

IT service management

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Aim and objectives

- This presentation introduces learners to **IT service management** defining basic terms and concepts. It also describes the **service lifecycle** within which the problem management process is identified and defined.
- The **objectives** of this presentation are to:
 - Familiarize learners with IT service management
 - Describe the service lifecycle phases
 - Highlight where problem management is located within the service lifecycle and define it

- At the end of this presentation, you will be able to:
 - Recall the definitions of the key concepts of IT service management
 - Name the service lifecycle stages
 - Explain what problem management means

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Introduction



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- ITIL stands for the **Information Technology Infrastructure Library**
- Set of detailed practices for **IT Service Management** (ITSM) that focuses on aligning IT services with the needs of business
- **International de facto management framework** describing “**good practices**” for IT Service Management
- Evolved from the UK government’s efforts during the 1980s to record service management approaches of successful organizations – most recent update is the release of **version 4 in 2019**
- Other ITSM best practices sources exist as well, such as the **ISO 20000 standard**, and the **COBIT public framework**

What is a service?

- To **understand what service management is**, and why it is so important to enterprises, we need to understand what services are
- 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
- The **outcomes** is the result of carrying out an activity, following a process, or delivering an IT service, etc. – it is what customers want to achieve via a service
- The **value** of the service to the customer is directly dependent on how well a service facilitates these outcomes



Source: <https://wptidbits.com>

What is service management?

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

- Service management is what **enables a service provider to:**
 - understand the **services** that they are **providing** from both a consumer and provider perspective
 - ensure that the **services** really do **facilitate** the **outcomes** that their customers want to achieve
 - understand the **value of** those **services** to their customers and hence their relative importance
 - understand and **manage** all of the **costs** and **risks** associated with providing those services

What is IT service management?

- IT service management refers to **implementation** and management of **quality IT services** that meet the needs of the business
- Performed by IT service providers **through an appropriate mix of people, process and information technology**, which constitute the specialized organizational capabilities for ITSM and IT services)
- **IT service provider** is a service provider that provides IT services to internal or external customers
- Every **IT department** should consider itself an IT service provider and adopt the principles and practices of IT service management

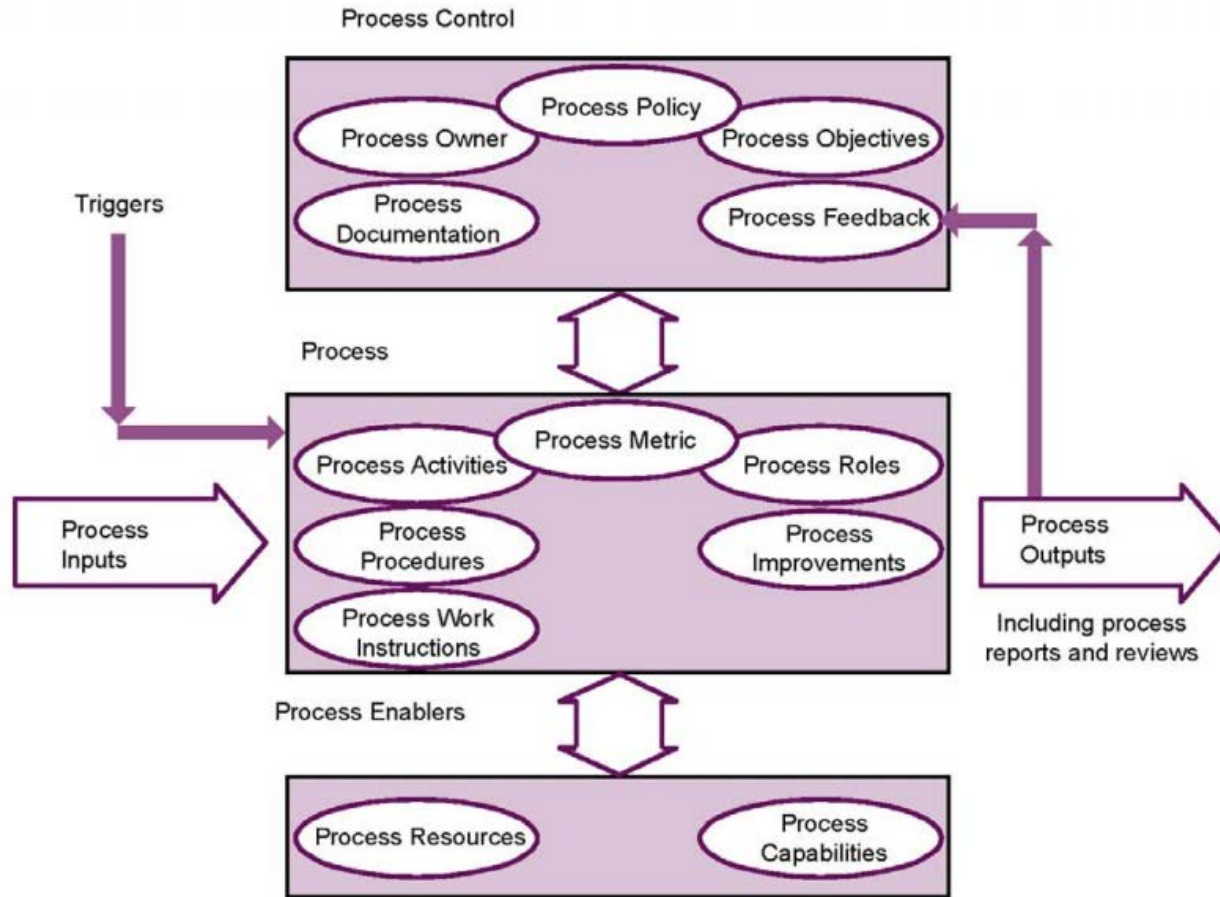


Source: <https://freshservice.com/solutions/it>

Processes and functions

- A **process** is a structured set of activities designed to accomplish a specific objective. A process takes one or more defined inputs and turns them into defined outputs
- Some **principles** for processes:
 - They should be **measurable and performance driven** (measuring overall efficiency including cost, effort and other resources used)
 - They are **strategic assets** when they create competitive advantage and market differentiation
 - They may **define** roles, responsibilities, tools, management controls, policies, standards, guidelines, activities and work instructions if they are needed

Process elements



Source: The Cabinet Office ITIL Service Design ISBN 978-0-113313-05-1

- **Measurability:** Processes are based on the performance of activities to deliver a specific output, so the measurement should be performance based
- **Specific Results:** Processes exist to deliver a specific result, or else they should not be taking place
- **Customers/Stakeholders:** Every process should deliver its primary result for the benefit of a customer or stakeholder
- **Responds to a Trigger:** It makes no difference if the process is repeated or continual; the actions should be traceable to a specific trigger

- A **function** is defined by ITIL as a team or group of people and the other resources or tools that are used to carry out a process or process activities
- Commonly, in **larger organizations**, functions are broken down and carried out by individuals, groups, or teams with specific or specialist skills
- In **smaller organizations**, there may be fewer specialist groups or teams, and one team may carry out a number of functions
- For example, the **service desk** is incorporated into the wider technical support team

Service lifecycle

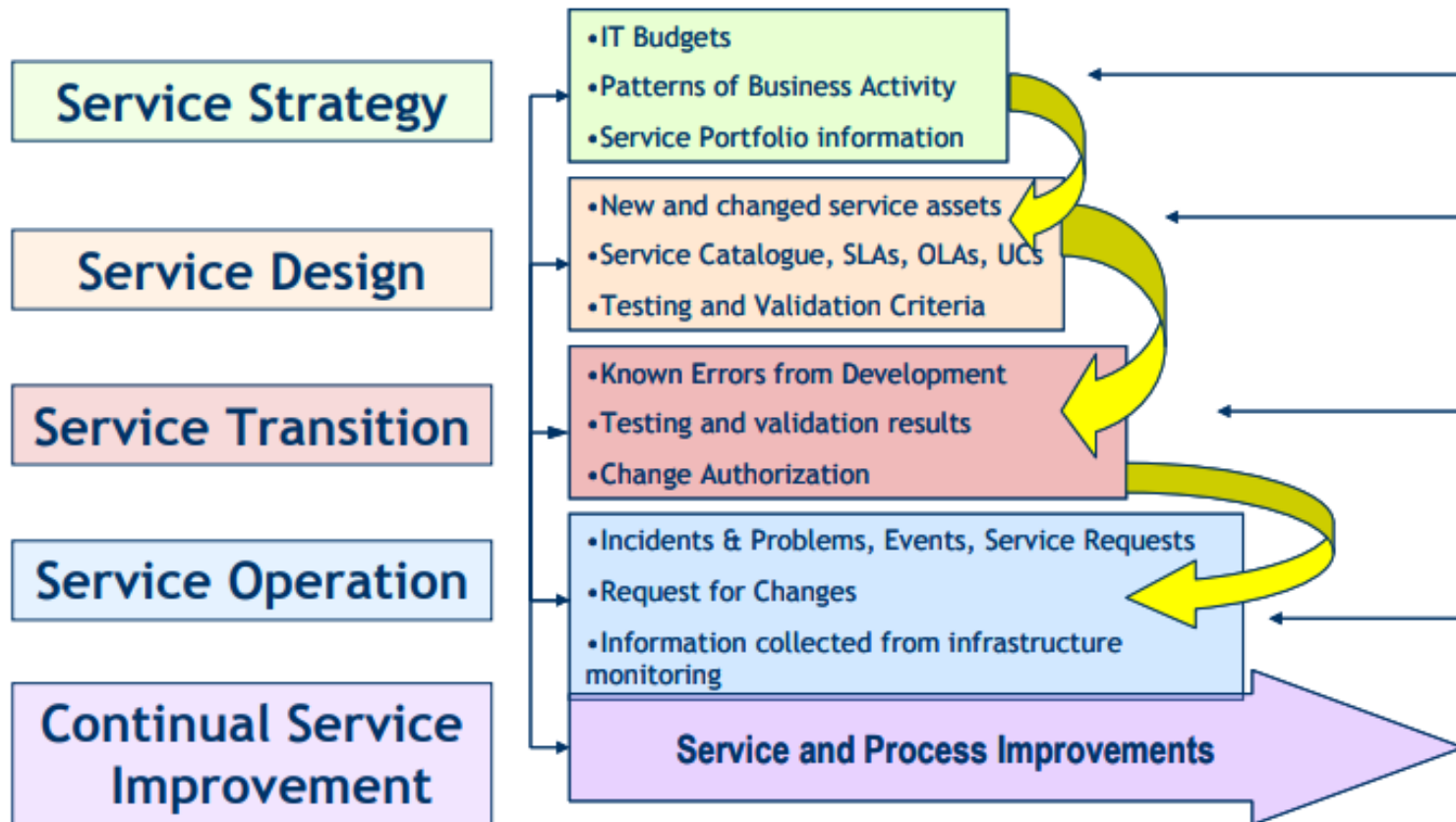
- Emphasizes the importance of **coordination and control** across the various functions, processes and systems necessary to manage the full lifecycle of IT services
- It enables a service provider to provide overall **strategic objectives** for the IT organization
- These will be used to **direct how services are designed, transitioned, supported and improved** in order to deliver optimum value to customers and stakeholders
- Considers **5 phases**: the strategy, design, transition, operation and continual improvement of IT services

Service lifecycle model



Source: The Cabinet Office ITIL Service Strategy ISBN 978-0-113313-04-4

How it works?



Source: ITIL V3 Foundation Complete Certification Kit: 2009 Edition, The Art of Service

- **Service strategy** is the hub around which everything revolves
- Its **objective** is to offer better services than the competition
- Is not just about the strategy for individual services today, but also about positioning the IT service provider for the **long haul**
- **Determines** the needs, priorities, demands and relative importance for desired services
- **Identifies** the value being created through services and the predicted financial resources required to design, deliver and support them



- Once an organization has determined the IT strategy it wishes to pursue, it uses the service design phase to **create new services**
- **Aims** to take the necessary steps to ensure that the new service will perform as planned and deliver the functionality and benefits intended by the business
- Provides **guidance on the design and development** of services according to the requirements of the customer and the strategic approach
- Documents the needed **infrastructure, processes** and **support mechanisms** (e.g. service management systems and tools)



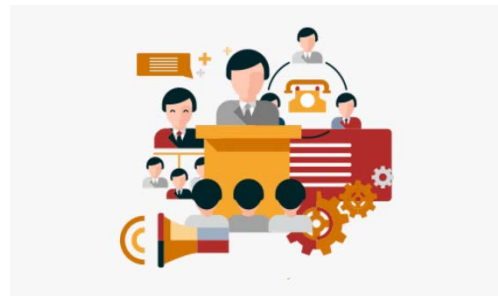
- **Service transition** is concerned with bridging smoothly the gap between the development and operations departments within IT
- **Ensures** that operational requirements are fully considered and catered for before anything is moved into the live environment
- **Includes** testing, deployment within the production environment, documentation and training for users and support staff
- Also responsible for the **decommissioning** and **removal** of **services** that are no longer required and their delivery is cut off



- **Service operation** is the phase of the IT service management lifecycle that is responsible for ‘business as usual’ activities
- If **services** are **not utilized** or are not delivered **efficiently** and effectively, they **will not deliver** their **full value**, irrespective of how well designed they may be
- It is service operation that is responsible for **utilizing the processes** to deliver services to users and customers
- **Manages and resolves incidents and problems** that affect service availability



➤ **Event management:** responsible for the monitoring of all events throughout the IT infrastructure and applications to ensure normal operation



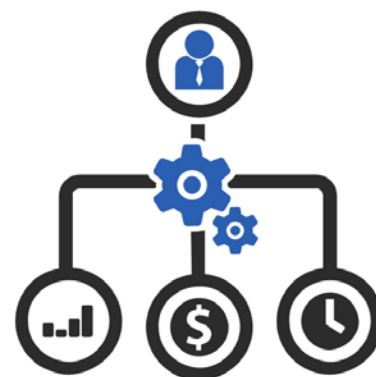
➤ **Incident Management:** Dealing with all incidents either where a service is being disrupted or is at risk of disruption



➤ **Request fulfillment:** carries out service requests from users. Request fulfilment covers standard change requests, requests for information and complaints



➤ **Problem management:** This process is responsible for the management of all problems in the IT infrastructure. The process includes root cause analysis and arriving at the resolution of problems. Problem management remains responsible until resolutions are implemented via the processes of change management and release management

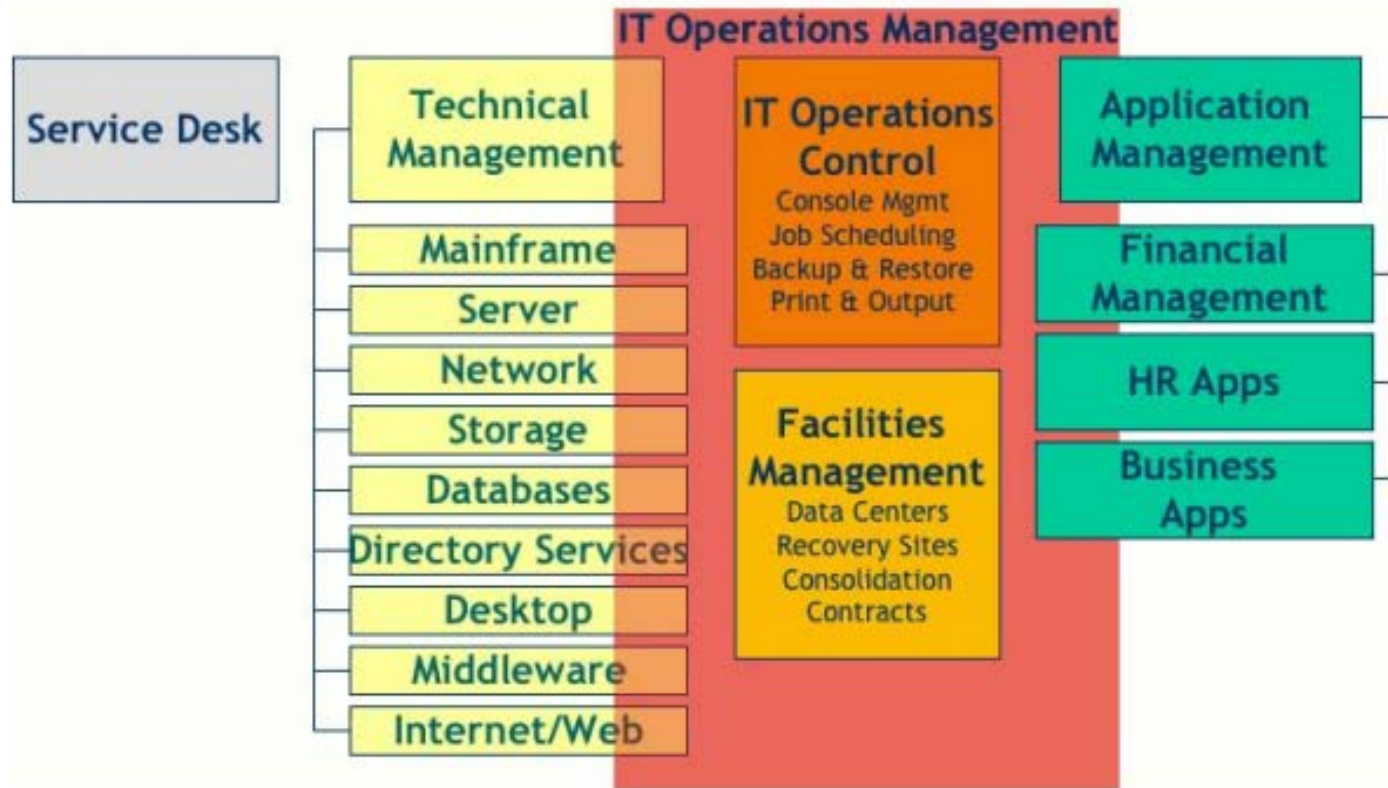


➤ **Access Management:** enables users with the correct level of authorization to access an application or service



- **Service Desk:** Conducts a number of processes, in particular incident management and request fulfilment. The service desk is made up of a group of staff trained to deal with service events
- **Technical Management:** Provides the resources and ensures that knowledge of relevant technologies is kept up to date
- **Application Management:** Manages applications through the totality of their lifecycle. This starts with the first business 'idea' and completes when the application is taken out of service
- **IT Operations Management:** Operation of the organization's IT infrastructure and applications on a day-to-day basis

Functions scheme

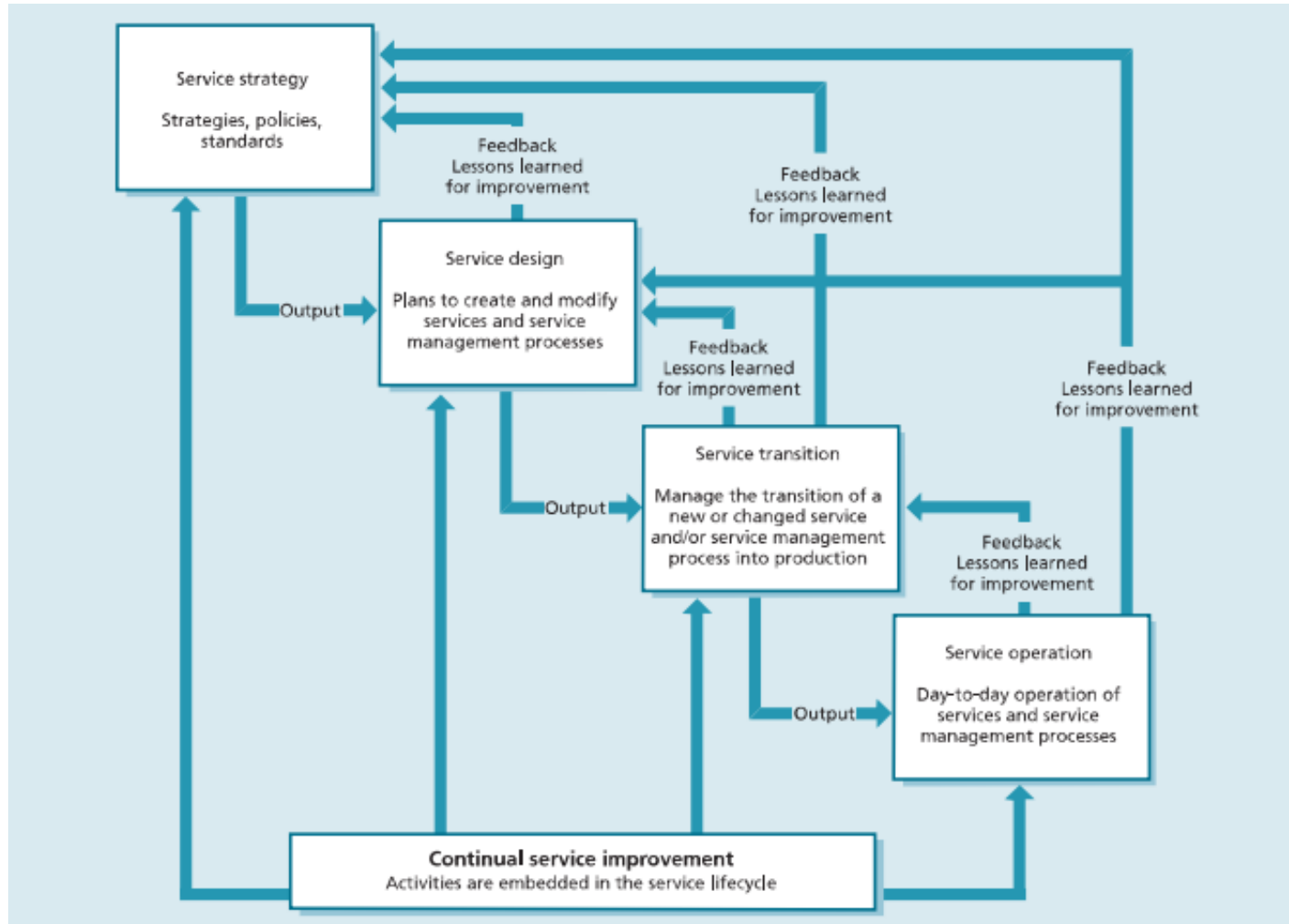


Source: ITIL V3 Foundation Complete Certification Kit: 2009 Edition, The Art of Service

- Once a **service management** solution has been **implemented**, it is essential not to sit back and think that the job has been done
- All aspects of the environment will be continually changing, and the service provider must always continue to **seek improvements**
- **Continual service improvement** is responsible for ensuring that these improvements are identified and implemented
- **Aims to** deliver business value by ensuring that the service management implementation continues to deliver the desired business benefits



Continual service improvement and the service lifecycle



Source: The Cabinet Office ITIL Service Operation, 2011 edition, ISBN 9780113313075

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