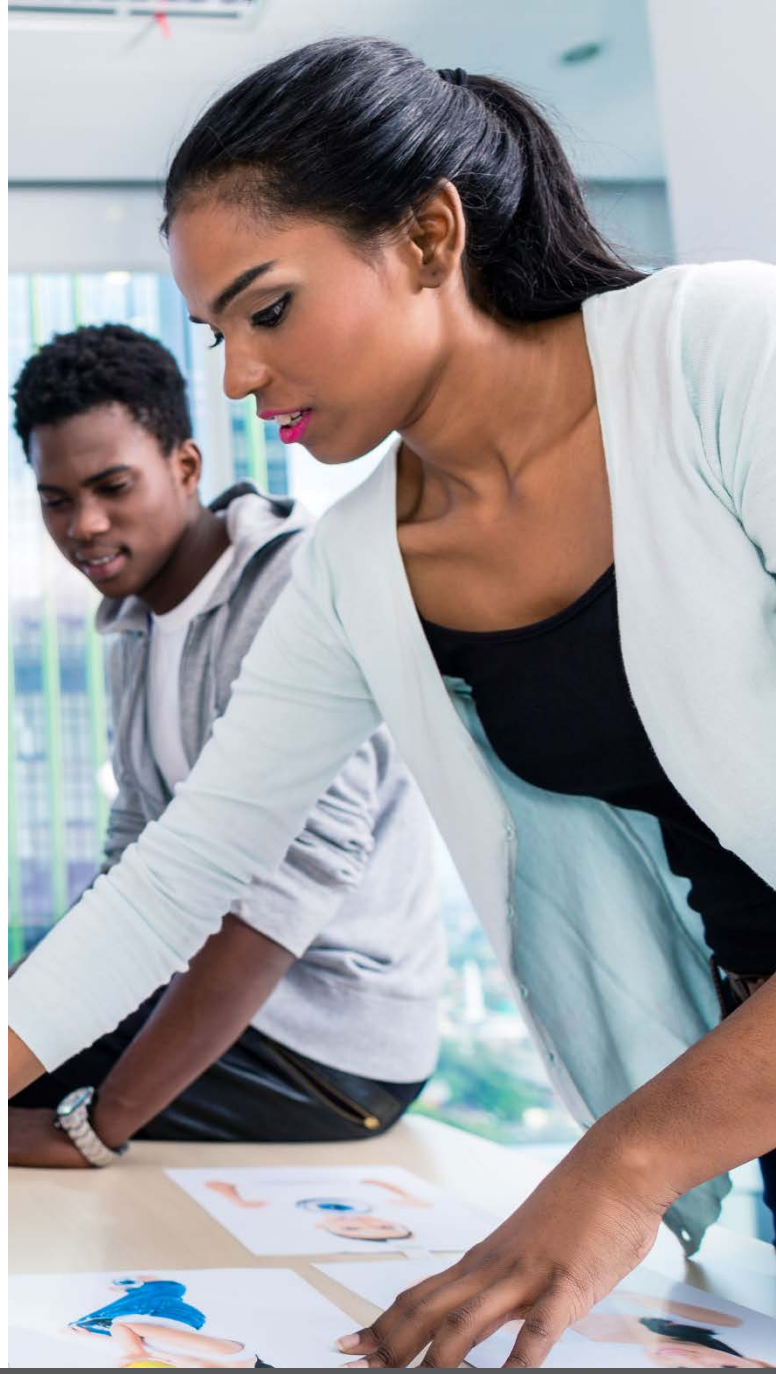
Chapter Contents

- Continual Service Improvement Introduction
- The Seven-Step Improvement Process

Continual Service Improvement Summary

Summary of Continual Service Improvement

- **The purpose:**
  - To align IT services with changing business needs by identifying and implementing improvements to IT services that support business processes
- **Key concepts:**
  - The CSI register
  - The CSI approach
  - The Deming Cycle
  - Baselines, critical success factors and key performance indicators
  - Types of metrics
- **Process:**
  - The seven-step improvement process



Assignment 6: Continual Service Improvement Key Concepts

Workbook

At this time, your instructor will direct you to your Workbook

You should complete Assignment 6: Continual Service Improvement Key Concepts

This assignment is an individual assignment and should take no more than 10 minutes

Continual Service Improvement Sample Question 1

Quiz

1. **Which of the following are objectives of continual service improvement?**
   1. To improve process efficiency and effectiveness
   2. To improve services
   3. To improve all phases of the service lifecycle except service strategy
   4. To improve international standards such as ISO/IEC 20000

   A. 1 and 2 only
   B. 2 only
   C. 1, 2 and 3 only
   D. All of the above

Continual Service Improvement Sample Question 2

Quiz

2. **Which of the following is not a step in the continual service improvement (CSI) approach?**
   A. What is the vision?
   B. Did we get there?
   C. Is there a budget?
   D. Where are we now?

Continual Service Improvement Sample Question 3

Quiz

3. **Which three types of metrics are described in continual service improvement (CSI)?**
   A. Process, personnel and technology metrics
   B. Service, process and function metrics
   C. Process, technology and service metrics
   D. Technology, application and service desk metrics

Chapter Objectives

- **Understand the purpose and objectives of the continual service improvement lifecycle phase**
- **Define key concepts of continual service improvement**
- **Learn about key processes within the continual service improvement lifecycle phase**
  - Purpose and objectives
  - Key concepts

Chapter 8

Technology and Architecture

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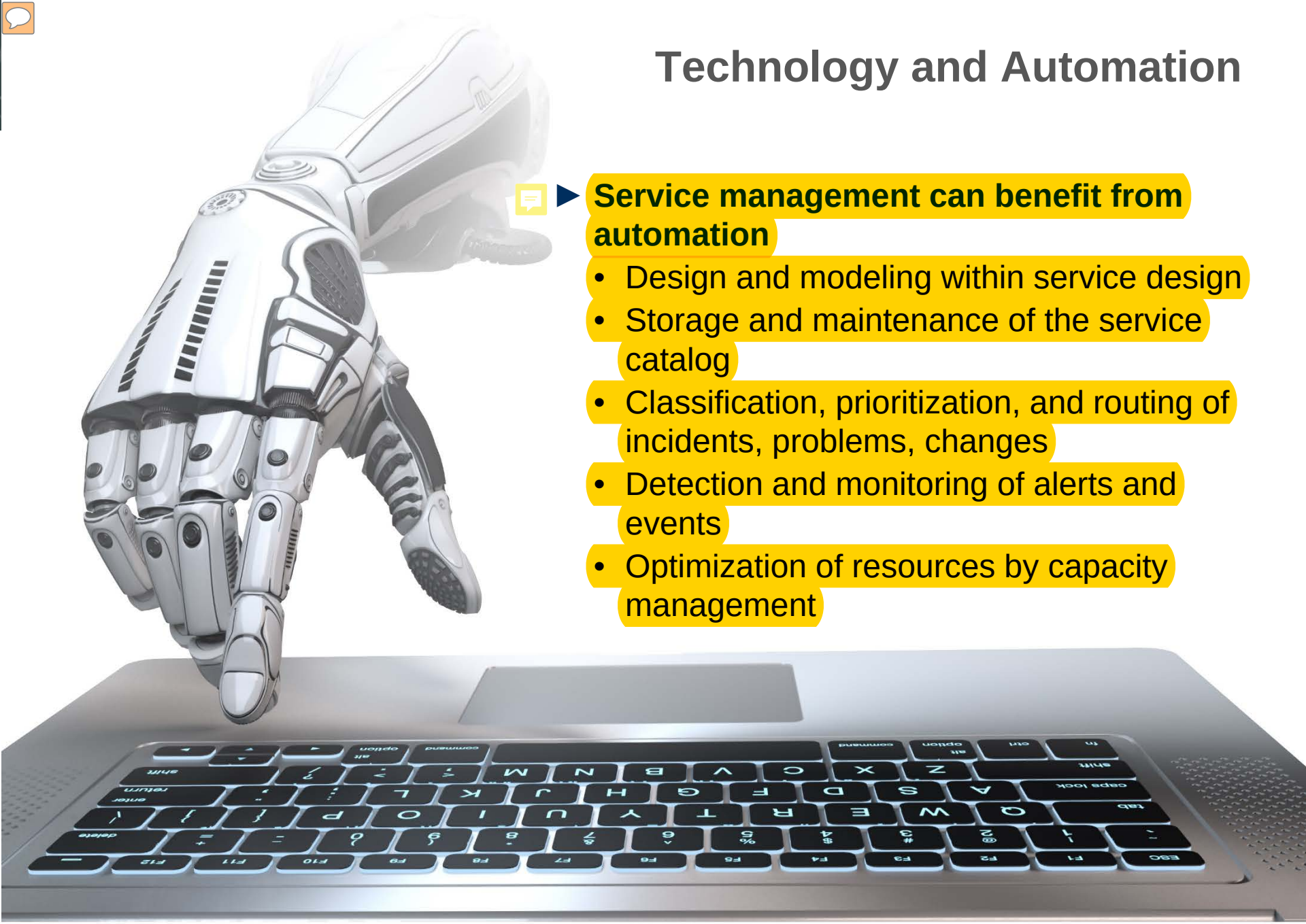
Chapter Objectives

- Understand key attributes to leveraging technology and architecture
- Learn key attributes to implementing automation

Technology and Automation

- **Automation can improve the utility and warranty of services**
  - Simplifying dynamic capacity allocation
  - Standardizing delivery over time zones
  - Improved measurement and reporting
  - Increased volume of task performance
  - Improved information and knowledge dissemination

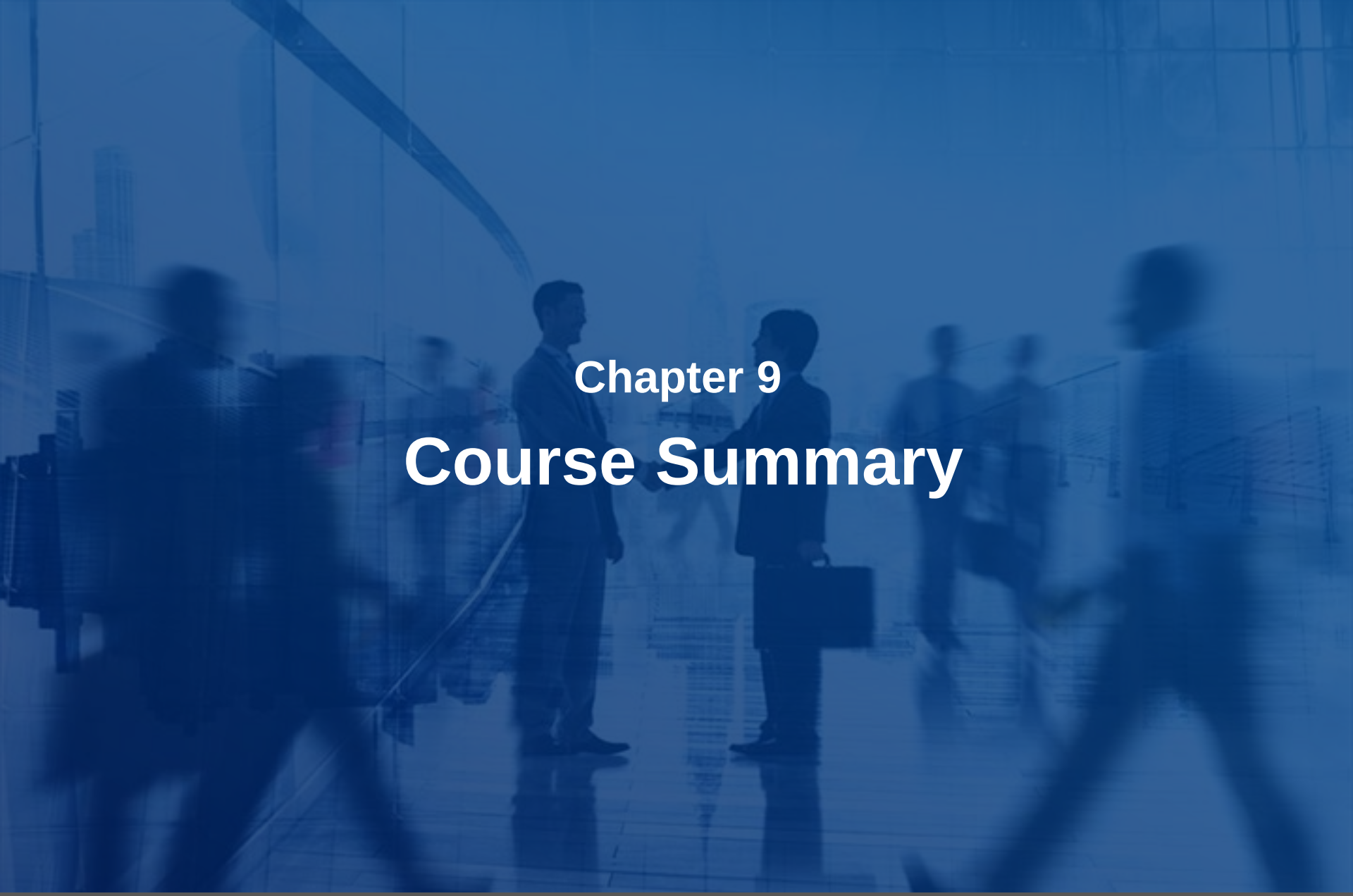
Technology and Automation



- **Service management can benefit from automation**
  - Design and modeling within service design
  - Storage and maintenance of the service catalog
  - Classification, prioritization, and routing of incidents, problems, changes
  - Detection and monitoring of alerts and events
  - Optimization of resources by capacity management

Chapter Objectives

- Understand key attributes to leveraging technology and architecture
- Learn key attributes to implementing automation



Chapter 9
Course Summary

Learning Tree® International

Service Lifecycle Summary

- **Service strategy**
  - To define the perspective, position, plans and patterns that a service provider needs to be able to execute to meet an organization's business outcomes
- **Service design**
  - To design IT services, together with the governing IT practices, processes and policies, to realize the service provider's strategy and to facilitate the introduction of these services into supported environments

Service Lifecycle Summary

- **Service transition**
  - To ensure that new, modified, or retired services meet the expectations of the business as documented in the service strategy and service design stages of the lifecycle
- **Service operation**
  - To coordinate and carry out the activities and processes required to deliver and manage services at agreed levels to business users and customers
- **Continual service improvement**
  - To align IT services with changing business needs by identifying and implementing improvements to IT services that support business processes

Webinar 1090: "Beyond ITIL® Foundation: What's Next?"

- **Free 90-minute webinar to help you determine the most-appropriate ITIL Intermediate courses based on your goals, including:**
  - Achieving the ITIL Expert Certification
  - Specializing your ITIL knowledge in the areas that directly affect your job
  - Overseeing an ITIL implementation
  - Finding out more about the ITIL certifications
- **Explains:**
  - The difference between the Lifecycle and Capability certifications
  - Which processes and functions are covered in each certification
  - The objectives and target audiences for each certification
  - The various routes to become an ITIL Expert
  - How Intermediate courses can help you do your job better
    - Even if you aren't interested in taking the exam to gain the certificate
- **Visit the Learning Tree website at www.learningtree.com for more information or contact your training advisor**

Appendix A

Summary Aid—Process Relationships

Summary Aid—Process Relationships

At the Foundation level, the following table summarizes the important relationships for the key processes of service level management, change management, incident management and problem management.

	Service Level management	**Change management**	**Incident management**	**Problem management**
Service level management Service design		SLAs, SLRs and other related documents should be under change control	SLM defines the service targets for incident management to work within Incident management provides information to enable SLM to identify service improvements	
Capacity management Service design	Capacity management provides information on the performance of the infrastructure when reviewing SLRs	Capacity management assists in impact assessment and raises RFCs The capacity plan should be under change control	Capacity management may develop incident workarounds	Capacity management will assist in problem investigations Capacity planning will be informed by problem management
Availability management Service design	Availability management will provide information and advice when negotiating SLAs to meet the agreed levels of availability	Availability management assists in impact assessment and raises RFCs	Availability management uses incident management data to determine service availability	Proactive problem management will work with availability management to increase availability in the long term
Financial management Service strategy	In some cases, financial penalties and incentives may be linked to the achievement of SLA targets	Financial management will provide the information to assess the cost of changes and provide financial approval		Problem management will provide information relating to the cost of resolving and preventing problems

Summary Aid—Process Relationships (continued)

	Service level management	Change management	Incident management	Problem management
Change management Service transition	Change management will provide details of scheduled change slots and the mechanisms for requesting different types of changes (including standard changes)		Incident management will detect and record incidents arising from failed changes	Problem management will seek to rectify situations caused by failed changes or releases
Release and deployment management Service transition	Release management will provide information on release schedules and policies which are relevant when agreeing mechanisms for service release	Releases will be the result of one or more RFCs		Release and deployment management will ensure outstanding development known errors are transferred into the live known error database
Service asset and configuration management Service transition	SLM will use CMS information to better understand the resources and capabilities available to develop and support new services	Facilitates the impact assessment by understanding the CIs affected and relationship between CIs	Incident management uses the CMS to identify faults, assess impact, and identify the support group	Problem management will use the CMS to identify the faulty CIs and assist root cause analysis
Incident management Service operation		An RFC may be raised to apply an incident resolution or workaround		Problem management will work closely with SLM to drive service improvement initiatives
Problem management Service operation		Problem management raises RFCs to fix problems and implement workarounds Problem management contributes to the CAB	Problems are the underlying causes of incidents Incident recording enables problems to be identified	

Appendix B

Exam Preparation

Exam tips and techniques

1. Your instructor (or a proctor if you take the exam at a later date) will administer the examination. They will explain the rules for the examination.
2. The examination consists of 40 multiple-choice questions each having four answer options. One right answer is worth one point and you are required to score 65 percent (26 out of 40) to pass. You do not lose marks for wrong answers.
3. You have one hour to complete the examination. Don't rush, but also don't spend too long trying to answer individual questions. If you get stuck on a question, move on. A subsequent question may trigger the correct answer. Don't forget to return and answer those questions!
4. Read each question and all answers carefully before choosing an answer. Don't miss the word "NOT" in the question.
5. Take the ITIL view. The questions are designed to test your understanding of the ITIL approach, not what you do at your own organization (which may or may not be the same).
6. Use the process of elimination as you can probably eliminate one or two wrong answers and concentrate on comparing the remaining answers.
7. Good luck!

Appendix C

ITIL® Glossary and Abbreviations

This glossary may be freely downloaded.

See https://www.axelos.com/glossaries-of-terms.

Appendix D

The ITIL® Foundation Certificate Syllabus

Document Control Information

Document Details	
Document Name	The ITIL Foundation Certificate Syllabus v5.5.docx
Purpose of Document	To provide a detailed syllabus for the ITIL Foundation Certificate in IT Service Management
Document Version Number	5.5
Document Status	Live
Document Owner	The Official ITIL Accreditor
Prepared By	Examination Panel
Date Approved	January 2013
Approved By	Chief Examiner
Next Scheduled Review Date	

Version History		
Version Number	**Date Approved**	**Change/Reasons for Change/Comments**
5.0	01 June 2011	Aligned to the 2011 edition of the ITIL core guidance
5.1	22 June 2011	Updated to reflect additional changes to core guidance
5.2	25 July 2011	Clarified wording of 08-2
5.3	September 2011	Clarified core guidance references in 04-9, 04-10 1st bullet and 05-51
5.4	July 2012	Logo and trade mark statement updates; additional references to fig 2.3 in guidance reference for 01-01 and SS Introduction 1 up to 1.1 in guidance reference for 02-02.
5.5	January 2013	Update to provisions for additional time relating to language

Professional Qualifications for

ITIL® PRACTICES FOR SERVICE MANAGEMENT

The ITIL Foundation Certificate
in IT Service Management
SYLLABUS

THE ITIL FOUNDATION CERTIFICATE IN IT SERVICE MANAGEMENT

The purpose of the ITIL Foundation certificate in IT Service Management is to certify that the candidate has gained knowledge of the ITIL terminology, structure and basic concepts and has comprehended the core principles of ITIL practices for service management.

The ITIL Foundation certificate in IT Service Management is *not* intended to enable the holders of the certificate to *apply* the ITIL practices for service management without further guidance.

Target Group

The target group of the ITIL Foundation certificate in IT Service Management is drawn from:

- Individuals who require a basic understanding of the ITIL framework and how it may be used to enhance the quality of IT service management within an organization.
- IT professionals that are working within an organization that has adopted and adapted ITIL who need to be informed about and thereafter contribute to an ongoing service improvement programme.

This may include but is not limited to, IT professionals, business managers and business process owners.

Learning Objectives

Candidates can expect to gain knowledge and understanding in the following upon successful completion of the education and examination components related to this certification.

- Service management as a practice (comprehension)
- The ITIL service lifecycle (comprehension)
- Generic concepts and definitions (awareness)
- Key principles and models (comprehension)
- Selected processes (awareness)
- Selected functions (awareness)
- Selected roles (awareness)
- Technology and architecture (awareness)
- Competence and training (awareness)

Foundation syllabus

The syllabus will guide the design, development and use of training materials as well as training aimed at raising individual's understanding of, and competence in, IT service management as described in the *ITIL Service Strategy*, *ITIL Service Design*, *ITIL Service Transition*, ITIL Service *Operation*, *ITIL Continual Service Improvement*, *ITIL Introduction* and *ITIL Glossary* publications. The syllabus has been designed with ease of reference, extensibility and ease of maintenance in mind.

Candidates for the ITIL Foundation certificate in IT service management have to complete all units and successfully pass the corresponding examination to achieve certification.

Training providers are free to structure and organize their training in the way they find most appropriate, provided the units below are sufficiently covered. It is strongly recommended that training providers do not structure their courses by simply following the order of the training units as described in this document. It has been designed to be flexible so that training providers can add value as appropriate. The recommended number of study days is 3 when taught in a classroom environment, which can include the final exam.

The units cover the topics listed.

Unit	Content
ITILFND01	**Service management as a practice** The purpose of this unit is to help the candidate to define the concept of a service, and to comprehend and explain the concept of service management as a practice. Specifically, candidates must be able to: 01-1. Describe the concept of best practices in the public domain (SS 2.1.7, Fig 2.3) 01-2. Describe and explain why ITIL is successful (SS 1.4) 01-3. Define and explain the concept of a service (SS 2.1.1) 01-4. Define and explain the concept of internal and external customers (SS 3.2.1.2) 01-5. Define and explain the concept of internal and external services (SS 3.2.2.3) 01-6. Define and explain the concept of service management (SS 2.1.2) 01-7. Define and explain the concept of IT service management (SS 2.1.3) 01-8. Define and explain the concept of stakeholders in service management (SS 2.1.5) 01-9. Define processes and functions (SS 2.2.2, 2.2.3.1) 01-10. Explain the process model and the characteristics of processes (SS 2.2.2, Fig 2.5) **The recommended study period for this unit is minimum 1 hour and 30 minutes.**
ITILFND02	**The ITIL service lifecycle** The purpose of this unit is to help the candidate to understand the value of the ITIL service lifecycle, how the processes integrate with each other, throughout the lifecycle and explain the objectives, scope and business value for each phase in the lifecycle

Unit	Content
	Specifically, candidates must be able to: 02-2. Describe the structure of the ITIL service lifecycle (SS 1. Introduction up to 1.1, SS 1.2, Fig 1.1) 02-3. Account for the purpose, objectives and scope of service strategy (SS 1.1.1, 1.1.2) 02-4. Briefly explain what value service strategy provides to the business (SS 1.1.4) 02-5. Account for the purpose, objectives and scope of service design (SD 1.1.1, 1.1.2) 02-6. Briefly explain what value service design provides to the business (SD 1.1.4) 02-7. Account for the purpose, objectives and scope of service transition (ST 1.1.1, 1.1.2) 02-8. Briefly explain what value service transition provides to the business (ST 1.1.4) 02-9. Account for the purpose, objectives and scope of service operation (SO 1.1.1, 1.1.2) 02-10. Briefly explain what value service operation provides to the business (SO 1.1.4) 02-11. Account for the main purpose, objectives and scope of continual service improvement (CSI 1.1.1, 1.1.2) 02-12. Briefly explain what value continual service improvement provides to the business (CSI 1.1.4) **It is recommended that this training is covered within other units.** **The recommended study period for this unit is minimum 1 hour.**
ITILFND03	**Generic concepts and definitions** The purpose of this unit is to help the candidate to define some of the key terminology and explain the key concepts of service management. Specifically, candidates must be able to define and explain the following key concepts: 03-1. Utility and warranty (SS 2.1.6) 03-2. Assets, resources and capabilities (SS 2.2.1) 03-3. Service portfolio (SS 4.2.4.1, Fig 4.14) 03-4. Service catalogue (both two-view and three-view types) (SD 4.2.4.5, Fig. 4.4, Fig. 4.5) 03-5. Governance (SS 2.3.1) 03-6. Business case (SS 3.6.1.1) 03-7. Risk management (SS 5.6.5.1, 5.6.5.2) 03-8. Service provider (SS 2.1.4) 03-10. Supplier (SS 2.1.5) 03-11. Service level agreement (SLA) (SD 4.3.4) 03-12. Operational level agreement (OLA) (SD 4.3.4) 03-13. Underpinning contract (SD 4.8.4.2) 03-14. Service design package (SD Appendix A) 03-15. Availability (SD 4.4.4.3)

Unit	Content
	03-16. Service knowledge management system (SKMS) (ST 4.7.4.3) 03-17. Configuration item (CI) (ST 4.3.4.2) 03-18. Configuration management system (ST 4.3.4.3) 03-19. Definitive media library (DML) (ST 4.3.4.4) 03-20. Change (ST 4.2.4.4) 03-21. Change types (standard, emergency and normal) (ST 4.2.4.3, 4.2.4.7, 4.2.5.11) 03-24. Event (SO 4.1 1st para) 03-25. Alert (Glossary) 03-26. Incident (SO 4.2 1st para) 03-27. Impact, urgency and priority (SO 4.2.5.4) 03-28. Service request (SO 4.3 1st para) 03-29. Problem (SO 4.4 1st para) 03-30. Workaround (SO 4.4.5.6) 03-31. Known error (SO 4.4.5.7) 03-32. Known error database (KEDB) (SO 4.4.7.2) 03-33. The role of communication in service operation (SO 3.6) 03-35. Release policy (ST 4.1.4.2) 03-36. Types of services (SS 3.2.2.4, Tab 3.5) 03-37. Change proposals (ST 4.2.4.6) 03-38. CSI register (CSI 3.4) 03-39. Outcomes (SS 2.1.1) 03-40. Patterns of business activity (SS 4.4.5.2) 03-41. Customers and users (SS 2.1.5) 03-42. The Deming Cycle (plan, do, check, act) (CSI 3.8, Fig 2.8) **It is recommended that this unit is covered as part of the training in the other units.**
ITILFND04	**Key principles and models** The purpose of this unit is to help the candidate to comprehend and account for the key principles and models of service management and to balance some of the opposing forces within service management. Specifically, candidates must be able to: **Service strategy** 04-2. Describe value creation through services (SS 3.2.3, 3.2.3.1,Fig 3.6, Fig 3.7, not section on “Marketing mindset”) **Service design** 04-3. Understand the importance of people, processes, products and partners for service management (SD 3.1.5, Fig 3.3) 04-4. Understand the five major aspects of service design (SD 3.1.1): • Service solutions for new or changed services • Management information systems and tools

Unit	Content
	• Technology architectures and management architectures • The processes required • Measurement methods and metrics **Continual service improvement** 04-9. Explain the continual service improvement approach (CSI 3.1, CSI 3.1.1, Fig 3.1) 04-10. Understand the role of measurement for continual service improvement and explain the following key elements: • Relationship between critical success factors (CSF) and key performance indicators (KPI) (CSI 5.5.1) • Baselines (CSI 3.9.1) • Types of metrics (technology metrics, process metrics, service metrics) (CSI 5.5) **The recommended study period for this unit is minimum 1 hour and 30 minutes.**
ITILFND05	**Processes** The purpose of this unit is to help the candidate understand how the service management processes contribute to the ITIL service lifecycle, to explain the purpose, objectives, scope, basic concepts, activities and interfaces for four of the core processes, and to state the purpose, objectives and scope for eighteen of the remaining processes. The list of activities to be included from each process is the minimum required and should not be taken as an exhaustive list. Specifically, candidates must be able to: **Service strategy** **05-2. State the purpose, objectives and scope for:** 05-21 Service portfolio management (SS 4.2.1, 4.2.2) • The service portfolio (SS 4.2.4.1, Fig 4.14) 05-22 Financial management for IT services (SS 4.3.1, 4.3.2) • Business case (SS 3.6.1.1) 05-23 Business relationship management (SS 4.5.1, 4.5.2, Tab 4.10) **Service design** **05-3. Explain the purpose, objectives, scope, basic concepts, process**

Unit	Content
	activities and interfaces for: 05-31 Service level management (SLM) (SD 4.3.1. 4.3.2, 4.3.6.4) The following list must be covered: • Service-based SLA (SD 4.3.5.1) • Multi-level SLAs (SD 4.3.5.1, Fig 4.7) • Service level requirements (SLRs) (SD 4.3.5.2) • SLA monitoring (SLAM) chart (SD 4.3.5.5, CSI Fig 4.4) • Service review (SD 4.3.5.6) • Service improvement plan (SIP) (SD 4.3.6.3) • The relationship between SLM and BRM (SD 4.3.2.1) **05-4. State the purpose, objectives and scope for:** 05-41 Service catalogue management (SD 4.2.1, 4.2.2) 05-42 Availability management (SD 4.4.1, 4.4.2) • Service availability (SD 4.4.4.2) • Component availability (SD 4.4.4.2) • Reliability (SD 4.4.4.3) • Maintainability (SD 4.4.4.3) • Serviceability (SD 4.4.4.3) • Vital business functions (VBF) (SD 4.4.4.3) 05-43 Information security management (ISM) (SD 4.7.1, 4.7.2) • Information security policy (SD 4.7.4.1) 05-44 Supplier management (SD 4.8.1, 4.8.2) • Supplier categories (SD 4.8.5.3, Fig 4.28) 05-45 Capacity management (SD 4.5.1, 4.5.2) • Capacity plan (SD 4.5.6.3) • Business capacity management (SD 4.5.4.3) • Service capacity management (SD 4.5.4.3) • Component capacity management (SD 4.5.4.3) 05-46 IT service continuity management (SD 4.6.1, 4.6.2) • Purpose of business impact analysis (BIA) (SD 4.6.5.2) • Risk assessment (SD 4.6.5.2) 05-47 Design coordination (SD 4.1.1, 4.1.2)

Unit	Content
	Service transition **05-5. Explain the purpose, objectives, scope, basic concepts, process activities and interfaces for:** 05-51 Change management (ST 4.2.1, 4.2.2, 4.2.4.6, 4.2.6.4, 4.2.6.5) • Types of change request (ST 4.2.4.3) • Change models (ST 4.2.4.5) • Remediation planning (ST 4.2.4.8) • Change advisory board / emergency change advisory board (ST 4.2.5.10, 4.2.5.11) • Lifecycle of a normal change (ST 4.2.5, Fig 4.2) **05-6. State the purpose, objectives and scope for:** 05-61 Release and deployment management (ST 4.4.1, 4.4.2) • Four phases of release and deployment (ST 4.4.5, Fig 4.23) 05-62 Knowledge management (ST 4.7.1, 4.7.2) • Data-to-Information-to-Knowledge-to-Wisdom (DIKW) & SKMS (ST 4.7.4.2, 4.7.4.3, Fig 4.36) 05-63 Service asset and configuration management (SACM) (ST 4.3.1, 4.3.2,) 05-64 Transition planning and support (ST 4.1.1, 4.1.2) **Service operation** **05-7. Explain the purpose, objectives, scope, basic concepts, process activities and interfaces for:** 05-71 Incident management (SO 4.2.1, 4.2.2, 4.2.4.2, 4.2.5, 4.2.6.4) 05-72 Problem management (SO 4.4.1, 4.4.2, 4.4.4.2, 4.4.5, 4.4.6.4), not section on problem analysis techniques (4.4.4.3) **05-8. State the purpose, objectives and scope for:** 05-81 Event management (SO 4.1.1, 4.1.2) 05-82 Request fulfilment (SO 4.3.1, 4.3.2)

Unit	Content
	05-83 Access management (SO 4.5.1, 4.5.2) **Continual service improvement** **05-9. State the purpose, objectives and scope for:** 05-91 The seven-step improvement process (CSI 3.9.3.1, 4.1, 4.1.1, 4.1.2, Fig 3.4) **The recommended study period for this unit is minimum 10 hours and 45 minutes.**
ITILFND06	**Functions** The purpose of this unit is to help the candidate to explain the role, objectives and organizational structures of the service desk function, and to state the role, objectives and overlap of three other functions. Specifically, candidates must be able to: 06-1. Explain the role, objectives and organizational structures for • The service desk function (SO 6.3, 6.3.1, 6.3.2, 6.3.3, Figs 6.2, 6.3, 6.4) 06-2. State the role and objectives of: • The technical management function (SO 6.4.1, 6.4.2) • The application management function (SO 6.6.1, 6.6.2) with application development (SO 6.6.6.1, Tab 6.2) • The IT operations management function (IT operations control and facilities management) (SO 6.5.1, 6.5.2) **The recommended study period for this unit is minimum 1 hour.**
ITILFND07	**Roles** The purpose of this unit is to help the candidate to account for and to be aware of the responsibilities of some of the key roles in service management. Specifically, candidates must be able to: 07-1. Account for the role and the responsibilities of the • Process owner (SD 6.3.2) • Process manager (SD 6.3.3) • Process practitioner (SD 6.3.4)

Unit	Content
	• Service owner (SD 6.3.1) 07-2. Recognize the responsible, accountable, consulted, informed (RACI) responsibility model and explain its role in determining organizational structure. (SD 3.7.4.1, tab 3.2, not RACI-VS or RASCI) **The recommended study period for this unit is minimum 45 minutes.**
ITILFND08	**Technology and architecture** The purpose of this unit is to help the candidate to: 08-2. Understand how service automation assists with expediting service management processes (SS 7.1) **It is recommended that this unit is covered as part of the training in the other units.**
ITILFND09	**Competence and training** 09-1. Competence and skills for service management (SD 6.5.1) 09-2. Competence and skills framework (SD 6.5.2) 09-3. Training (SD 6.5.3) **This unit is not examinable. The recommended period of study is 15 minutes.**
ITILFND10	**Mock exam** The purpose of this unit is to help the candidate to pass the ITIL Foundation exam. Specifically, candidates must: 10-1. Sit a minimum of one ITIL Foundation mock exam. **The recommended study period for this unit is minimum 2 hours inclusive of revision.**

Format of the Examination

This syllabus has an accompanying examination at which the candidate must achieve a pass score to gain the ITIL Foundation Certificate in IT Service Management.

Type	Multiple choice, 40 questions. The questions are selected from the full ITIL Foundation Certificate in IT Service Management examination question bank.
Duration	Maximum 60 minutes for all candidates in their respective language
Provisions for additional time relating to language	Candidates completing an exam in a language that is not their mother tongue have a maximum of 75 minutes to complete the exam and are allowed the use of a dictionary.
Prerequisite	Accredited ITIL Foundation training is strongly recommended but is not a prerequisite.
Supervised	Yes
Open Book	No
Pass Score	26/40 or 65%
Delivery	This examination is available in Online or Paper based format.