

ITIL – A guide to change management

The goal of change management

The purpose of the Change Management process is to ensure that:

- Standardised methods and procedures are used for efficient and prompt handling of all changes
- All changes to service assets and configuration items are recorded in the Configuration Management System (CMS)

The purpose and objectives of release and deployment management

The purpose of change management is to:

Respond to the customer's changing business requirements while maximizing value and reducing incidents, disruption and rework

- Respond to the business and IT requests for change that will align the services with the business needs
- The objective of the change management process is to ensure that changes are recorded and then evaluated, authorised, prioritised, planned, tested, implemented, documented and reviewed in a controlled manner and take necessary corrective action

The top five risk indicators of poor change management are:

- Unauthorised changes
- Unplanned outages
- A low change success rate
- A high number of emergency changes
- Delayed project implementations

The scope of change management

"The addition, modification or removal of authorised, planned or supported service or service component and its associated documentation."

The scope of change management covers changes to service assets and configuration items across the whole service lifecycle.



Value to the business of change management

Availability of IT service is essential for any organisation.

Service and infrastructure changes can have a negative impact through service disruption but change management adds value to the business by:

- Prioritising and responding to business change proposals
- Contributing to meet governance, legal, contractual and regulatory requirements
- Reducing failed changes and therefore service disruption, defects and rework
- Delivering change promptly to meet business timescales
- Contributing to better estimations of the quality, time and cost of change
- Assessing the risks associated with the transition of services (introduction or disposal)
- Aiding productivity of staff through minimising disruptions due to high levels of unplanned or emergency change

Planning the concepts of change management

Change management policies

Policies that support change management include:

- Creating a culture of change management across the IT organisation
- Aligning the service change management process with business, project and business/organisation change management processes
- Prioritisation of changes
- Establishing accountability/responsibilities for changes through the service lifecycle
- Establishing a single focal point for changes to minimize conflicting changes and potential disruption
- Preventing anyone who is not authorised to make changes from having access to the production environment
- Establishing change windows
- Performance and risk evaluation of all changes
- Performance measures for the process

Change management process design

The change management process should be planned in conjunction with release and configuration management. This helps to evaluate the impact of the change on the current and planned services and releases.

Types of changes

The organisation/business need to ensure that appropriate procedures are available to cover the different types of change requests. For different change types there are specific procedures, e.g. for impact assessment and change authorisation.

A change model

A process model is a way of predefining the steps that should be taken to handle a process (in this case a process for dealing with a particular type of change) in an agreed way. Support tools can then be used to manage the required process. This will ensure that such changes are handled in a predefined path and to predefined timescales.

These models are usually input to the change management support tools in use and the tools then automate the handling, management, reporting and escalation of the process.



Standard changes (pre-authorised)

A standard change is a change to a service or infrastructure for which the approach is pre-authorised by change management that has an accepted and established procedure to provide a specific change requirement.

The elements of a standard change are:

- There is a defined trigger to initiate the request for change
- The activities/tasks are well known, documented and proven
- Authority is given in advance (these changes are pre-authorised)
- The risk is usually low

A normal change

A normal change refers to changes that must follow the complete change management process. Normal changes are often categorised according to risk and impact to the organisation/business. For example, minor change – low risk and impact, significant change – medium risk and impact and major change – high risk and impact.

By definition a normal change will proceed through all steps of the change management process and those that are categorised as medium or high risk will be reviewed by the Change Advisory Board (CAB).

The activities are of the normal change process are:

- Record requests for change
- Change logging
- Review the request for change
- Assess and evaluate the change
- Evaluation of change
- Allocation of priorities
- Change planning and scheduling
- Authorising the change
- Coordinating change implementation
- Review and close change record

The Change Advisory Board

The Change Advisory Board (CAB) exists to support the authorisation of higher risk changes.

Emergency changes

Emergency change is reserved for changes intended to repair an error in an IT service that is impacting the business to a high degree or to protect the organisation from a threat.

Change management process interfaces

Programme and project management

Programme and project management must work in partnership to align all the processes and people involved in service change initiatives.

Asset and configuration management

As changes are implemented, the configuration management information is updated. The Configuration Management System (CMS) may also be used to carry out risk and impact assessment for changes that are being assessed. The CMS may also related changes to particular configuration items.



Problem management

Problem management is another key process that interacts with change management as changes are often required to implement workarounds and to fix known errors. Problem management is a major source of requests for change and also often a contributor to CAB discussion.

IT service continuity

IT service continuity has many procedures and plans should be updated via change management to ensure that they are accurate, up to date and that stakeholders are aware of changes.

Security management

Security management interfaces with change management since changes required by security will go via change management process and security will be a key contributor to CAB discussion on many services.

All change will be assessed for its potential impact on the security plan.

Other processes

Most ITIL service management process have an interaction with change management either as an initiator of change via a request for change or as a member of the CAB.

Key performance indicators and metrics for change management

The key performance indicators for change management are:

- The number of changes implemented to services which met the customer's agreed requirements, e.g. quality/cost/time (expressed as a percentage of all changes)
- Reduction in the number of disruptions to services, defects and rework caused by inaccurate specification, poor or incomplete impact assessment of changes
- Reduction in the number of unauthorised changes
- Reduction in the number and percentage of unplanned changes and emergency fixes
- Change success rate (percentage of changes deemed successful at review/number of RFCs approved)
- Reduction in the number of changes where remediation is invoked
- Reduction in the number of failed changes
- Average time to implement based on urgency/priority/change type
- Incidents attributable to changes
- Percentage accuracy in change estimate