SYSTEM MANAGEMENT

Brief description of management

Summary

Management is about creating a model/method (management model) to ensure that we support, maintain, further develop and support the systems/applications/services/processes that we and IT use to deliver value to the business.

Richard Frank

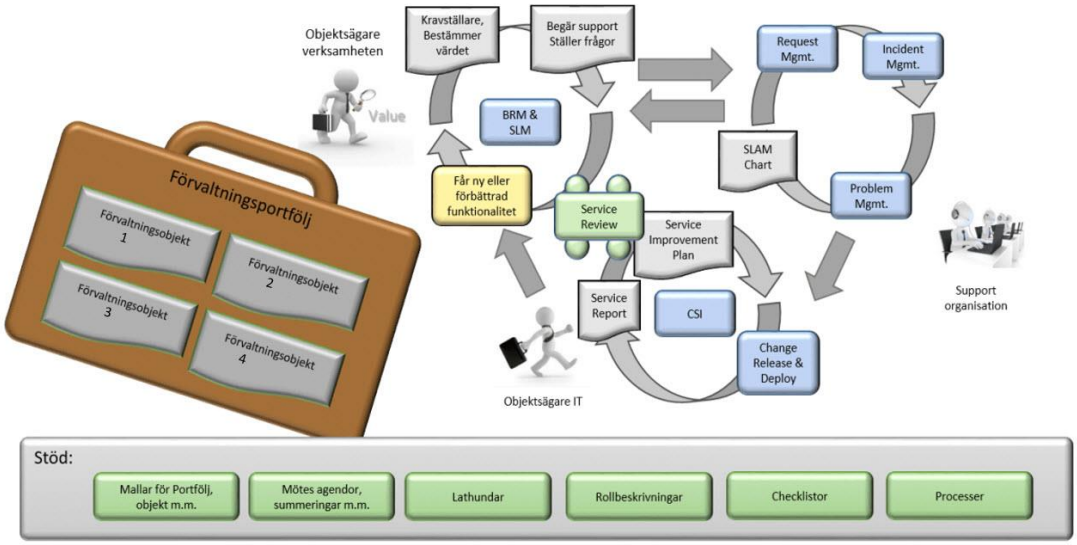
Innehåll

1 History

Version	Author	Date	Description
1.0	Richard Frank	2020-05-25	Verified and approved by the system administrator group
1.1	Richard Frank	2020-05-30	Added requirement specification and requirement documentation, Changed images The administration's steering group to Administration and client
1.2	Richard Frank	2020-06-01	Clarified Hypercare in flow
1.3	Richard Frank	2023-01-19	De-identified flow

The guidance is primarily aimed at those who will carry out administrative work in practice.

2 PROCESS-ORIENTED MANAGEMENT – WHAT IS IT ALL ABOUT?



Process-oriented management is about creating a model/method (management model) to ensure that we support, maintain, further develop and support the systems/applications/services that we use to deliver value to the business. To do this, we need to inventory, document and describe the objects/systems we want to manage (what should be managed), what should be done with them and who should do what, i.e. create the processes that describe the objects/systems that in turn interact with other processes.

Simply put, it is about creating a "micro-organization", a management organization with people from both IT and the business as well as associated roles, work routines and tools (templates, documents and other aids) that will manage the processes.

2.1 VALUES AND OBJECTIVES OF MANAGEMENT

- **An improved understanding of the**
  relationships between requirements, expectations and costs provides an increased understanding that increases the actual quality of the delivered IT services.
- **Improved cost-efficiency**
  The management model describes the methods and processes that lead to a higher utilisation rate of investments and resources in the management object.
- **Coordination and cooperation**
  The management model serves as guidance for how work should be conducted within the business and IT.

3 WHAT IS TO BE MANAGED?

The first thing we need to do is define what is to be managed. This is often defined as management objects that we divide into different types and document in a management portfolio based on which area it is to support, e.g. HR support, sales support or similar.

3.1 WHAT IS TO BE DONE IN THE ADMINISTRATION?

There are different parts to handle within the administration, it is about **providing support, maintaining, further developing and making available systems and supporting processes.**

3.1.1 PROVIDE SUPPORT

In order for the business, project or user to be able to use what we manage, we will offer training, manuals, cheat sheets, etc.

3.1.2 MAINTAIN & FURTHER DEVELOP

These are actually two different parts, but since they fall within the same area, it is sometimes easier to see them as one. Maintenance is about maintaining the existing service or system and further development is about the development of simpler functions or rather improvements, major changes should not take place within the everyday administration but via a controlled Change Management process that includes more stakeholders (PS, even minor changes / improvements should of course also be handled via Change Management, but in a more "Leant" way of working). In maintenance and further development, it is important to divide the work into clear sections/work areas. Management is complex and with the help of RAFS you get a good idea how we handle these areas:

- **R** – Fixes (Bug fixes, minor adjustments)
- **A** – Customizations (To fit with other applications or HW or similar
- **F** – Improvements (New functionality or smarter features)
- **S** – Decontamination (Remove what is not needed)

3.1.3 MAKE AVAILABLE

In order for it to be easy for the business to use the management objects, it is important that there is a clear and easily accessible way for questions and support for any issues that may arise.

3.1.4 SUPPORTING PROCESSES

A process is actually a flow of activities that describe a specific area in which they are to be performed.

At the company there are many processes but also pure management. Even the pure management can be handled as a process. What is important to consider when defining a process and determining the beginning and end of the process? Processes encompass wholes and bind together several different activities. Important when defining a process is that the process goes from "customer need to customer need solved.

4 THE MANAGEMENT ORGANISATION – WHO DOES WHAT WITHIN

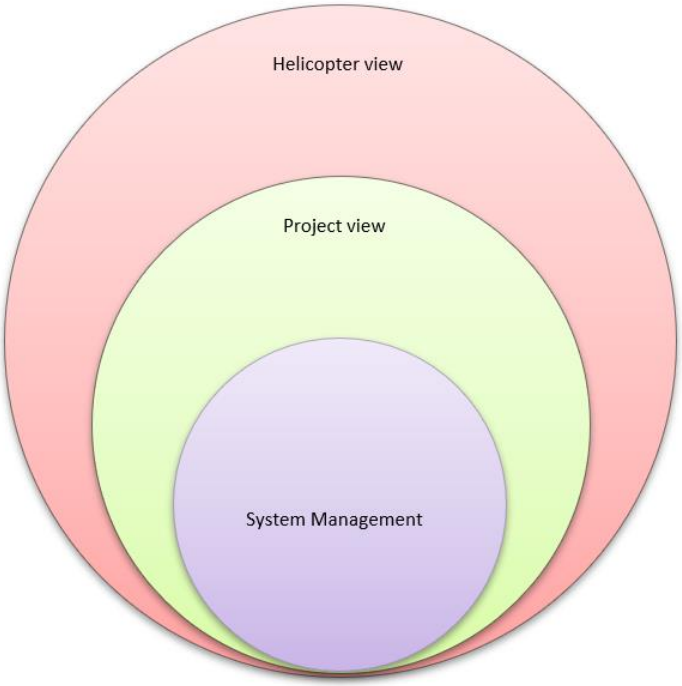
Now that we know what to do with the different objects, it's time to look at who does what. We need to establish a management organization for and, above all, for what is to come.

To establish a management organization, it must be described based on its purpose. A process-oriented management organization consists not only of the roles defined in management, but also roles that exist in the organization. It can be anything from installation technicians to top administration and management team.

There are several different levels of Process Management:

- Helicopter management (What processes exist?)
- Project management (What ongoing projects are there?)
- Management (Process or object/system we will manage.)

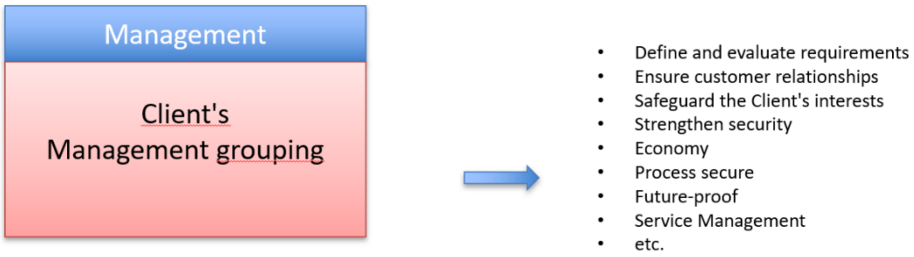
But let's sort out the concepts and their scope. The following **illustration** illustrates the relationship between the different levels of government:



4

Regardless of the type of administration, the administration will be built up of several competencies. These competencies will be represented for each relevant unit within the company. Below is an example of how such a composition can be made. The composition may vary as it is based on the procurement that staffing takes place. Some groupings such as finance, IT and administration are basic groupings.

Of course, this is not a one-man job, but all relevant processes, system owners, departments and others will be involved in the work to ensure safe, quality-assured, economical and manageable management.

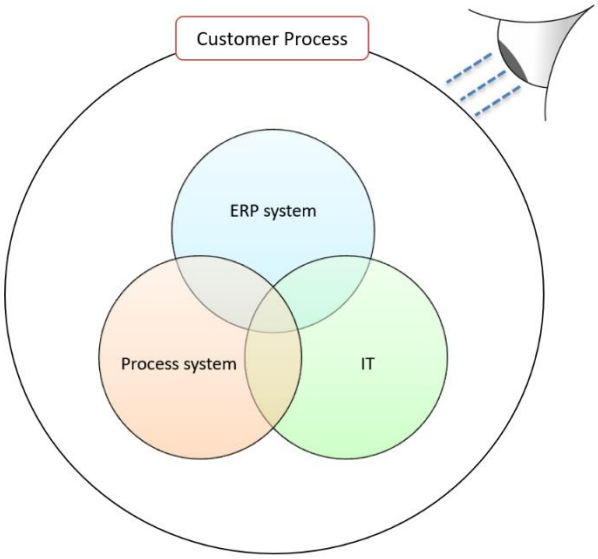


5 THE DIFFERENT TYPES OF MANAGEMENT

5.1 HELICOPTER MANAGEMENT

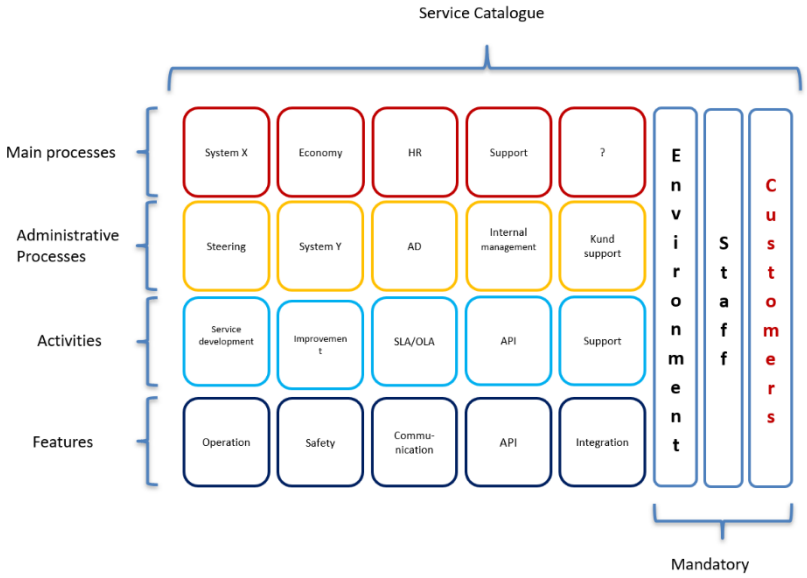
The helicopter management is the administration that actually manages the various processes that exist in the company.

An example of such is the customer process:



Each circle represents a named process that in turn contains other processes, features, and activities such as integration, scripting, networking, etc. This type of management is to have a helicopter perspective and thus also a so-called service catalogue of existing processes.

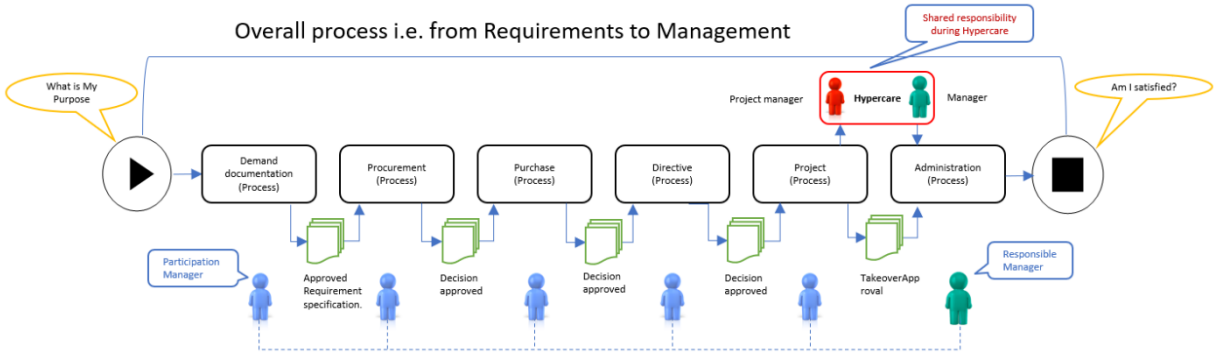
Such a directory may look like this:



Note that the content is a suggestion of what it might look like.

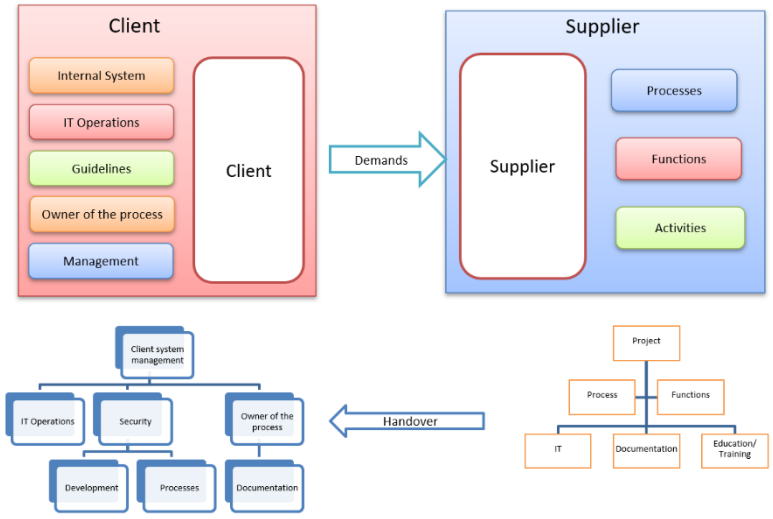
5.2 PROJECT MANAGEMENT

In most implementations, projects are created to ensure the optimal from procurement to finished implementation. Requirements specification, Procurement, Purchasing, Directives, Projects and finally management are all processes in which the appointed manager should be involved. Regardless of the type of commitment, including the overall commitment, management will be the final part of a takeover from the project to management. Management is the last responsible part of an implementation. It must secure the future in a way that is the administration's watchword:→→→→ provide support, maintain, further develop and make available systems, supporting processes and the economy. This can be done in different ways, but the optimal thing is that already at the procurement stage and throughout the process, the administration is represented.

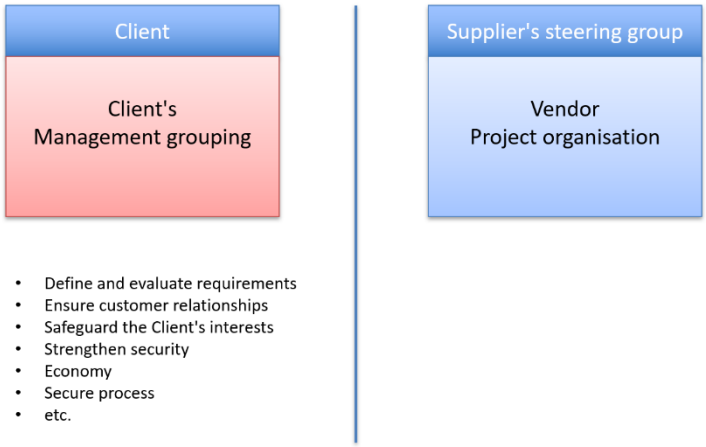


If this is not possible, it is the Administration that decides whether the project should be approved for handover, a procedure that means that every part of the specified process, ie from directives to the project's results and execution, is reviewed. When the project closes or enters the hypercare period (audited part of the takeover), SLAs, OLAs, performance protocols, system solutions, architecture, etc. should be reviewed. This process is not recommended as it can result in a takeover that risks taking over residual lists, increased costs and uncertain management.

A proposal for such an EGTC could be:



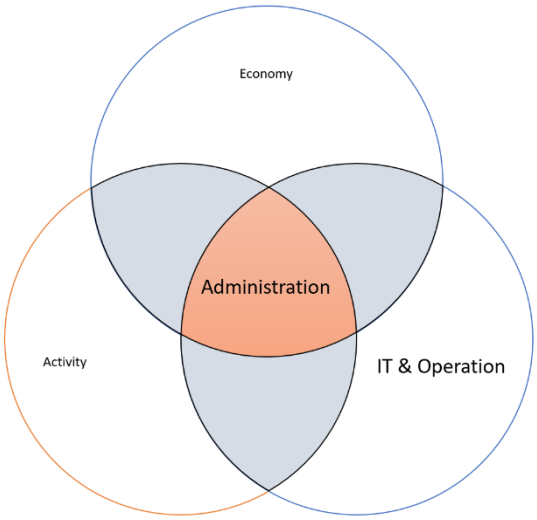
A slightly clearer picture can be, for example:



What needs to be defined in IT as the business is also in the interface. These interfaces can be divided into three (3) categories: During project implementation, after project completion and ordinary management, i.e., management that transitions from project completion to pure management.

What is the difference between Project Management and Management? The big difference is that in project management, the appointed manager follows the different processes (processes) up to the hypercare period. It is during this period that the Manager actively takes over the various processes to management, together with the project ensures that all parts meet the requirements that were once agreed with the Supplier. During the journey, the Trustee has only advised by obtaining the necessary knowledge with its expert group (the Client's management grouping). This is done through, for example, forums created only for stakeholders.

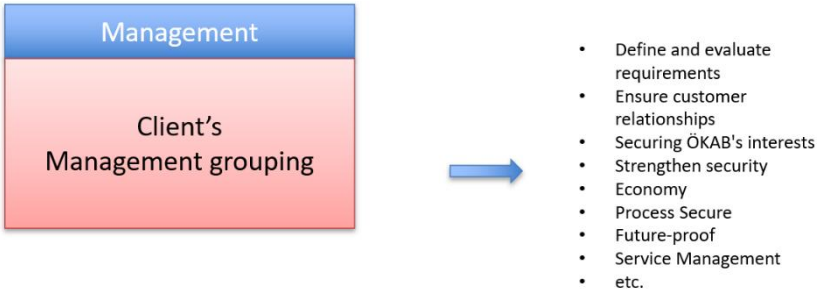
Whether it is a project or a normal management, the images below will represent the scope and coordination of the management. This is to be able to establish the administration that can provide support, maintain, further develop and make available systems and supporting processes, regardless of whether it concerns management, Architecture, IT or IT support. The following venn diagram describes what a management can look like, whether it is Project Management or pure management, both be an advisory as an execution.



5.3 ADMINISTRATION

Another name for this is could be object or process management. This is the i.e. management that takes place after a project's hypercare period (the period that is under both the project's and the management's review).

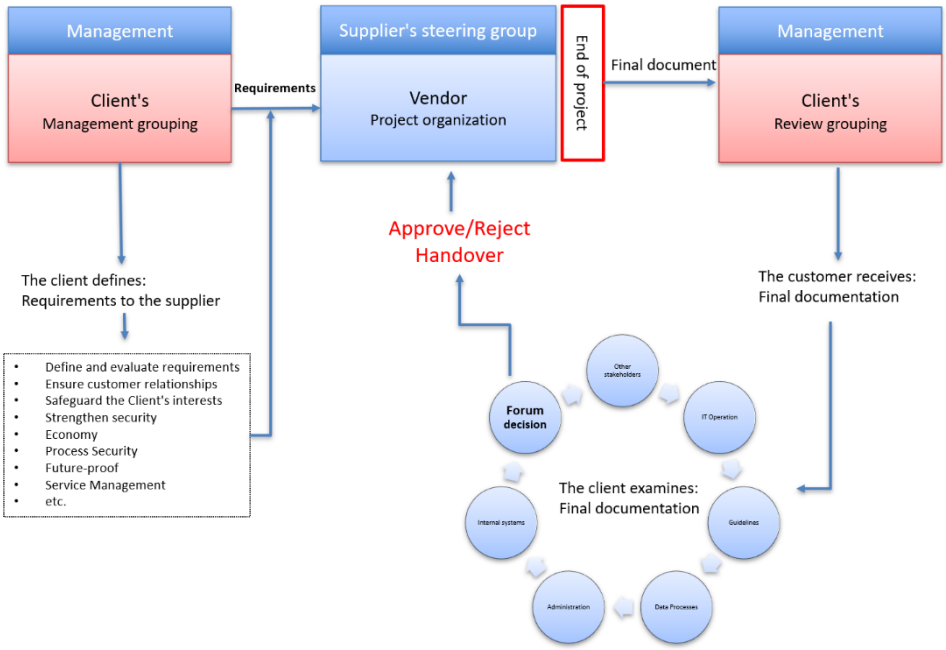
The grouping for this is the organization that will in future manage the taken over project, now called process. The difference is that now the supplier should not be in the management cycle, but it is the administration that should have taken over SLA, OLA, etc. The cycle is explained in chapter 4.4



5.4 WORKFLOW

Several different situations and activities are reflected in a manager's work and this too can be described in a process. The following describes a review process for a vendor project.

A normal flow in this process:



By describing different workflows in this way, a service catalogue is built up that can automate the work and be used by processes as sub-processes.

6 Role descriptions and responsibilities

There are different roles in an administration, some of which are briefly described below. More about the roles and other not specified roles can be found in the role document that has been prepared. See <System *Management Matrix Role Description (2)*>

6.1 SYSTEM OWNER

A SA has the overall responsibility for the administration and operation of one or more computer systems. Usually, it is the person ultimately responsible in an organization or part of the organization that is SÄ.

6.2 SYSTEM SPECIALIST

The system specialist is the link between the business and IT and works with needs analysis, proposals for change, decisions, acceptance testing, implementation and training of users, etc. The System Specialist, together with System Administrators, controls the daily Support &; Management of their System.

6.3 SUPERUSER

An SU has greater competence and permissions than ordinary users to one or more computer systems. A computer system can have several SUs that share the tasks.

6.4 SYSTEM ADMINISTRATOR

An SF is responsible for the administration and operation of one or more computer systems. SF should act as a link between the users and the DA. A computer system can have several SFs that share the tasks.

7 ESTABLISH NEW OBJECTS INTO MANAGEMENT

With new objects/systems/processes to be managed, it is important to have a clear, well-functioning and smooth process for handing over from project to management. Information, knowledge, documentation, tools, knowledge transfer and transfer of ownership must be handled in a standardized and follow-up way to ensure that we can manage the object/system/processes correctly once it is in operation.

To ensure this, support in the form of tools and other things is required.

7.1 TOOLS REQUIRED FOR EFFECTIVE MANAGEMENT

- System descriptions
- Checklist for handover from project to management
- Template, improvement plan
- Template, budgettools / reports
- Template, management strategy
- SLA, OLA and UC
- Kanban tool for daily/weekly follow-up
- KPI, scorecard, balanced scorecard
- Role descriptions
- Risk management matrix
- Forum descriptions
- Management portfolio
- System matrix
- Requirements documentation

8 USING ITIL

ITIL in itself is not a magic formula that solves all problems. One of the biggest misconceptions about the ITIL framework is that many people believe that ITIL is a model that solves all problems. "If you do as the book says, everything will work perfectly."

Nothing could be further from the truth. ITIL consists of five books of about 2000 pages, where you give recommendations on working methods to handle different scenarios that may arise such as in problem management. Then it is always we in the administration who in turn decide **if and how** we want to use the recommended working methods.

8.1 A GOOD PROCESS FOR SOURDOUGHS

Most often, one misses the process introduction of the problem process. Most have introduced the incident process, but do not find it to work optimally. When recurring errors occur and "leaven", you discover that the incident process cannot always handle all types of incidents in a good and structured way. This is largely due to the fact that the incident process is not designed to handle recurring errors and "leavens" satisfactorily. And it is at these times that the problem management process can do the best.

The goal of problem management is to:

- Prevent problems from occurring
- Eliminate recurring incidents
- Minimize the impact of the incidents that cannot be prevented

It is important to remember that an incident never becomes a problem issue, as incidents and problems have their own life cycles.

Unlike the incident process, the problem process is designed to handle the disorder and extra work that recurring incidents can cause. However, it is not enough just that the problem process works well. The problem process is very dependent on the incident and change management processes also functioning satisfactorily.

9 PROBLEM MANAGEMENT

Problem management is an ITIL process that proactively prevents incidents from occurring and minimizes the impact of the incidents that cannot be prevented.
Unfortunately, problem management is often one of the least prioritized processes. Most often, Incident Management, Change Management and sometimes Service Level Management and the service catalog are

introduced. However, the Problem Management process is usually missing. One of the reasons may be that you do not see the benefits in the short term or that you think that the Incident Management process is enough. Within the administration of electricity meters, Problem Management is one of the most important processes we have. It saves time, money, customer and user frustration!

9.1 FIRE EXTINGUISHING OR A SIMPLE PROCESS?

When implementing a meter replacement and accompanying system, you will discover the benefits of distinguishing between incident and problem. All is well and good at first. Then teething problems begin to manifest themselves more and more. Incidents were sent like a pinball between a number of different units. The same incident could come back to the first line, sometimes three times or more, unresolved. Always with the explanation that "that incident is not something we deal with". This will create great irritation and a minor war. It is now that the distinct distinction between incident and problem will crystallize. Through a collective grip, the worst knots dissolve.

To avoid fire extinguishing and high staff turnover, we use the defined ITIL processes

10 THE PROCESSES BELONG TOGETHER

The phrase that "No chain is stronger than its weakest link" definitely applies in ITIL. This also applies to the connection between incident, problem and change management. If one of these processes does not work satisfactorily, there is a great risk that the others will not either, the end result will in any case not be as good as it could have been.

Come to Problem Management, the incident process is NOT designed to take care of incidents that recur or that have not been solved within a relatively short time (leaven) in a good and structured way. The purpose and goal of the incident management process is to restore an IT service/system/solution as quickly as possible and minimize the impact on the business. There is no time or resources dedicated in incident management to "stop" and do a more in-depth investigation to find the root cause of why, for example, recurring incidents occur.

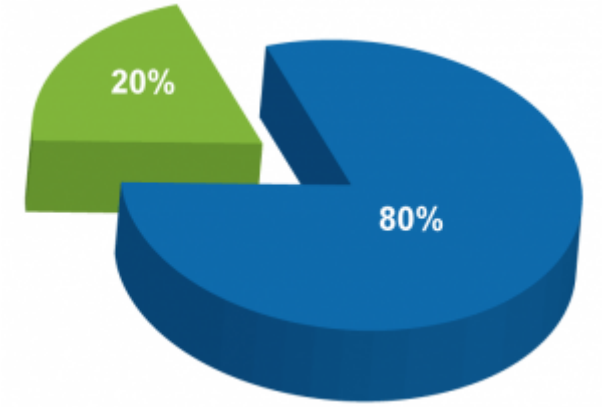
The Problem Management process, on the other hand, is designed to allow System Administrators to act and technicians to "go into more depth" in their troubleshooting. It should also be included in the calculations that it may take extra time to find the root cause of why, for example, certain types of incidents recur. You should also have a person who is appointed as Problem Manager and who is responsible for ensuring that the process is managed in the best way. It is also desirable to have access to technicians who only work with problem management or who set aside scheduled time to manage and develop problem management.

Change management ensures that all changes made are planned, approved and tested. That is, the change process can be activated with input from the incident or problem process.

The conclusion of this reasoning is that the three processes are not only connected, but are deeply involved and interdependent. They can both support and complement each other in an excellent way. The more we reason and discuss about the relationships between the three processes, the more you realize that the problem process is a must to get a stable IT operation and effective IT support!

11 CHANGE MANAGEMENT

11.1 ITIL CHANGE MANAGEMENT IS LIKE LEARNING TO RIDE A BIKE

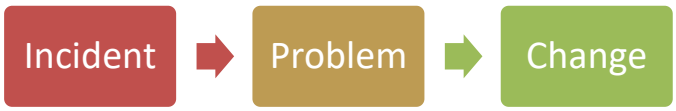


80% of all incidents are created in IT and within ongoing projects mainly through poorly planned and implemented changes (ITIL change management).
By implementing changes in a structured and planned way, we can not only free up time and reduce stress, but also increase trust in IT and become more professional. Of course, everything leads to a reduction in fire extinguishing.

11.2 HOW ARE THE PROCESSES CONNECTED?

Most IT organizations that introduce ITIL usually start with Incident Management, then problems and then change.

- If you have a meter that delivers the wrong measurement value, you change the meter (incident management).
- If you have an installation point where the meters even after replacement deliver the wrong value after meter replacement, you send a technician to find the reason why (Problem Management).
- When you have found the root cause of the incorrect values, a change may be needed to get the right values, you may need to have a different type of meter, change location, etc. (Change Management).



If you think about it, you realize that this is how we learn things as little ones. We cycle and fall on the bike, get plastered, fall over again – plasters, etc. We learn that rolling gravel increases the risk of falling. Then we learn to ride a bike, we learn our limitations and choose the routes and speeds that we can handle.

This does not mean that we will never fail again, but we reduce the risks by changing our behavior. In the same way, we never get rid of all incidents just by introducing ITIL change management, but we reduce the probability and number of incidents dramatically through a well-defined, documented and well-established Change Management process.

These three processes are closely linked. In an IT department, the project and in the business, one or more ways of dealing with incidents are guaranteed. You most likely have one or more ways of tackling recurring

problems to the extent that you have time for. But what about change management? Don't underestimate one of the most important processes in ITIL. The process that can pick most low-hanging fruits...