

SERVICE MANAGEMENT PRACTICES

Section 11

SERVICE MANAGEMENT PRACTICES

SECTION 11: SERVICE MANAGEMENT PRACTICES

SERVICE MANAGEMENT PRACTICES



MONITORING & EVENT MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > MONITORING AND EVENT MANAGEMENT

Monitoring And Event Management

to ensure the services and service components are observed systematically, detect & report the change of state which has significance to service, service performance, and contribution to the business

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

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Event

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

- **Events** are typically recognized through notifications created by an IT service, CI, or monitoring tool
- Manages events throughout their lifecycle to prevent, minimize, or eliminate their negative impact on the business



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Event Management https://www.youtube.com/watch?v=_T29YZE5Qs

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Monitoring

- **Focuses** on the **systematic observation** of services and the CIs that underpin services to detect conditions of potential significance
- **Monitoring** should be performed in a highly automated manner and can be done actively or passively
- **Monitoring** is necessary for event management to take place, but not all monitoring results in the detection of an event

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Event

- **Events** are often classified as **informational**, **warning**, and **exceptions**
- **Informational events** do not require action when they are identified
- **Warning events** allow action to be taken before the business experiences any negative impact
- In contrast, **exception events** indicate that a breach of an established norm has been identified
- **Exception events** require action, even though business impact may not yet have been experienced

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Activities

- **Identifying** what services, systems, cis, or other service components should be monitored
- **Implementing** and maintaining monitoring
- **Establishing and maintaining** thresholds and other criteria for determining which changes of state will be treated as events
- **Establishing and maintaining** policies for how each type of detected event should be handled to ensure proper management
- **Implementing processes** and automations required to operationalize the defined thresholds, criteria, and policies

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- This practice is highly **interactive** with other practices participating in the service value chain
- The **correct control** action will be to initiate activity in the incident management practice
- **Repeated events** showing performance outside of desired levels may be evidence of a potential problem, which would initiate activity in the problem management practice
- For some events, the **correct response** is to initiate a change, engaging the change control practice



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- Organizations and people are also critical to appropriately responding to monitored data and events aligned with policies and organizational priorities
- **Roles and responsibilities** must be clearly defined, and each person or group must have easy, timely access to the information needed to perform their role
- **Automation** is key to successful monitoring and event management
- The **monitoring** itself can be either active or passive
- In active **monitoring**, tools will poll key CIs, looking at their status to generate alerts when an exception condition is identified
- In passive **monitoring**, the CI itself generates the operational alerts

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- **Automated tools** should also be used for the correlation of events
- These features may be provided by monitoring tools or other tools such as **ITSM workflow systems**
- There can be a huge volume of data generated by this practice, but it will be of no value without clear policies and strategies on how to limit, filter, and use this data
- Don't ask for data that is not truly needed, but if data is required, make sure that the provision of that data is explicitly part of the contract for the supplier's services

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The difference between monitoring and event management

Monitoring and event management are closely related, but slightly different in nature. Event management is focused on generating and detecting meaningful notifications about the status of the IT infrastructure and services.

While it is true that monitoring is required to detect and track these notifications, monitoring is broader than event management. For example, monitoring tools will check the status of a device to ensure that it is operating within acceptable limits, even if that device is not generating events.

Put more simply, event management works with occurrences that are specifically generated to be monitored. Monitoring tracks these occurrences, but it will also actively seek out conditions that do not generate events.



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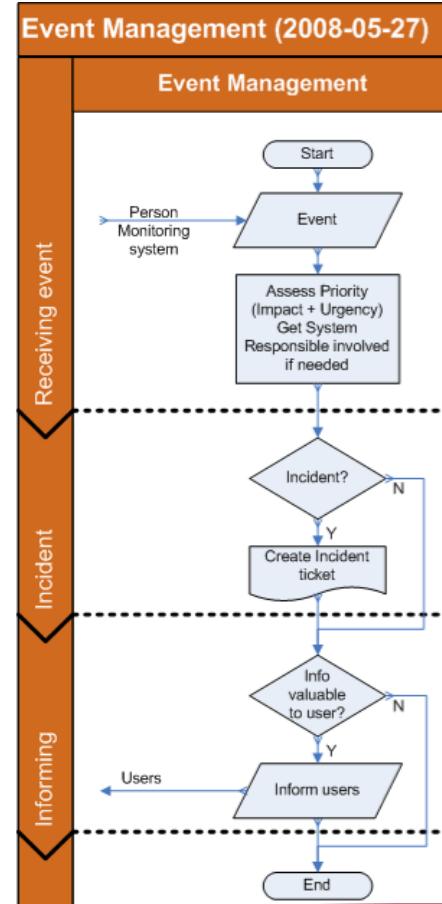
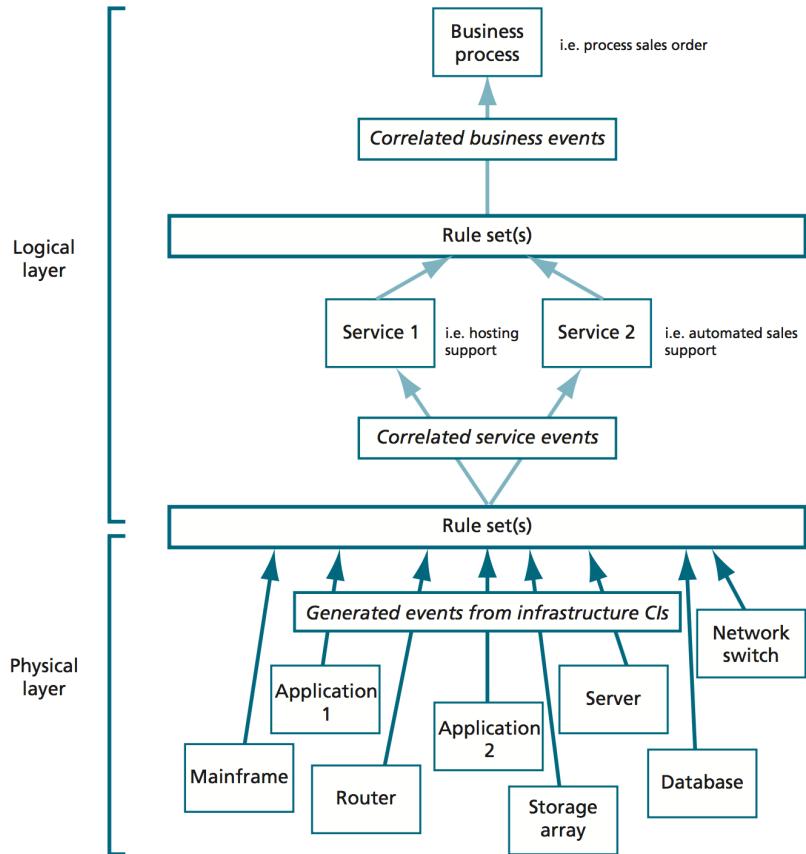
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Active versus passive monitoring

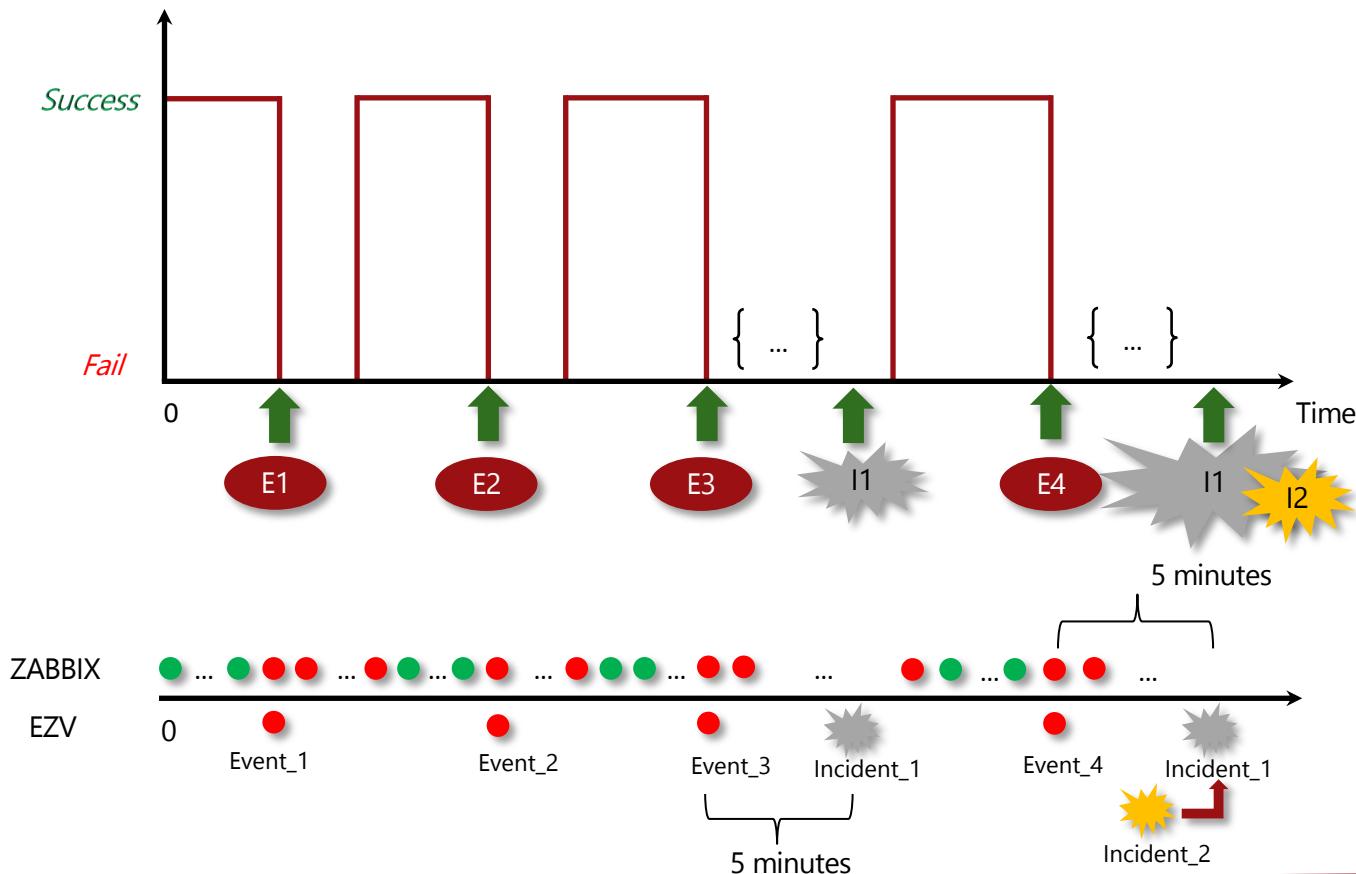
	Active	Passive
Reactive	<p>Used to diagnose which device is causing the failure and under what conditions (e.g. 'ping' a device, or run and track a sample transaction through a series of devices)</p> <p>Requires knowledge of the infrastructure topography and the mapping of services to Cls</p> <p>Requires capability to simulate service workloads and demand volumes</p>	<p>Detects and correlates event records to determine the meaning of the events and the appropriate action (e.g. a user logs in three times with the incorrect password, which represents a security exception and is escalated through information security management procedures)</p> <p>Requires detailed knowledge of the normal operation of the infrastructure and services</p>
Proactive	<p>Used to determine the real-time status of a device, system or service – usually for critical components or following the recovery of a failed device to ensure that it is fully recovered (i.e. is not going to cause further incidents)</p>	<p>Event records are correlated over time to build trends for proactive problem management</p> <p>Patterns of events are defined and programmed into correlation tools for future recognition</p>

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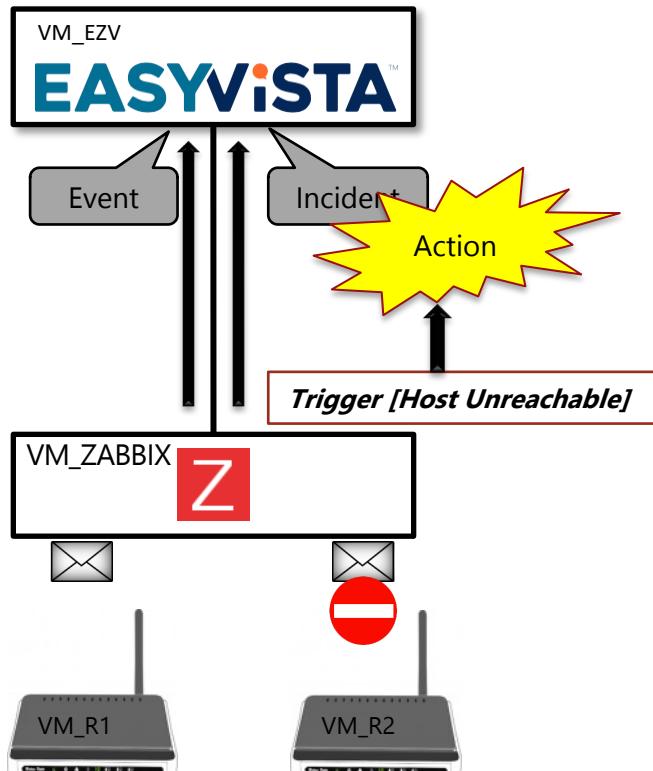
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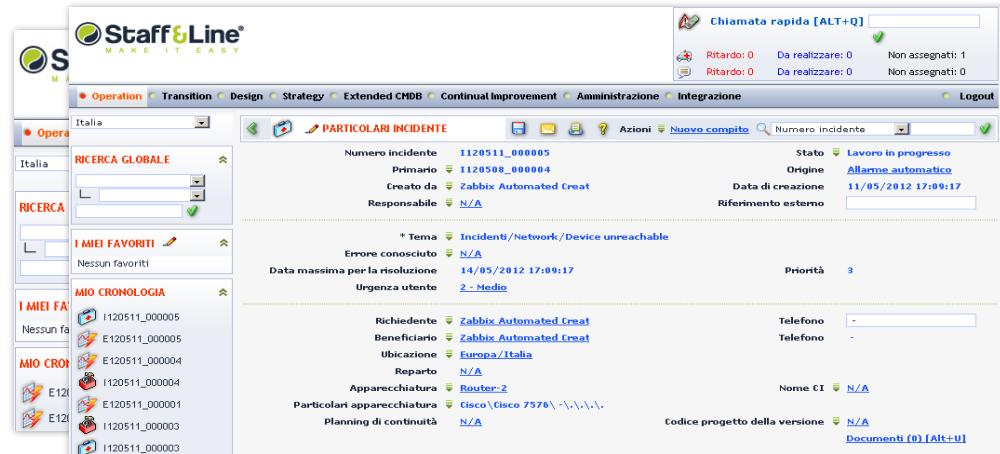
MONITORING & EVENT MANAGEMENT



MONITORING & EVENT MANAGEMENT



- 1. *Active Monitoring*
- 2. Event: VM_R2 shutdown
- 3. Zabbix detects that the VM_R2 router is not reachable anymore
- 4. Execution of the action associated with the trigger
- 5. New event raised up on EasyVista
- 6. New incident raised up on EasyVista



Staffline® MAKE IT EASY

Chiamata rapida [ALT+Q]

Ritardo: 0 Da realizzare: 0 Non assegnati: 1

Ritardo: 0 Da realizzare: 0 Non assegnati: 0

Ci sono 0 richieste in coda.

Numero incidente I120511_000005

Principale Host unreachable

Creata da Zabbix Automated Creat

Responsabile N/A

Tema Incidente/Network/Device unreachable

Errore conosciuto N/A

Data di creazione 14/05/2012 17:09:17

Riferimento esterno

Priorità 3

I MIEI FAVORITI Nessun favorito

MIO CRONOLOGIA I120511_000005, E120511_000005, E120511_000004, E120511_000004, E120511_000001, E120511_000003, I120511_000003

MIO CROI E120511_000005, E120511_000005, E120511_000004, E120511_000004, E120511_000001, E120511_000001, E120511_000003, I120511_000003

Particolari incidente

Numero incidente I120511_000005

Principale Host unreachable

Creata da Zabbix Automated Creat

Responsabile N/A

Tema Incidente/Network/Device unreachable

Errore conosciuto N/A

Data massima per la risoluzione 14/05/2012 17:09:17

Urgenza utente 2 - Medio

Richiedente Zabbix Automated Creat

Beneficiario Zabbix Automated Creat

Ubicazione Europa/Italia

Reparto N/A

Apparecchiatura Router_2

Particolari apparecchiatura Cisco\Cisco 7576\-\.\.\.\.

Planning di continuità N/A

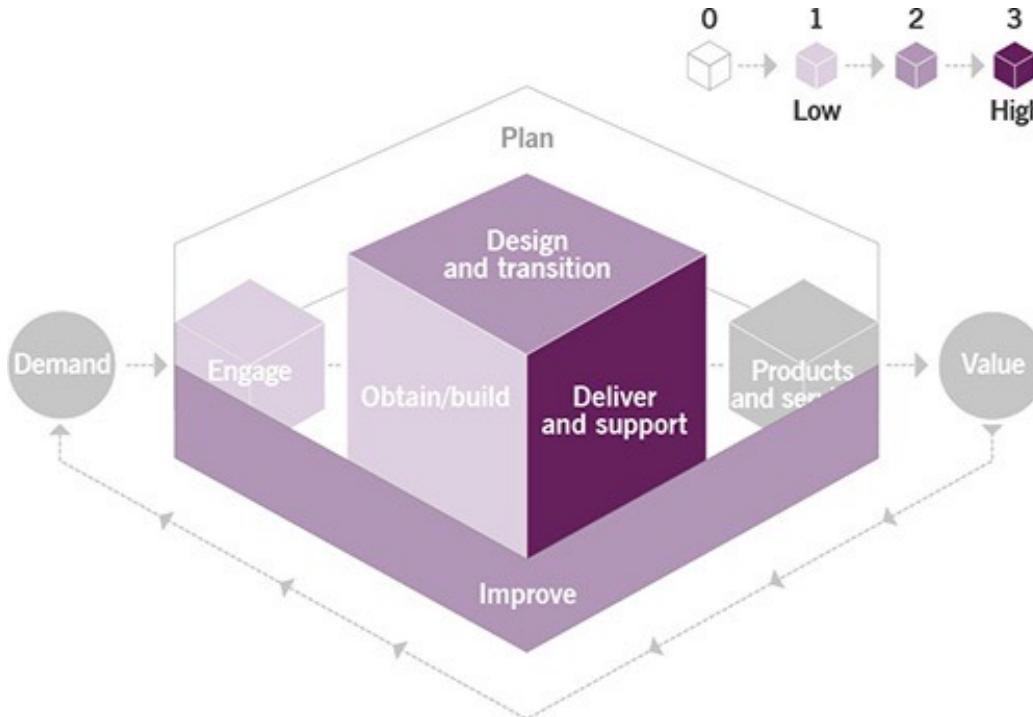
Nome CI N/A

Codice progetto della versione N/A

Documenti (0) [Alt+U]

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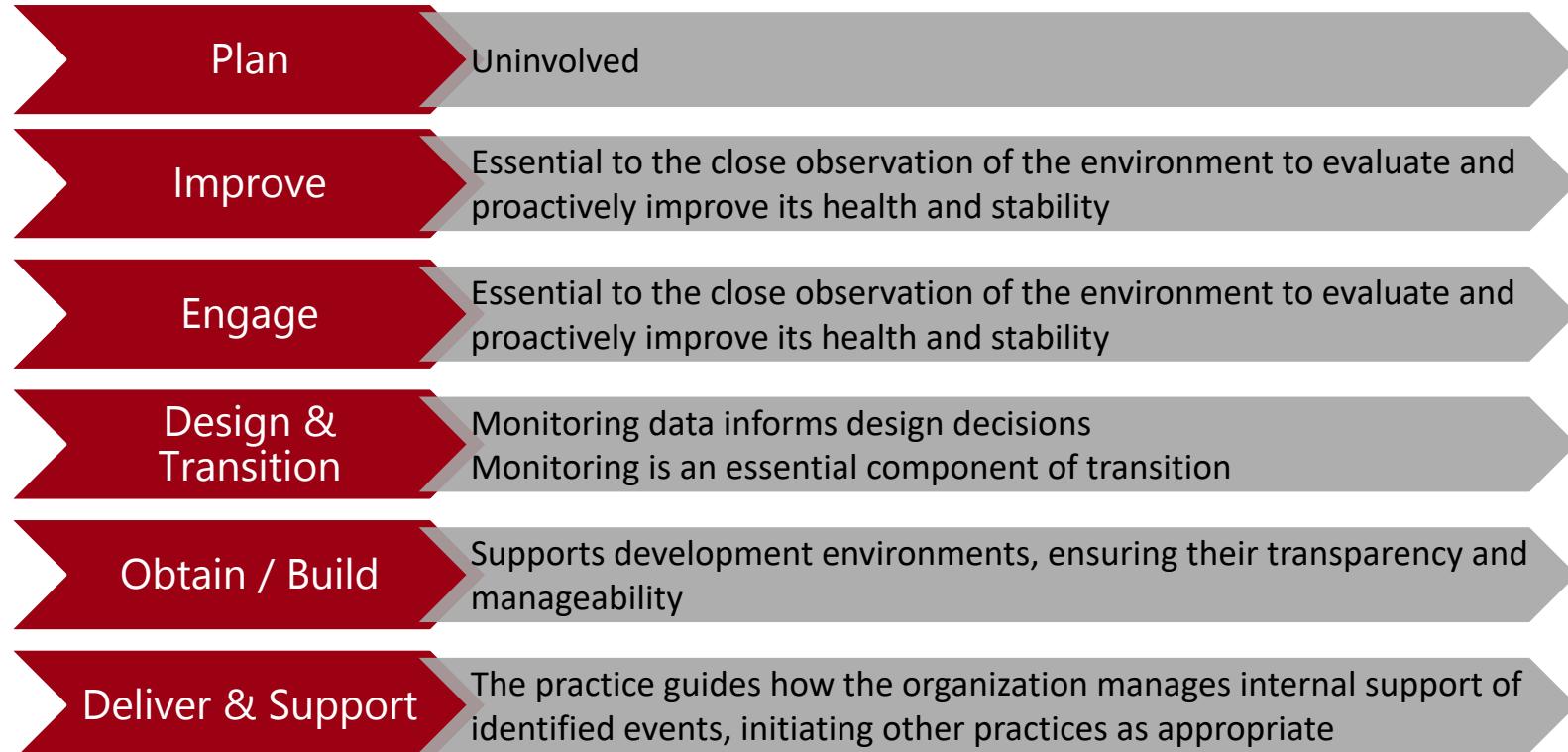
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Heat map of the contribution of monitoring & event management to value chain activities

MONITORING & EVENT MANAGEMENT

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INCIDENT MANAGEMENT

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Incident Management

minimalizing the negative impact of incidents by restoring normal service operation as quickly as possible





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ITIL Journey - The Incident <https://youtu.be/8cctLnKdEfo>

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Incident

the unplanned interruption to a service or degradation of the service performance or quality



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Swarming

involves many different stakeholders working together initially, until it becomes very clear which of them is best placed to continue and who can move on to other tasks

- Solving incidents relies heavily on collaboration and information sharing

INCIDENT MANAGEMENT

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INCIDENT MANAGEMENT

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Classification

Classifying means assigning Priority and Category

Priority

- The SD determines the priority of incidents as soon as they are received
- The priority is established according to the criteria described in the SLA
- The priority is calculated on the basis of impact and urgency

Impact

effect that the incident has on business activities

Urgency

speed at which the incident must be resolved

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The Impact is always intended as Business Impact

- Critical period (i.e. night or day?)
- Critical applications
- Number of users
- Etc.

When determining the priority, the following must be considered:

- The potential costs of non-resolution
- The threat of harm to customers and staff
- The legal implications
- The "nuisance" caused to customers and staff

The impact is not related to the technical complexity of the resolution

INCIDENT MANAGEMENT

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		Impact		
Urgency		High	Medium	Low
High	1	2	3	
Medium	2	3	4	
Low	3	4	5	

Priority code	Description	Target resolution time
1	Critical	1 hour
2	High	8 hours
3	Medium	24 hours
4	Low	48 hours
5	Planning	Planned



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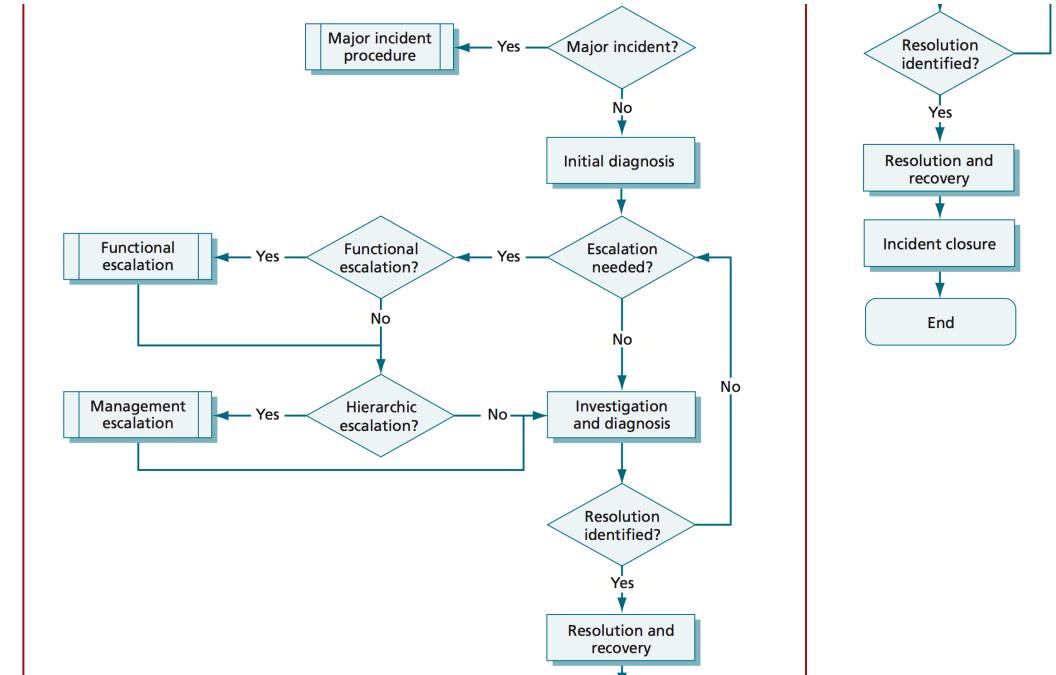
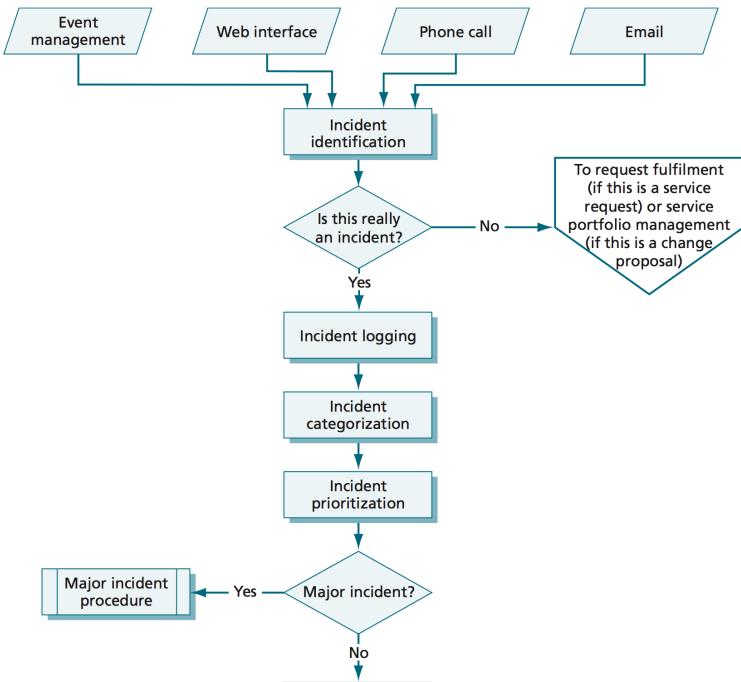
Hierarchical Escalation = Inform / Support
Functional Escalation = Knowledge

Escalation and Referral NEVER turn an incident into a problem, even when the owner of an incident speaks to the PM for administrative reasons, and the PM should proceed with the identification of an associated problem

Problems are NOT serious accidents

INCIDENT MANAGEMENT

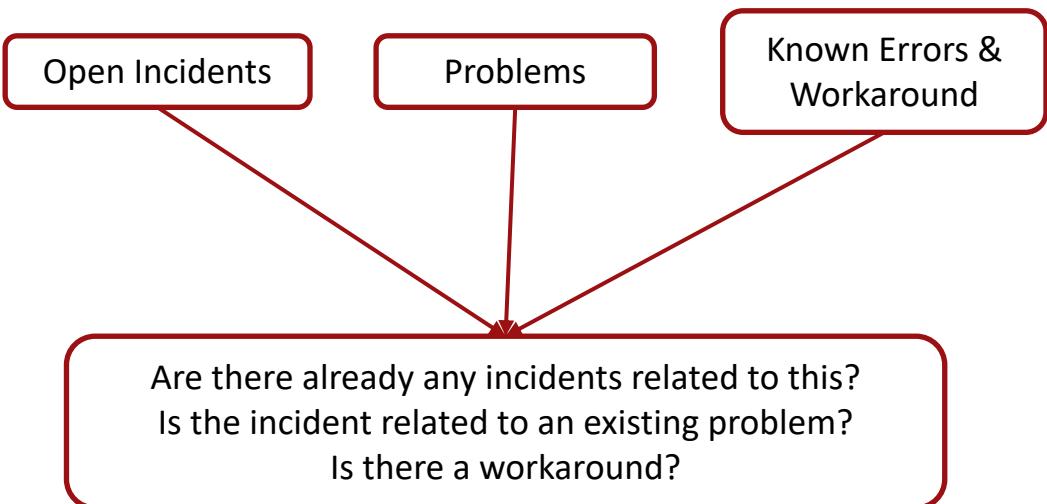
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Incident Matching



Incident matching procedure

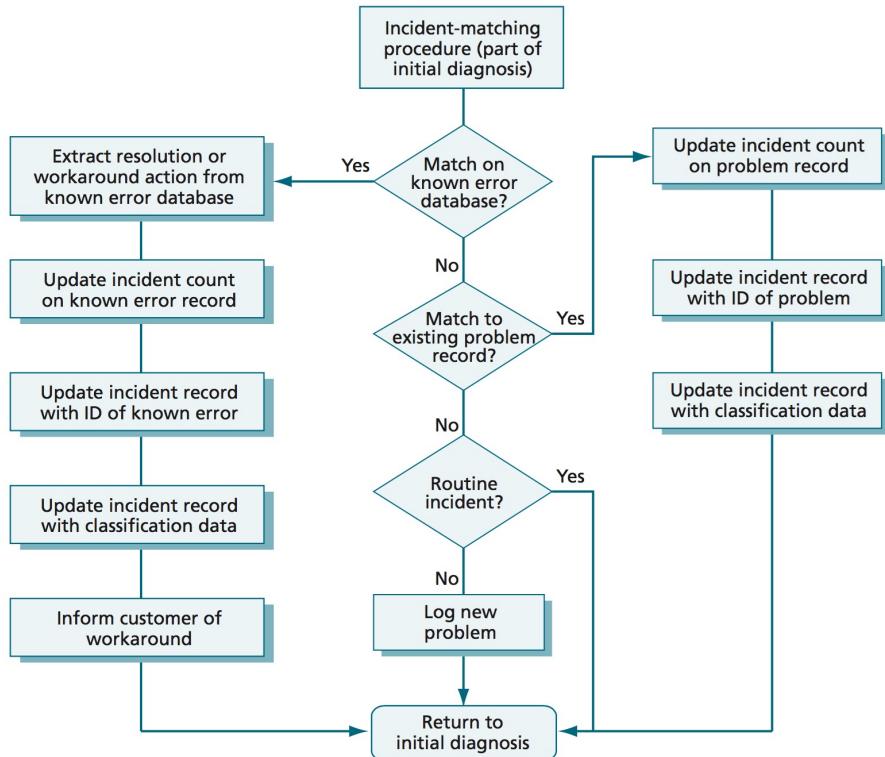
Many incidents are regularly experienced and the appropriate resolution actions are well known. However, it is necessary to have a procedure for matching incident classification data against that for problems and known errors. Successful matching gives efficient and quick access to proven resolution actions, reducing the time it takes to restore service back to users. The process of classification and matching allows incident management to be carried out more quickly and minimizes the need for escalation to other support staff.

Effective use of incident matching ensures that incidents are not redundantly being investigated for resolution over and over each time. A procedure can be developed to help service desk and other support staff match incidents to find resolutions quickly where possible. An example of an incident-matching procedure is shown in Figure 4.5.

INCIDENT MANAGEMENT

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Incident Matching workflow



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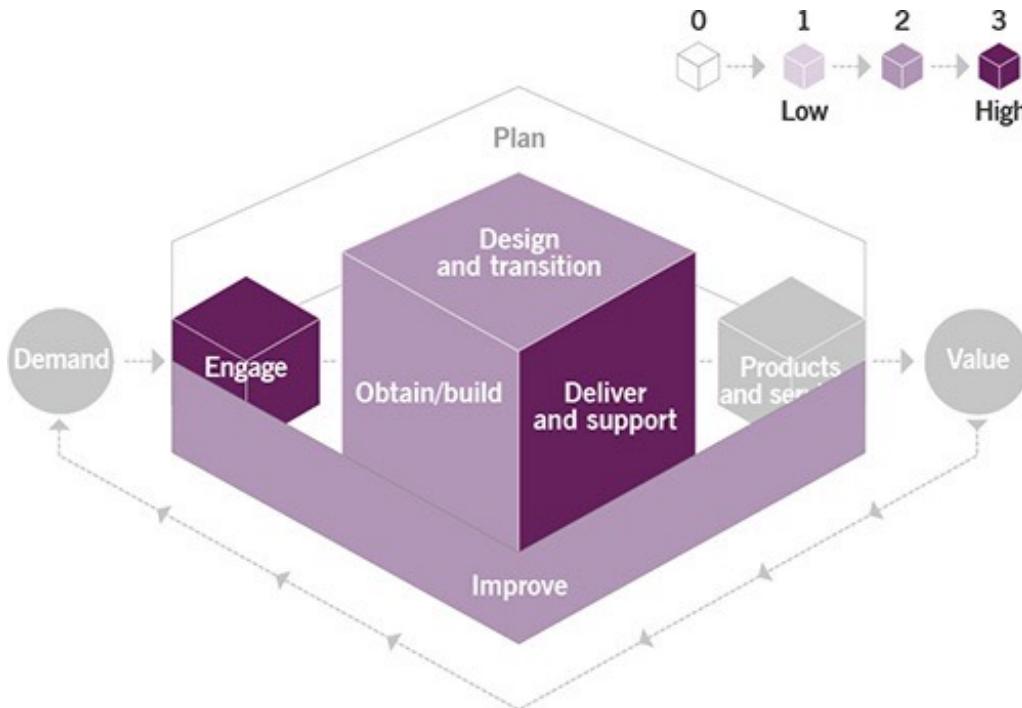
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Incident Management <https://www.youtube.com/watch?v=q3xl97i1kkE>

INCIDENT MANAGEMENT

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Heat map of the contribution of incident management to value chain activities

INCIDENT MANAGEMENT

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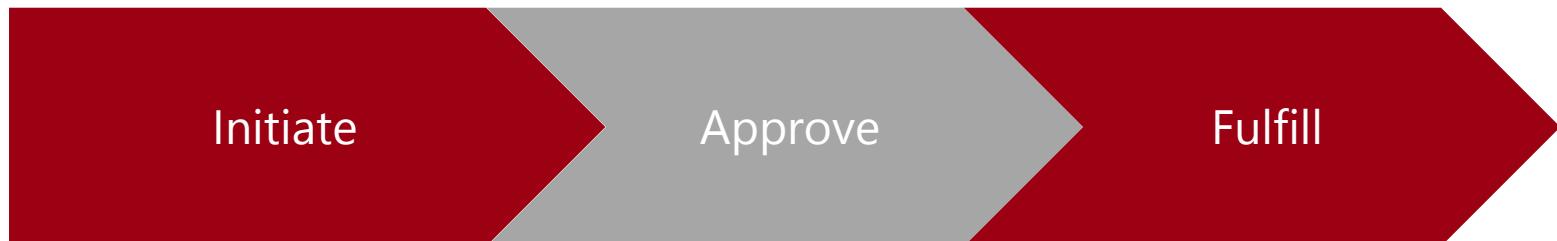


SERVICE REQUEST MANAGEMENT

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Service Request Management

support the agreed quality of the service by handling the pre-defined user requests, which are initiated by users in a professional and friendly manner



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Service Request

a request from a user or a user's authorized representative initiates a service action that has been agreed as a regular part of service delivery

- Service Request are a normal part of service delivery



SERVICE REQUEST MANAGEMENT

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Incidents vs Requests <https://youtu.be/l6q7-oz1QdY>

SERVICE REQUEST MANAGEMENT

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Service Request Catalog

a crucial part for the implementation of the process is the definition of the requests for an accurate planning of the supply processes for each type of request (Service Request Catalog)

SERVICE REQUEST MANAGEMENT

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Use **automation** to the greatest degree possible

Seek out **opportunities** for improvement

Create **appropriate** policies to limit, remove, and minimize the need for additional approvals

Redirect incidents and problems to the appropriate practices

Optimize then automate & Manage expectation

Leverage existing workflow models

SERVICE REQUEST MANAGEMENT

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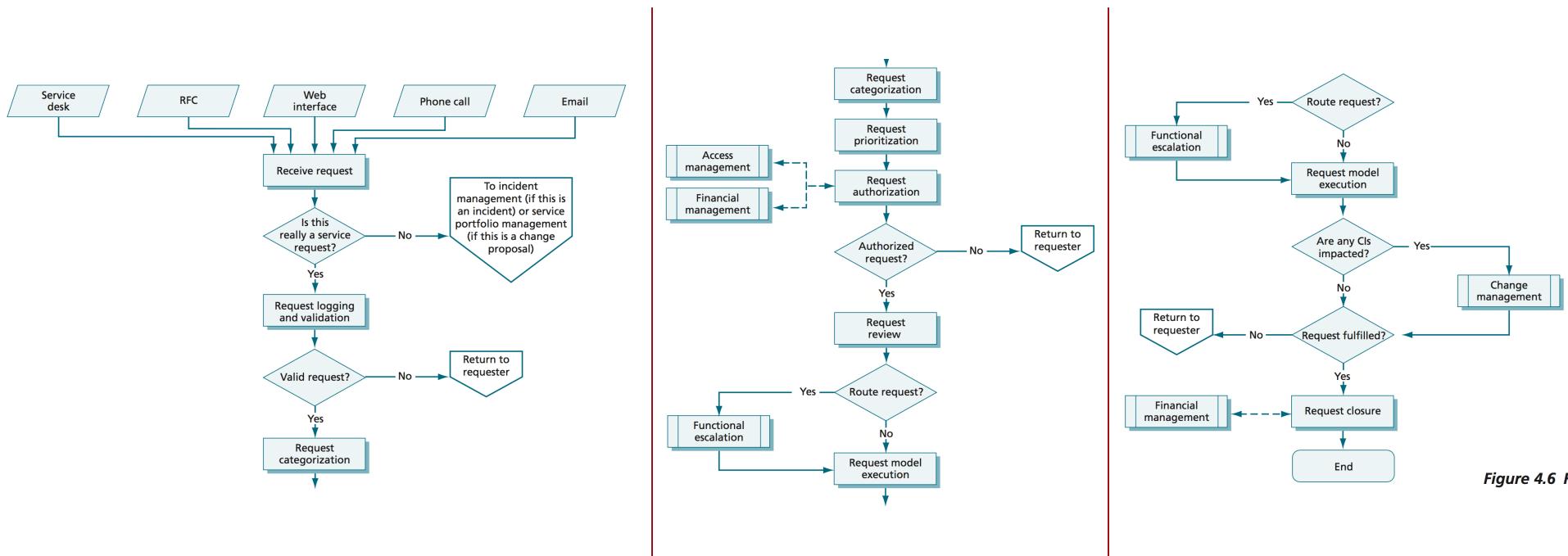


Figure 4.6 R

SERVICE REQUEST MANAGEMENT

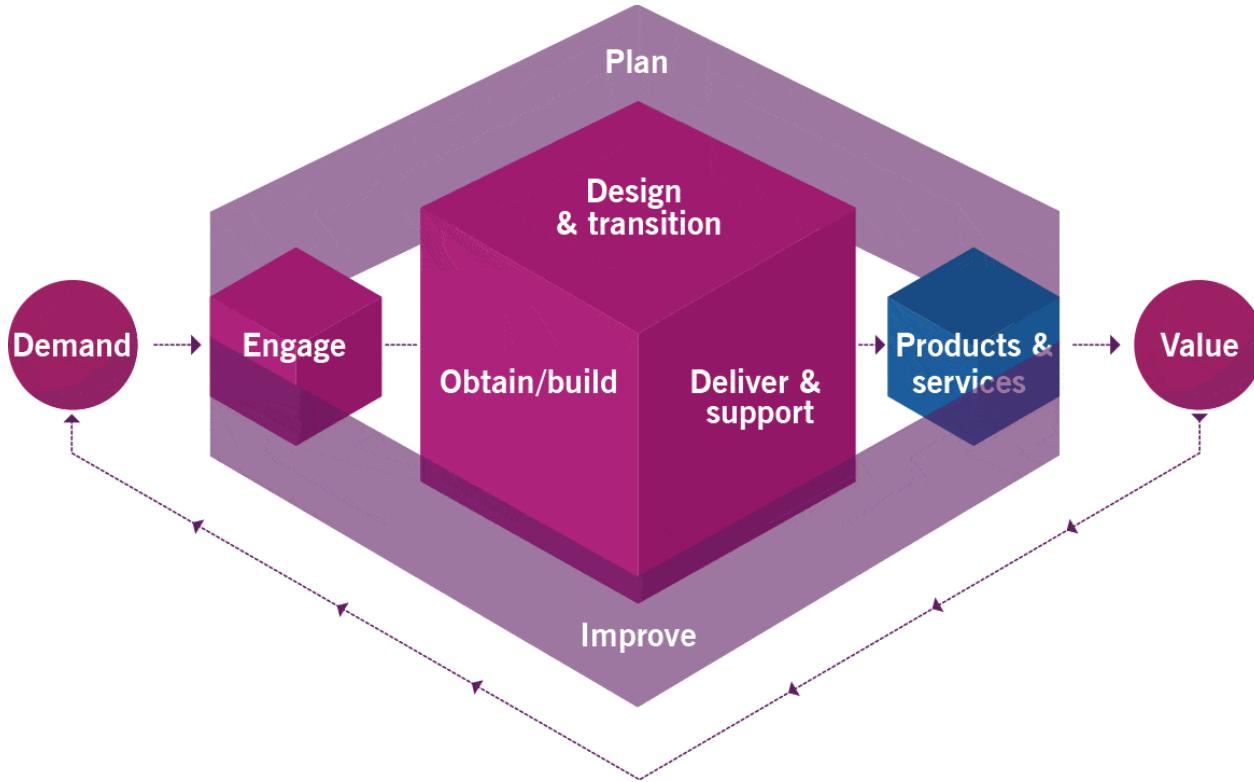
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Service Request Fulfillment – Explained using Pizza and online shopping
<https://www.youtube.com/watch?v=LovnRgbaMY8>

SERVICE VALUE CHAIN

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SERVICE REQUEST MANAGEMENT

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SERVICE REQUEST MANAGEMENT | EXERCISE

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- Create a template for a Service Request, what needs to be included in the template?

PROBLEM MANAGEMENT

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Problem Management

to identify the potential & actual causes of incidents and reduce the probability of the impacts of incidents by providing the solutions and workarounds, including the creation of known errors

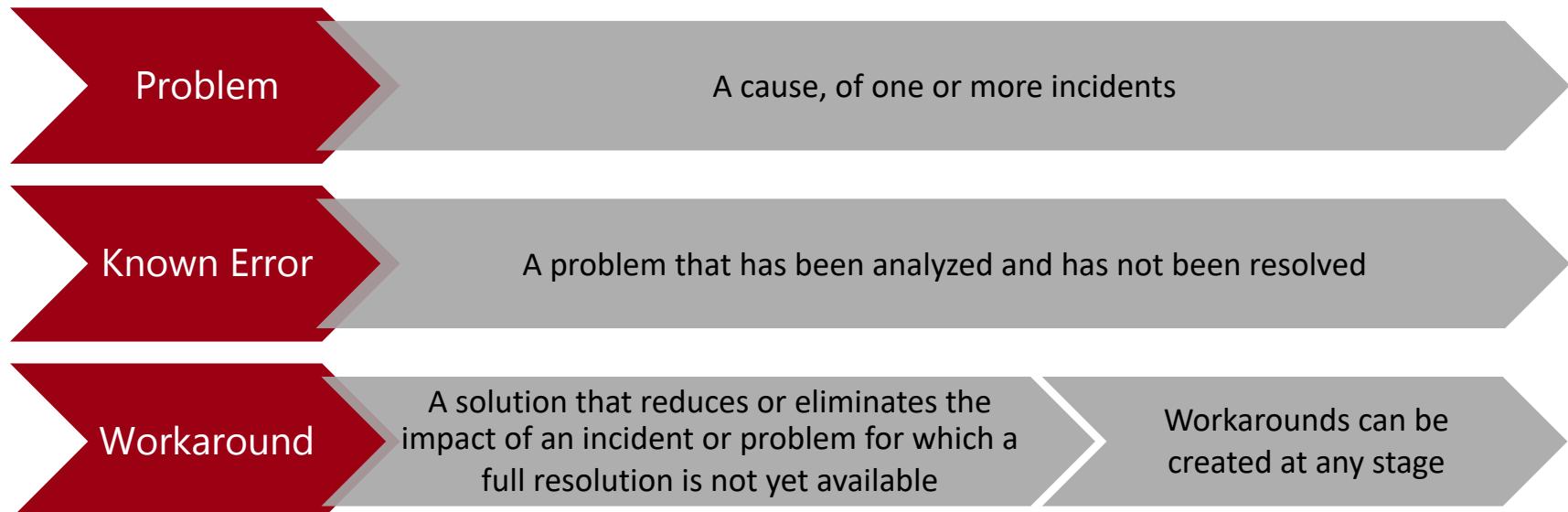
Incidents vs Problems

we will go into more detail on this soon



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Problem Management involves three distinct phases, as shown in figure



Problems are prioritized for analysis based on the risk that they pose, and are managed as risks based on their potential impact and probability

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The responsibilities of this practice can be summarized as follows (subprocesses):



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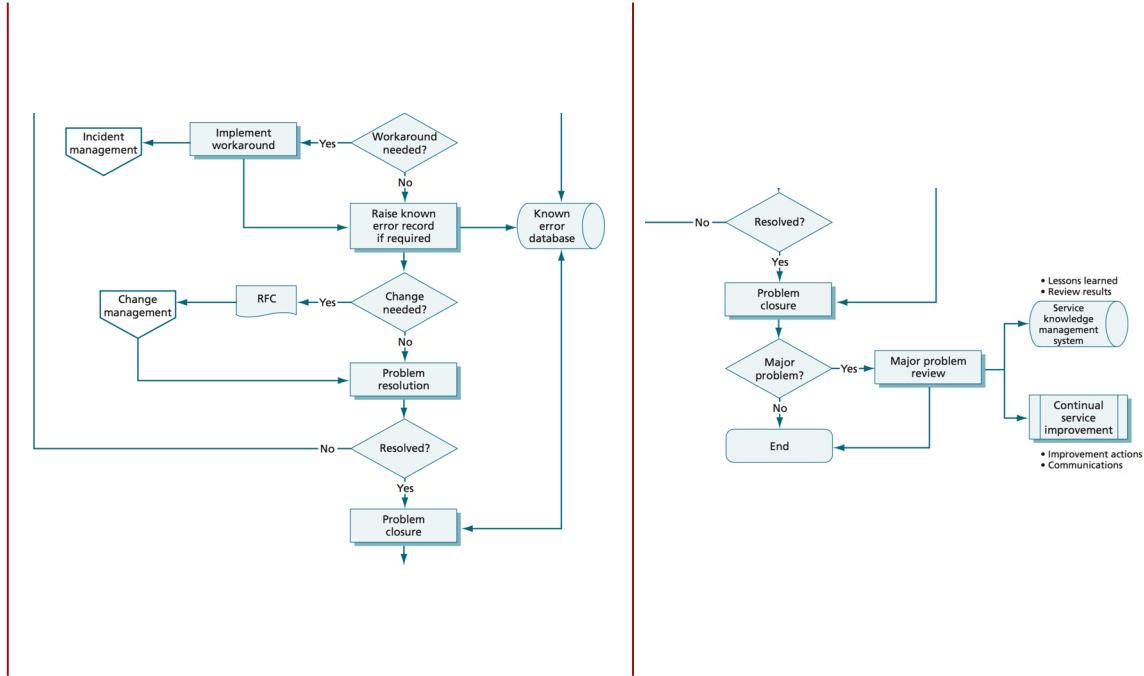
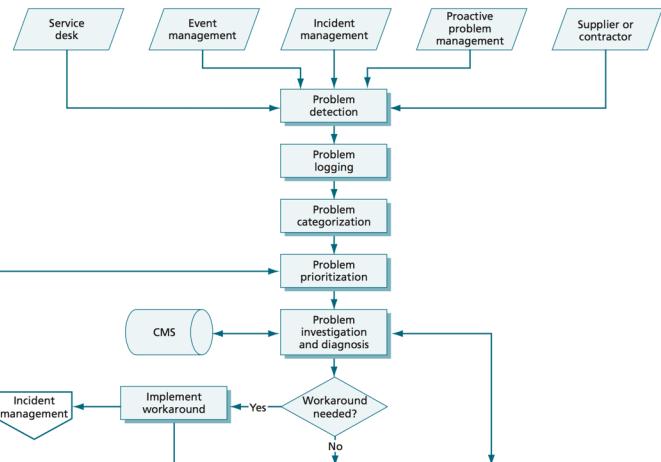
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Problem Analysis Techniques

Problem situation	Suggested analysis techniques
Complex problems where a sequence of events needs to be assembled to determine exactly what happened	Chronological analysis Technical observation post
Uncertainty over which problems should be addressed first	Pain value analysis Brainstorming
Uncertain whether a presented root cause is truly the root cause	5-Whys Hypothesis testing
Intermittent problems that appear to come and go and cannot be recreated or repeated in a test environment	Technical observation post Kepner–Tregoe Hypothesis testing Brainstorming
Uncertainty over where to start for problems that appear to have multiple causes	Pareto analysis Kepner–Tregoe Ishikawa diagrams Brainstorming
Struggling to identify the exact point of failure for a problem	Fault isolation Ishikawa diagrams Kepner–Tregoe Affinity mapping Brainstorming
Uncertain where to start when trying to find root cause	5-Whys Kepner–Tregoe Brainstorming Affinity mapping

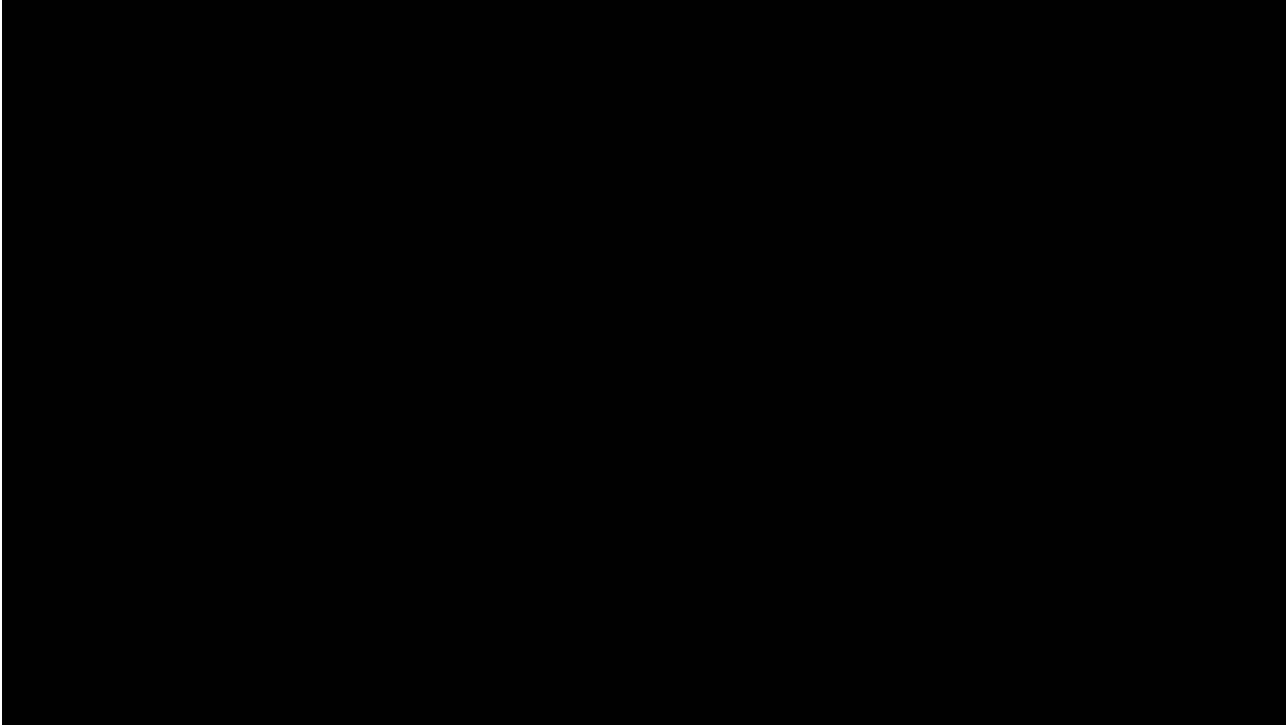
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PROBLEM MANAGEMENT

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PROBLEM MANAGEMENT - Explained using Doctor and Patient
<https://www.youtube.com/watch?v=w1aOeF6P8kA>

PROBLEM MANAGEMENT

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Reactive

Prevention of problems on other systems and applications

Monitoring of Change Management

Initiating changes to combat:
1. Occurrence of incidents
2. Repetition of incidents

Identification of trends

Problem identification – Problem diagnosis

Supplying 2°/3° line incident support

Proactive

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The "Proactive Control Management" sub-process carries out those activities aimed at identifying and resolving problems before they can cause incidents.

These activities are:

- Trend Analysis
- Targeting Support Action
- Informing the organization

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Trend Analysis

Incident and problem reporting can provide information for preventive measures to improve service quality

Incident and problem analyzes can identify trends such as:

- The occurrence of a certain type of problem as a result of a change
- The beginning of a certain type of anomaly or malfunction
- The repetition of particular incidents and problems with some CIs in particular
- The need to train the staff or the customer

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Targeting Support Action

Trend Analysis can lead to the identification of faulty parts in the IT infrastructure, which can then be analyzed and corrected

It can also lead to the identification of problem areas that need more attention from the support

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Informing the organization

Problem Management can provide information about problems, KEs and RFCs issued

This helps to determine the health of the business and the details can be used to inform the "decision making" processes within the organization and other practices such as Service Level Management and Service Desk

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Proactive and Reactive Problem Management
<https://youtu.be/LOgGTdERCLM>

PROBLEM MANAGEMENT

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The benefits of a formal approach to Problem Management include:

- Improvement of the quality of IT service

The PM helps to create a cycle of rapid increase in the quality of IT service, and is good for the productivity and mood of those who provide the IT service

- Reduction in the volume of accidents

PM contributes to reducing the number of incidents that disrupt the conduct of business

- Permanent solutions

There is a gradual reduction in the number and impact of Problems and KEs once those solved remain solved

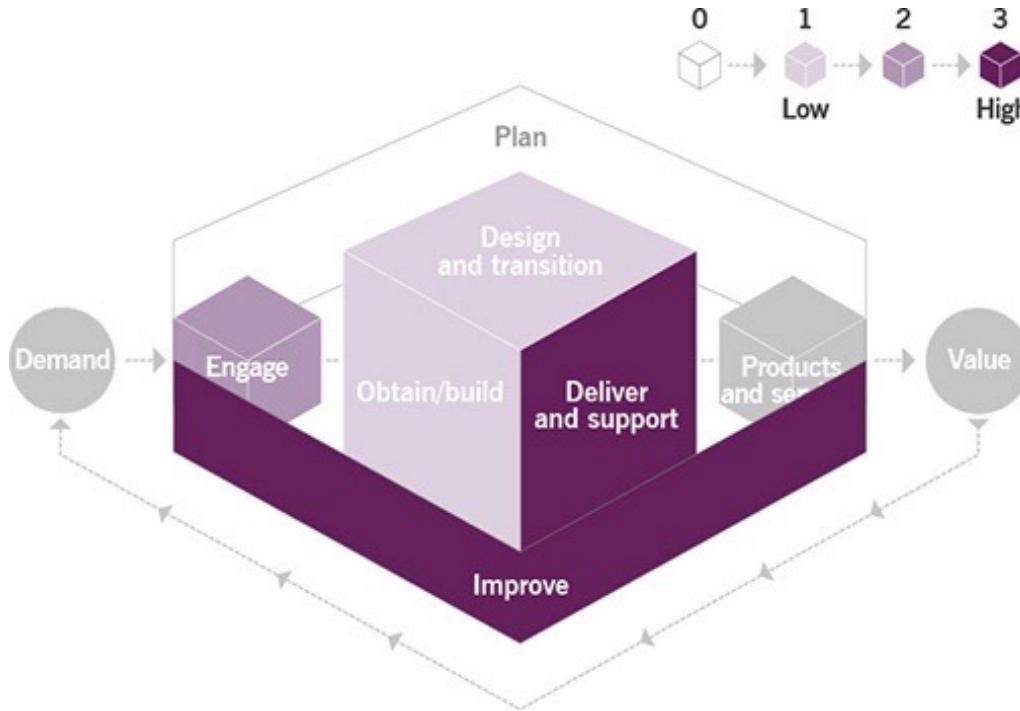
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- Improvement of the level of learning at the organizational level.
The PM process is based on the concept of learning from past experiences. The process provides historical data to allow the identification of trends, a means of preventing failures and reducing the impact of these, resulting in improved user productivity
- Greater number of fixes working since the first time available to the SD.
The PM provides the SD with more incident fixes that work on the first try thanks to the information-based process of the CMDB

PROBLEM MANAGEMENT

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Heat map of the contribution of problem management to value chain activities

PROBLEM MANAGEMENT

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CHANGE ENABLEMENT

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Change Control

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

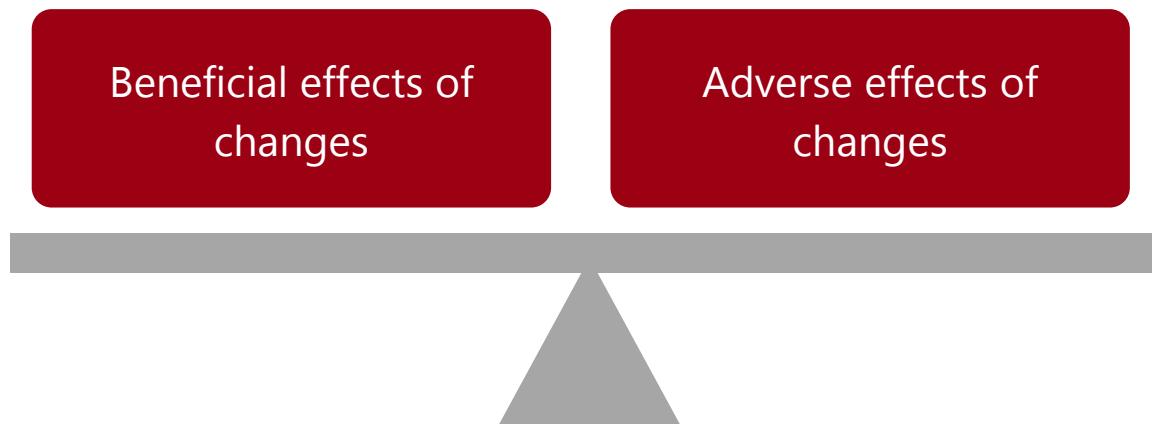
- Business today requires a highly controlled IT environment
- The first goal is to ensure that standardized methods and procedures are in place to make changes: balancing between the need for a change and its impact
- No bureaucracy but reduce the need to make continuous ad hoc changes.
- Managing change has become a full-time job

CHANGE ENABLEMENT

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Change Enablement

must balance the need to make beneficial changes that will deliver additional value with the need to protect customers and users from the adverse effect of changes



CHANGE ENABLEMENT

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Change

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



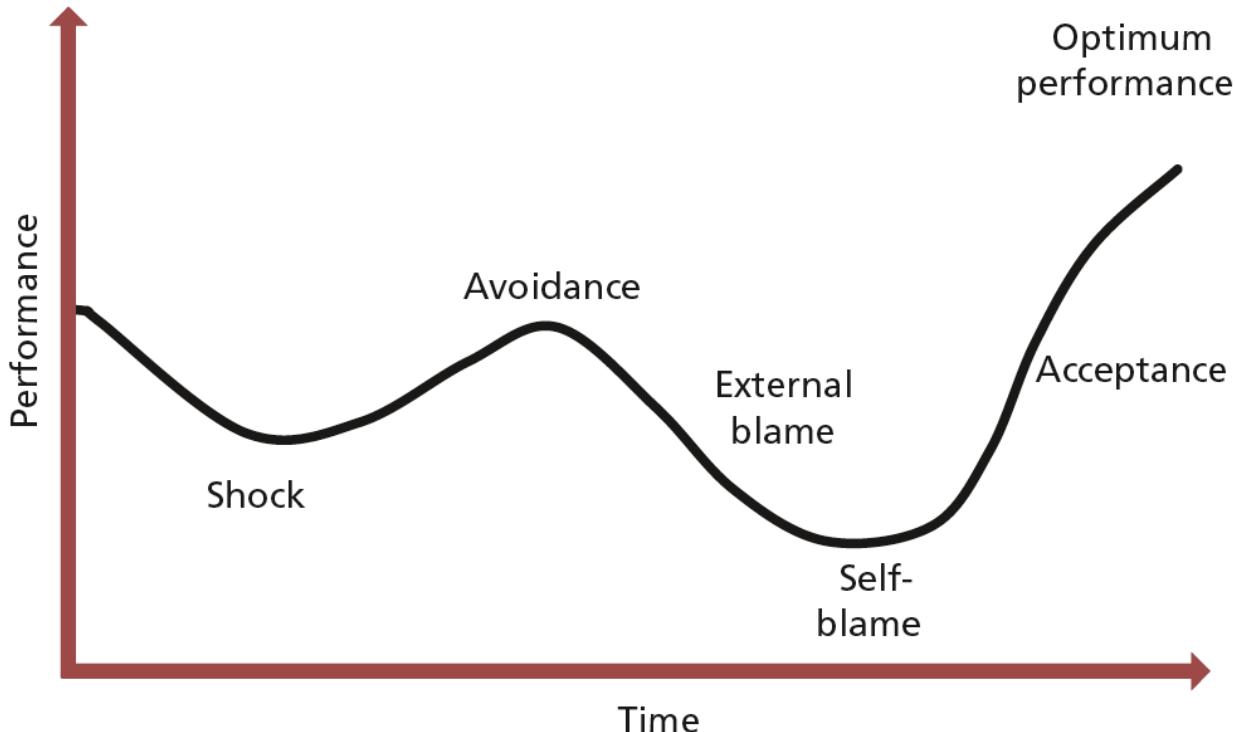
THE 7 R OF CHANGE MANAGEMENT

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- Who **Raised** the Change?
- What is the **Reason** for the Change?
- What is the **Return** required from the Change?
- What are the **Risks** involved in the Change?
- What **Resources** are required to deliver the Change?
- Who is **Responsible** for the build, test and implementation of the Change?
- What is the **Relationship** between this Change and other Changes?

THE EMOTIONAL CYCLE OF CHANGE

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CHANGE RACI MATRIX

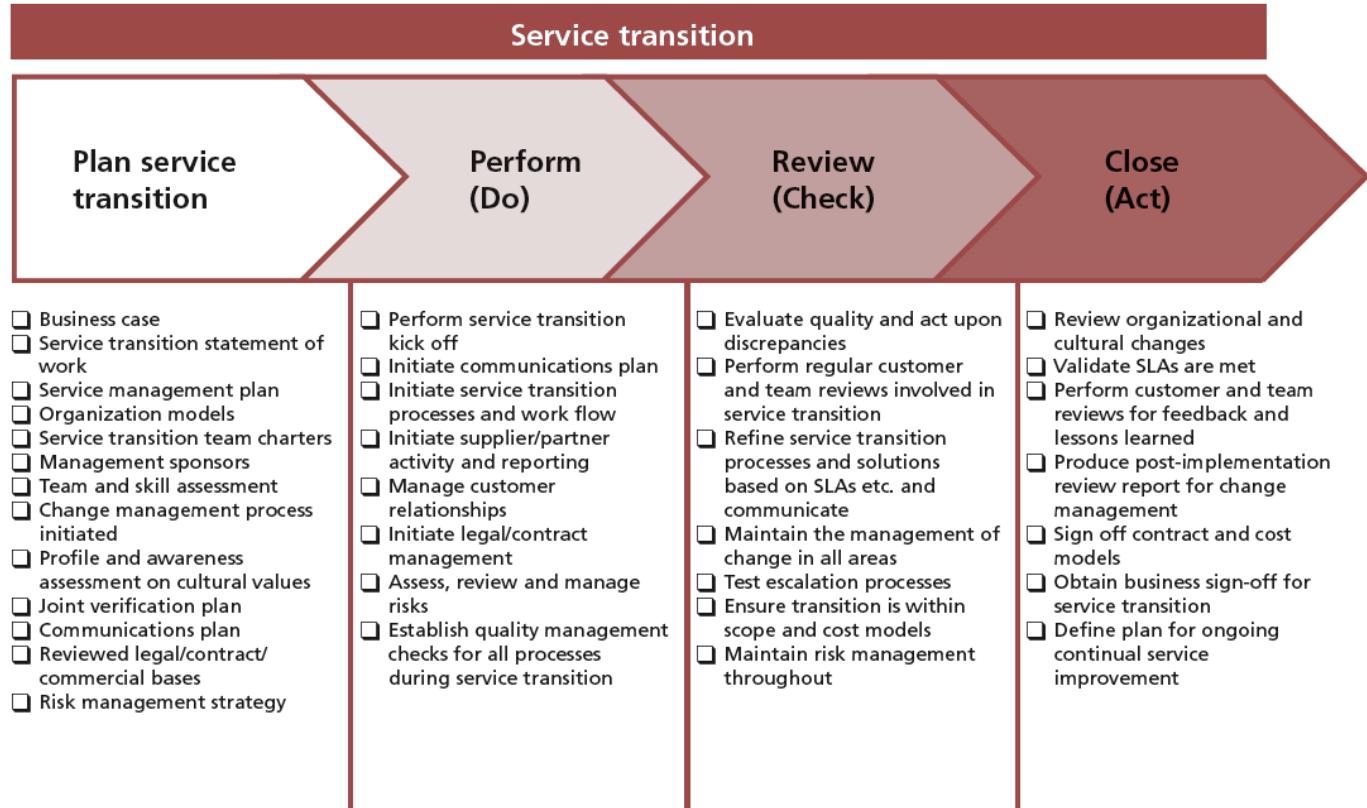
SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT

Role responsibility	Change sponsor, e.g. business and IT leader	Change enabler, e.g. process owner, service owner	Change agent, e.g. team leader instructing change	Change target, e.g. individual performing the change
Articulate a vision for the business and service change in the domain	AR	R	C	I
Recognize and handle resistance to change	R	A	R	C
Initiate change, understand the levers for change and the obstacles	R	AR	C	C
Manage change and input to change plan	C	AR	C	C
Input to design of target organization or structure, etc.	C	AR	C	I
Set up a system for communicating change	AR	R	C	I
Steer change	AR	R	R	C
Mobilize the organization	AR	C	C	C
Mobilize the department, unit, team	AR	R	R	I
Lead workshops and group analysis of the current processes	I	AR	R	I

CHANGE ENABLEMENT

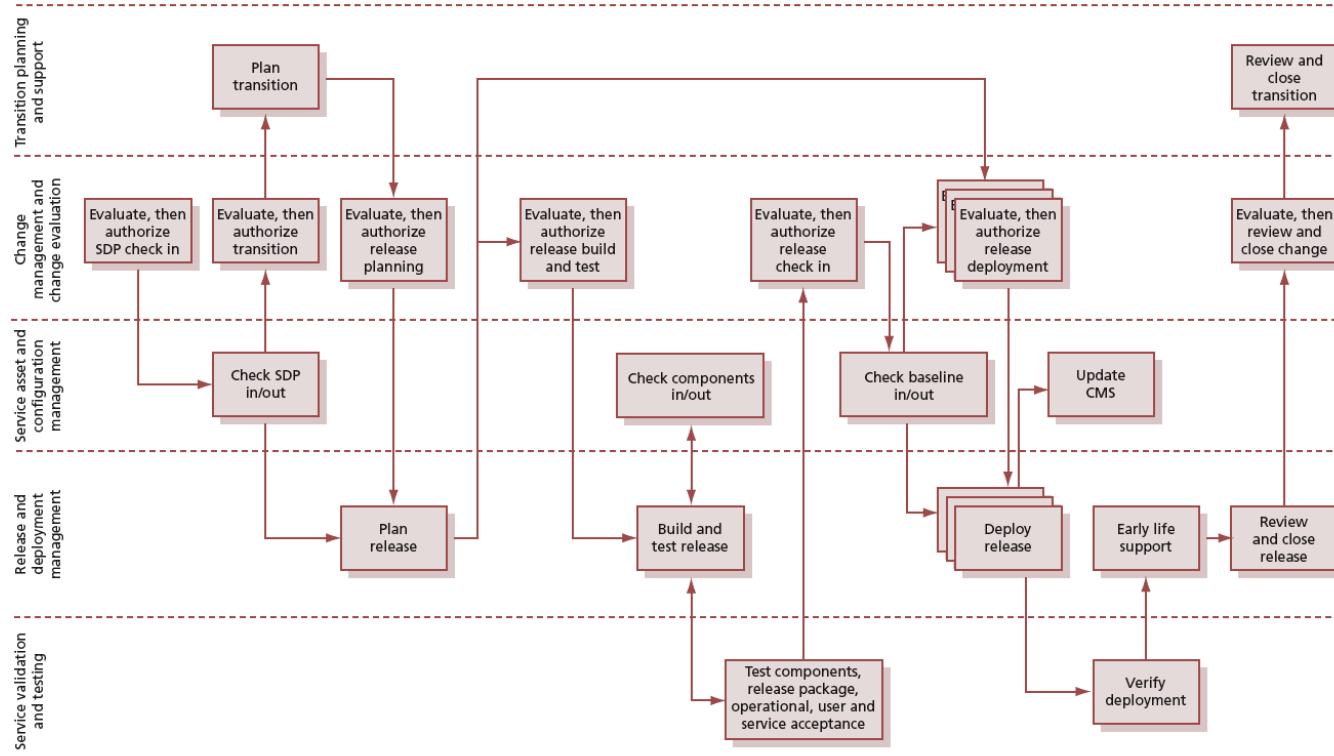
SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT

Service Transition In OutSourcing



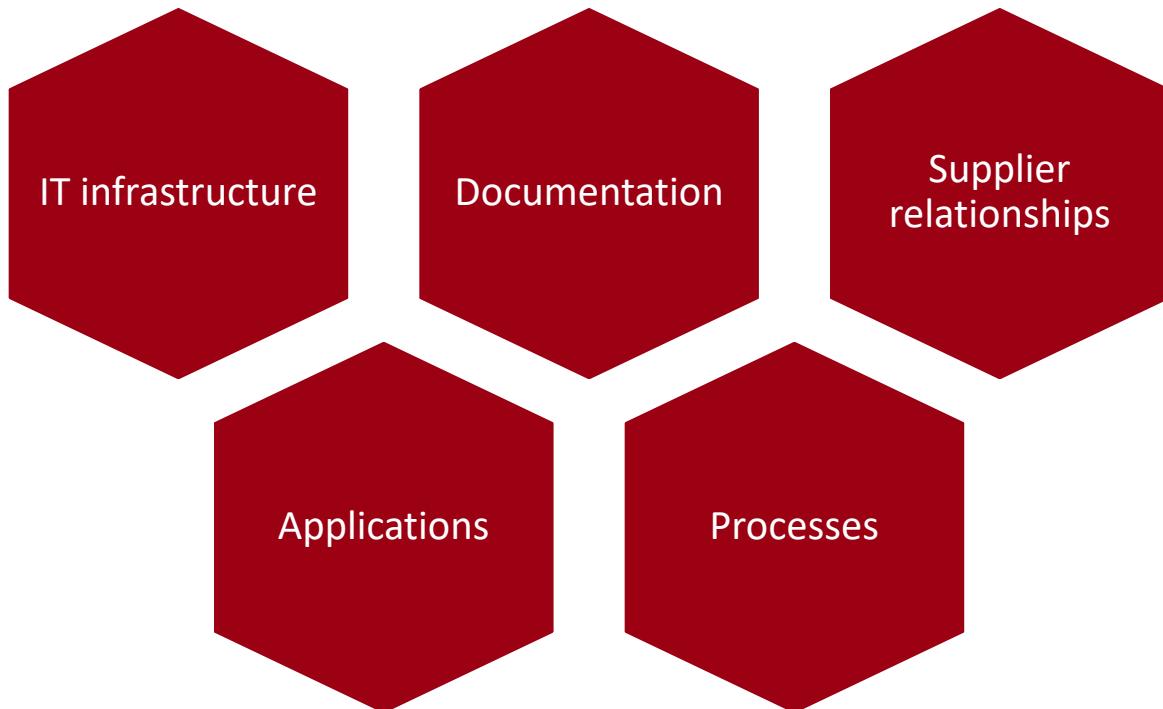
EXAMPLE OF A PATH THROUGH THE PROCESSES

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT



CHANGE ENABLEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT SCOPE



CHANGE ENABLEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT

Change Priority

Priority	Corrective change	Enhancement change
Immediate Treat as emergency change (see section 4.2.5.11)	Putting life at risk Causing significant loss of revenue or the inability to deliver important public services Immediate action required	Not appropriate for enhancement changes
High To be given highest priority for change building, testing and implementation resources	Severely affecting some key users, or impacting on a large number of users	Meets legislative requirements Responds to short-term market opportunities or public requirements Supports new business initiatives that will increase company market position
Medium	No severe impact, but rectification cannot be deferred until the next scheduled release or upgrade	Maintains business viability Supports planned business initiatives
Low	A change is justified and necessary but can wait until the next scheduled release or upgrade	Improvements in usability of a service Adds new facilities

CHANGE ENABLEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT



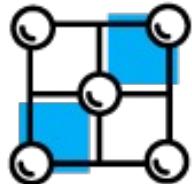
STANDARD

- Straightforward
- Frequent
- Documentation needed
- No authorization by CAB needed



NORMAL

- Important
- Full review
- Requires CAB authorization



MAJOR

- High risk
- Detailed report
- Requires CAB & management authorization



EMERGENCY

- Urgent
- Resolves incident
- High risk of failure
- Flexible pool of approvers

CHANGE ENABLEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT

Change Schedule (CS)

(formerly the ITIL v2 Forward Schedule of Change (FSC)) contains the details of all the changes authorized for implementation, accompanied by the expected dates

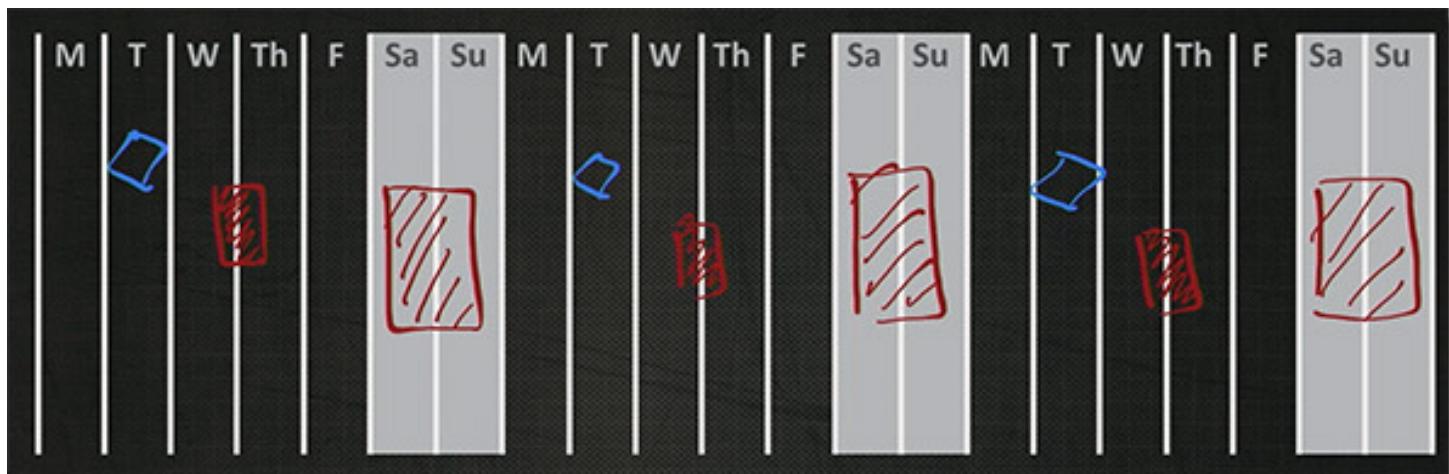
Change Requests with a Start Date								
03/01/2015 – 11/09/2017								
Actions		Report Options		Filter Options		Export Options		
Last Updated: October 9, 2017 2:48p PDT								
Request #	Start Date	End Date	Status	Scope	Customer Affected	Assigned Group	Department	Implementer
47	Oct 13, 2017 3:00a PDT	Oct 13, 2017 4:00a PDT	Pending			Change Management		Charles Becker
Description Vmware patch on 5th floor server room								
46	Oct 17, 2017 2:00a PDT	Oct 17, 2017 3:00a PDT	Pending		Charles Becker	Change Management		
Description New Spam filters in server room								
72	Oct 20, 2017 1:00a PDT	Oct 20, 2017 2:00a PDT	New	Global	Paloalto IT7	Network	Commerce/Finance	Betty Davis
Description Reconfigure of 5 new servers on public web site.								
49	Oct 22, 2017 6:30p PDT	Oct 22, 2017 8:30p PDT	Planning	Local	Naomi Cantwell	Help Desk		Sally Doright
Description SAP CRM Upgrade for the Northern Region Sales Organization								
45	Oct 27, 2017 12:15a PDT	Oct 27, 2017 1:15a PDT	Pending	Global	Giva Administrator	Change		

CHANGE ENABLEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT

Projected Service Outage (PSO)

contains the details of the changes according to the SLAs and the agreed maintenance windows, the planned downtime also for other reasons such as maintenance or data backup



CHANGE ENABLEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT

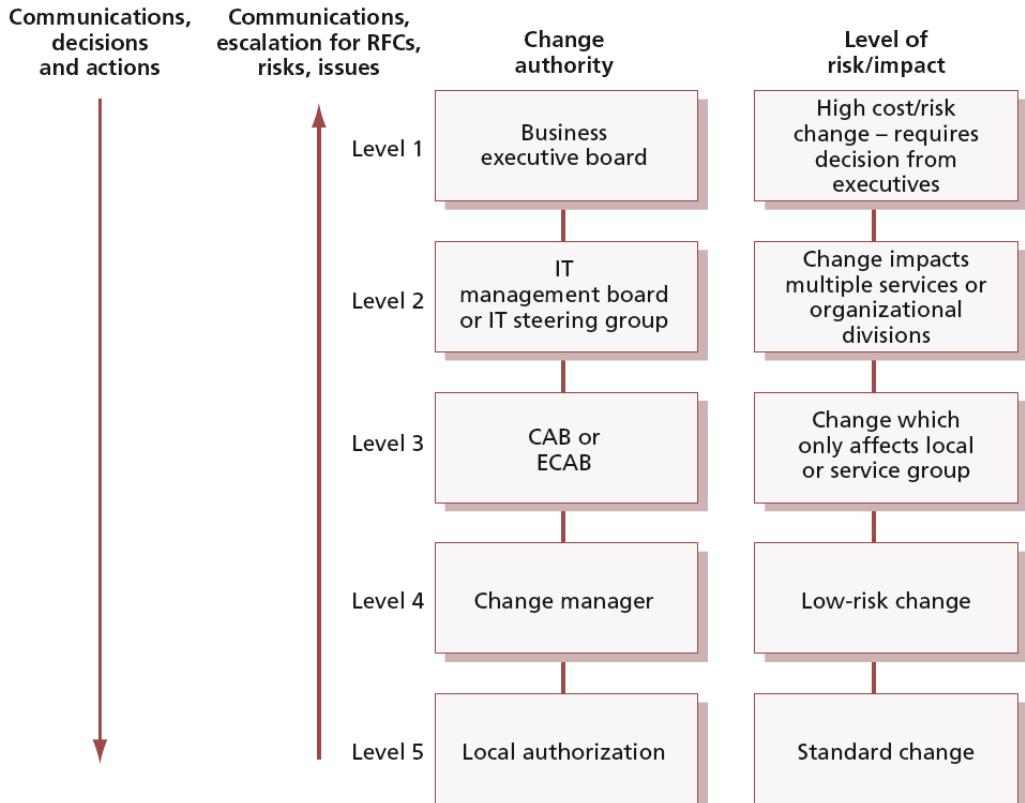
Change Authority

a person or group responsible for authorizing a change

Change Advisory Board (CAB)

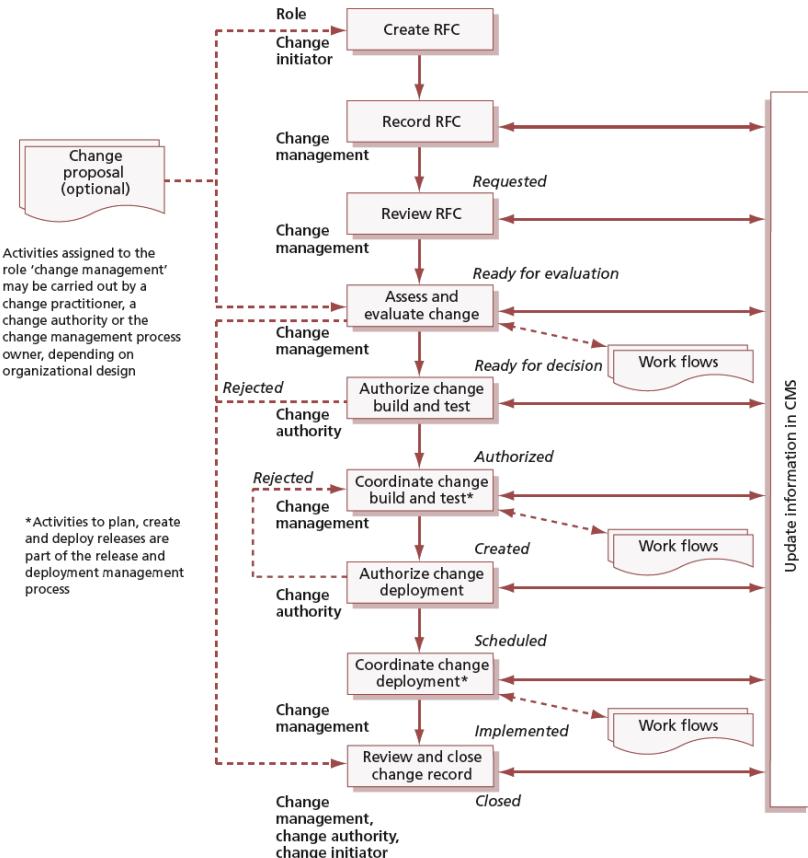
The CAB is not static but can change according to the level of risk to which the change is subject

On the right, an example of a change authorization model



CHANGE ENABLEMENT

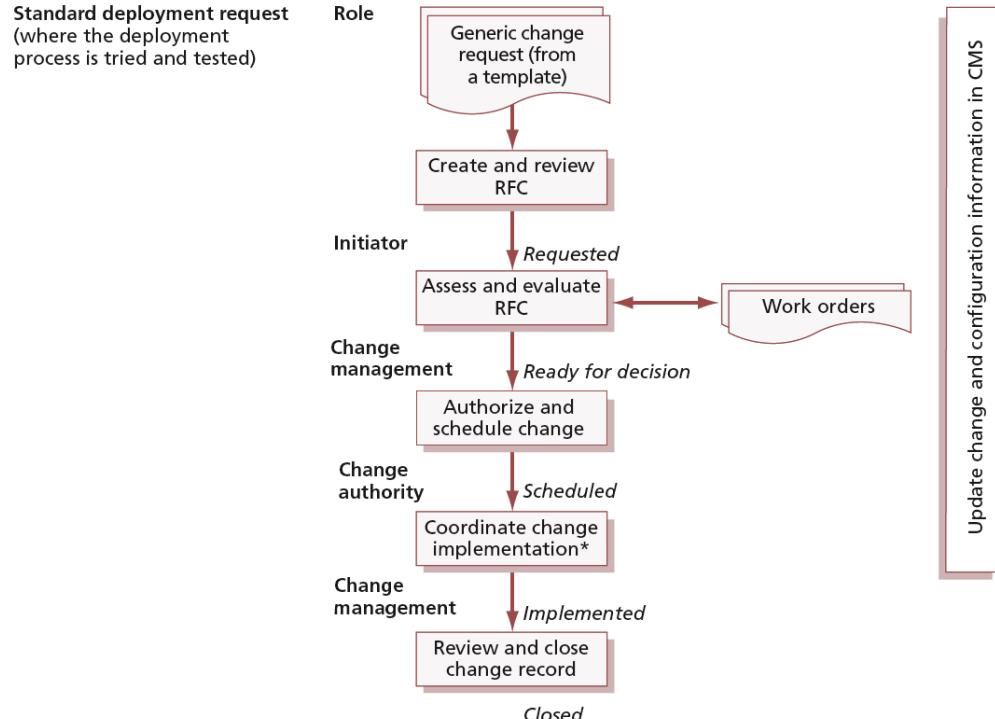
SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLING



Typical flow for a Normal Change

CHANGE ENABLEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLING

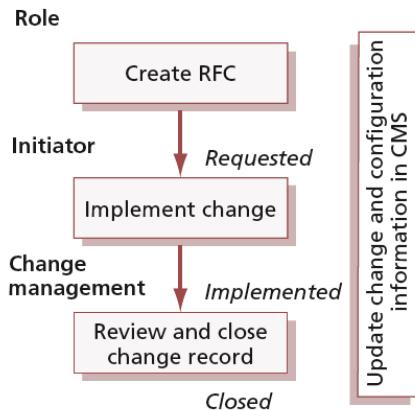


Typical flow for a Standard Deployment Request

*Includes build and test the change

CHANGE ENABLEMENT

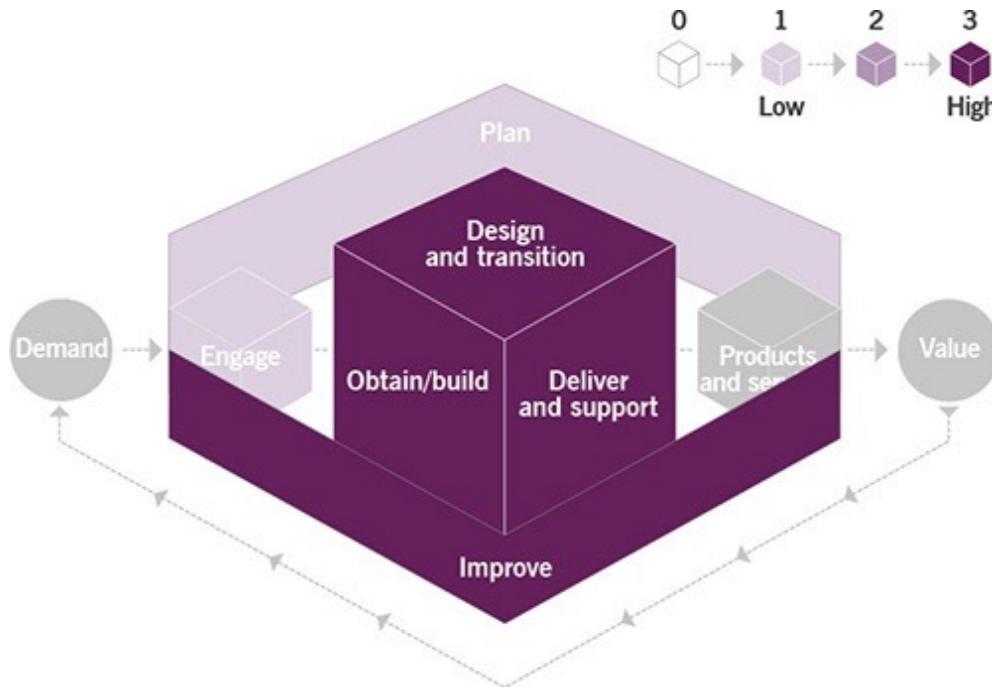
SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT



Typical flow for a standard
Operational Change Request

CHANGE ENABLEMENT

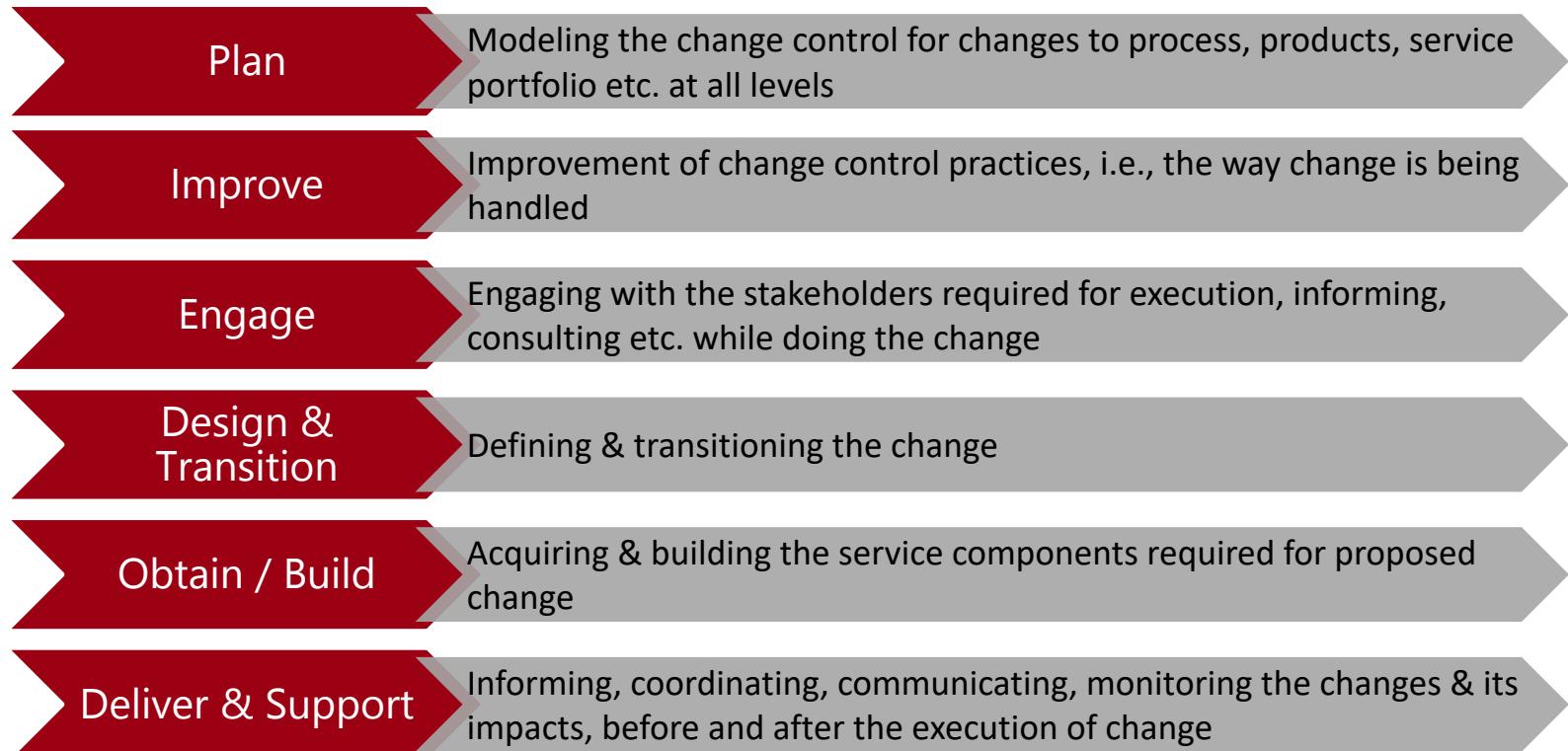
SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT



Heat map of the contribution of change enablement to value chain activities

CHANGE ENABLEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CHANGE ENABLEMENT



SERVICE MANAGEMENT PRACTICES

SECTION 11: SERVICE MANAGEMENT PRACTICES > EPIC



EPIC <https://www.youtube.com/watch?v=NOznQoxo44I>

SERVICE MANAGEMENT PRACTICES

Incident



Your Computer
Crashed due to
a blue screen



What caused
Blue Screen

Restart
your
Computer



Computer
Working
Normal



EPIC

Let's Investigate



List all
possible
causes

1 DEVICE DRIVERS

2 MEMORY ISSUE

3 OVERHEAT

4 DISPLAY ADAPTOR



FAIL DISPLAY ADAPTOR

?

How to fix
display adaptor

MONITORING



1. DEVICE DRIVERS
2. MEMORY ISSUE
3. OVERHEAT
4. DISPLAY ADAPTOR

PROACTIVE
PROBLEM MANAGEMENT
Event

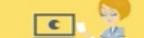


INCIDENT



HAPPY CUSTOMER

CHANGE REQUEST

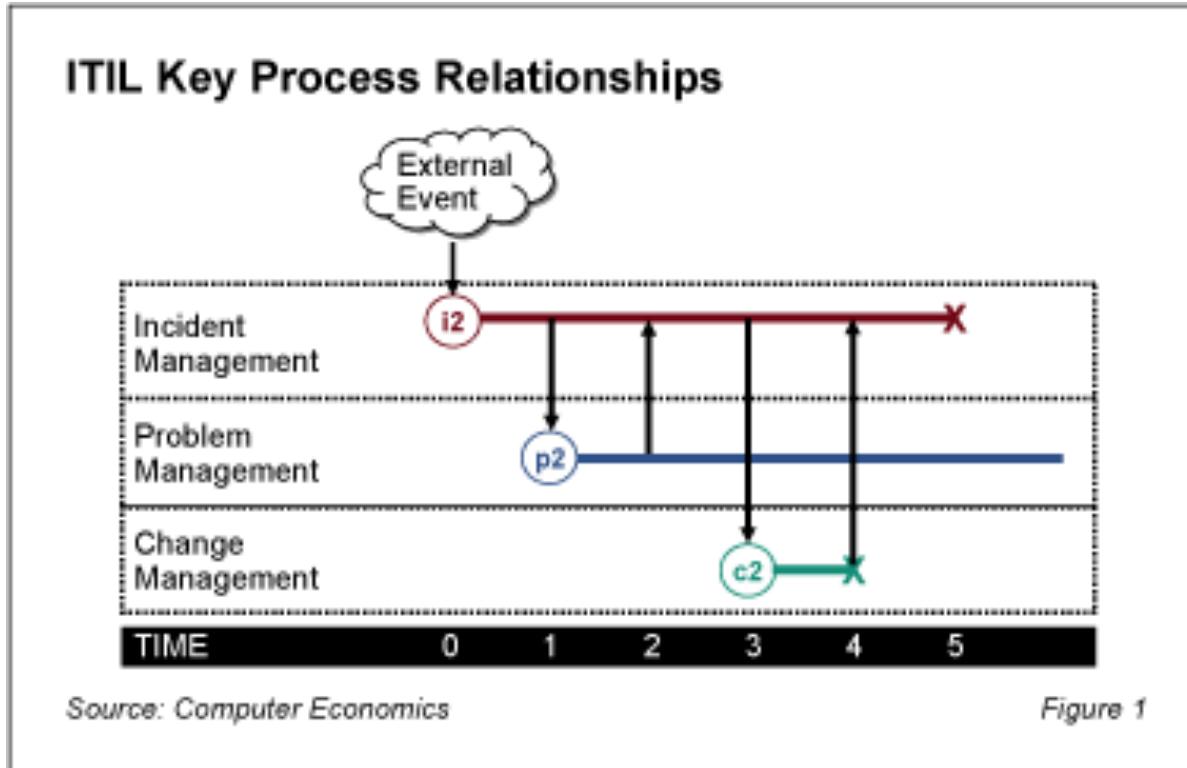


REPLACE DISPLAY
ADAPTOR

Change

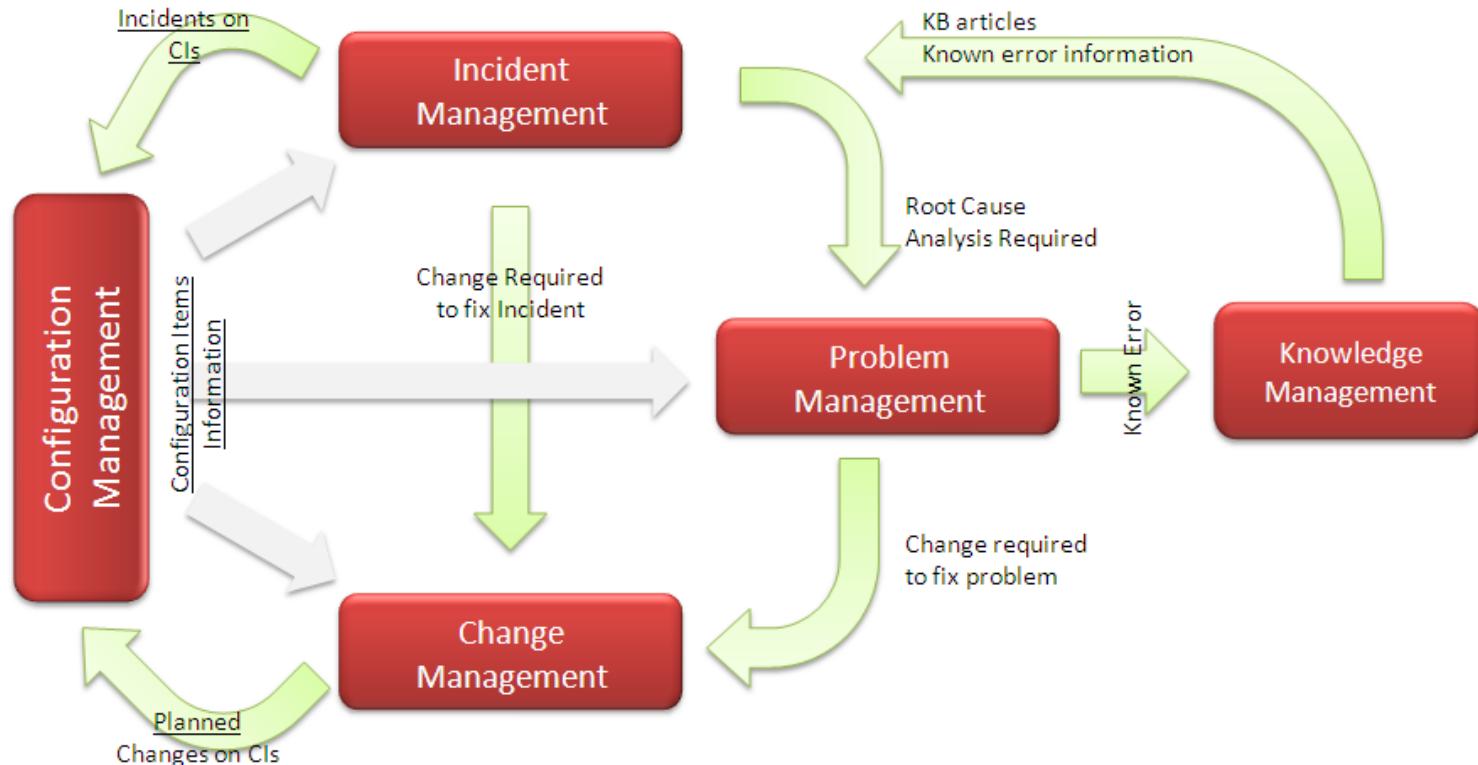
SERVICE MANAGEMENT PRACTICES

SECTION 11: SERVICE MANAGEMENT PRACTICES > EPIC



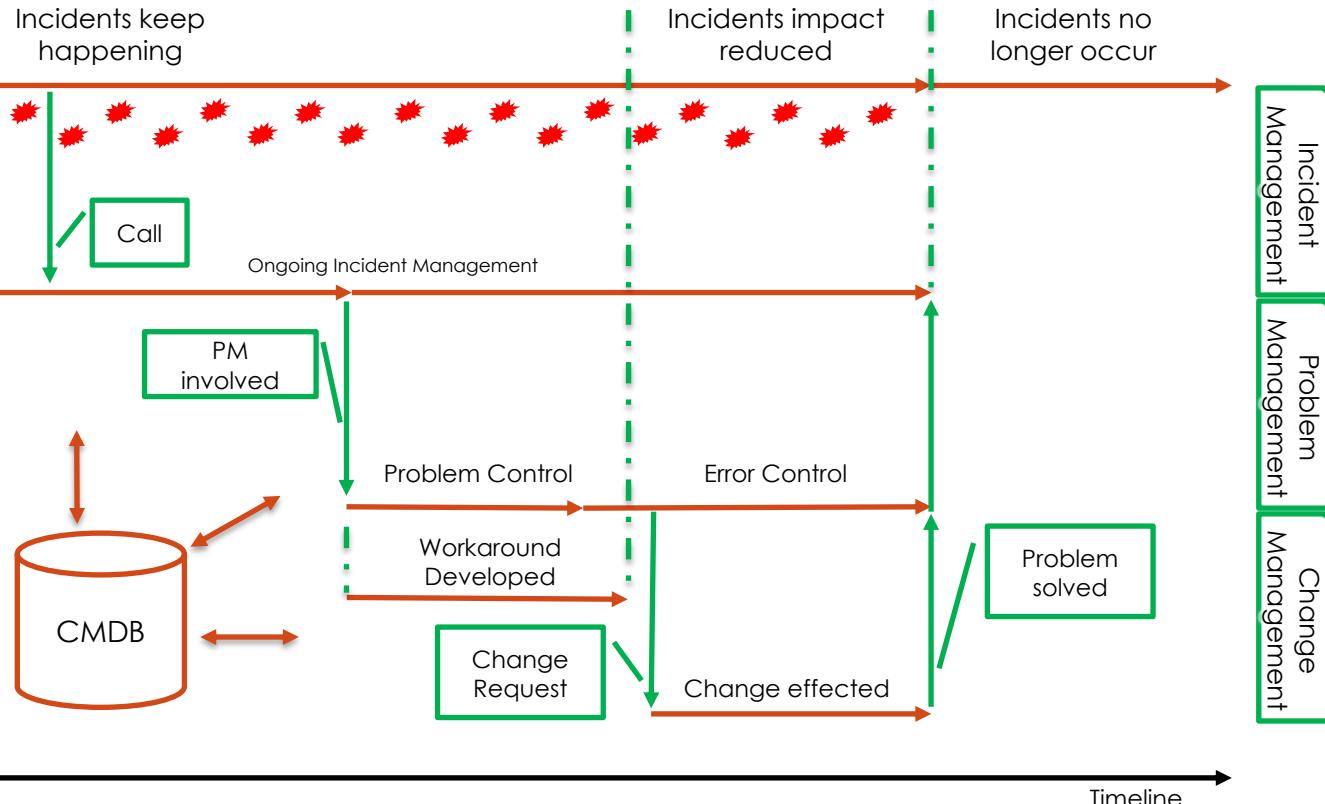
SERVICE MANAGEMENT PRACTICES

SECTION 11: SERVICE MANAGEMENT PRACTICES > EPIC



SERVICE MANAGEMENT PRACTICES

SECTION 11: SERVICE MANAGEMENT PRACTICES > EPIC

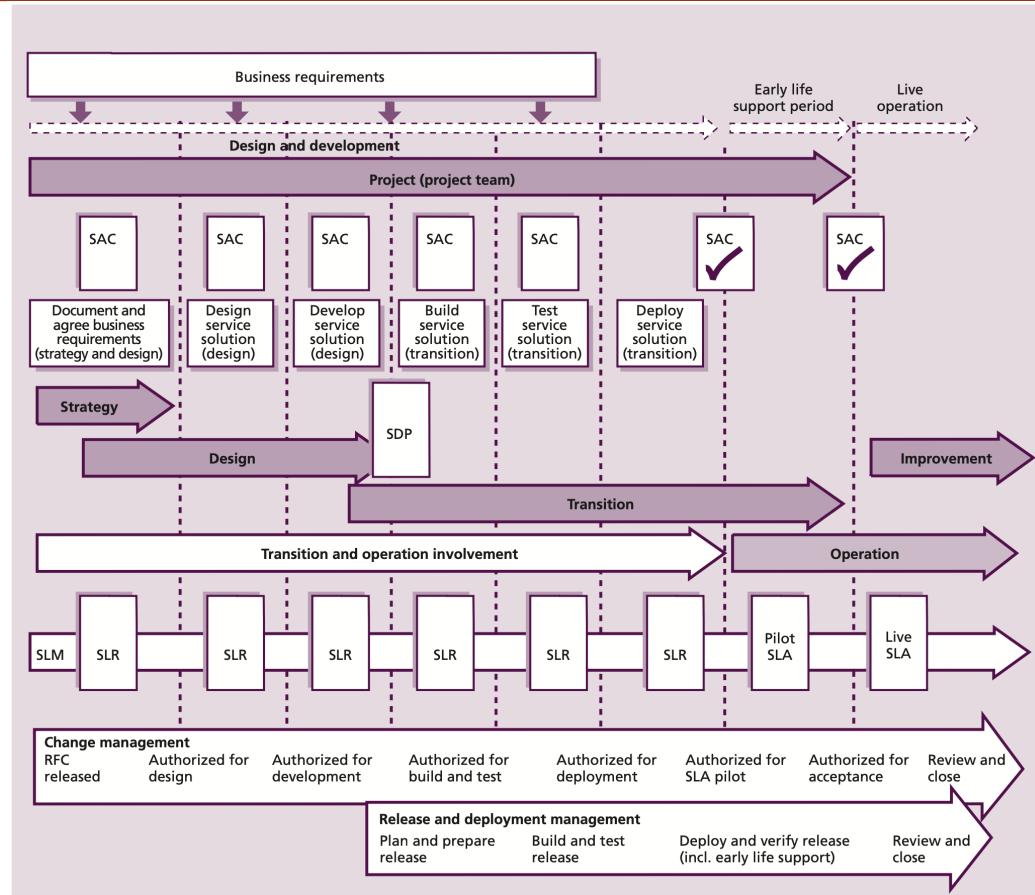


SERVICE MANAGEMENT PRACTICES

SECTION 11: SERVICE MANAGEMENT PRACTICES > TRANSITION PHASE

The figure shows the lifecycle of a service from the initial or changed business requirement through the design, transition and operation stages of the lifecycle.

It is important that there is effective transfer of knowledge at all stages between the operational staff and the project staff to ensure smooth progression through each of the stages illustrated.



SERVICE DESK

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK



Service Desk

capture demand for incident resolution and service requests

SERVICE DESK

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK

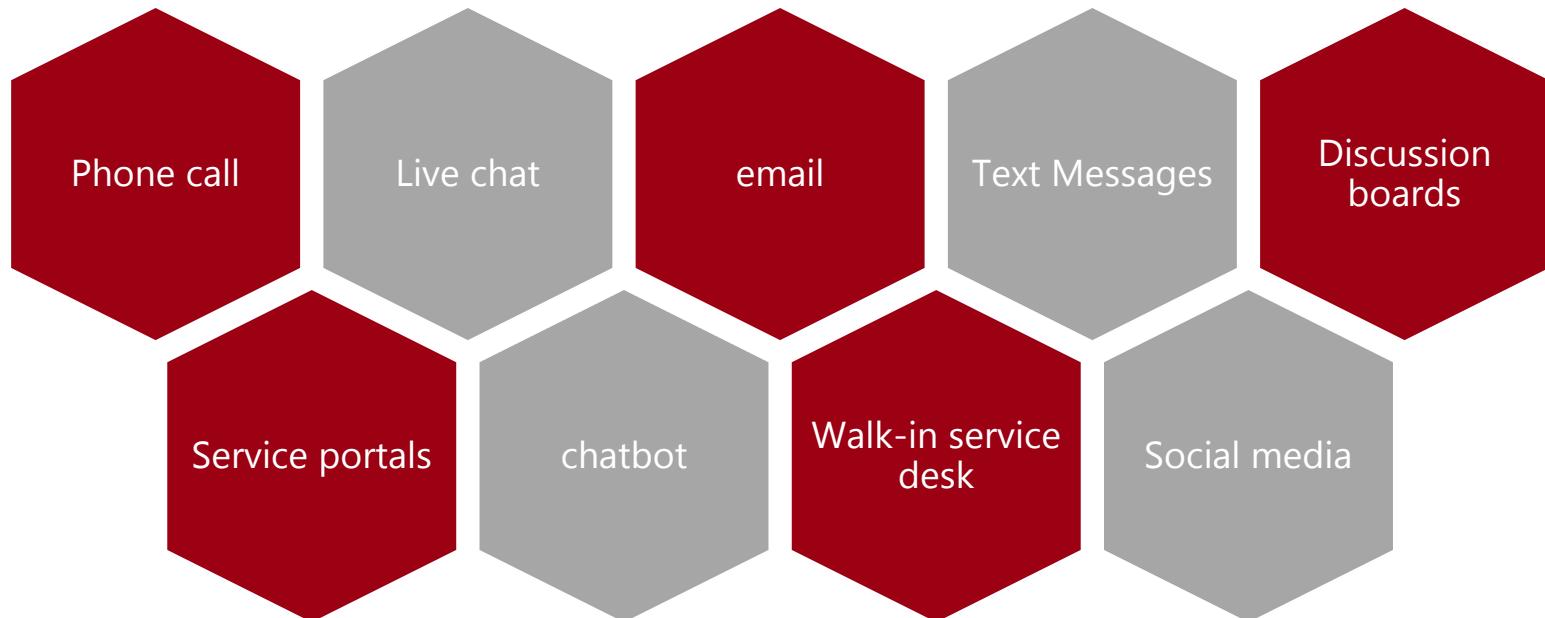


Key Aspects of Service Desk

SERVICE DESK

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK

Channels of Service Desk



SERVICE DESK

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK STRUCTURE

Structures of Service Desk

Centralized

Local

Virtual

Follow the Sun

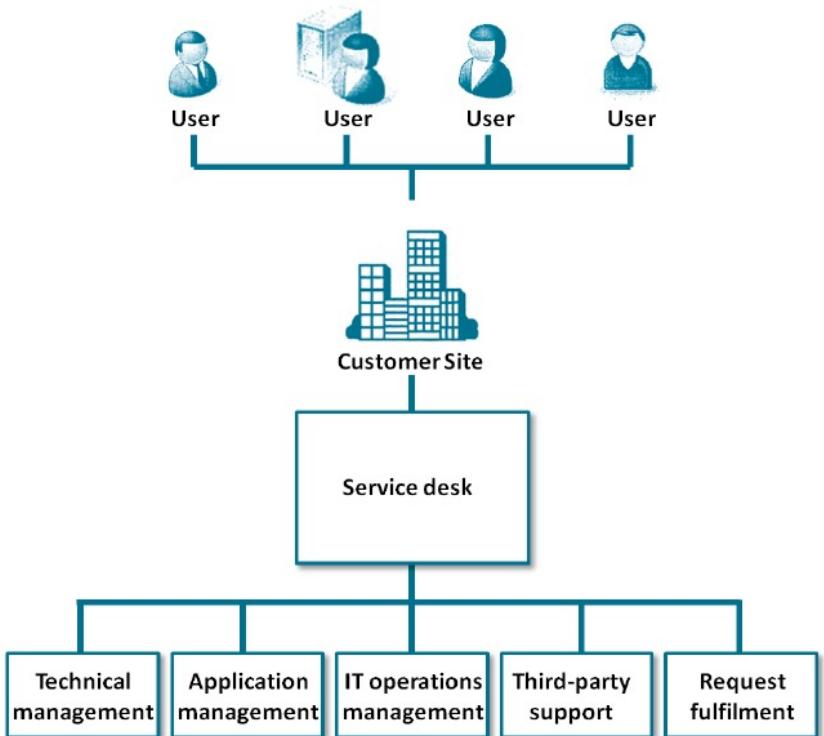
SUPPORTING TECHNOLOGIES

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK > SUPPORTING TECHNOLOGIES



SERVICE DESK STRUCTURE

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK STRUCTURE



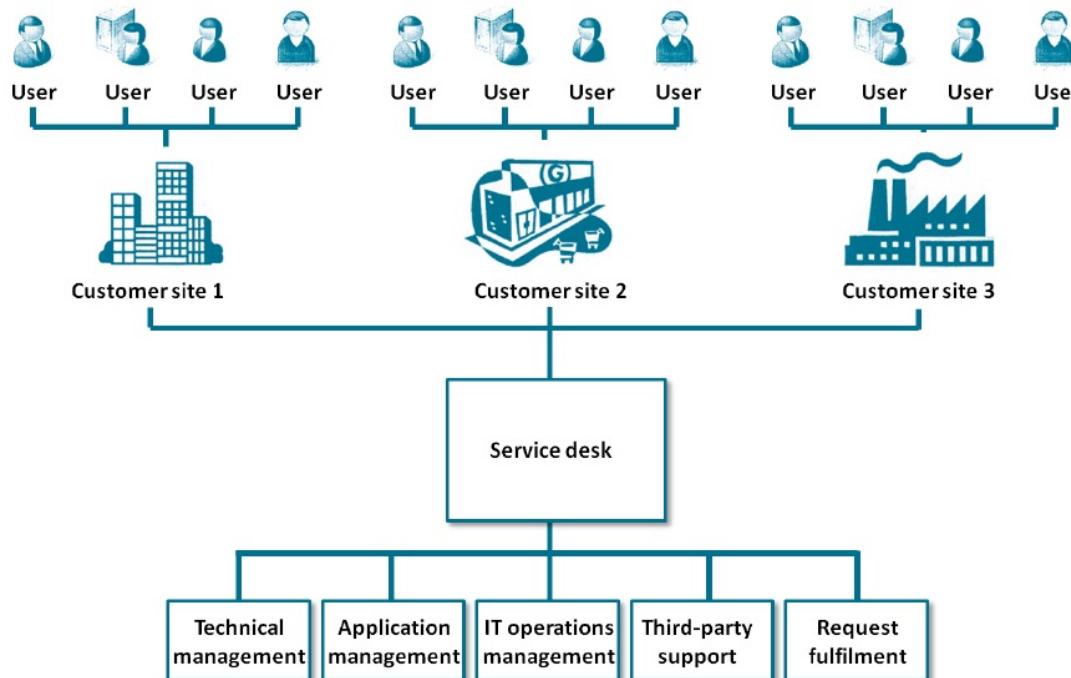
LOCAL

Users and support staff are located on the same premises or campus

SERVICE DESK STRUCTURE

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK STRUCTURE

CENTRALIZED

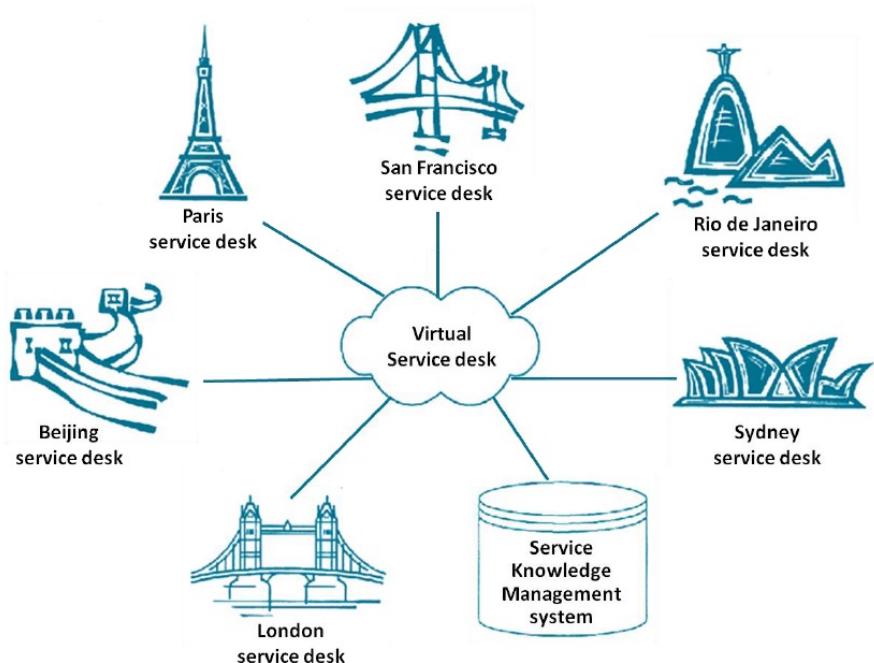


Multiple user locations are serviced by a single support location

SERVICE DESK STRUCTURE

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK STRUCTURE

VIRTUAL



Virtual

Multiple user locations are serviced by multiple support locations which by virtue of call routing and other technology are able to appear and respond to user requests as a single entity

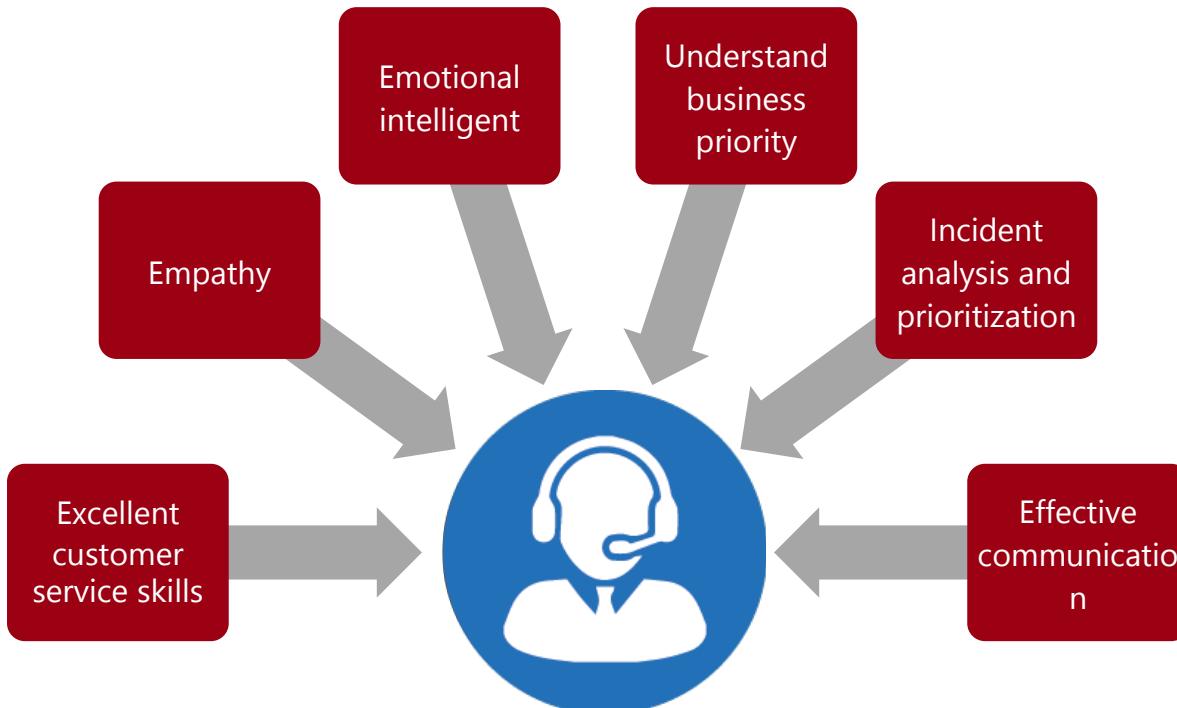
Follow the Sun

Identical to a virtual service desk, but organized in such a way as to utilize support staff shifts working during normal daylight hours for all user requests coming from any time zone

SUPPORTING STUFF

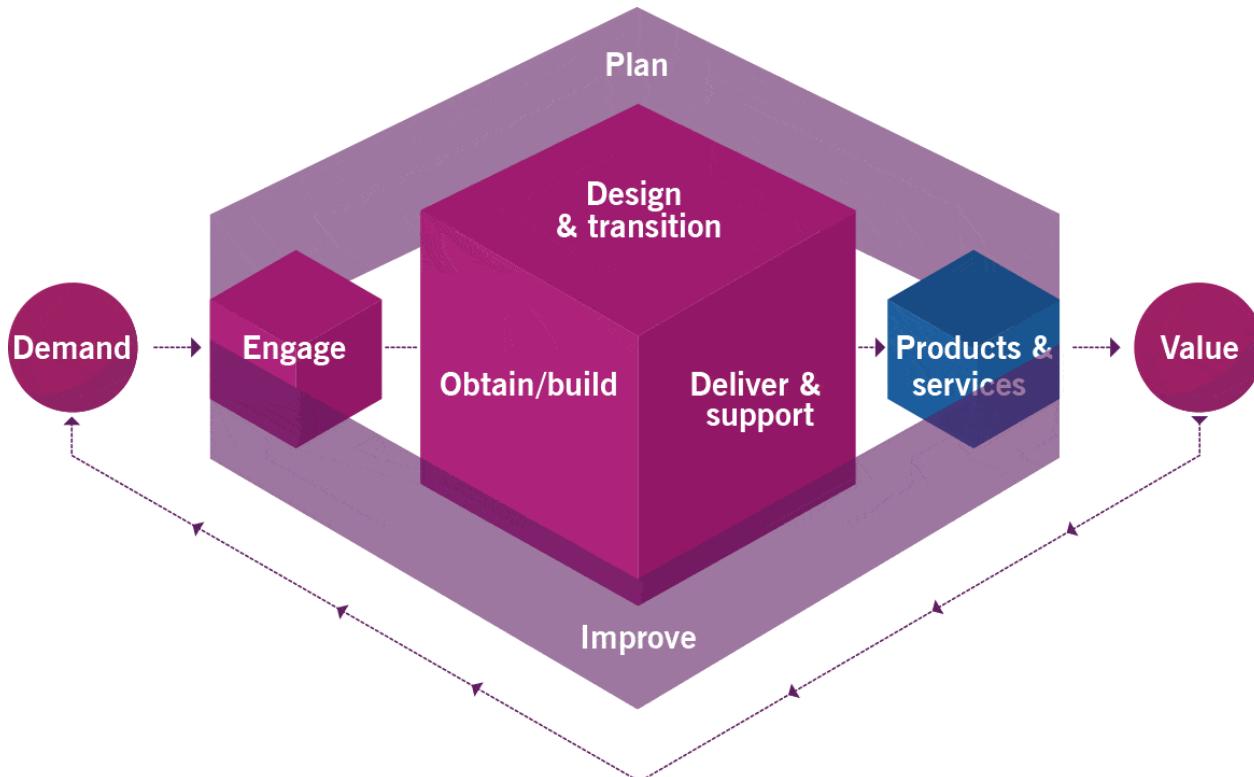
SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK > SUPPORTING STUFF

Service Desk Staff



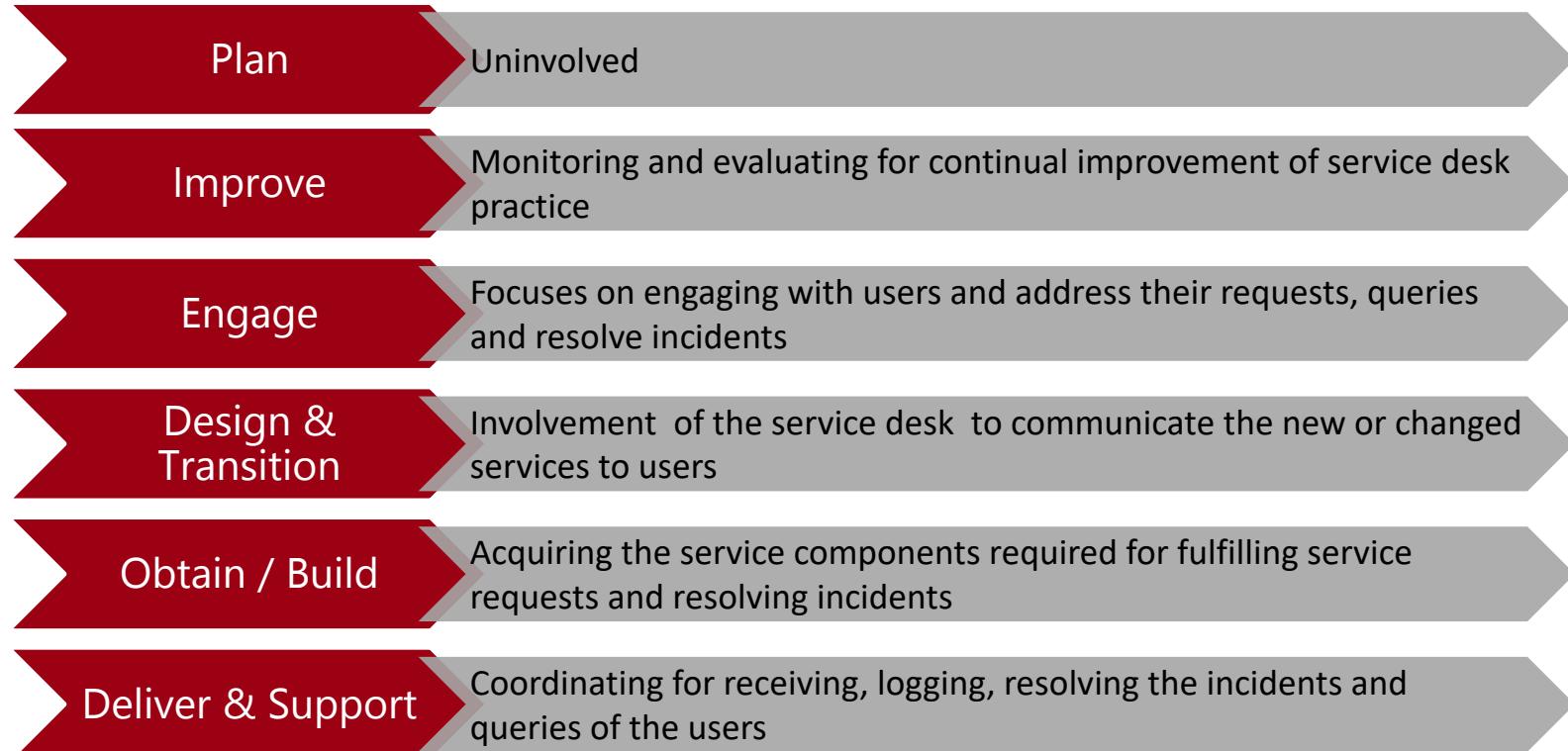
SERVICE VALUE CHAIN

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK



SERVICE DESK

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE DESK



IT ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT

IT Asset Management (ITAM)

to plan and manage the entire life-cycle of all the IT Assets, and ensuring:

- maximizing the value
- control costs
- manage risks
- enable decisions related to procurement
- utilization & retirement of assets
- meet contractual & regulatory requirements

IT Asset

any financially valuable component that can contribute to the delivery of an IT product or service

TYPES OF ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT > TYPES OF ASSET MANAGEMENT

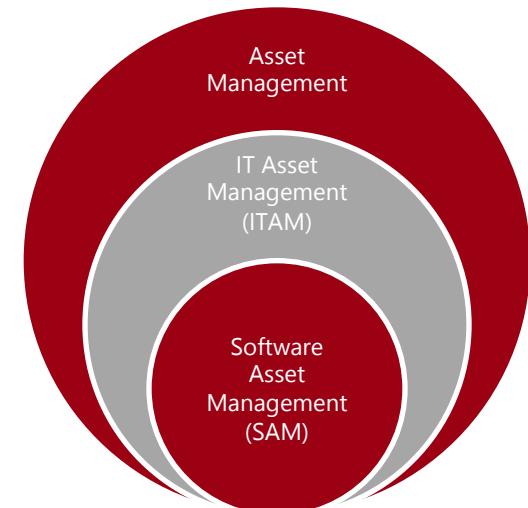
IT Hardware Asset Management (IT HAM)

is a sub-practice of asset management that is specifically aimed at managing the lifecycles and total costs of IT equipment and infrastructure

Software Asset Management (SAM)

is an aspect of IT asset management specifically aimed at managing the acquisition, development, release, deployment, maintenance, and eventual retirement of software assets

- **SAM** procedures provide effective management, control, and protection of software assets



IT ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT

- Understanding the **cost** and **value** of assets is essential
- **IT Asset Management** contributes to the visibility of assets and their value, which is a key element to successful service management
- **IT Asset Management** requires accurate inventory information, which it keeps in an **asset register**: it can be gathered in an audit, but it is much better to automate the collection of information
- The organization **needs to ensure** that the full lifecycle of each asset is managed, including **managing asset provisioning**; receiving, decommissioning, and return; hardware disposal; software re-use; leasing management; and potentially many other activities

IT ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT

- **IT Asset Management** maintains the assets information, costs, and related contracts
- Therefore, the **IT asset register** is often combined (or federated) with the information stored in a configuration management system (CMS)
- In some organizations there is a centralized team responsible for **IT Asset Management**
- This **team** may also be responsible for configuration management
- Each organization must consider its own context and culture to choose the appropriate level of centralization

IT ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT ACTIVITIES

Activities

- **Hardware Assets** must be labelled for clear identification
- **Software Assets** must be protected from unlawful copying, which could result in unlicensed use
- **Cloud-based Assets** must be assigned to specific products or groups so that costs can be managed
- **Client Assets** must be assigned to individuals who take responsibility for their care

IT ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT ACTIVITIES

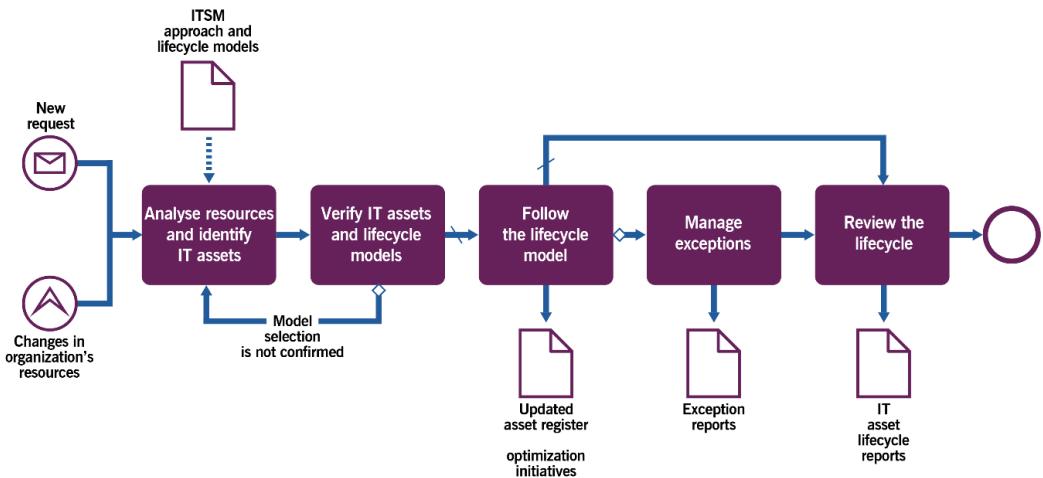
Activities

- **Define**, populate, and maintain the asset register in terms of structure and content, and the storage facilities for assets and related media
- **Control** the asset lifecycle in collaboration with other practices and record all changes to assets
- **Provide current** and historical data, reports, and support to other practices about IT assets
- **Audit assets**, related media, and conformity and drive corrective and preventive improvements to deal with detected issues

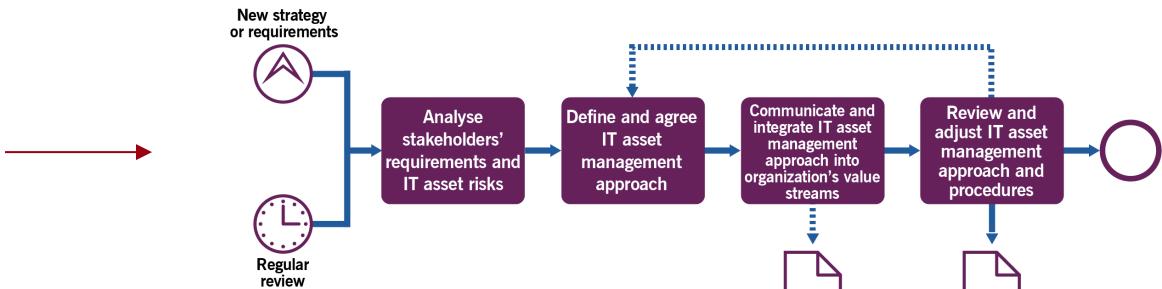
IT ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT ACTIVITIES

Workflow of the managing a common approach to ITAM process



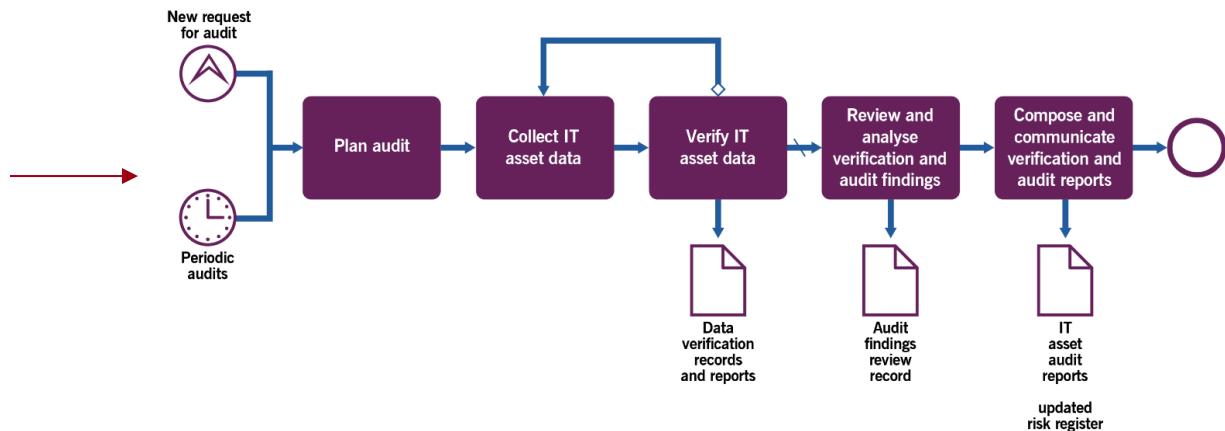
Workflow of the managing the IT asset lifecycle and records process



IT ASSET MANAGEMENT

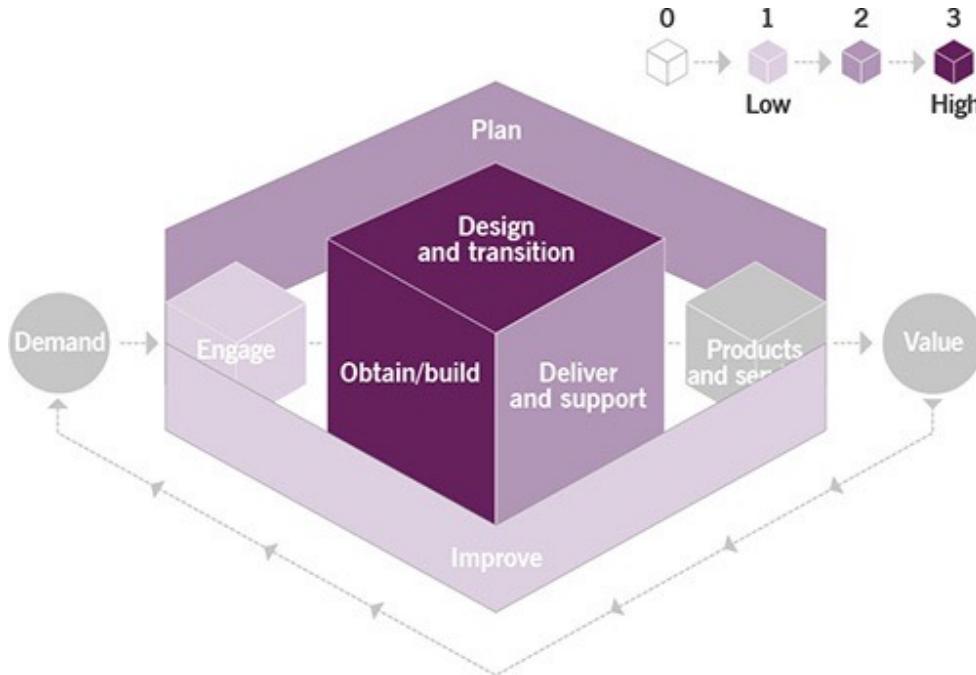
SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT ACTIVITIES

Workflow for the verifying, auditing,
and analysing IT assets process



IT ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT CONTRIBUTION



Heat map of the contribution of IT asset management to value chain activities

IT ASSET MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > IT ASSET MANAGEMENT CONTRIBUTION

Plan

Most policies and guidance for IT asset management comes from the service financial management practice

Improve

Some improvements will directly involve IT asset management in helping to understand and manage costs

Engage

There may be some demand for IT asset management from stakeholders

Design &
Transition

This value chain activity changes the status of IT assets

Obtain / Build

Ensure that assets are traceable from the beginning of their lifecycle

Deliver & Support

Locate IT assets, trace their movements, and control their status in the organization

SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

Service Configuration Management

The purpose of the Service Configuration Management practice is to ensure that accurate and reliable information about the configuration of services, and the CIs that support them, is available when and where it is needed. This includes information on how CIs are configured and the relationships between them.

Configuration Item (CI)

any component that needs to be managed in order to deliver an IT service.

Service Asset

is any resources or capabilities that could contribute to the delivery of services

SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

Each CI has:



Category



Attributes



Relations



Status

CI are always:



Necessary to provide a Service



Uniquely identifiable



Subject to changes

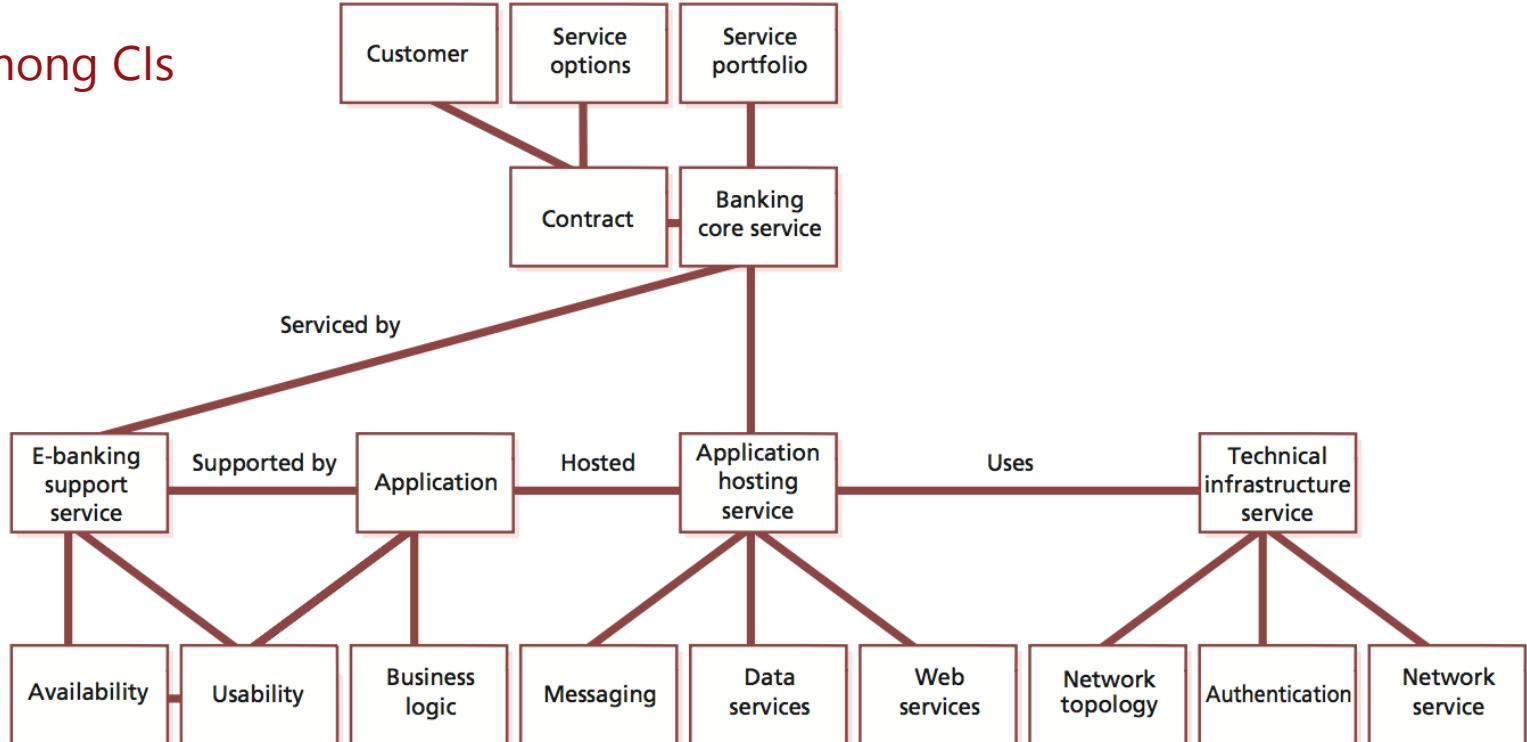


They can be managed

SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

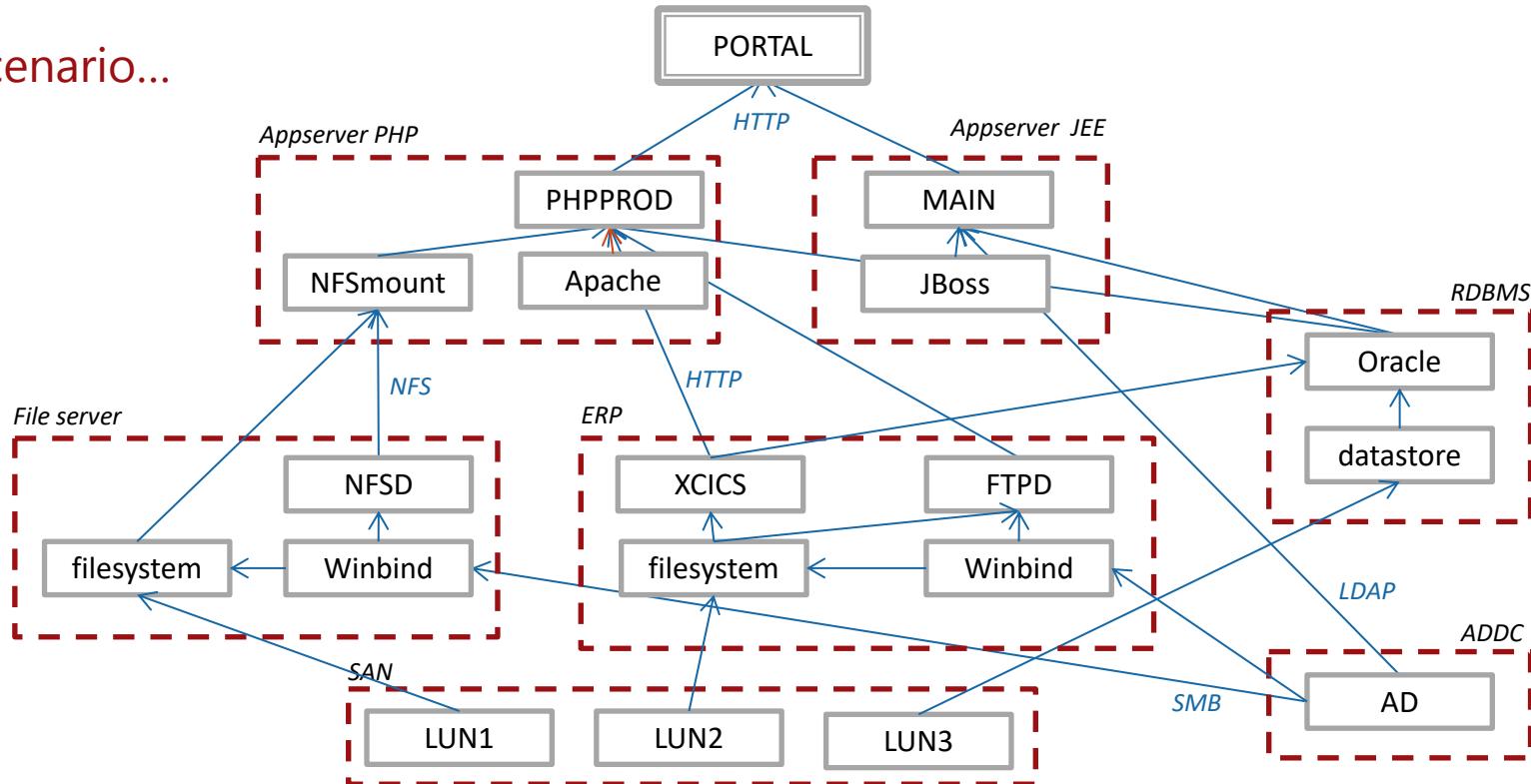
Relations among CIs



SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

A real scenario...

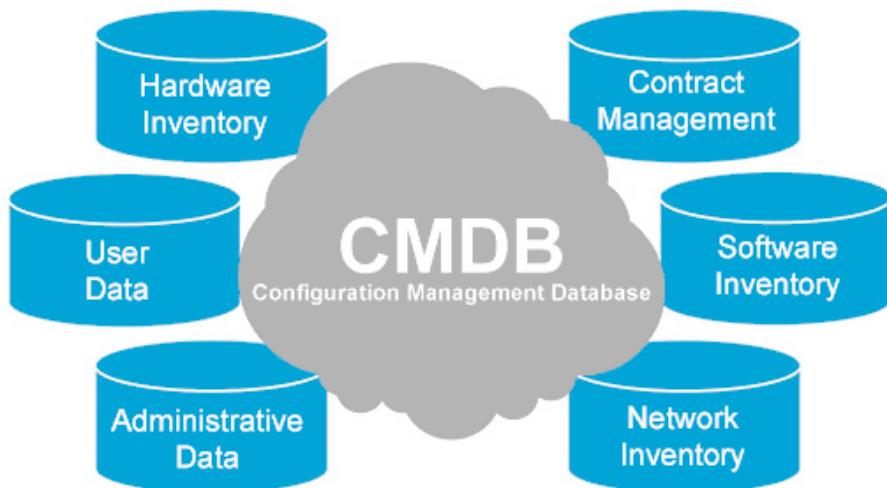


SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

Configuration Management DataBase (CMDB)

the minimum number of attributes and data that the CMDB should stores are as follows:



- CI Unique Identifier or Identification Code
- CI Name or Label (often, both, long names and short names)
- CI Abbreviations or Acronyms
- CI Description
- CI Ownership (organizations and people)
- CI Importance

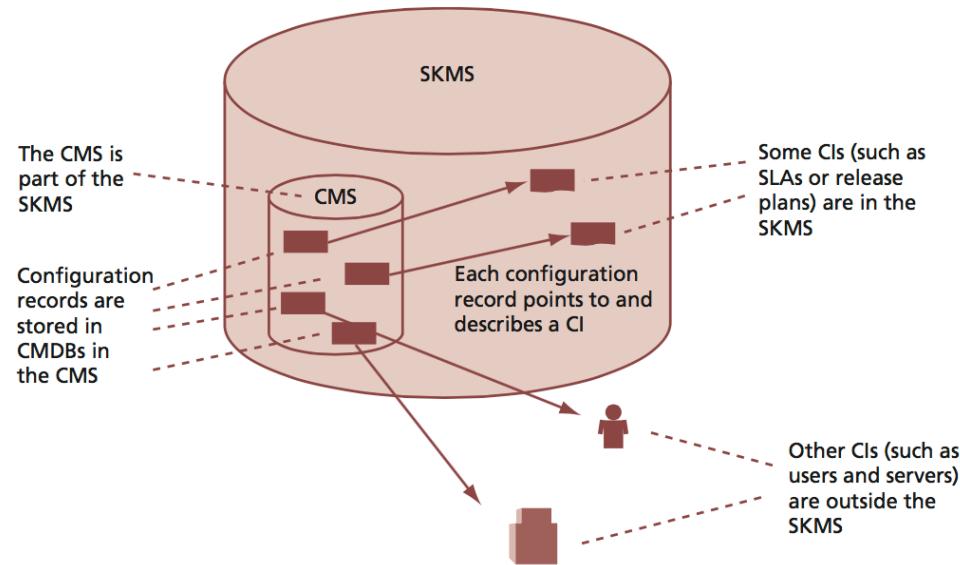
SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

Configuration Management System

a set of tools and database that are used to support service assets and manage IT Service Provider's Configuration data

- In reality, you can see it as a set of different CMDBs
- The CMS includes information about Known Errors, Changes, and Releases and may contain data about employees, Suppliers, locations, Business Units, Customers, and Users
- CMS can also be integrated with other external databases of customers or suppliers for seamless information transfers



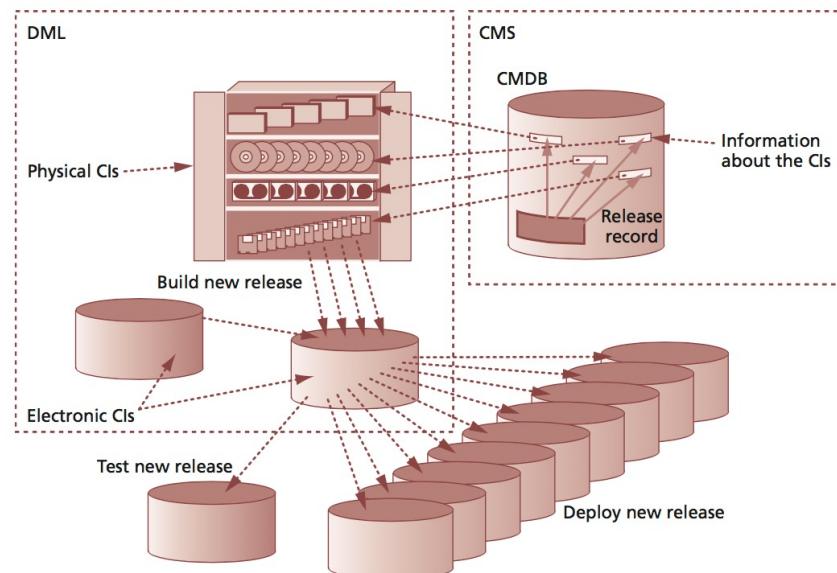
SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

Definitive Media Library (DML)

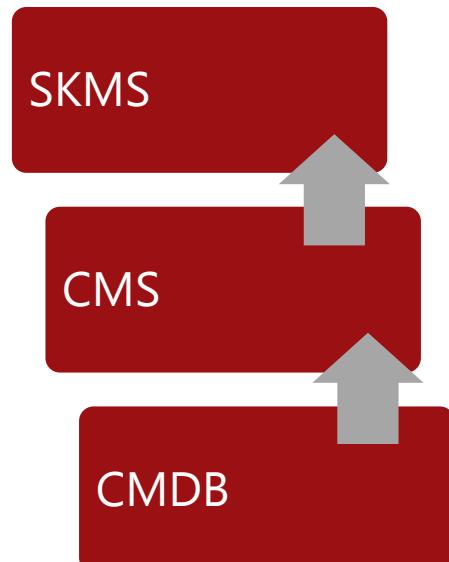
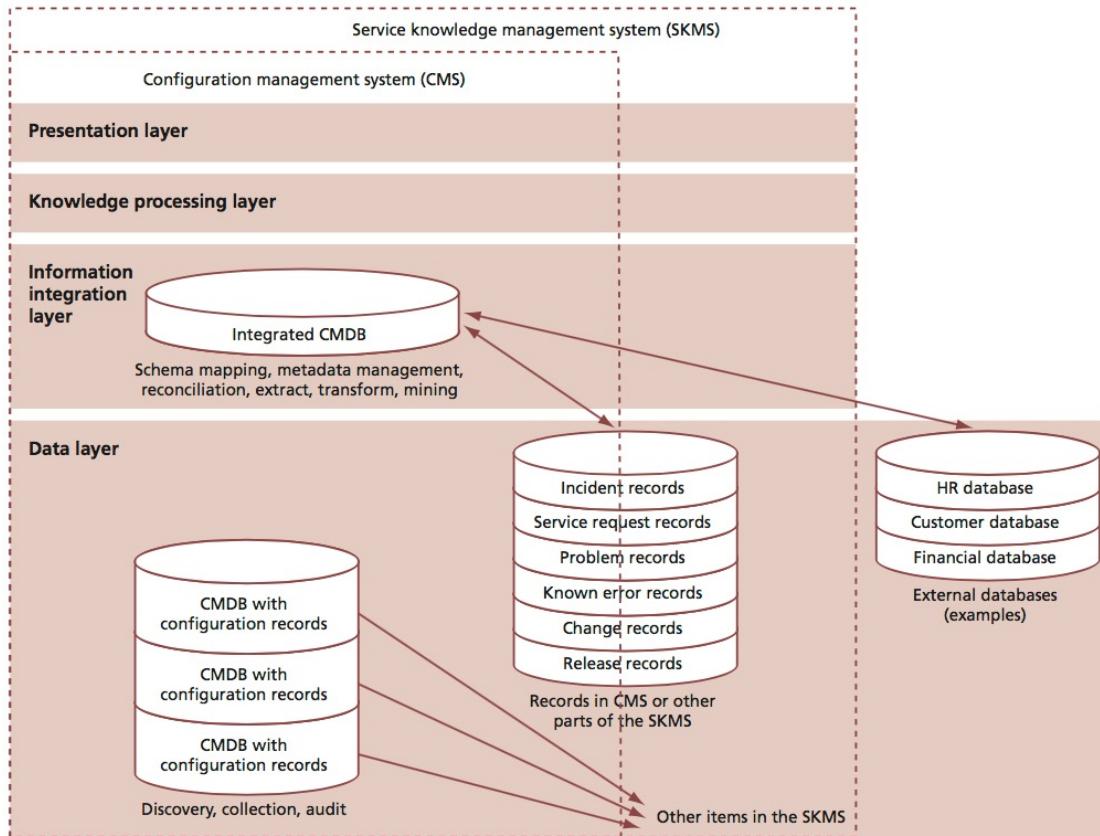
is the secure repository in which the definitive authorized versions of all media, software, license CIs are stored and protected

- It stores master copies of versions that have passed quality assurance checks and master copies of all controlled software in an organization
- DML is strictly controlled by SCM practice to ensure that only authorized media is stored
- DML may store data in the virtual storage or in physical storage (CD/DVD) or in both



SERVICE CONFIGURATION MANAGEMENT

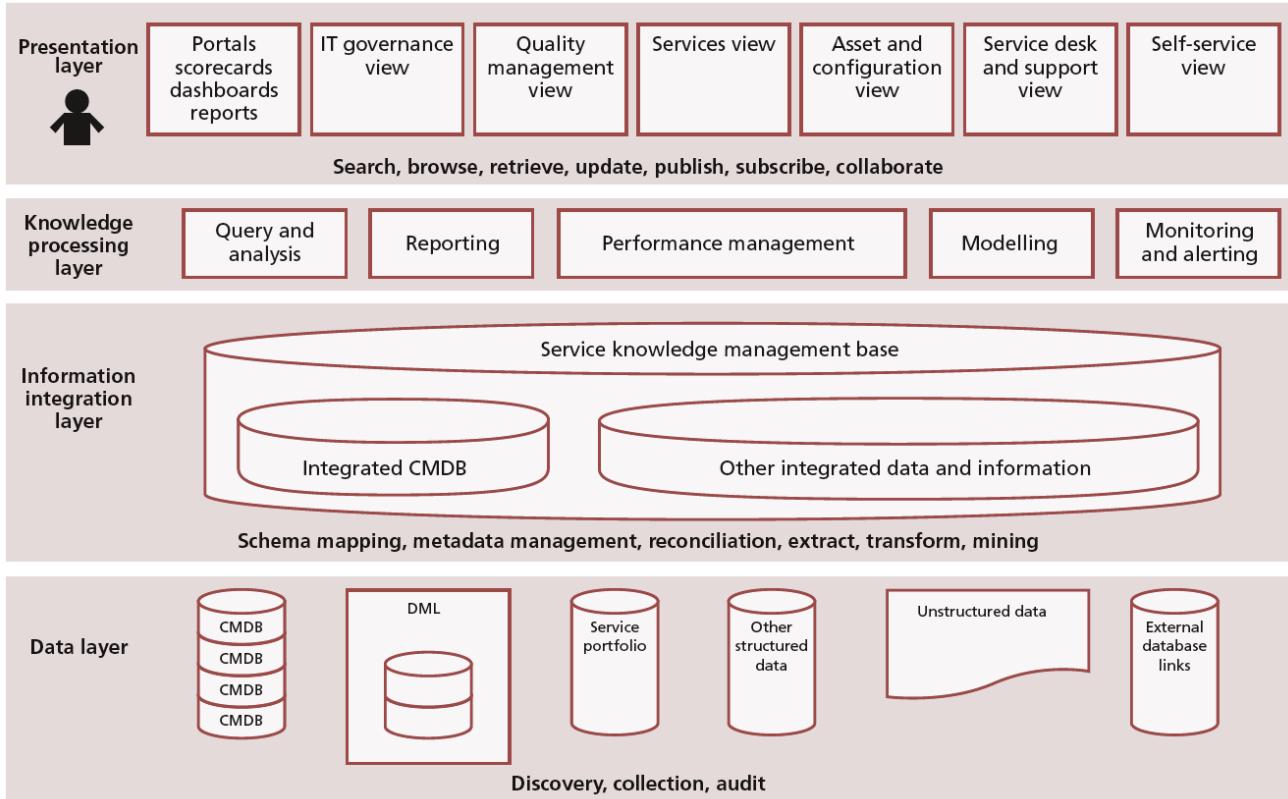
SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT



SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

Service Knowledge Management System



SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT

Configuration Baseline

is the configuration of a service, product or infrastructure that has been formally reviewed and agreed, which thereafter serves as the basis for further activities and can be changed only through formal change procedures

It captures the structure, contents and details of a configuration and represents a set of configuration items that are related to each other

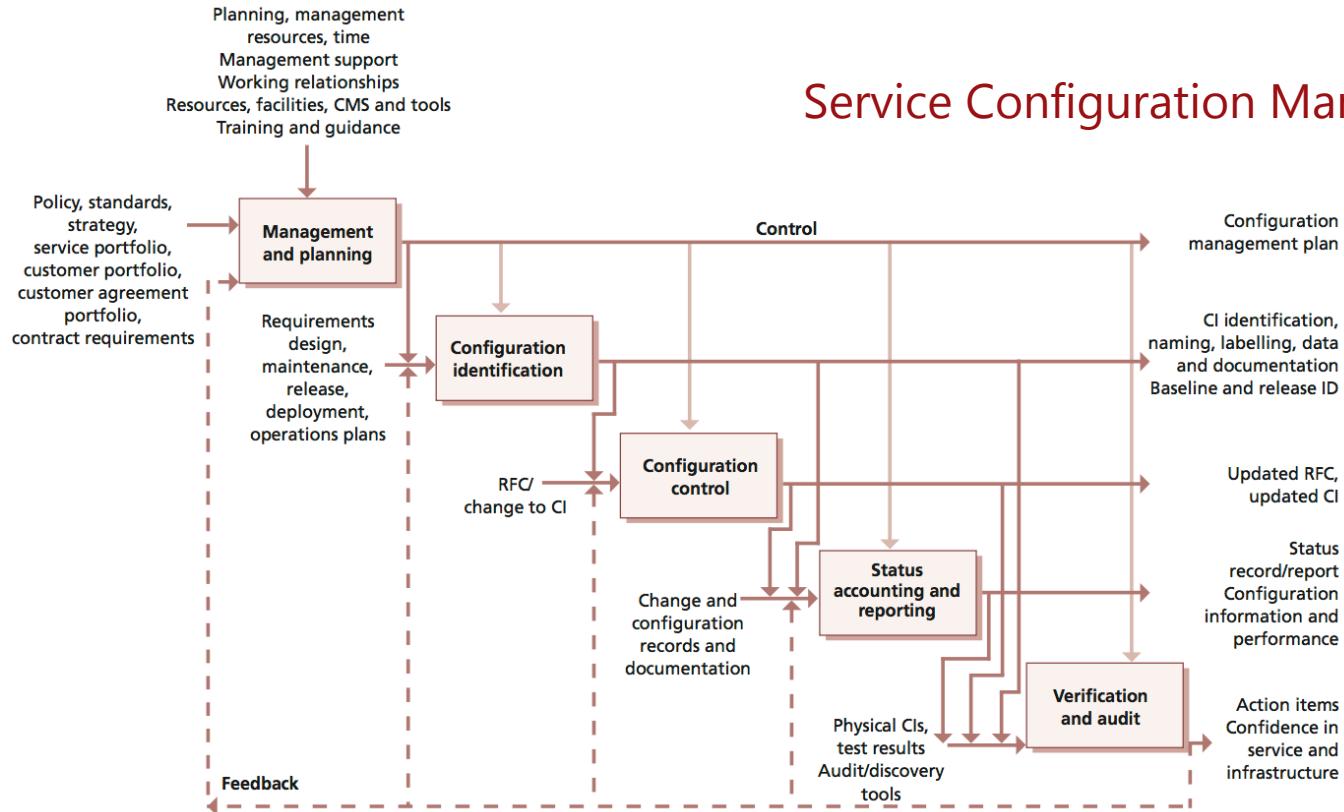
Snapshot

is the current state of a configuration item or an environment, e.g. from a discovery tool

This snapshot is recorded in the CMS and remains as a fixed historical record

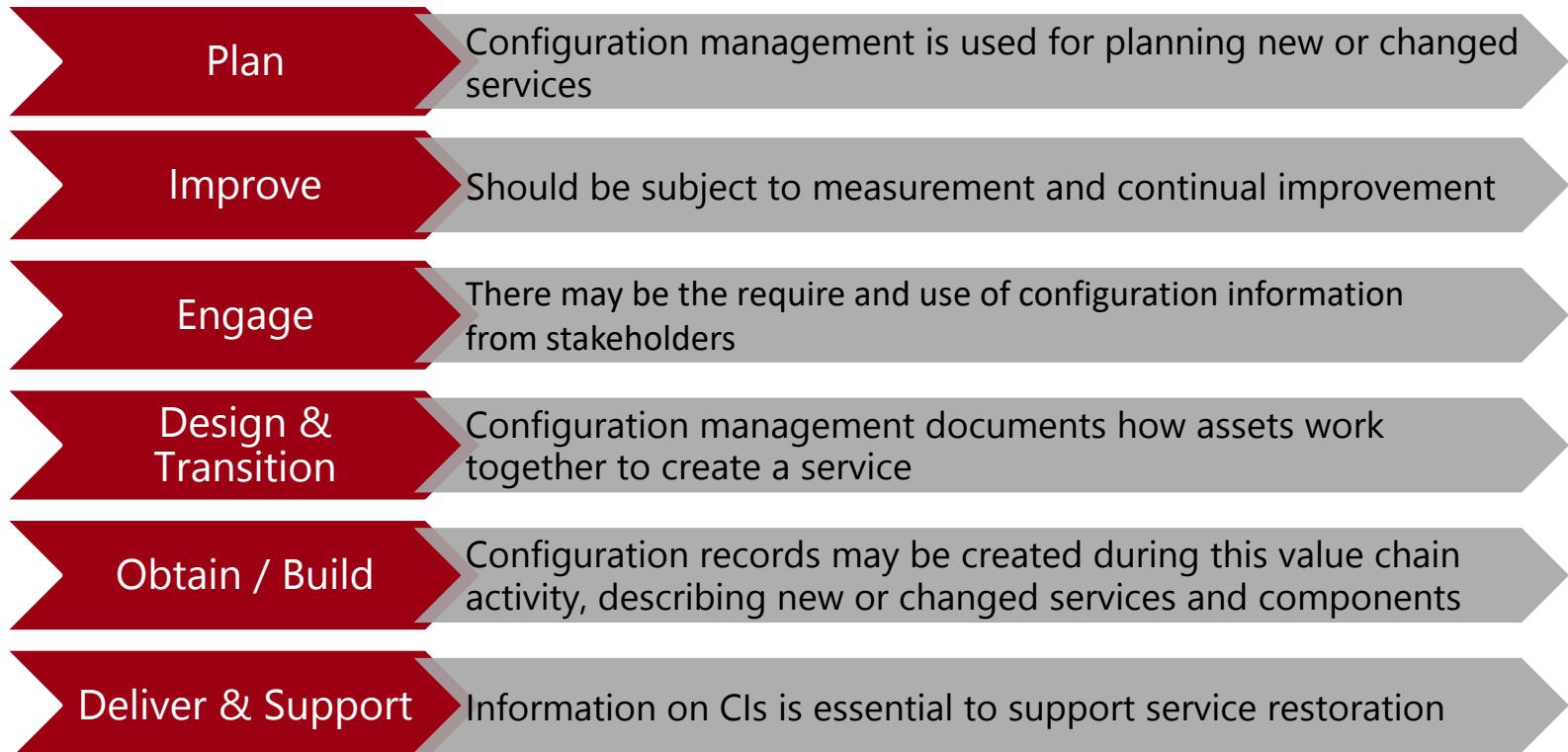
SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT



SERVICE CONFIGURATION MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONFIGURATION MANAGEMENT



RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT PURPOSE

Purpose

to make new and changed services and features available for use

Release

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

A **release** may comprise many different **infrastructure** and **application** components that work together to deliver new or changed functionality

It may also include **documentation**, **training**, **updated processes** or **tools**, and any other components that are required

RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT

- **Releases** can range in size from the very small, to the very large
- In either case, a **Release Plan** will specify the exact combination of new and changed components to be made available, and the timing for their release
- A **Release Schedule** is used to document the timing for releases
- This **schedule** should be negotiated and agreed with customers and other stakeholders
- A **Release Post-Implementation Review** enables learning and improvement, and helps to ensure that customers are satisfied

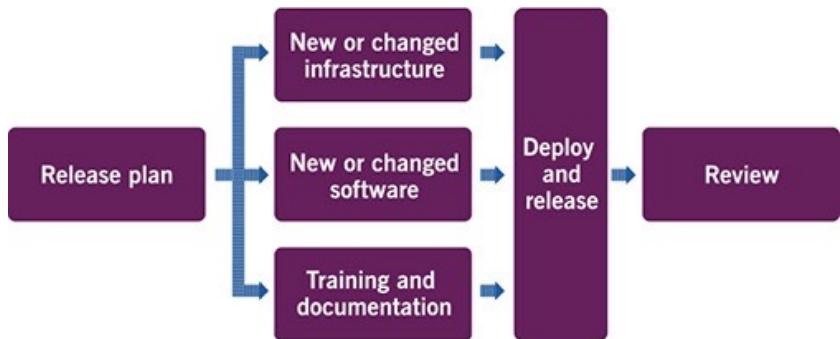
RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT

- In some **environments**, almost all release management work takes place before deployment, with plans in place as to exactly which components will be deployed in a particular release
- The **deployment** then makes the new functionality available

RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT



Release Management in a
traditional/waterfall environment



Release Management in an
Agile/DevOps environment

RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT

- **Release Management** is often staged, with pilot releases being made available to a small number of users to ensure that everything is working correctly before the release is given to additional groups
- Sometimes a **Release** must be made available to all users at the same time, as when a major restructuring of the underlying shared data is required

STAGING OF A RELEASE

SECTION 11: SERVICE MANAGEMENT PRACTICES > STAGING OF A RELEASE

Blue/green releases use two mirrored production environments

- Users can be switched to an environment that has been updated with the new functionality by using network tools that connect them to the correct environment

Feature flags enable specific features to be released to individual users or groups in a controlled way

- The new functionality is deployed to the production environment without being released

RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT

- In a **DevOps environment**, release management is often integrated with the continuous integration and continuous delivery toolchain
- The tools of **release management** may be the responsibility of a dedicated person, but decisions about the release can be made by the development team
- In a more **traditional environment**, releases are enabled by the deployment of the components
- Each release is described by a release record on an **ITSM tool**
- Release records are linked to **CIs** and **change records** to maintain information about the release

RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT

- **Third parties** often provide components of a **release**, like **cloud infrastructure**, **software as service** components, and **third-party support**
- It is also common to include **third-party software**, or **open-source software**, as part of application development
- **Release Management** needs to work across organizational boundaries to ensure that all components are compatible and to provide a seamless experience for users
- It also needs to consider the impact of changes to third-party components, and to plan for how these will be released

RELEASE MANAGEMENT

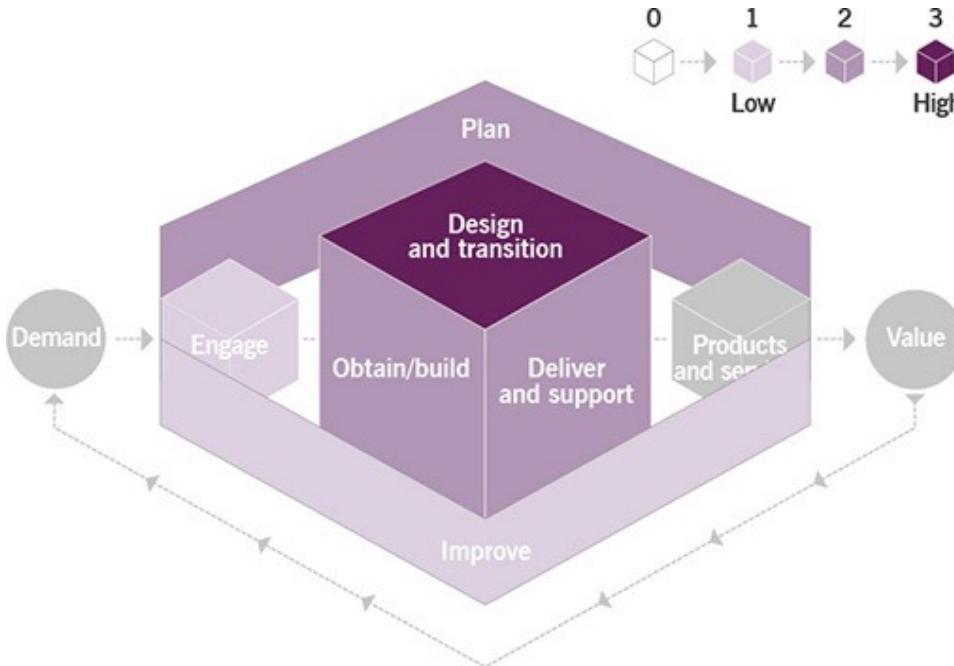
SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT

Activities include:

- Release policies and planning
- Release development and configuration design
- Acceptance of releases
- Rollout planning
- Extensive tests defined on the basis of acceptance criteria
- Communication, preparation and training
- Checking the HW and SW before and after the changes
- Installation of new HW or upgrade of the existing one
- Saving of the controlled SW both in centralized and distributed systems, distribution of the SW

RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT



Heat map of the contribution of IT release management to value chain activities

RELEASE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > RELEASE MANAGEMENT CONTRIBUTION

Plan

The organizational strategy and service portfolio drive policies, guidance, and timelines for releases / The size, scope, and content of each release should be planned and managed

Improve

New or changed releases may be required to deliver improvements, and these should be planned and managed in the same way as any other release

Engage

The content and cadence of releases must be designed to match the needs and expectations of customers and users

Design & Transition

Release management ensures that new or changed services are made available to customers in a controlled way

Obtain / Build

Changes to components are normally included in a release, delivered in a controlled way

Deliver & Support

Training, documentation, release notes, known errors, user guides, support scripts, etc. are provided by this practice to facilitate service restoration

SERVICE LEVEL MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT

Service Level Management

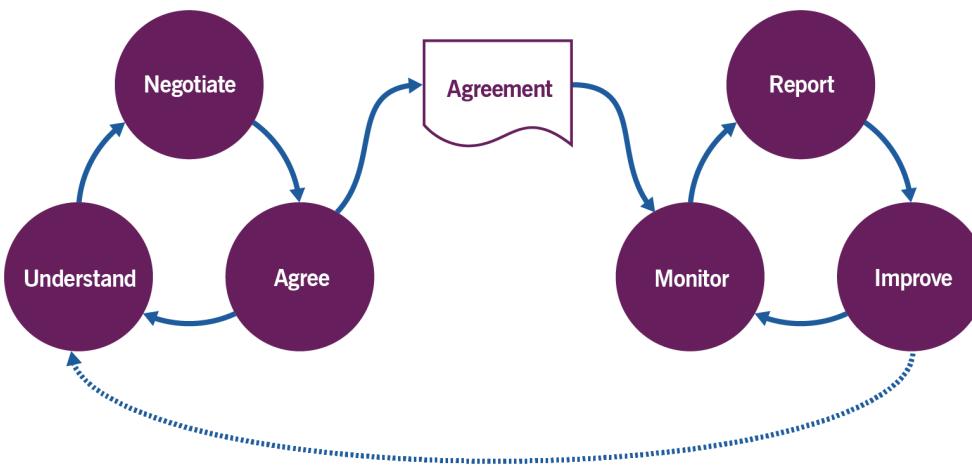
set clear business-based targets for services performance so that the delivery of a service can be properly assessed, monitored, and managed against these targets



SERVICE LEVEL MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT

Key activities of the Service Level Management practice (SLM)



SERVICE LEVEL MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT

Key activities of the Service Level Management practice (SLM)

- The service level management practice involves the definition, documentation, and active management of service levels
- It provides end to end visibility of the organization's services. For this, the service level management practice:
 - Establishes a shared view of the services and target service levels with customers
 - Ensures the organization meets the defined service levels
 - Performs service reviews
 - Captures and reports on service issues including performance against defined service levels

SERVICE LEVEL AGREEMENTS

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT > SERVICE LEVEL AGREEMENTS

Service Level Agreement

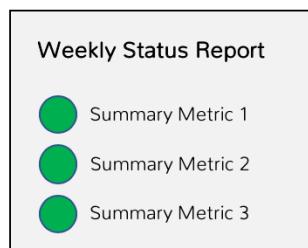
a documented agreement between a service provider and a customer that identifies both services required and the expected level of service

- Service level agreements (SLAs) have long been used as a tool to measure the performance of services from the customer's point of view, and they must agree in the broader business context
- Using SLAs may present many challenges; often, they do not fully reflect the more comprehensive service performance and the user experience

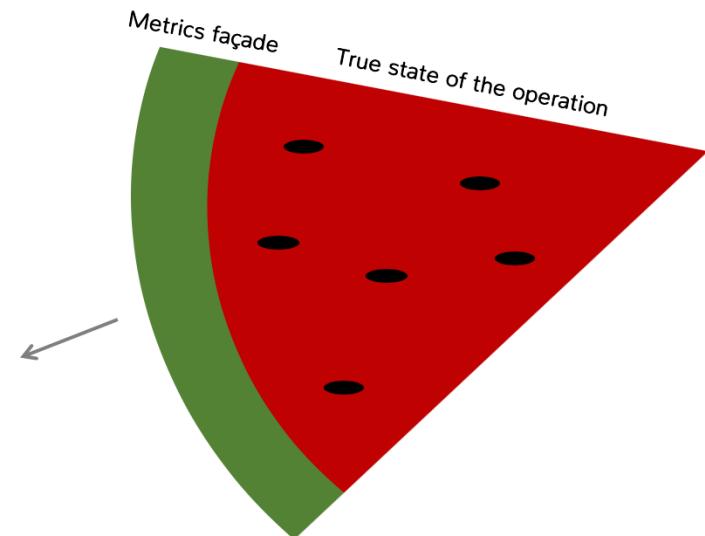
The watermelon SLA Effect

In many cases, using single system-based metrics as targets can result in misalignment and a disconnect between service partners as to the success of the service delivery and the user experience

"Look at the metrics,
we're all green!"



Watermelon Effect



SERVICE LEVEL MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT

Requirements of Service Level management (SLM)

- Focus and effort to engage and listen to the requirements, issues, concerns, and daily needs of customers
- Engagement is needed to understand and confirm the actual ongoing needs and requirements of customers
- Listening is important as a relationship-building and trust-building activity, to show customers that they are valued and understood

SERVICE LEVEL MANAGEMENT

SECTION 10: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT

Sources for Collating and analyzing Information



SERVICE LEVEL MANAGEMENT

SECTION 10: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT

Customer engagement

involves initial listening, discovery, and information capture

Customer feedback

Surveys: from immediate feedback such as follow-up questions to incidents

Key business-related measures: measures agreed between the service provider and its customer, based on what the customer values as important

Operational metrics

low-level indicators of various operational activities

Business metrics

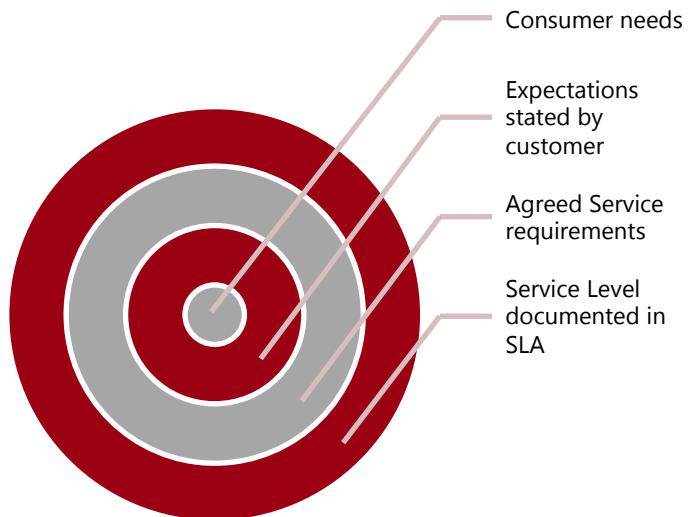
any business activity that is deemed useful or valuable by the customer

SERVICE LEVEL MANAGEMENT

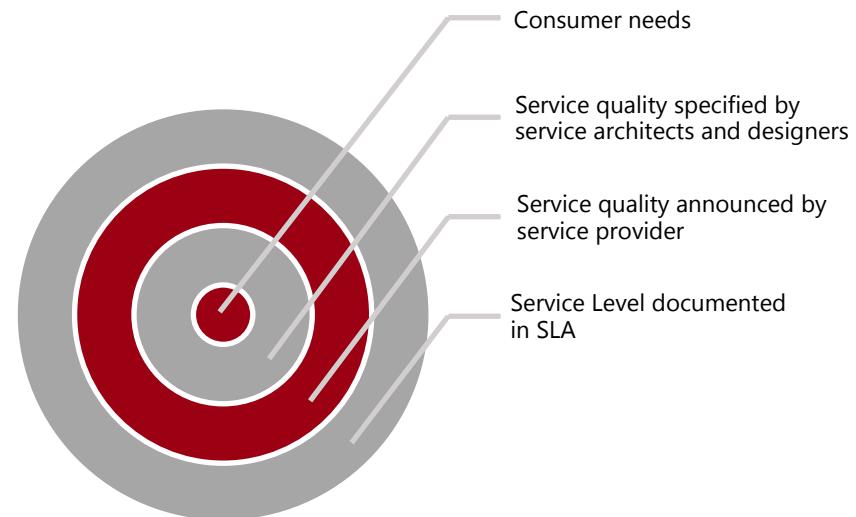
SECTION 10: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT

Practice success factors

Establishing a shared view of target service levels with customers



Tailored services: from customer needs to SLA

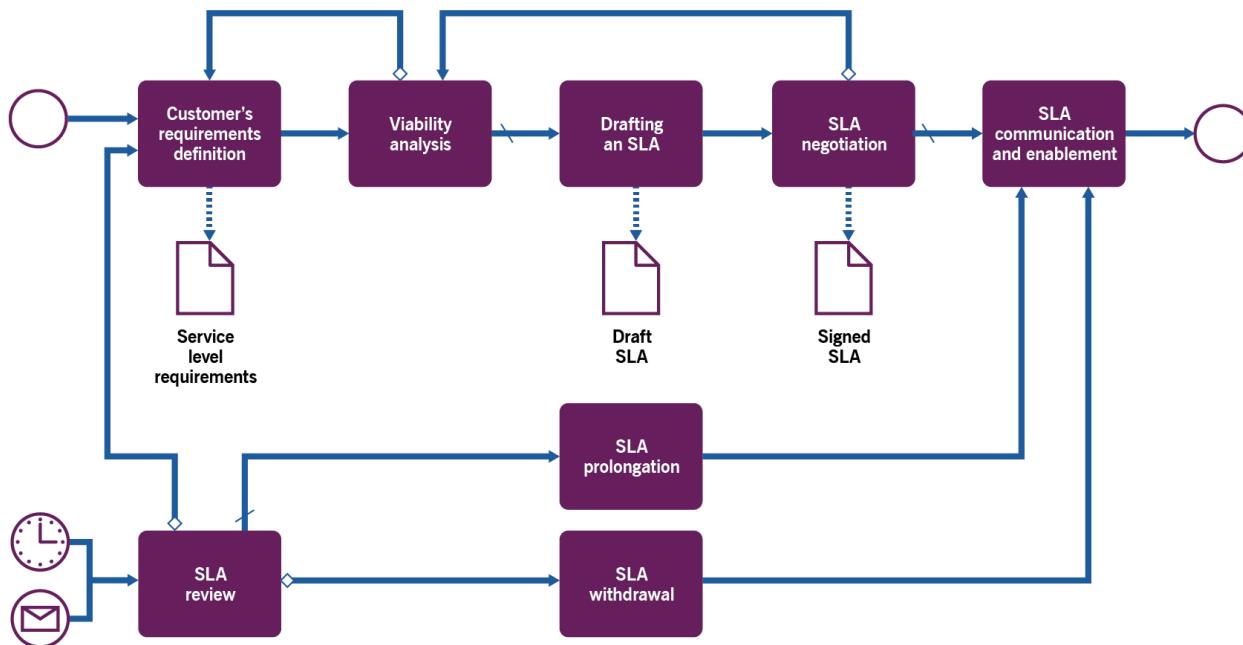


Out-of-the-box services: from consumer needs to SLA

SERVICE LEVEL MANAGEMENT

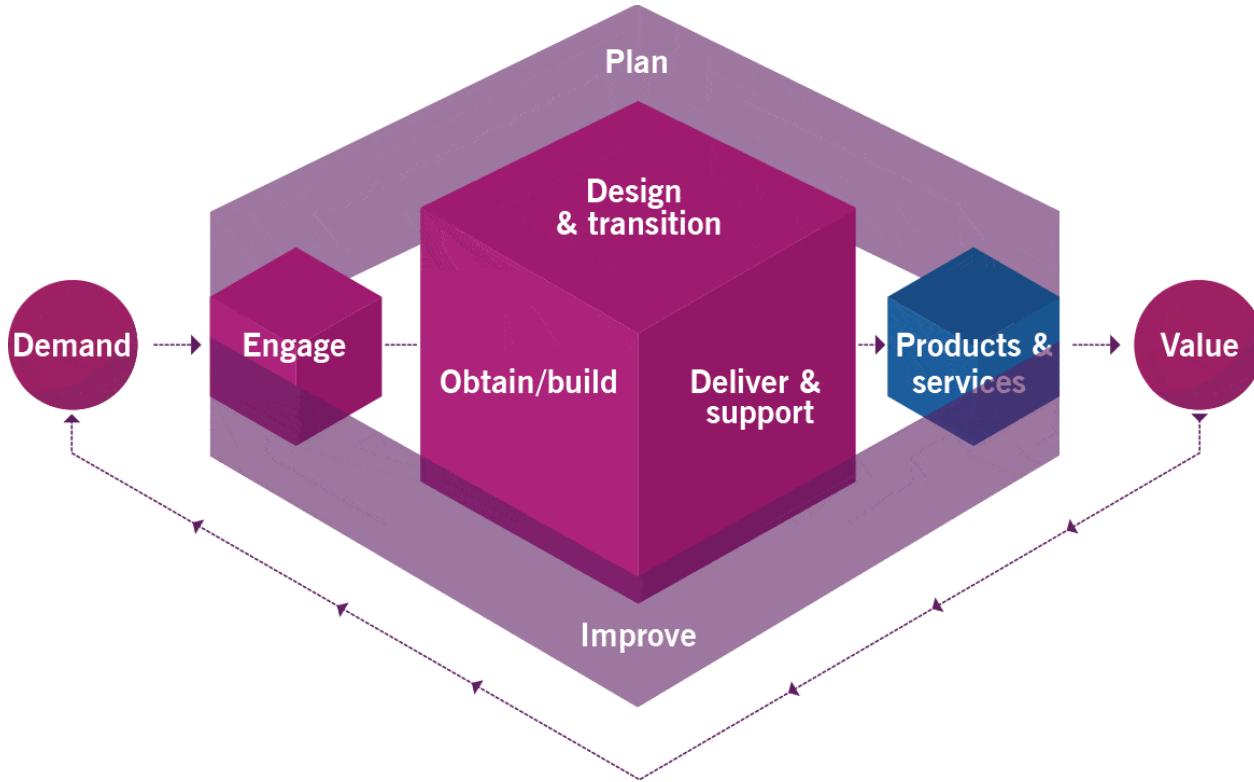
SECTION 10: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT

Workflow for management of SLAs



SERVICE VALUE CHAIN

SECTION 11: SERVICE MANAGEMENT PRACTICES



SERVICE LEVEL MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE LEVEL MANAGEMENT CONTRIBUTION



AVAILABILITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT

Availability Management

ensure that services deliver agreed levels of availability to meet the needs of customers and users

Availability

the ability of an IT service or other configuration item to perform its agreed function when required.

negotiating achievable targets

designing infrastructure and applications

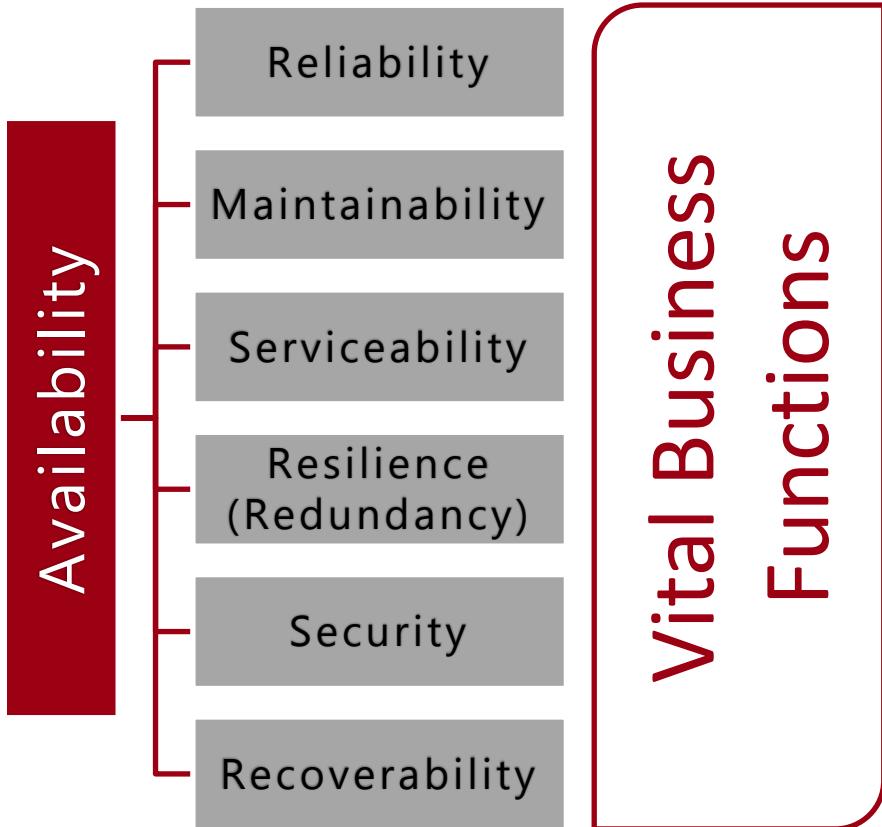
ensure the measure of availability

monitoring, analysing and reporting availability

planning improvement to availability

AVAILABILITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT



Availability is the ability of a service, component or CI to perform its agreed function when required

Note that down time should only be included in the following calculation when it occurs within the agreed service time (AST)

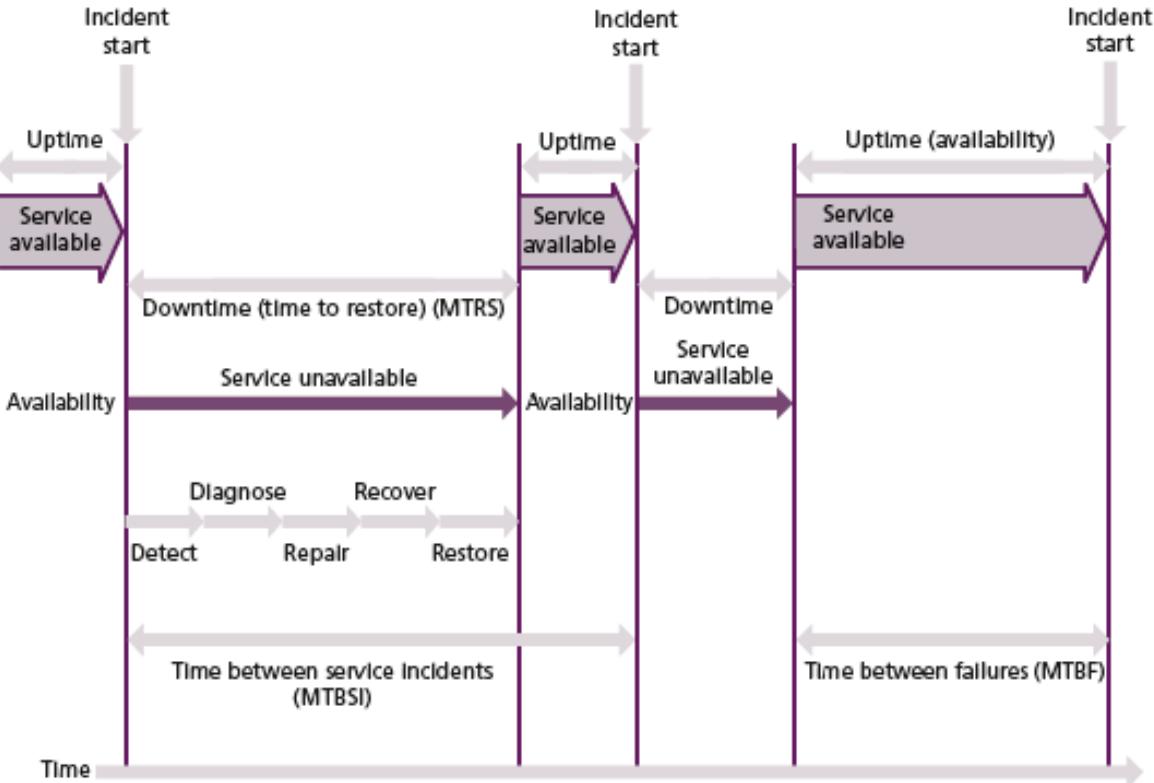
$$\text{Availability (\%)} = \frac{\text{Agreed service time (AST)} - \text{downtime}}{\text{AST}} \times 100$$

AVAILABILITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT

Incident LifeCycle

- Mean Time Between Failures
- Mean Time to Restore Service
- Mean Time Between Service Incidents
- Recovery Point Objective
- Recovery Time Objective



AVAILABILITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT

Availability Management rules

It is essential to establish the basic rules of Availability Management

- which vital business functions are affected by different application failures
- at what point is slow performance so bad that the service is effectively unusable
- when does the service need to be available, and when can the service provider carry out maintenance activities

IT and the Business must be sure they agree on the interpretation of the Availability metrics

AVAILABILITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT

Availability Management rules

The Customer's perception of downtime may differ from that of the IT department

- i.e., the "place of delivery" is their desk and not the IT department

When reporting availability data to the business, the language used by the business must be used

- For business, downtime means: unusable workforce, lost earnings, dissatisfied end customers, threats of legal action and the inability to comply with legislation

Both the total duration of the downtime and its frequency affect the quality of the service

AVAILABILITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT

Availability Management example 1

SLA: service running 5 days x 8 hours / week

The service was down for 4 hours during week 43, so availability was
 $(40-4) / 40 \times 100 = 90\%$

It's not so simple: it depends on what has been agreed, how and what is measured, how many etc.

If only one of the 1000 users has a downtime of 4 hours, can we really talk about 10% downtime or should it be considered $10/1000 = 0.01\%$?
For that user it is 10% but for the whole company it is much less

AVAILABILITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT

Availability Management example 2

Even when the SLA is met, the service can be perceived as unavailable

i.e. an Invoicing Application is used by the Finance division from Monday to Friday from 9:00 to 17:00. Every day, from Monday to Friday, between 20:00 and 22:00, the backup is made (which makes it unavailable).

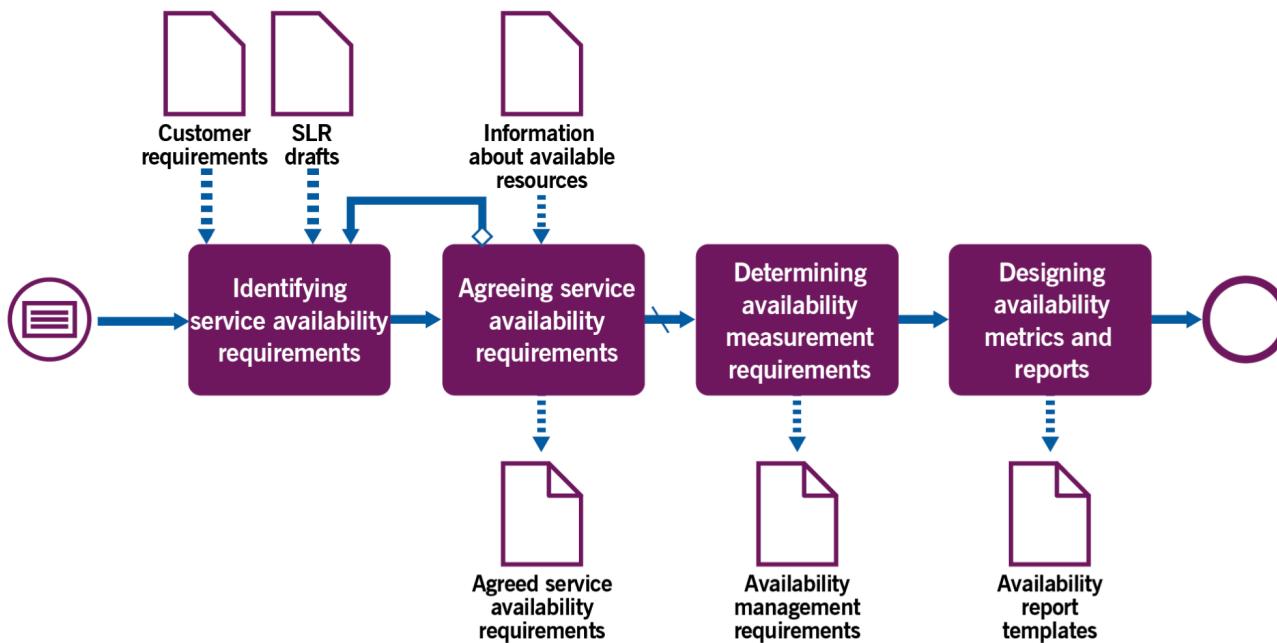
The backup schedule has been agreed with the customer and it was written in the SLA.

A Finance user works overtime: at 20:00 he loses his access to the application due to the backup in progress. For the user, the service is not available, while the SLA has not been broken.

AVAILABILITY MANAGEMENT

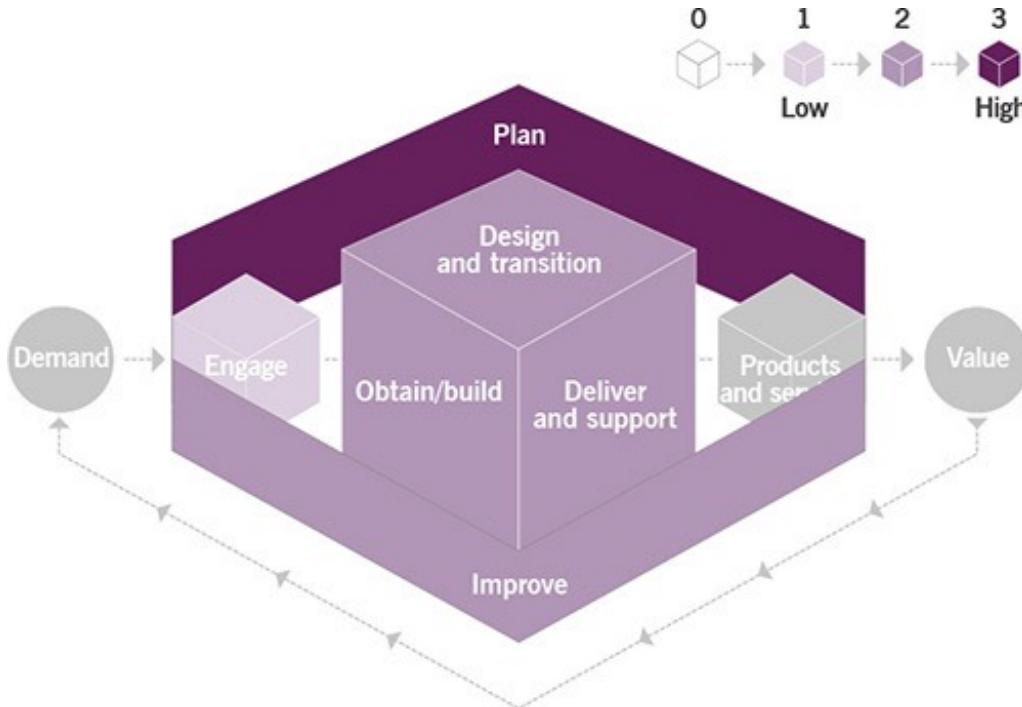
SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT

Workflow for the establishing Service Availability Control Process



AVAILABILITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > AVAILABILITY MANAGEMENT



Heat map of the contribution of availability management to value chain activities

SECTION 11: SERVICE MANAGEMENT PRACTICES > CAPACITY AND PERFORMANCE MANAGEMENT

Capacity and Performance Management

ensure that services achieve agreed and expected performance, satisfying current and future demand in a cost-effective way

The purpose of this discipline is to ensure that there is always a reserve of IT capacity, the costs of which are justifiable and that meet the needs of the business.



Performance

a measure of what is achieved or delivered by a system, person, team, practice, or service

CAPACITY AND PERFORMANCE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CAPACITY AND PERFORMANCE MANAGEMENT

It determines business demand (in terms of IT resources), forecast workloads and schedule IT resources. One of the most important contributions of the process is to provide a well documented Capacity Plan.



*Are you buying the right amount of infrastructure
at the right time?*

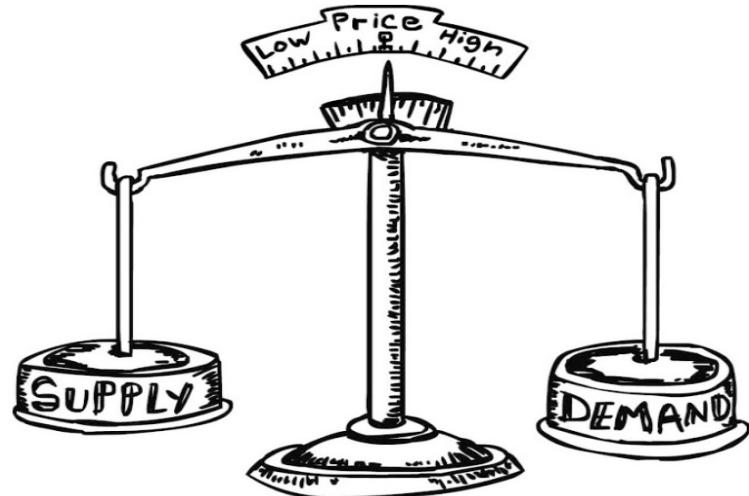
It includes the following activities:

- service performance and capacity analysis
 - research and monitoring of the current service performance
 - capacity and performance modelling
- service performance and capacity planning
 - capacity requirements analysis
 - demand forecasting and resource planning
 - performance improvement planning

CAPACITY AND PERFORMANCE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CAPACITY AND PERFORMANCE MANAGEMENT

Avoid overprovision



It is essentially a balancing act

CAPACITY AND PERFORMANCE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CAPACITY AND PERFORMANCE MANAGEMENT

BUSINESS CAPACITY MANAGEMENT

is focused on current and future business requirements



SERVICE CAPACITY MANAGEMENT

is focused on the provision of existing services that support the business

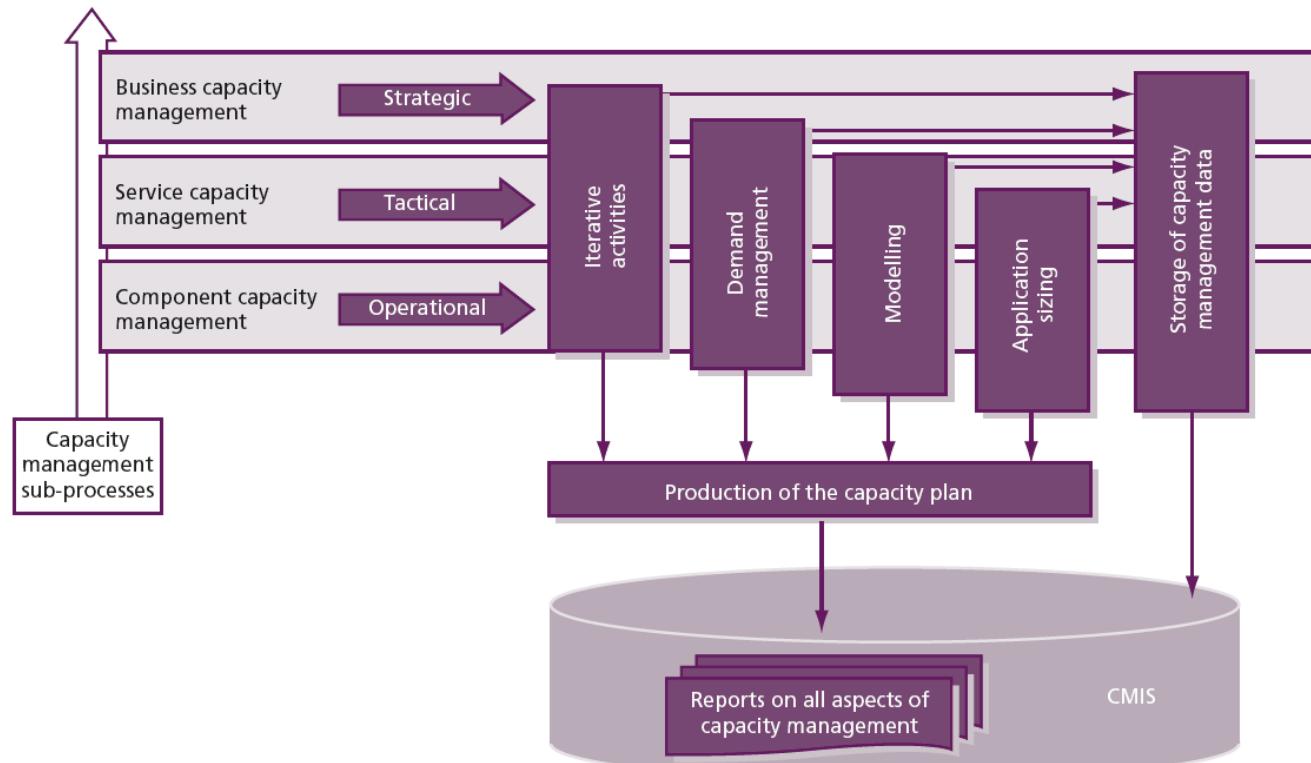


COMPONENT CAPACITY MANAGEMENT

is focused on the technology underlying the provision of all services

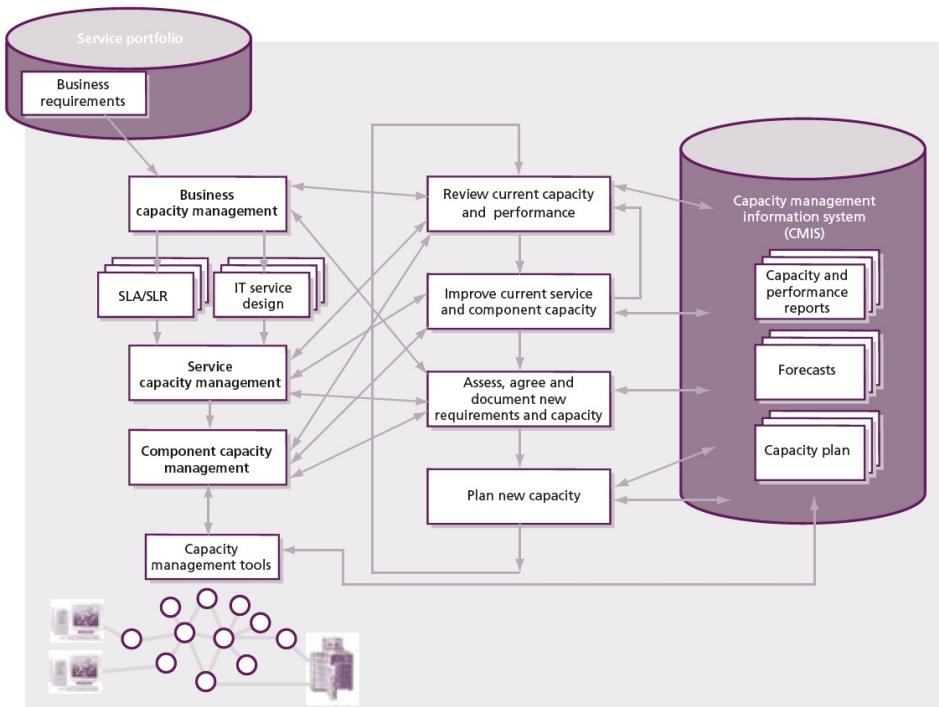
CAPACITY AND PERFORMANCE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CAPACITY AND PERFORMANCE MANAGEMENT

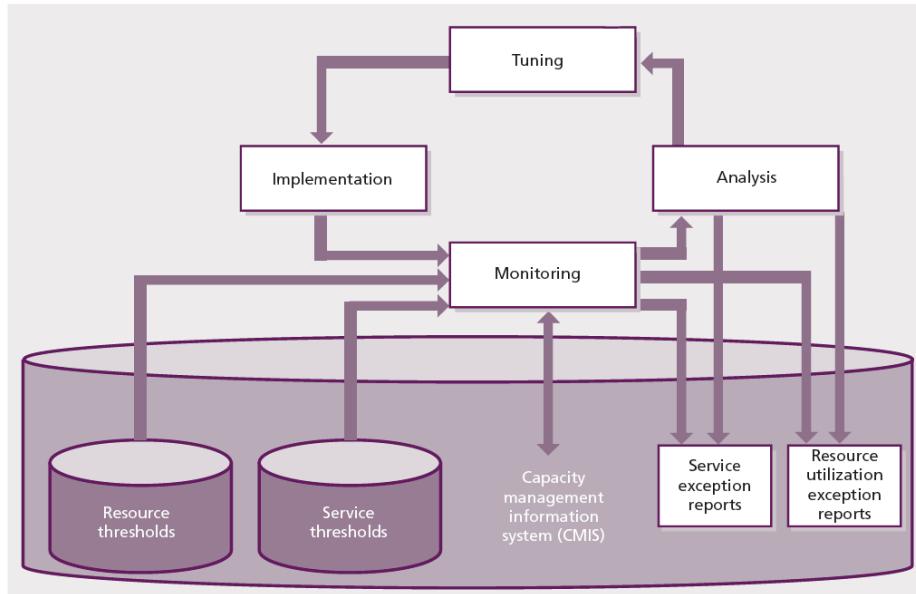


CAPACITY AND PERFORMANCE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CAPACITY AND PERFORMANCE MANAGEMENT

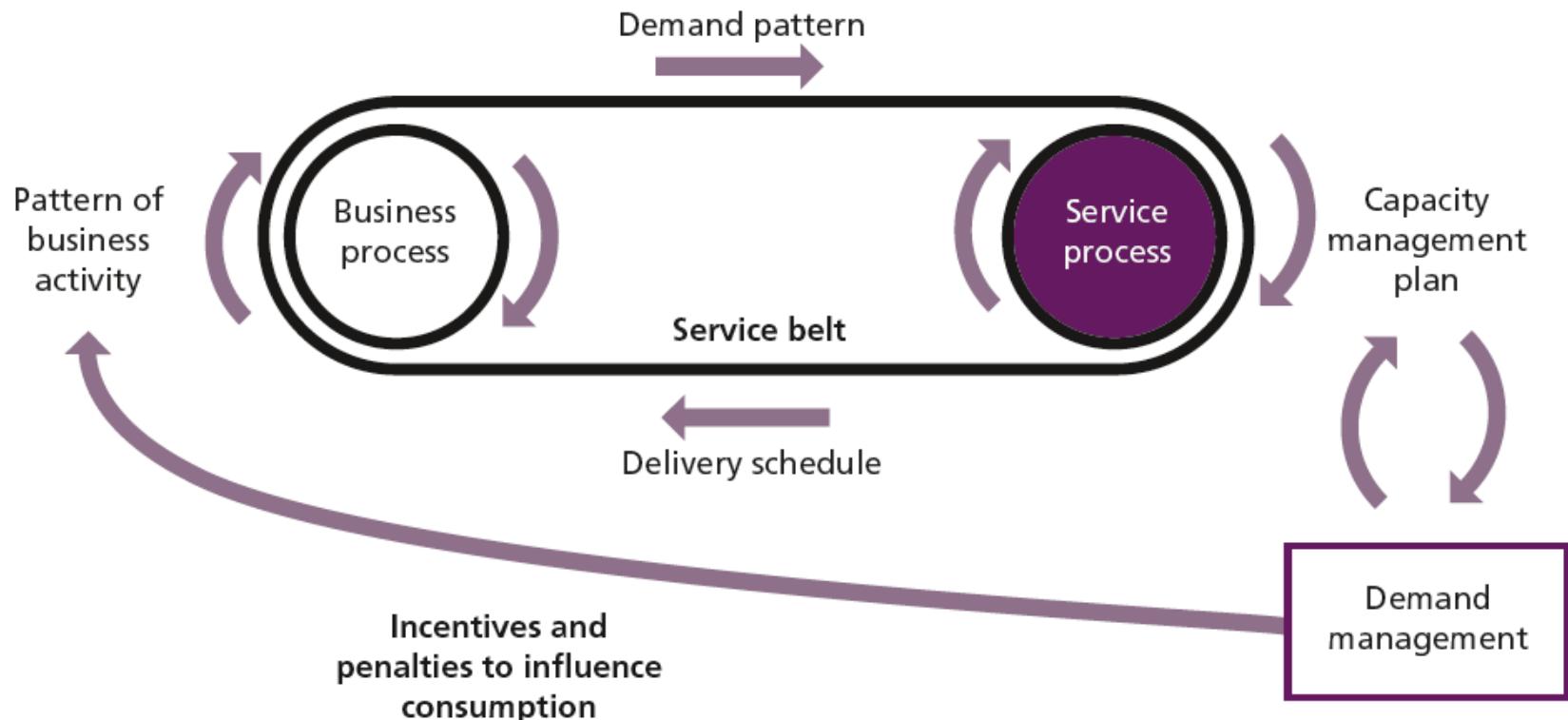


The ongoing iterative activities
of capacity management



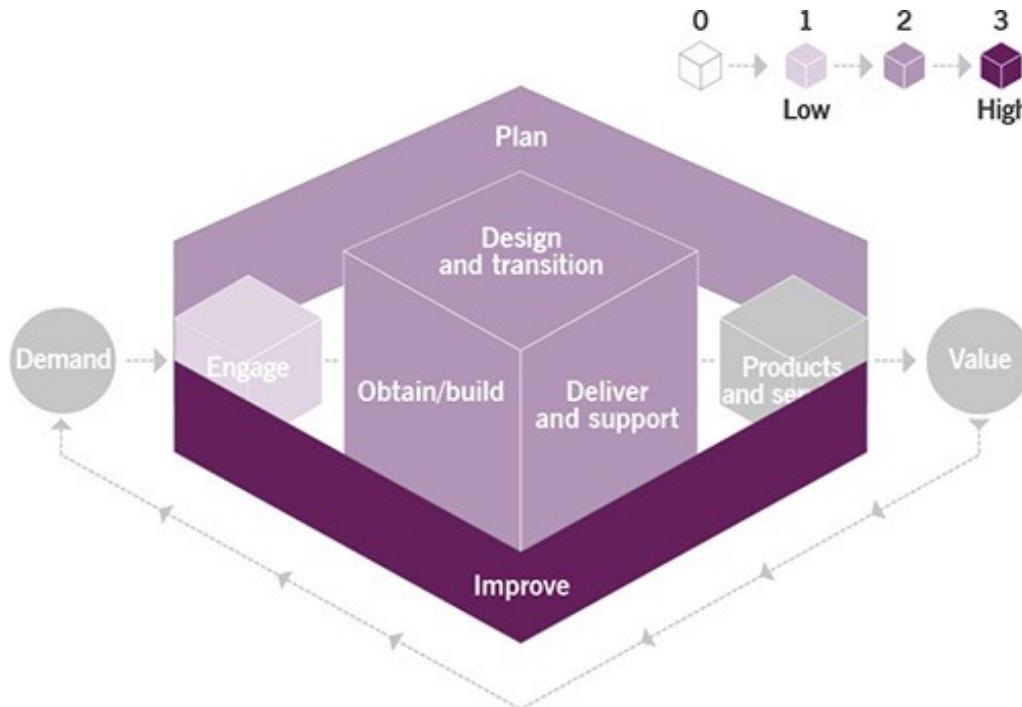
CAPACITY AND PERFORMANCE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CAPACITY AND PERFORMANCE MANAGEMENT



CAPACITY AND PERFORMANCE MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > CAPACITY AND PERFORMANCE MANAGEMENT



Heat map of the contribution of capacity and performance management to value chain activities

BUSINESS ANALYSIS

SECTION 11: SERVICE MANAGEMENT PRACTICES > BUSINESS ANALYSIS

Business Analysis

analyse a business or some element of it, define its associated needs, and recommend solutions to address these needs and/or solve a business problem, which must facilitate value creation for stakeholders

Business analysis enables an organization to communicate its needs in a meaningful way, express the rationale for change, and design and describe solutions that enable value creation in alignment with the organization's objectives

BUSINESS ANALYSIS

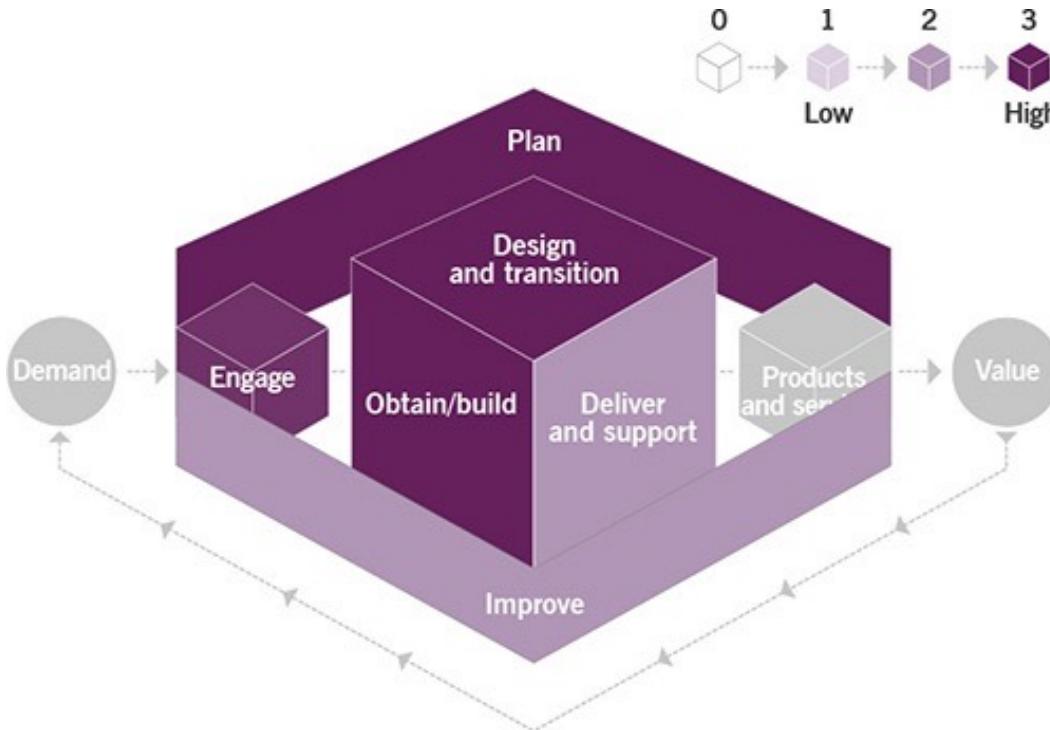
SECTION 11: SERVICE MANAGEMENT PRACTICES > BUSINESS ANALYSIS

The key activities associated with business analysis are:

- analysing business systems, business processes, services, or architectures in the changing internal and external context
- identifying and prioritizing parts of the SVS, and products and services that require improvement, as well as opportunities for innovation
- evaluating and proposing actions that can be taken to create the desired improvement
- documenting the business requirements for the supporting services to enable the desired improvements
- recommending solutions following analysis of the gathered requirements and validating these with stakeholders

BUSINESS ANALYSIS

SECTION 11: SERVICE MANAGEMENT PRACTICES > BUSINESS ANALYSIS



Heat map of the contribution of business analysis to value chain activities

SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT

Service Continuity Management

ensure that the availability and performance of a service are maintained at sufficient levels in case of a disaster.

The practice provides a framework for building organizational resilience with the capability of producing an effective response that safeguards the interest of key stakeholders and the organization's reputation, brand and value-creating activities

Disaster

a sudden unplanned event that causes great damage or serious loss to an organization.

To be classified as a disaster, the event must match certain business-impact criteria that are predefined by the organization.

SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT

A list of disasters generally includes:

- cyber attacks
- electricity outages
- failures of strategic partners
- fires
- floods
- key personnel unavailability
- large-scale IT infrastructure failures (such as data-centre failures)
- natural disasters

Defining those events which are not disasters is equally important.

SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT

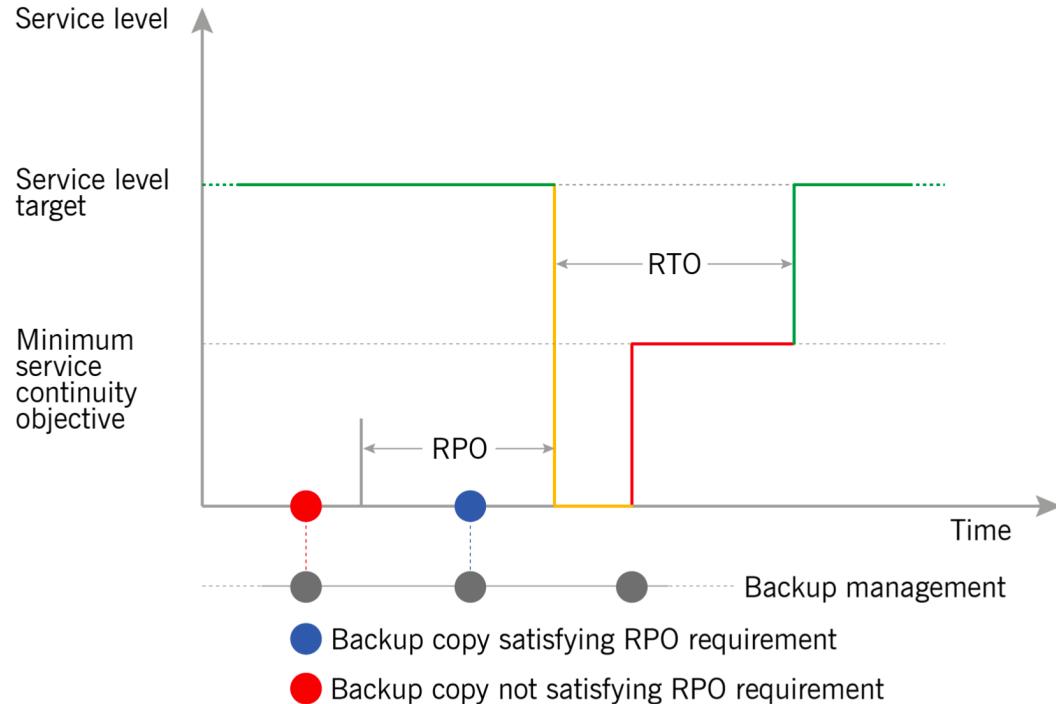
The service continuity management practice includes the following areas:

- performing BIA to quantify the impact of service unavailability to the service provider and service consumers
- developing service continuity strategies (and integrating them into the business continuity management strategy, if relevant)
- developing and managing service continuity plans (and providing a clear interface to business continuity plans, if relevant)
- performing exercises and testing the service continuity plans invocation in case of disaster

* Business Impact Analysis (BIA) is a process of analysing activities and the effect that a disruption might have on them

SEVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT



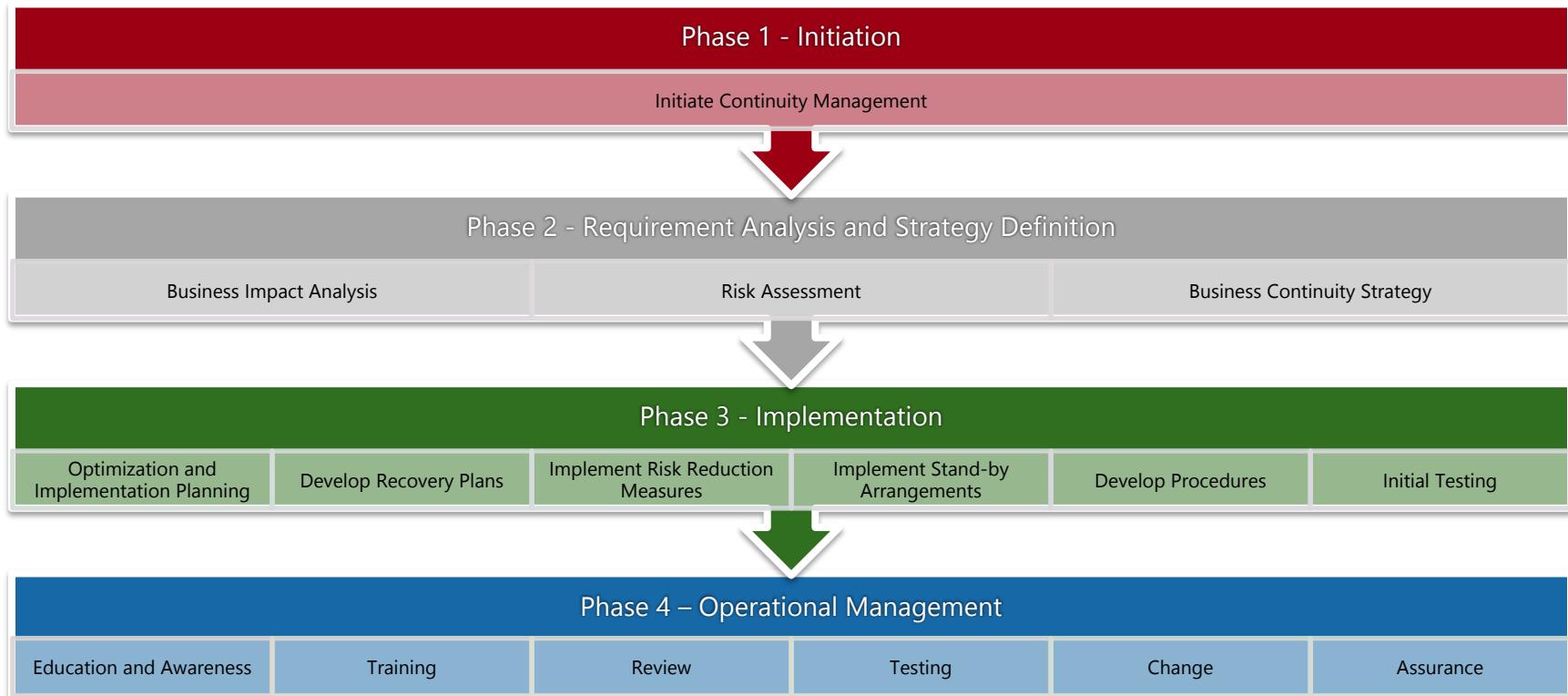
Recovery Time Objective (RTO) is the targeted duration of time and a service level within which a business process must be restored after a disaster

Recovery Point Objective (RPO) is the maximum targeted period during which transactional data is lost from an IT service due to a major incident.

Minimum Target Service Level Is the level of service which is acceptable to the service provider to achieve its objectives during a disruption.

SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT



SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT

The options

The choice of options usually depends a lot on the finances available or how much the business wants to invest.



SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT

Contingency Plan



Evaluate Your Firm's Contingency Plan					
Plan Rating	Nonexistent	Poor	Okay	Good	Excellent
Preparedness	Backup only	Own a backup server	Co-located facility where systems reside	Ability to restore systems manually on a regular basis	Automated synchronization or equivalent on a daily basis
Philosophy	"I can't imagine I'd ever need to, but I'm confident that everything will be restored with the tape."	"I assume my IT folks will drop everything else to get my firm going again if there is a disaster."	"I've established a site to house my equipment and realize that I still need to have a more robust plan."	"I realize that it's going to take time to restore my data, but I'm prepared to make do without all of my systems for a couple of business days."	"My firm made a substantial investment to ensure that my systems are up and running ASAP, but I know the switch will take time to implement."
Recovery Time	1-2 weeks	1 week	3-4 days	1-2 days	2-4 hours
Stage	Denial	Acceptance	Planning	Implementing	Validation
Cost	\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$

SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT

Service continuity

is a set of clearly defined plans related to how an organization will recover from a disaster and return to a pre-disaster condition, considering the four dimensions of service management

Service continuity plans usually include:

- Response plan
- Recovery plan
- Plan of returning to normal operations

Business continuity plans may include:

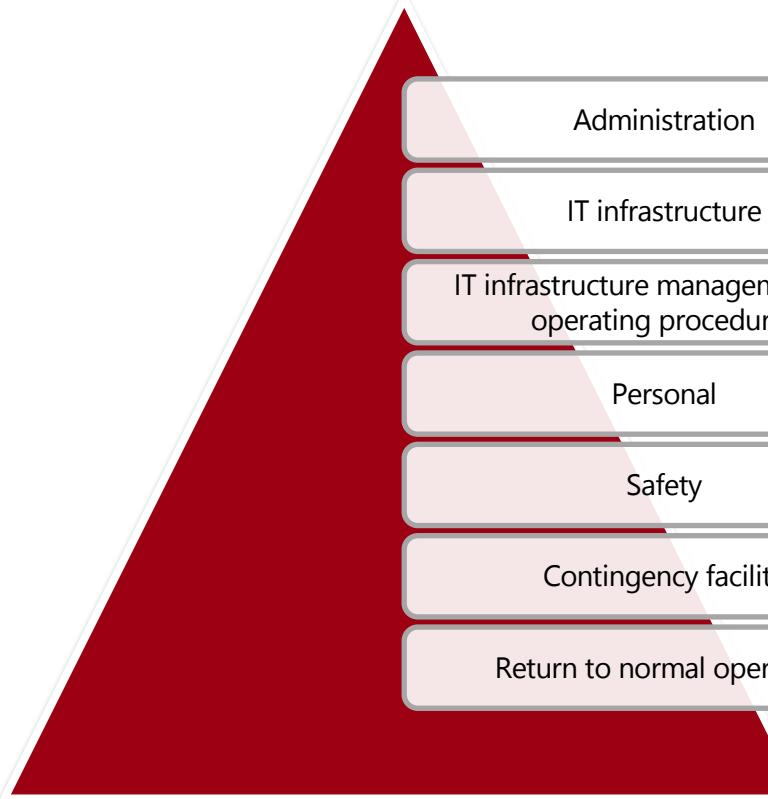
- emergency response to interface with all emergency services and activities
- evacuation plan to ensure the safety of personnel
- crisis management and public relations plan plans for the command and control of different crises and the management of the media and public relations
- security plan showing how all aspects of security will be managed on all home sites and recovery sites
- communication plan showing how all aspects of communication will be handled and managed with all relevant areas and parties involved during a major incident

SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT

Contingency Plan

the 7 sections of the plan

- 
- Administration
 - IT infrastructure
 - IT infrastructure management and operating procedures
 - Personal
 - Safety
 - Contingency facility
 - Return to normal operation

SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT

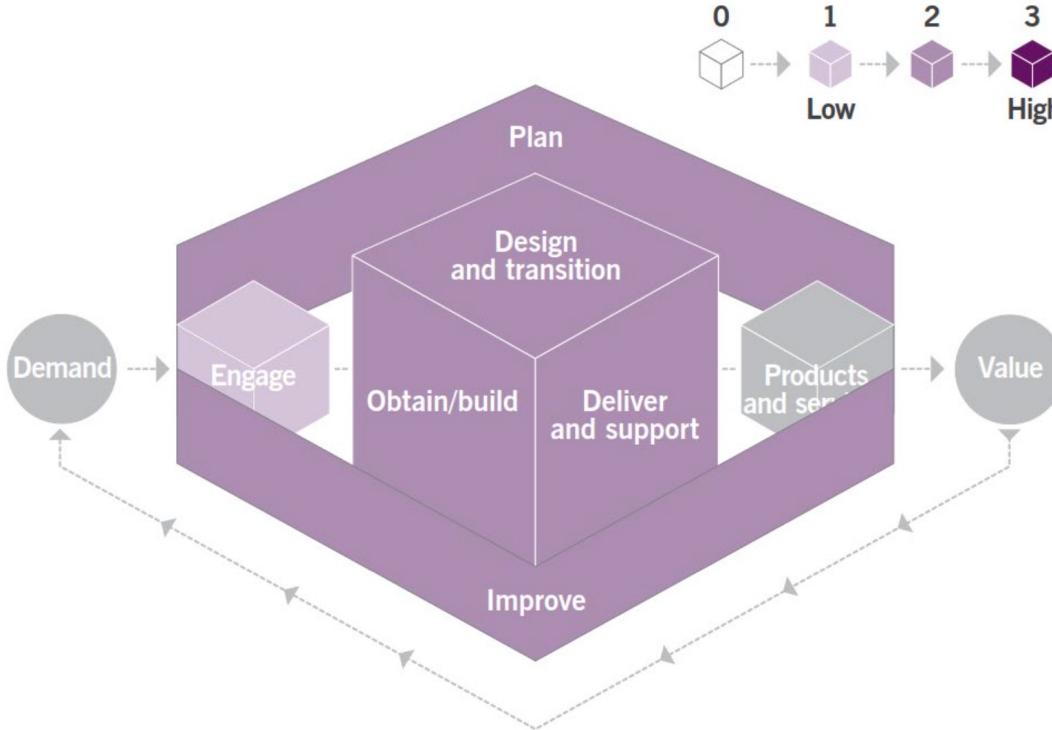
Contingency Plan: an example

SAMPLE EVENT		
CONTINGENCY PLAN		
ITEM	WHAT CAN GO WRONG	SEVERITY
Keynote Speaker	No-show	High
Wi-Fi	Doesn't work	Medium
Catering	Food isn't delivered	High
Registration desk	Registration sheets go missing	Low



SERVICE CONTINUITY MANAGEMENT

SECTION 11: SERVICE MANAGEMENT PRACTICES > SERVICE CONTINUITY MANAGEMENT



Heat map of the contribution of service continuity management to value chain activities

SECTION 11: SERVICE MANAGEMENT PRACTICES > EXERCISE

What is the purpose of the 'change control' practice?

- Supporting the agreed quality of a service by handling all pre-defined, user-initiated service requests in an effective and user-friendly manner
- Making new and changed services and features available for use
- Ensuring that risks are properly assessed, authorizing changes to proceed and managing a change schedule in order to maximize the number of successful IT changes
- Aligning an organization's practices and services with changing business needs through the ongoing identification and improvement of all elements involved in the effective management of products and services

SECTION 11: SERVICE MANAGEMENT PRACTICES > EXERCISE

Identify the missing word(s) in the following sentence. A known error is a(n) [?] that has been analyzed but has not been resolved.

- Change
- Incident
- Event
- Problem

SECTION 10: SERVICE MANAGEMENT PRACTICES > EXERCISE

Which practice provides a single point of contact for users?

- Change control
- Incident management
- Service request management
- Service Desk