ITIL & PROCESSES

Basic Training
DO IT RIGHT!
CMDB
Start Now
Help Yourself

ITIL is For You
Customers love ITIL
ITIL

- **ITIL = IT Infrastructure Library**
  - The ITIL describes the processes that need to be implemented in an organization in the area of management, operations and maintenance of the IT infrastructure in order to offer an optimal service to the customers at the highest possible quality.

- **ITSM = IT Service Management**
  - ITSM is the management, operations and maintenance of the IT infrastructure.

- **De facto standard – widely used all over the world**

- **Process oriented approach:**
  - IT Processes & Business Processes Relationship
What is ITIL

- Best practices (not a formal method)
- One language / terminology
- Focus on IT (but not just suitable for IT)
- Existing activities and how to optimise them
- Related process and tasks (roles)

- ITIL is a means to deliver a constant quality!
Why ITIL?

- To align IT services with the current and future needs of the business and its customers
  because business is changing; user requirements and expectations increase...

- To improve the quality of the delivered IT services
  quality of business=quality of IT; business is more dependent on IT
<table>
<thead>
<tr>
<th>ITIL - background</th>
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<tr>
<td>• Founded in Great Britain (the Falkland War 1982)</td>
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<td>• Great popularity in the Netherlands</td>
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<tr>
<td>• USA, India, Australia</td>
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<tr>
<td>• Originally 40-50 small books</td>
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<td>• Version 2 in 9 books</td>
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<tr>
<td>• Versin 3 (June 2007) in 5 books</td>
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<td>• ISO 20000 has been launched</td>
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Process definitions

- A process is a logically related series of activities conducted toward a defined objective.

Processes are a series of actions (input-output related) that generate Added Value. The Goal is achieved by a series of connected processes.
Process, Procedure & Work Flow

- Process
- Procedures
- Work instructions

Why & what?

How, who, when & where?

How (exactly)?
Process - what is it...

The Functionally Oriented Approach

the lines decide
Process - what is it …

The Process Driven Organization

- GOAL
- ACTIVITIES
- RESULT
- FEEDBACK

the processes decide
What is ITIL ...

ITIL Service Management

- Availability Management
- IT Service Continuity Management
- Capacity Management
- Release Management
- Change Management
- Configuration Management
- Problem Management
- Service Desk
- Service Management for IT services
- Financial Management
- Service Level Management
- Incident Management
- Infrastructure

Service Delivery Set

Service Support Set
What is ITIL … Processes (1)

- Incident Management
  The primary goal of the **Incident** Management process is to restore normal service operation as quickly as possible and minimise the adverse impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained.

- Problem Management
  The goal of **Problem** Management is to minimise the adverse impact of Incidents and Problems on the business that are caused by errors within the IT Infrastructure, and to prevent recurrence of Incidents related to these errors. In order to achieve this goal, Problem Management seeks to get to the root cause of Incidents and then initiate actions to improve or correct
What is ITIL … Processes (2)

• Change Management

The goal of the **Change** Management process is to ensure that standardised methods and procedures are used for efficient and prompt handling of all Changes, in order to minimise the impact of Change-related Incidents upon service quality, and consequently to improve the day-to-day operations of the organisation.

• Release Management

Good resource planning and management are essential to package and distribute a **Release** successfully to the customer. Release Management takes a holistic view of a Change to an IT service and should ensure that all aspects of a Release, both technical and non-technical, are considered together.
What is ITIL … Processes (3)

• Financial Management for IT services
  It supports the organisation in planning and executing its business objectives and requires consistent application throughout the organisation to achieve maximum efficiency and minimum conflict.

• Capacity Management
  Capacity Management is responsible for ensuring that the Capacity of the IT Infrastructure matches the evolving demands of the business in the most cost-effective and timely manner.

• IT service Continuity Management
What is ITIL … Processes (4)

• Availability Management

The goal of the Availability Management process is to optimise the capability of the IT Infrastructure, services and supporting organisation to deliver a Cost effective and sustained level of Availability that enables the business to satisfy its business objectives.
What is ITIL …

Terminology (I)

• incident
  – any event which is not part of the standard operation of a service and which causes, or may cause, an interruption to, or a reduction in the quality of that service
  – can be reported by:
    • users
    • IT service provision
    • IT systems ➔ events
    • …
What is ITIL … Terminology (II)

- service request (handled as incident)
  - a request by a user for information, advice or documentation
    - functional question
    - request information
    - request status account
    - request batch jobs
    - request back ups / restores
    - request password / authorisation
    - RFC - request for change
Problem

is the *unknown* underlying cause of one or more incidents.

Known Error

The root cause of the problem is *known* and a temporary workaround or a permanent alternative has been identified.
What is ITIL …

Terminology (IV)

- **Owner, Manager, Operatives**
  - The **process owner** is responsible for the process roles
  - The **process manager** is responsible for realization and structure of the process and reports to the process owner
  - The **process operatives** are responsible for defined activities and these activities are reported to the process manager
AGENT

One who is authorized to represent and act on behalf of another person or business (called the PRINCIPAL) in transactions involving a third party.

Unlike an employee who merely works for the principal, an agent works in place of the principal.

Agents have three basic characteristics:

1) they act on behalf of and are subject to control of the principal
2) they do not have title to the principal's property
3) they owe their duty of allegiance to the principal's orders.
What is ITIL ...

Terminology (VI)

- **KPI = Key Performance Indicator**
  - KPIs are parameters for measuring processes relative to key objectives of Critical Success Factors (CSF) in the organization
  - Use performance indicators from the very start
  - They are your metrics towards the goal
  - Do not use only quantitative KPI’s
ITIL ROLES AND PROCESS FUNCTIONS

DON’T MESS AROUND, PLAY YOUR OWN ROLE!

COMMON TARGET - REDUCE INCIDENTS

Ok Coach! - I take care of my own tasks and pass exact output to the right place
ITIL GAME

WHICH WAY YOU PLAY IT?
TietoEnator / GO and ITIL processes

Release Management
- DSL
- Release Strategies

Configuration Management
- CMDB

Change Management
- Impact Analysis → Authorization

Problem Management
- Problem Control
- Error Control

Service Desk
- Incident Management

Operational IT-Services

Request For Change

Operational Processes

Incidents
In some cases an incident can travel through the whole organisation and beyond but it will NEVER become a problem.
Raise a problem ticket at once it is clear that the incident cannot be solved without a root cause investigation - it’s a task of problem process only!

If nothing can be found by matching DB, propose possible already known or found workaround to restore the service.

Close the incident after customer approval.

Match DB to find open problems or known errors you can use to solve the incident.

Problem Manager accepts the workaround proposed by incident management or found by root cause analysis to be used (generally).

Workaround or resolution information will be taken to the DB and to incident process to be used to restore the service.

Known Error will be fixed with structural resolution to prevent further incidents.
Incident management process is responsible to raise a problem ticket when needed to get rid of incidents!

**Problem**

- root cause unknown

**Problem Control**

**Known Error**

- root cause known, resolution/workaround found

**Error Control**

**Change**

1. Incident Managers are responsible of Incident Management Process

2. Problem Managers are responsible of Problem Management Process

3. Incident resolution time is measured against SLA!

4. Solution to root cause - no more incidents from it.

5. link to open problem

6. link to known error - KE used

7. RFC

Problem resolution time is measured against SLA!
Responsibility of Incident process is to:

- record and administrate all incidents – also stupid ones
- recovering the service at first hand by using the available workaround
- suggest a possible workaround to recover the service - **no root cause analysis**!
- transferring the root cause investigation to problem management by raising a problem ticket

Responsibility of Problem process is to:

- approve/provide workarounds to incident process to be able to handle incidents
  • proactively by recording all known errors and related workarounds to the system
  • raised by incident process
  • part of the root cause analysis
- find the root cause for the incidents - Problem Control
  • ordered by Incident process (= problem ticket)
  • proactively creating a problem ticket themself
- maintain the process of removing the root causes - Error Control
Terminology (1)

Incident Management

Problem Management

Change Management

Incident → Problem → Known Error → RFC

Finding symptoms → Finding & removing underlying cause → Implementing the change

Source: the Art of Service
The Service Desk

- Incident Management
  - 1st line support
- 2nd Line Support
  - Development
  - Software Management
  - System Management
  - Technical management
  - Network Management
  - ...
- 3rd Line Support
  - External Supplier(s), ...

Problem Management

Request for support
CONTINUOUS SERVICE TARGETS:

1. TO RESTORE THE DISTURBED SERVICE AS SOON AS POSSIBLE
   - Incident Process

2. TO FIND A ROOT CAUSE AND FIX IT TO PREVENT FURTHER DISTURBANCE
   - Problem Process

THAT’S ALL!

PROJECT NEEDS ARE SOMETHING ELSE AND ARE NOT COVERED HERE. PROJECT CAN OF COURSE BUY CONTINUOUS SERVICE TO PRODUCTION READY PARTS OF THE PROJECT AS ANY OTHER CUSTOMER. PRODUCTION IMPLEMENTATION WILL BE DONE AS FOR ANY OTHER CUSTOMER.
Hands-on example

When there is no service deviation in the service offered

Incident management

- Help
  - Incident
  - Service Requests
  - Knowledgebase - Workarounds

  "Disk space limit has been exceeded". Cannot update.
  Workaround from KB: "Remove files"

Problem management

- Root cause description in Problem Control: "Not enough disk space"
- Proposal in Error Control when root cause has been found in Problem Control: "More disk space is needed"

Change management

- New disk is replaced according to authorized change plan

Decision based on CAB estimation in Change management:
- Is it possible to provide more disk space?
  - Estimate implementation risks and cost
  - Plan Schedule for implementation