ITILv3: Service Operation

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Service Operation

- **Purpose:** To coordinate and carryout the activities and processes required to deliver and manage services at agreed levels to business users and customers.

- **Process:** A structured set of activities designed to accomplish a specific objective. A process takes one or more defines inputs and turns them into defined outputs. **Service:** is defined as a means of delivering value to customers by facilitating the outcomes, customers want to achieve without the ownership of specific **costs** and **risks**.

- **Processes are**
  - Event Management
  - Request Fullfilment
  - Access Management
  - Incident Management
  - Problem Management

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- Value to business:
  - Reduce unplanned labour and cost
  - Reduce the duration and frequency of service outages
  - Provide operational results and data
  - Meet the goals and objectives of the organization's security policy
  - Provide quick and effective access to standard services
  - Provide a basis for automated operations

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Objectives:

- 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.

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Definitions:

- **Event:** An event can be defined as any change of state that has significance for the management of an IT service. Types of events include:
  - Information events – e.g. batch file has finished successfully
  - Warning events – e.g. a disk drive is 90% full
  - Exception events – e.g. a server is not responding to the query.

- **Alert:** A notification that a threshold has been reached, something has changed, or a failure has occurred. Alerts are often managed by the Event Management Process.

- **Incident:** An unplanned interruption to an IT service or reduction in the Quality of an IT Service. For example, failure of one disk from a mirror set.

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Definitions:

- **Impact:** A measure of the effect of an Incident, Problem or Change on Business Processes. Impact is often based on how Service levels will be affected. Impact and urgency are used to assign priority.

- **Urgency:** For example, a high Impact Incident may have low urgency, if the Impact will not affect the Business until the end of the financial year.

- **Priority:** is based on Impact and Urgency, and is used to identify required times for actions to be taken. For example, the SLA (Service Level Agreement) may state that Priority 2 incidents must be resolved within 12 hours.

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Definitions:

- **Service Request:** A formal request from a user for something to be provided. For example, a request for information or advice, to reset a password, or to install a workstation for a new user.

- **Problem:** A cause of one or more incidents. The cause is usually not known at the time a Problem Record is created, and the Problem Management Process is responsible for further investigation.

- **Workaround:** Reducing or eliminating the Impact of an Incident or Problem for which a full Resolution is not yet available. For example, by restarting a router. Workarounds for Problems are documented in Known Error Records.

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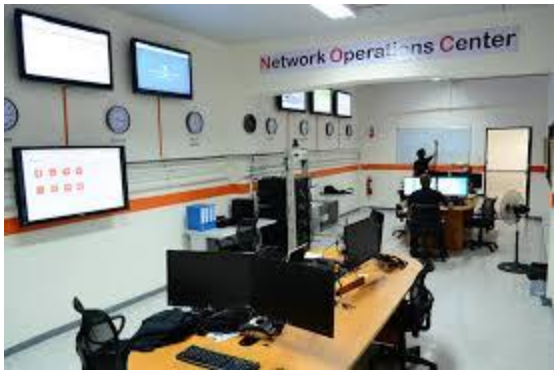
Definitions:

- **Known Error:** A problem that has a documented Root Cause and a Workaround. Known Errors are created and managed throughout their Lifecycle by Problem Management.



- **Known Error Database (KEDB):** A database containing all Known Error Records. This database is created by Problem Management and used by Incident and Problem Management.

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Functions:

- **Service Desk:** A single point of contact between the service provider and the users. A typical service desk manages incidents and service requests, and also communication with the users.

- **Technical Management:** The function responsible for providing technical skills in support of IT services and management of the IT infrastructure. Technical management defines the roles of support groups, as well as the tools, processes and procedures required.

- **Application Management:** The function responsible for managing applications throughout their lifecycle.

- **IT Operations Management:** The function within an IT service provider that performs the daily activities needed to manage IT services and the supporting IT infrastructure. IT operations management includes IT operations control and facilities management.

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Service Operation (Incident Management)

Purpose:

- Restore the normal service operation as quickly as possible.
- Minimize the adverse impact on business operations.
- Ensuring the agreed levels of service quality are maintained.
- So what is Incident Management?
  - *It is the process for dealing with all incidents; this can include failures, questions or queries reported by the users (usually via a telephone call to the service Desk), by technical staff, or automatically detected and reported by Event monitoring tools.*

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Incident Management Activities:

- **Incident Identification:** Work cannot begin until incident is known.
- **Incident Logging:** All incidents fully logged, date/time stamped and relevant information recorded.
- **Incident Categorization:** Allocate suitable incident categorization coding so that the exact type of incident is recorded.
- **Incident Prioritization:** Agree and allocate appropriate prioritization codes, determined by impact and urgency.
- **Initial Diagnosis:** Carried out by the Service Desk, Attempt to discover full symptoms and exactly what went wrong. Diagnostics scripts and known error information can be used.

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Incident Management Activities:

- **Incident Escalation:** Unable to resolve the incident itself (or when target time for first-point resolution have been exceeded – whichever comes first) the incident must be immediately escalated for further support.
  - High priority – notification to managers
  - Functional Escalation – Escalate to the second level support
  - Hierarchical Escalation – “Investigation”, “recover and resolution” steps
  - Take too long – escalates to IT Managers

- **Investigation & Diagnosis:** Determine the nature of request; Support groups to determine what’s gone wrong, all activities documented in record to maintain historical information.

- **Resolution & Recovery:** Identify resolution – apply and test. Sufficient testing must be performed – ensure recovery action is complete. Incident record must be updated with relevant information and details.

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Incident Management Activities:

- **Incident Closure:** Service Desk check incident fully resolved, users satisfied, agreed to close. The service desk should also check the following:
  - Close categorization
  - User satisfaction survey
  - Incident documentation
  - Ongoing or recurring problem?
  - Formal closure

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Quiz:

1.IT operations management is responsible for _____ activities and events in the IT infrastructure. (measuring, monitoring, maintain)

2.Priority should be based on _____ and urgency. (demand, impact, preference)

3.Which of the following is NOT a phase of the service lifecycle?

1. **Service optimization**
2. **Service transition**
3. **Service design**
4. **Service strategy**

4.A technician uses a pre-defined technique to restore service since s/he has been seen it before.

1. **A workaround**
2. **A standard change**
3. **A service capability**
4. **An alert**

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Group Discussion:

- A stable IT service is paramount to an organization. Explain to your customer how you would handle incidents according to the Incident Management process based on ITIL. Provide a scenario to explain this.

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Reference:

- ITSM Experts, ITIL Foundation Course, Student Manual V3, 2011 edition

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