### Service Design

To design products and services that are fit for purpose and use, and that can be delivered by the organization and its ecosystem. This includes planning and organizing people, partners and suppliers, information, communication, technology, and practices for new or changed products and services, and the interaction between the organization and its customers.

### **Design thinking**

Design thinking is a practical and human-centred approach that accelerates innovation. It is used by product and service designers as well as organizations to solve complex problems and find practical, creative solutions that meet the needs of the organization and its customers.

Inspiration and empathy, Ideation, Prototyping, Implementation, Evaluation

## Software development and management

To ensure that applications meet internal and external stakeholder needs, in terms of functionality, reliability, maintainability, compliance, and auditability.

**SDLC model**: the sequence in which the stages of the software development lifecycle are executed. The major stages are: establish requirements, design, code, test, run

### Change Enablement

To maximize the number of successful service and product changes by ensuring that risks have been properly assessed, authorizing changes to proceed, and managing the change schedule.

The addition, modification, or removal of anything that could have a direct or indirect effect on services.

Standard Change, Normal Change, Emergency Change

Change authority: A person or group responsible for authorizing a change.

# Service Validation and Testing

To ensure that new or changed products and services meet defined requirements. The definition of service value is based on input from customers, business objectives, and regulatory requirements and is documented as part of the design and transition value chain activity. These inputs are used to establish measurable quality and performance indicators that support the definition of assurance criteria and testing requirements.

Testing On Development Environment, In-Team Environment, Staging Environment, Production

# Release Management

To make new and changed services and features available for use.

#### Release

A version of a service or any other configuration item, or a collection of configuration items that is made available for use

# Deployment Management

To move new or changed hardware, software, documentation, processes, or any other component to live environments. It may also be involved in deploying components to other environments for testing or staging

### Service Desk

To capture demand for incident resolution and service requests. It should also be the entry point and single point of contact for the service provider for all users

#### **Omnichannel communications**

Unified communications across multiple channels based on sharing information across the channels and providing a seamless communication experience.

### Service empathy

The ability to recognize, understand, predict, and project the interests, needs, intentions, and experiences of another party in order to establish, maintain, and improve the service relationship

#### Moment of truth

Any episode in which the customer or user comes into contact with an aspect of the organization and gets an impression of the quality of its service. It is the basis for setting and fulfilling client expectations and ultimately achieving client satisfaction.

# Incident Management

To minimize the negative impact of incidents by restoring normal service operation as quickly as possible.

#### Incident

An unplanned interruption to a service or reduction in the quality of a service.

#### Incident model

A repeatable approach to the management of a particular type of incident.

#### **Major incident**

An incident with significant business impact, requiring an immediate coordinated resolution.

#### Workaround

A solution that reduces or eliminates the impact of an incident or problem for which a full resolution is not yet available. Some workarounds reduce the likelihood of incidents.

#### **Technical debt**

The total rework backlog accumulated by choosing workarounds instead of system solutions that would take longer.

## **Problem Management**

To reduce the likelihood and impact of incidents by identifying actual and potential causes of incidents, and managing workarounds and known errors.

#### **Problem**

A cause, or potential cause, of one or more incidents.

Problem identification Reactive or proactive?

Problem control

Analysis of the problems, Workaround, Known error

Error control

Problem records may be closed: The problem is solved, The problem no longer affects the organization.

## Knowledge Management

To maintain and improve the effective, efficient, and convenient use of information and knowledge across the organization.

**Explicit knowledge** can be transferred to others, codified, assessed, verbalized, and stored. It includes information from books, databases, descriptions, and so on.

**Tacit knowledge** is difficult to transfer to others, difficult to express, codify, and assess. It is based on experience, values, capabilities, and skills.

Socialization (tacit to tacit), Externalization (tacit to explicit), Combination (explicit to explicit), Internalization (explicit to tacit)

## Monitoring and Event management

To systematically observe services and service components, and record and report selected changes of state identified as events. This practice identifies and prioritizes infrastructure, services, business processes, and information security events, and establishes the appropriate response to those events, including responding to conditions that could lead to potential faults or incidents.

#### **Event**

Any change of state that has significance for the management of a service or other configuration item (CI).

### Monitoring:

Repeated observation of a system, practice, process, service, or other entity to detect events and to ensure that the current status is known.

#### Metric:

A measurement or calculation that is monitored or reported for management and improvement.

**Threshold**: The value of a metric that triggers a pre-defined response.

**Alert**: A notification that a threshold has been reached, something has changed, or a failure has occurred.

# Service Level Management

To set clear business-based targets for service levels, and to ensure that delivery of services is properly assessed, monitored, and managed against these targets.

#### Service level

One or more metrics that define expected or achieved service quality.

#### Service level agreement

A documented agreement between a service provider and a customer that identifies both services required and the expected level of service.

### Utility

The functionality offered by a product or service to meet a particular need. Utility can be summarized as 'what the service does' and can be used to determine whether a service is 'fit for purpose'. To have utility, a service must either support the performance of the consumer or remove constraints from the consumer. Many services do both.

### Warranty

Assurance that a product or service will meet agreed requirements. Warranty can be summarized as 'how the service performs' and can be used to determine whether a service is 'fit for use'. Warranty often relates to service levels aligned with the needs of service consumers. This may be based on a formal agreement, or it may be a marketing message or brand image. Warranty typically addresses such areas as the availability of the service, its capacity, levels of security, and continuity. A service may be said to provide acceptable assurance, or 'warranty', if all defined and agreed conditions are met.