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The IT Service Management Forum

IT Service Management
GLOBAL BEST PRACTICES

Collector's Edition

Organization

Chapter 5

5.1 Introduction

The best practices documented in ITIL® have motivated many IT organizations to move from a product-oriented to a service-oriented organization. A process-based approach was considered to be the most efficient and effective way to achieve this, so IT organizations adopted processes and installed process managers according to ITIL guidelines.

Unfortunately, the new approach introduced a big hurdle on the road to the promised benefits: the emergence of the matrix organization. The old lines of command are confronted with a whole new layer of process managers crossing their borders. If organizations do not make clear choices when setting up their management structures, they will end up with a situation where line managers and process managers are engaged in an endless and unproductive struggle. Another possible consequence is that processes just turn out to be copies of the old departments, with resulting process silos instead of technology silos. To reap the benefits of the new approach, organizations have to make clear choices in definition of roles, responsibilities, tasks and authorities, for line management and process management. They also have to define new roles, such as process owner and service owner. To do this properly, they may even have to redefine their objectives, or to consider their exact definition of a service.

The contributions in this chapter each recognize the big organizational changes involved in IT service management implementations. They explain common pitfalls of process management, and provide you with very practical and effective instruments to avoid them and to achieve the results that you originally planned.

CONTENTS

The three articles in this chapter each explore the organizational choices we have to make to turn IT Service Management implementations into a success:

- **Out of one silo and into another**
  Author: Karen Ferris (Independent Consultant, Australia)
- **The Process Management Matrix (PPM), variations in process management**
  Authors: Wim Hoving (BHVB, The Netherlands) and Jan van Bon (Inform-IT, the Netherlands)
- **Improving the IT organization using the team model (MOF)**
  Authors: Marcel Burghoorn (Microsoft, The Netherlands), Paul Leenards and Hans Vriends (Getronics PinkRoccade, The Netherlands)

SHORT SUMMARIES

One of the objectives of ITIL was to break down the technology silos that reflected the way in which organizations were structured, and to introduce service-oriented processes which span all technologies. **Ferris** states that organizations did, indeed, move away from technology silos, but tend to replace them with process silos instead. She explores why this

has happened, what repercussions this has on the organization, and what the organization can do to remove these silos. The key of the solution she proposes is the establishment of two horizontal roles: the process owner and the service owner. To be able to define these roles, organizations have to get a consensus across the organization on what exactly constitutes a service. Ferris defines the two roles and explains how they work together to remove the vertical silos, and create processes which permeate across all technology platforms and the service lifecycle. She also discusses how best practice guidance (as per ITIL V3) can assist organizations in this process.

Hoving and Van Bon focus on the heart of the failure of many ITIL projects: the "process management drama" with line manager, process manager and employee as the three active participants. All process management implementations result in a matrix organization, with process managers and line managers. To take control of this complex organization, and to be able to operate as a successful service provider, organizations have to make choices. The authors provide a practical tool to make a clear division in tasks, responsibilities and authorities for line and process management: the Process Management Matrix (PPM). This matrix can help in the selection and combining of "old" and "new" lines of command, to support the objectives of an organization.

Burghoorn, Leenards and Vriends demonstrate how a practical and pragmatic team model can help prevent the pitfalls of a process implementation, i.e. a matrix organization. They show how the team model (MOF) can help realize quick improvements in IT performance, and they illustrate this with experiences from real case studies. The main principle of the team model is to separate conflicting tasks and responsibilities; for example, reactive ad-hoc tasks and proactive repetitive tasks. This separation is realized by creating virtual teams, and adding resources to these teams. The authors describe the seven teams of the team model, and provide a step-by-step implementation approach illustrated by a generic case study.

5.2 Out of one silo and into another

In the past twenty years many organizations adopted ITIL best practice and made a concerted effort to move from technology silos with embedded processes. But rather than having processes span all technologies, they have now created process silos. In this article, Karen Ferris explores why this has happened and how to avoid it.

INTRODUCTION

Since its conception over twenty years ago, one of the aims of IT service management best practice as per the IT Infrastructure Library (ITIL®) has been to assist organizations break down the technology silos within which were embedded service management processes. These embedded processes were duplicated, inconsistent, inefficient and definitely ineffective.

What has happened is that organizations have replaced the technology silos with process silos. Processes have been implemented within functional silos, and the objective of processes permeating across all technology platforms and throughout the service lifecycle has been missed.

Definition of "silo": A silo system cannot easily integrate with any other system. This means we have multiple versions of the same data, violating the idea of a single version of the truth.

This article will explore how we have moved from technology silos to process silos and why this has happened. It will explore the repercussions to the organization and two key things that the organization can do to remove or avoid those silos – namely to define the process owner and the service owner. The article will also look at how best practice guidance as per ITIL can assist.

TECHNOLOGY SILOS AND PROCESS SILOS

The technology silos

For many years organizations had created technology silos which reflected how the organization was structured and processes were embedded into each of those silos. Figure 1 shows the individual technology silos around which the organization would be structured. The mainframe platform would have its own processes for handling any faults detected and, therefore, would have a form of incident management process in place. The server platform would also have a form of incident management process, as would the application development platform, the network platform etc. This would also be the case

for processes involved with keeping track of assets, so each technology silo would also have a form of configuration management process. Each technology silo would need some management focusing upon changes to the technology in their charge and, therefore, would have a form of change management process.

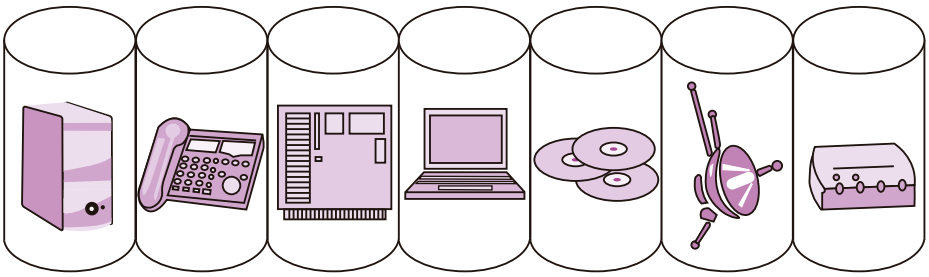

Figure 1 Technology silos

In addition to keeping track of assets, each technology silo would need a repository for information relating to assets, their attributes including location etc. As a result, each technology silo would have a form of configuration management database albeit simply an excel spreadsheet or access database, or even a paper-based system.

The upshot of the technology silos is that there was process duplication, duplication of effort, increased overheads, inconsistency of information, lack of data integrity etc. Not only was this a costly situation but also a dangerous one, as decisions were being made based upon data which most likely contained serious discrepancies between the various technology silos. The different processes were confusing to everyone involved and each time a member of the organization moved from one technology silo to another there was a steep learning curve in order to become competent with the processes within the technology silo to which they had moved.

The intent of ITIL best practice

The intent of ITIL best practice, as in version 1 published in the late 1980s and version 2 published in 1999-2000, was to guide and assist organizations in recognising that processes should span all technology platforms and that there should be one consistent, repeatable and measureable process across all of the silos. Therefore there should be one incident management process, one change management process, one configuration management process and one configuration management database (CMDB) or a single view of a number of CMDBs. This is illustrated in figure 2.

Adoption of this guidance appeared to be a major challenge for many organizations who, for a long time, had organized themselves around the technology. There had to be a major mindset shift from the concept of technology silos to one of services using both different technologies and common processes spanning those technologies.

The idea of talking about services as a focus rather than technologies and applications was, and still is, a challenge for many organizations. This will be discussed further in the section "The service owner" but for the purposes of this article moving forward let's take the ITIL definition of service as a guide to what we mean by service.

A service is a means of delivering value to the customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks.[1]

I believe that most organizations and individuals embraced this concept but there have been errors in the execution of the guidance available. Maybe the errors in implementing the guidance were because organizations had maintained, and individuals embraced, the technology silos for so long that they found the concept of not having silos of some sort and fashion a little disconcerting! So despite the guidance available, organizations ended up replacing the technology silos with..... process silos.

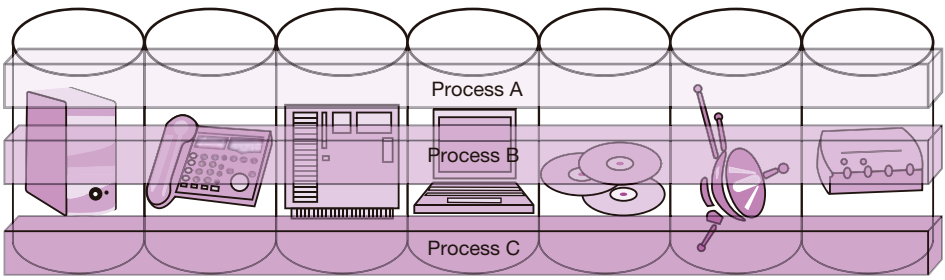

Figure 2 Single process across all technology silos

The process silos

What has happened is that organizations have taken a silo approach in trying to implement best practice guidance because they have implemented it bottom up rather than top down. Rather than taking a holistic approach across the organization with a top down approach, the processes have been developed in isolation to each other with little or no consideration to the other processes and the interrelationships. There is little or no integration between the processes. The processes have become "functions" rather than true process.

A process is a particular course of action intended to achieve a result that is repeatable, consistent and measureable. A function is the actions and activities assigned to, or required or expected of, a person or group. We can have processes and functions co-existing alongside each other. However, we have to be clear of the distinction between the two and not pretend to be implementing processes that are spanning across all technology and, in fact, implementing processes embedded into their own silos which are functions. Figure 3 illustrates the outcome that many organizations are now faced with.

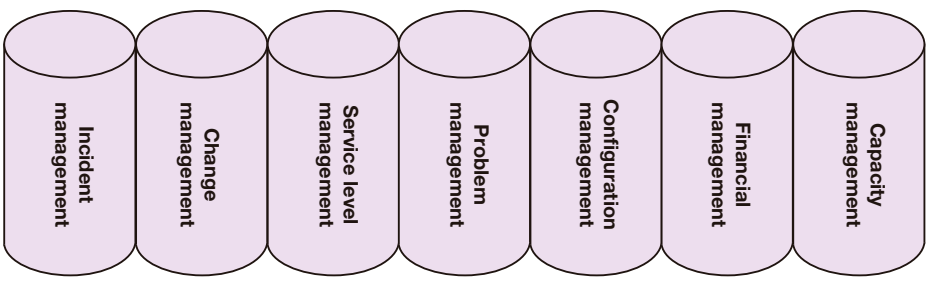

Figure 3 Process silos

[1] *OGC (2007), ITIL Service Strategy*

So, rather than the processes spanning across and permeating the whole organization as intended, they have become entrenched within an organizational design that reflects particular service delivery areas. Once again, where is the service approach that ITIL has talked about since version 1?

THE REPERCUSSIONS AND CHALLENGES

The repercussions

What has the adoption of process silos meant for organizations? The bottom line is that the creation of process silos and functional groups responsible for the execution of a process has hindered the adoption of the process across the organization.

Let's take a step back for a moment. We know that when ITIL guidance is introduced into an organization many people's response is "ITIL is being done to us". This reaction was understandable as many people did not understand why it was being introduced, what the benefits would be to the organization and to themselves, what it would mean to them in their current roles and what it would mean for the future. They were basically not well informed and, therefore, there was no buy-in across the organization. This in turn resulted in resistance to change.

Many organizations recognised that this resistance to change would need to be managed. However, because the organization had introduced functional groups responsible for particular processes and those functional groups were trying to establish the process across the organization, people still felt that "ITIL is being done to us". This is because there was not involvement from everyone.

What is needed within the organization is an understanding that everyone in the organization is involved with these processes to some degree or another. For example, anyone who at any time is involved with the rectification of a fault is part of the incident management process. Anyone who at any time is involved with implementing a change without adverse impact is part of the change management process. Anyone who at any time is involved with trying to determine the root cause of a fault (be it technical or otherwise) is part of the change management process.

When you have a group of people, entitled "Problem management" telling you what the process should be (or is) and what you should be doing, then there will be resistance to the adoption of that process. What should happen is that everyone who is ever involved in problem management as part of their day-to-day job should be engaged in some way in the design and implementation of the process so that it becomes OUR process and not THEIR process.
The organization may have a functional team called problem management that comprises a problem manager and problem analysts but they are not the only ones involved in the problem management process. The role of the problem management team is to drive the process and associated activities across the organization. They need to involve staff from all parts of the organization, both internal and external to IT. Everyone has to be part of the journey. What needs to be avoided is the creation of the perception that problem management is done "over there", i.e. in the problem management team. It is not! It is done everywhere. The same applies to all of the other service management processes. We need to ensure that we do not create process silos.

Processes will commonly cross more than one department or function and this may cause conflict, especially when those boundaries between departments are rigid and ownership is important to people. Everyone needs to understand that implementation of best practice service management processes is a joint venture, and success will only come from everyone working together.

The challenges

So, it seems that it has been a challenge for organizations to adopt the concept of common processes spanning across all aspects of IT and beyond, and that they have taken the guidance in ITIL and implemented functions rather than processes.

There is a misconception that there needs to be a incident management team, a capacity management team, a change management team etc. The author was recently asked whether all the people involved in capacity management activities should be located in one capacity management team. The response was absolutely not! Why take these people away from their peers working on the same technology platform? It should not matter where, physically, the capacity management activities are being conducted as long as there is a common process that is being followed.

The key is to have a process owner who can ensure that the process is defined, documented and clearly understood, executed and who takes action when there are discrepancies, or where non-conformances are detected. The process owner is also responsible for the continual service improvement for that process. A key challenge to success is making sure that the process owner is both empowered and given the authority to do the job at hand.

HOW TO AVOID CREATING SILO'S IN THE ORGANIZATION

There are two key roles that need to be established within the organization to assist with the removal or avoidance of silos. These are the process owner, as already mentioned, and the service owner. They are horizontal roles that, if empowered, will make the change in your organization

The process owner

The process owner was always a role that was talked about in ITIL but it was not given the depth of mention or focus until version 3. This focus is provided in the Service Design publication.

Before we move on to discuss the process owner role, we must first clarify what we mean by process. As Socrates said "Wisdom begins with the definition of terms".
A process is a connected set of actions, activities, changes etc. performed by agents with the intent of satisfying a purpose or achieving a goal. ITIL defines a process as:

> *A structured set of activities designed to accomplish a specific objective. A process takes one or more defined inputs and turns them into defined outputs. A process may include any of the roles, responsibilities, tools and management controls required to reliably deliver the outputs. A process may define policies, standards, guidelines, activities and work instructions if they are needed*[2].

[2] *OGC (2007), Service Design*

Role

In the article "Process Owners –'Architects' Of ITIL Project Success" (DuMoulin, 2006), the role of the process owner was described as having to concentrate on the structure and flow of processes without having to focus on staffing or other departmental issues. The process owner "owns" the process not necessarily the "function" or "functions" that carry out that process. The process owner's job is to carefully monitor and manage the assigned processes so that they can be continually improved. The process owner plays the important role of champion, visionary, protector and advocate – without whom the process has no chance of survival.

The initial planning stage of any ITIL initiative should involve the appointment of the process owner. They need to be associated with credibility, influence and authority and, therefore, need to be a senior member of the organization.

The process owner's job is not necessarily to actually do the process design or reengineering and improvement, but to make sure that the job gets done. The process owner would pull together a team of people to undertake the task at hand and ensure that there was buy-in from the organization including senior management, and management of the functional areas who will be involved in this process.

When the process has been implemented and is in operational use, the process owner retains ongoing responsibility for the integrity of the process, continual communication, awareness and education around the process, monitoring of performance of the process and ensuring compliance to the process. Where non-compliance is detected, the process owner takes action to rectify and remove the reason for non-compliance.
Earlier we defined the meaning of a process and said that its intent has to satisfy a purpose or achieve a goal. The process owner has to ensure that the process continues to be aligned with business objectives and goals.

Activities

"Process Owners –'Architects' Of ITIL Project Success" (DuMoulin 2006) describes three main activities of the process owner: process design, organizational awareness and advocacy.

Process design

The process owner is accountable for the ongoing business value and integrity of the process design across the functional and organizational boundaries that the process crosses:

- processes, policies and procedures
- process roles
- Key Performance Indicators (KPIs)
- process automation requirements
- process integrations

Organizational awareness

The process owner is accountable for planning and implementing practices, orientation and training to ensure organizational understanding and adoption of the process activities:

- internal and external training
- new employee on-boarding and orientation
- one-on-one mentoring
- teambuilding exercises

- conflict facilitation
- communication and feedback forums

Advocacy
The process owner is accountable for protecting, measuring and reporting on process compliance across organizational silos:
- dealing with political issues
- promoting a culture of process collaboration
- breaking down strong silo or functional mindsets
- verifying process compliance on an ongoing basis
- representing IT processes to business
- managing process exceptions
- promoting integration with other processes

Common mistakes

There are some common mistakes that organizations make in regards to process ownership:
- The first and biggest mistake is not having a process owner. The process owner within the organization is non-existent which means there is no-one to drive a particular process. This will guarantee failure of that process.
- Another mistake is having a process owner who is so bogged down with other day-to-day reactive activities or "more important" business-driven projects that they, therefore, have no time for the unnecessary "bureaucracy" of things like ITIL.
- Probably the most common mistake that organizations make is having more than one process owner for a particular process. This is a classic mistake. The idea is to have consistent, repeatable and measurable processes across the organization. Having two or more chiefs will not work. If there is more than one process owner, who will ultimately be responsible for the process? This mistake is most often seen when a functional group or team is given the responsibility of process ownership and therefore no one person takes overall accountability for that process. Everyone expects everyone else to be doing it!

The organizations that have been most successful in the establishment of processes are the ones that have had one process owner, even if the organization is multi-national. This ensures that the process is consistent and helps in breaking down the barriers between departments, functions, divisions, etc.
In organizations where there is not the senior management buy-in or commitment, there may be reluctance to spend money on dedicated resources for process owners. The necessary understanding of the need for a dedicated resource in order to make the process successful is not present.

It should also be understood that a process owner can have a split role, doing other work in addition to process ownership, especially in smaller organizations. This is ok if the other role is not a reactive fire-fighting role as the process ownership aspect will be subverted by the reactive activities. One person can also have responsibility for more than one process as long as they are the right combination of processes, as discussed in the next section "The right combination of process ownership".
In large organizations the process owner roles should be filled with dedicated people, and organizations that fail to do so are not serious about service management; it is likely that this is a direct result of a lack of management commitment.

The right combination of process ownership

In the aforementioned article by DuMoulin the combination of processes that could be owned by a single process owner was discussed. Where a process owner is required to own more than one process because a dedicated resource to a single process cannot be justified, then care should be taken in the combination of processes. Some combinations will work whilst others will not. Some of the right combinations are:

Change & configuration management

Change management acts as the primary control mechanism for the updating of the Configuration Management Database (CMDB); likewise, change management relies on configuration data for impact analysis. For this reason, the combination of the two processes under a single accountability provides an added value to each process.

Change & release management

Both change and release management deal with minimizing the impact of changes to the IT infrastructure; this shared objective makes this pairing desirable.

Availability, capacity & IT service continuity management

Each of these processes is back-office related and deals with the right sizing of the IT environment according to business needs. This combination is often under the control of a tactical or strategic IT planning group.

Service level management (SLM) & financial management for IT

Defining IT services, negotiating service levels and the cost associated with these services makes SLM and financial management a possible fit; however, most organizations will keep these separated, but aligned, due to the level of work required for each activity.

The wrong combination of process ownership

Incident & problem management

At face value, these two processes look ideally suited for joint ownership; however, in practice this is rarely the case. Unlike other processes, the challenge does not lie in an inherent conflict of interest.

Typically, the goals of problem management are subverted by the urgency of service restoration. Problem management is responsible for taking a holistic view of the issues around service delivery by identifying systemic IT issues and service degradation trends. Incident management is primarily concerned with the restoration of service as quickly as possible. The typical result of combining these processes is that problem management activities are often overridden by the immediate need of fire fighting. This is even more apparent when the problem management coordinators are given the role of managing the major incident or crisis processes and resulting post-incident reviews. The great majority of time is then spent in what is actually an incident management role, and the proactive side of problem management is largely neglected.

Change & incident or problem management

The objective of change management is to efficiently handle, assess, approve and coordinate all changes to the IT infrastructure in an efficient manner. At the same time, incident and problem management are raising records that lead to requests for changes. Combining ownership of these processes invites a conflict of interest around the required due diligence for change management.

Best practice guidance says that process ownership should reside with a single individual to ensure clear accountability. The process owner is critical for process design and ongoing management of the process once implemented. Whilst you don't have to have one process owner for each process, organizations should be aware of the good and bad combinations before assigning ownership.

The missing piece

So we have, hopefully, now established that we need process owners empowered to make sure that processes are common across all technology platforms and that we remove those process silos. In addition to process owners, there is one other key activity or role needed to remove process silos from the organization. The missing piece is service ownership and the role of the service owner.

This has not been a new concept for some organizations but has only just received mention in ITIL V3. ITIL had not referred to the role of service owner in previous versions. The service owner role is referred to in the Continual Service Improvement publication. The author believes that if we address both of these activities – process ownership and service ownership – properly, then we can remove the process silos.
The organization may have process owners in place making sure that the end-to-end processes are effective and efficient. In addition there may be platform and technology owners looking after the infrastructure. There will be other internal and external service providers providing supplies to the organization such as applications, training etc. With that all in place, there is still something missing to ensure that we are delivering value to the business. This is the service owner.

The service owner

As we did when looking at the process owner role, before we go any further we need to define what we mean by a service. Service is something ITIL has always talked about since its conception, but despite that, it is something that organizations still grapple with. Many organizations still talk about applications and technology as services.

A service is an activity that produces an outcome, valued by a consumer, where and when it is needed. So if we accept that definition, does a technology produce an outcome that is valued by a consumer? Does an application produce an outcome that is valued by a consumer? In their own right, no they don't. It is the combination of technology, applications, infrastructure, processes and people that provide the service. In the ITIL Service Strategy publication it describes a service as:

> *A means of delivering value to customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks.*

Is Microsoft Office Outlook 2007 a service? Outlook itself does not deliver a service to a customer. It needs a platform to run on and a pc to deliver to, together with maintenance and support as well. Messaging is a service delivered to a customer via e-mail which uses a product or technology called Outlook. If you change the technology, the service delivered to the customer should unaffected, albeit improved. Therefore if the organization changes from Outlook to Lotus Notes, the service of messaging remains, but the supporting technology that delivers the service has changed.

As already mentioned, the definition of service is something that organizations are still grappling with. The key is to get a consensus across the organization of what constitutes a service, using the guidance that the service has to deliver value to the customer by facilitating outcomes that the customer wants to achieve.
Some organizations start with the definition of a business process and the services that underpin this process. The services are then broken down into the technology components that deliver that service.

The service owner is accountable for a specific service (infrastructure, application or professional service) within an organization, regardless of where the technology components or professional capabilities reside. To ensure that a service is managed with a business focus, the definition of a single point of accountability is absolutely essential to provide the level of attention and focus required for its delivery.
Much like a process owner, the service owner is responsible for continuous improvement and the management of change affecting the services under their care. In both cases these horizontal roles are effective or not according to the level of empowerment (true power) given to the lucky person by the executives of the IT organization. The service owner is a primary stakeholder in all of the IT processes which enable or support it (DuMoulin, 2006).

Traditional organizational structure

Before we explore the role of the service owner, let's explore the service level management model that many organizations have based their structure on. Figure 4 illustrates this concept. IT has a relationship with the business through the establishment of Service Level Agreements (SLAs) which, in turn, are underpinned by the Operational Level Agreements (OLAs) and Underpinning Contracts (UCs) with third party providers.

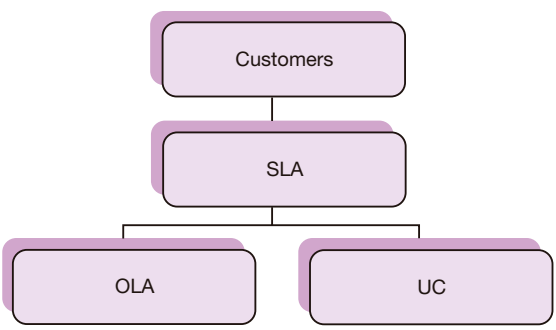

Figure 4 SLA structure model

In the same way that organizations structured themselves around the technology, many organizations have done the same with this model. What this then looks like is shown in figure 5.

Traditionally we have SLM liaising with the customers / business units, gathering Service Level Requirements (SLRs) and liaising with internal and external service providers to ensure that the service levels within the Service Level Agreement (SLA) can be delivered. There is nothing wrong with this structure in principle, but in the real world this ends up with service level management being all things to all people.

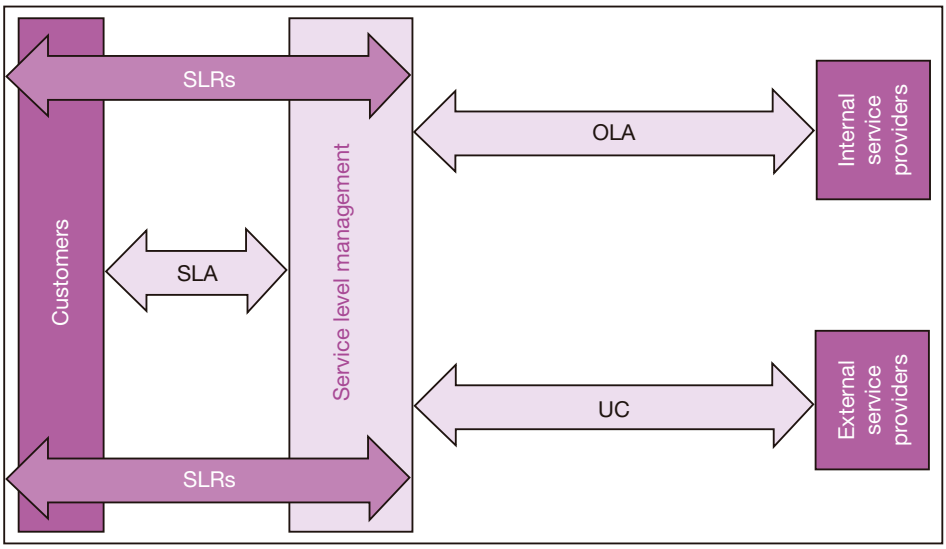

Figure 5 Traditional structure

Service level managers are performing the customer-facing role from technology into the business. They hold the account management or relationship management role and are responsible for negotiating, reviewing, maintaining and improving the levels of service provided. In addition to responsibility for the SLAs, they may also have levels of responsibility for the service portfolio and service catalog. They represent technology for all of the services that the customer or business unit consumes.

In many organizations, as a result of their customer relationship, the service level managers also become the first point of contact for customer impacting incidents and issues. They have to drive the resolution of those incidents and issues on behalf of the customer across all technology, both internal and external to the organization. They have to ensure that the OLAs and UCs underpin the service level targets that have been agreed with the customer and documented in the SLAs.

Service level managers end up operating in the tactical and operational environment whereas they should be focused within the strategic and tactical environment. They have pressure from the customer to deliver, and from the service providers to manage the expectations of the customer. Once again, this is across all the services that the customer consumes.
The service level managers become spread so thin that it is impossible to deliver quality service and meet the needs of the business. There is a more efficient and effective operating model to avoid this situation.

New organizational structure

In order to allow the service level managers to become truly customer facing and undertake the service level management role as intended, there should be the role of the service owner.

The service owner is responsible for ensuring that the OLAs between the internal service providers and the UCs with the external service providers will meet the requirement of the SLAs as being negotiated by the service level managers with the business.

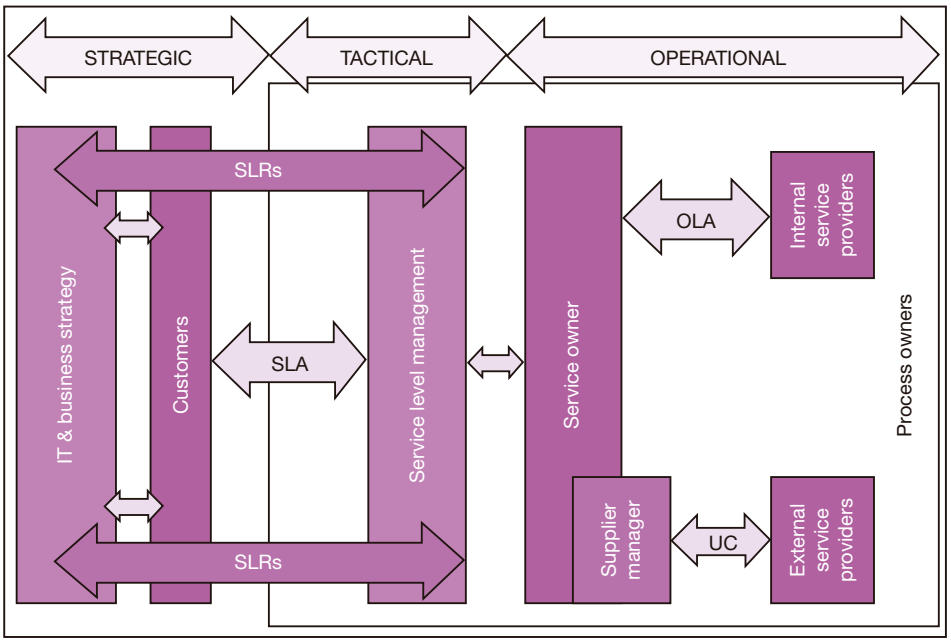

Figure 6 New organizational structure

The position of the service owner within the organization is shown in figure 6. The service owner can operate in the operational environment, relieving service level management of those responsibilities. The service owner is "service" focused, whereas the service level manager is "customer" focused.

Role

The ITIL Continual Service Improvement (CSI) publication describes the role of the service owner as follows. Key responsibilities are:

- service owner for a specified service
- provides input in service attributes such as performance, availability etc.
- represents the service across the organization
- understands the service (components etc.)
- point of escalation (notification) for major incidents
- represents the service in Change Advisory Board (CAB) meetings
- provides input in CSI
- participates in internal service review meetings (within IT)
- works with the CSI manager to identify and prioritize service improvement
- participates in external service review meetings (with the business)
- responsible for ensuring that the service entry in the Service Catalog is accurate and is maintained
- participates in negotiating SLAs and OLAs.

To ensure that a service is managed with a business focus, the definition of a single point of accountability is absolutely essential to provide the level of attention and focus required for its delivery. The service owner is responsible for continual improvement and the management of change affecting the services under their care.

The ITIL Service Design publication describes the service catalog management process and the role of the service catalog manager. In a large organization it may be justified to have someone dedicated to the role of service catalog manager. If this cannot be justified, the service owner could also take on this role and ensure the integrity and quality of data held within the service catalog. Note that there still needs to be a single owner of the service catalog management process but the service owner could undertake the activities required of that process. Therefore this responsibility could be added to those listed above.

The service owner is a primary stakeholder in all of the underlying IT processes which enable or support the service they own[3]. For example:

- **incident management** – involved in, or perhaps chairs the crisis management team for high-priority incidents impacting the service owned
- **problem management** – plays a major role in establishing the root cause and proposed permanent fix for the service being evaluated
- **release and deployment management** – is a key stakeholder in determining whether a new release affecting a service in production is ready for promotion
- **change management** – participates in CAB decisions, approving changes to the services they own
- **asset and configuration management** – ensures that all groups that maintain the data and relationships for the service architecture for which they are responsible, have done so with the level of integrity required
- **service level management** – acts as the single point of contact for a specific service and ensures that the service portfolio and service catalog are accurate in relationship to their service
- **availability and capacity management** – reviews technical monitoring data from a domain perspective to ensure that the needs of the overall service are being met
- **IT service continuity management** – understands and is responsible for ensuring that all elements required to restore their service are known and in place in the event of a crisis
- **IT financial management** – assists in defining and tracking the cost models in relationship to how their service is costed and recovered

The process owner and service owner as partners

Both the process owner and the service owner are required to operate horizontally across the organization and prevent the creation of process silos, or remove the process silos that have become embedded in many organizations. They are partners in the achievement of this. Remember that it is imperative that both these roles are empowered to do their job. They need to be garnered with the accountability, responsibility and the empowerment to undertake the job at hand.

ITIL BEST PRACTICE ASSISTANCE

What was missing from ITIL V2 was a strong focus on the integration and interactions between the processes. The dependencies of the processes on each other and the hand-offs between the processes did not have the emphasis to ensure understanding of just how vital each of these are.

The guidance now contained within ITIL V3 should assist organizations in avoiding the creation of the process silos and also help those who have them to remove them. ITIL

[3] *(OGC, 2007), Continual Service Improvement*

V3 takes a service lifecycle approach as opposed to the process approach in ITIL V2. It identifies where each of the processes fit into each stage of the service lifecycle. It is clearly demonstrated within the five core publications: Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement; that most processes are involved in nearly all of the stages of the service lifecycle. As a result, if processes span the service lifecycle, it should be impossible if adopting the best practice guidance contained in ITIL V3 to create the process silos that we have seen in the past.

Now all we need do is break down the barriers between the stages of the lifecycle, such as that between service design (referred to as "development" in many organizations) and service operations (referred to as "operations" in many organizations) and get the functions that are embedded in these service lifecycle stages working collaboratively together. If we do implement processes that span the service lifecycle then this should be easier to do as everyone involved in each stage of the lifecycle will be a part of one process.

MAKING THE CHANGE

There has to be a fundamental change in mindset to view processes as running across and throughout an organization and the service lifecycle, and that these are single, consistent, repeatable and measurable processes.

In addition to this, organizations really need to get to grips with what constitutes a "service". This may vary from one organization to another but the organization needs to obtain an organizational-wide consensus on this to be able to move forward. There are so many organizations still trying to determine what they mean by a "service" that it is holding them back from determining service ownership and associated roles and responsibilities. Until one can define what is meant by a "service", end-to-end service ownership cannot be established. Once this has been done, service owners can be put in place to own the end-to-end services and ensure that they meet the needs of the business by delivering business value and outcomes that the customer wants.

Single, consistent, repeatable and measurable processes in the custody of process owners will avoid the process silos embedded into functional domains that have been established in the guise of processes.

Everything that has been discussed in this chapter so far will involve organizational change, whether implementing best practice guidance for the first time and putting in place process owners and service owners, or trying to remove the silos that have already been established by implementing these roles. Organizational change is hard because it involves people but this is no reason to ignore it in the hope that it will go away. It won't!

Often we engage consultants to help us make the change, but they cannot make it happen. It cannot be delegated to "outsiders". Change is an inside job. Although outsiders like consultants might provide valuable ideas and input, people inside the organization must accept responsibility for the change. The consultants cannot act as the scapegoats.

People need to be involved in the change so that they feel they have had an input. Communication is crucial. It has to be made totally clear what the organizational change is and why it is being done, how it is going to be achieved and what impact it will have on people.

CONCLUSION

There is a lot more that could be written around services and processes but that was not the intent of this chapter within this publication. The aim was to assist organizations in moving away from a silo mentality.

The silos can be removed through an organizationally-adopted understanding that the processes span the breadth and depth of the organization and do not reside within functional groups. Process ownership is key to ensuring that processes are clearly defined, documented, understood and executed, and that non-compliance to process is addressed and eradicated. The process owner is also responsible for the continual improvement of that process, ensuring that it continues to meet business needs. The process owner should ensure that the process is seen as "our" process as a result of everyone being involved at some level in the design and execution of the process. It also has to be understood that best practice processes are not just "operational" processes but are embedded in every stage of the service lifecycle.
Removal of silos is also a result of a recognition that a service is something that delivers an outcome that is valued by the business. A service comprises technology components, as well as people and processes.

The service owner is the central point of contact for a specific service(s) regardless of where the underlying technologies, functions or processes are located. The service owner represents the service and understands all the components that make up that service. Having an owner of service is just as crucial as having an owner for a process.

Both the process owner and service owner operate horizontally across the organization, avoiding the creation of the vertical silos which prevent the organization from being truly effective and meeting the needs of the business.

I have referred many times in this chapter to ITIL V3 and the best practice guidance contained within. However, I will finish on an air of caution. As with the previous versions of ITIL, it does not contain a silver bullet. It will not resolve all your issues with a sweep of a magic wand. The success for the organization is how it takes the best practice guidance and makes it work for them. For example, it will not tell you what defines a service within your organization. You will need to do that. ITIL will only guide you.

As with any organizational change, it is going to take hard work, dedication and commitment to make it a success. Everyone has to be a part of the journey to ensure buy-in across the organization. This is both from a top down perspective and a bottom up one as well.

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5.3 The Process Management Matrix (PMM), variations in process management

To ensure process- based service management works, organizations need to make clear choices in organizational structure. Wim Hoving and Jan van Bon analyze the "process management drama" and describe how you can use the Process Management Matrix as a tool to make the right division of tasks, responsibilities and authorities for line and process management.

INTRODUCTION

It wasn't until the end of the eighties that the discipline of IT service management received serious attention with the development of the IT Infrastructure Library (ITIL®). Ever since, the discipline has quickly developed from infrastructure management to service management. While this is a general development, there are many different interpretations in service management frameworks. The simple choice for process-based service management, using ITIL, and using process managers, is not sufficient to be a successful service organization. It is impossible to implement ITIL as a blueprint. ITIL is too general, too inconsistent and lacks descriptions for too many aspects. Complementary choices need to be made for many aspects in order to make an organization operate as a successful IT service provider. If these choices are not made when setting up the IT service organization, the resultant departments and processes will be in constant battle over their respective interests. This will ultimately have a negative impact on the service. This paper focuses on a balanced approach to process and line management[1].

In this paper, we will introduce the Process Management Matrix (PMM). This matrix describes the different forms of collaboration between the process organization and the line organization.

THE PROCESS MANAGEMENT DRAMA

In the last decade, more and more IT management organizations have turned to the implementation of IT service management processes. Starting from the ITIL principle, most of them will have described a number of relevant processes. Many organizations also appointed process managers at the same time, either in part-time or full-time positions, and these process managers were allocated responsibilities. Unfortunately, in many cases the appointment of process managers led to problems: employees were confronted with additional managers who had something (or nothing) to say and who interfered with their jobs; and process managers and line managers themselves argued because they felt the other was interfering with their responsibilities. The commotion, emotion and hardening of the situation that resulted from this certainly did not help the easy implementation of process-based working. Besides seared process descriptions, this is one of the most important reasons for the failure of many ITIL projects. *People don't seem to get the matrix to work.*

[1] *This paper is based on a paper by Wim Hoving and Rolf Akker, about the Process Management Matrix, in part one of the Dutch "IT Service Management, best practices".*

In our opinion, a major reason for this chaos is that the introduction of process management, and specifically process managers, didn't receive enough and proper attention. The role of the process manager is created straight from the blueprint, and tasks, responsibilities and authorities are connected to the role without understanding the consequences for the organization as a whole. In particular, the two following issues are not addressed:

1. There are many different ways of granting tasks, responsibilities and authorities to process managers. ITIL does not help out here and the information in recent literature is highly insufficient. The possible variations are not mentioned and the merits of selecting a specific variant are not included.
2. Assigning tasks, responsibilities and authorities to process managers directly influences the position of the line management.

The **Process Management Matrix (PMM)**, as described in this paper, lists some of the major variations that can be chosen for the positioning of these process managers. The associated consequences for the line management are then described for each variant.

What happens if insufficient attention is paid to the organizational structures during the set-up of IT service management processes? Whatever happens, it will always result in a lot of discussion within the organization. The key issue here is that when the responsibilities and authorities are not distributed properly in the management team, individual managers may end up with overlapping responsibility sets, and consequently they may need to manage employees from the same resource pool. This will, inevitably, cause disagreement between the managers involved. On top of that, when these managers are line managers (vertical dimension) as well as process managers (horizontal dimension), the lid is off.
What are the obstacles in practice?

- process managers who feel overpowered by line managers
- line managers who feel overpowered by process managers
- employees who are given contradictory tasks by process managers and line managers
- activities that nobody feels responsible for

THE DRAMA TRIANGLE

Considering the problematic situation we've just described, we can recognize the "drama triangle". We will focus on the three parties in this triangle: line manager, process manager and employee.

LINE ORGANIZATION AND PROCESS ORGANIZATION

The set-up of an IT service management organization needs to resemble its objectives. Organizational studies tend to focus on the so-called hierarchical line organization (the "rake" movement). With such a set-up, the vertical lines are often our main starting point. The question is whether these vertical lines enable us to realize the objectives of our organization. To be able to work with these objectives correctly we often introduce processes. The focus then is on horizontal work processes that aim to deliver something to a satisfied customer in an efficient and effective way. Organizations, usually, are a mix of both management dimensions.

Organization = Line organization + Process organization

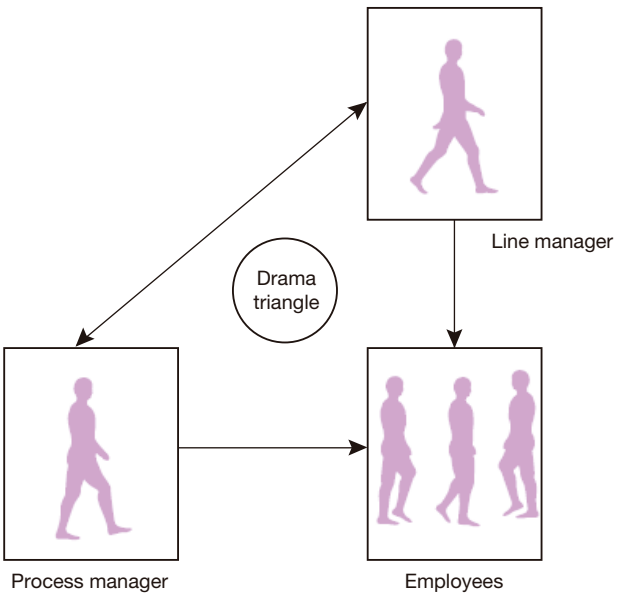

Figure 1 The drama triangle

At this point, we can already point out a contradiction between the vertical line organization and the horizontal processes. How should the line manage the processes? Is that really necessary and, if so, how do you organize this? Within every organization both dimensions are present. The line dimension describes who executes the activities, whilst the process dimension describes how the organization's objectives are realized. This can lead to the conclusion that every organization will have to solve the matrix question.

The process organization

The process organization appears in formalized as well as non-formalized form. The non-formalized process organization is based on a set of informal (collaboration) agreements between departments and employees, with or without official quality requirements. The agreements can be embedded in several local procedures.
The formalized process organization is characterized by a combination of detailed processes that are linked through a process model and focused on the realization of the organization's objectives.

The line organization

The line organization is characterized by the department structure, with departments made up of people with sufficient capacity and quality (capability) to execute specific activities. Apparently, when an organization has several departments, no single department is capable of realizing all of the organization's objectives on its own. IT departments often have a specific task, for example to execute system management tasks, application management tasks or helpdesk tasks. Realizing the organization's objectives requires these specific tasks to be aligned. The tuning and organization of these tasks is done through the set-up of the process organization.

PROCESSES

What exactly are processes and what does ITIL say about them? We will summarize all this in an explanation of how we believe that processes work.

ITIL processes

Within ITIL, a process is defined[2] as: "A structured set of activities designed to accomplish a specific objective".

Several statements from ITIL can now be used to conclude something about the organization set-up:

- The process owner is responsible for the process design. The process owner is also responsible for ensuring that everybody involved in the execution of the process is kept up-to-date on changes that will take place.
- Because processes and their activities exist throughout organizations, they will need to be listed and coordinated by process managers.
- A frequent question when starting the introduction of processes is "do I need to adjust the structure of my organization?" This question originates from the fact that, according to ITIL, the processes need to be managed, while they are executed by more than one department, in an organization with traditional hierarchical structures. Some organizations may already have adopted a matrix organization, but others may have to make a start with this.
- Processes embrace the hierarchy of the organization. Therefore it is important to define the responsibilities that belong to the activities that are executed within each process.

The ITIL V2 Service Support book[3] compares three organizations' forms for the adoption of ITIL processes. See table 1. In this paper we focus on the hierarchical structure and the matrix-organization.

Hierarchical structure		Matrix organization		Self learning teams	
+	Traditional role model	+	Process-oriented structure	+	Continual quality improvement initiated from within
+	Clear lines of communication	+	Flexible	+	Equality of various teams
+	Clear job and task definitions within each department	+	Clear communication model	-	Requires quality awareness
-	Can lead to bureaucracy when procedures are described in too much detail	-	No (or less) clear responsibilities	-	No performance control
-	Hard to position processes in this model	-	No (or less) clear leadership roles (informal leadership)	-	Possible role conflicts
-	Process approach will require a complex structure of communication				

Table 1 Comparison of three organizational structures (Source: OGC)

[2] *ITIL V3 Glossary, 2007*
[3] *OGC, 2002, p.282*

With regard to the organization issue, we can conclude the following:
- ITIL does not indicate a preference for an organization form. ITIL does not care whether it is adopted in a hierarchical model, a matrix model or a networked model.
- ITIL does not answer the question of how tasks, responsibilities and authorities can be adopted within the triangle.

This means that we always have to make our own choice in terms of the organization, as well as in the division of tasks, responsibilities and authorities. This choice needs to be made explicitly and we need to be aware of the consequences.

IT service management processes

When using the term *process*, throughout this paper, we mean a goal-oriented series of activities, performed to serve the customer. There are two core elements in this definition:
1. **Goal-oriented**: indicates that a certain objective should be realized. This objective is defined and related to the customer.
2. **Activities**: processes are sets of activities. Processes do not refer to organization, tooling, etc. Processes only concern activities.

This means that we always need to determine the organizational structures for ourselves when setting the processes up. The same goes for the usage of support tools, which is another question we need to answer when starting to implement processes. In this respect we believe that the IT service management system is realized through three elements:
1. **people** – employees, organization, skills, tasks, responsibilities, etc.
2. **process** – process models (IPW, ISM, ITIL, MOF), procedures
3. **product** – tools, forms, templates, etc.

In our opinion, too often it is only the process element that is considered to be contained within IT service management. This is not only a serious shortcoming, it is also a shortcoming that will lead to problems, as we described above.

Furthermore, we can distinguish the following roles that are involved with processes:
1. **Process owner** – Role that is responsible for a process; the characteristics of "ownership" are: control, ability to regulate, dedication, insight, authority. The process owner can be confronted with several line managers when the process oversteps departmental borders. The process owner often delegates the operational responsibility for the process to a process manager.
2. **Process manager** – Role that is responsible for operational management of the process.
3. **Employee** – Role that is responsible for the execution of process activities.

To serve the readability of this paper, we will only use the process manager and employee role besides the line manager role.

MATRIX ORGANIZATION

Pure process organizations, where activities are managed exclusively by process management, are very rare. In practice, process management exists only in combination with line management, in a so-called matrix organization. In these organizations line and process will both influence the same activities that need to be executed. The complicating factor here is that line management does not need to work from the same responsibilities and priorities as process management. All-in-all a matrix organization is a complex organization form (see figure 2).

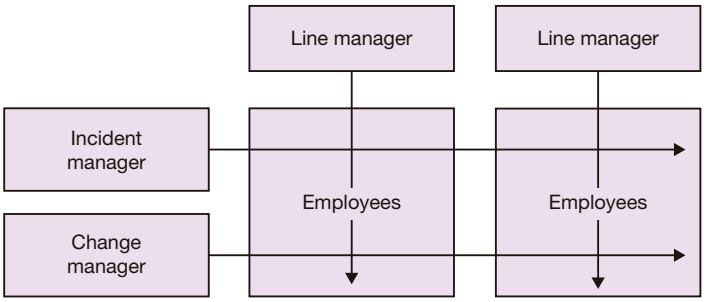

Figure 2 The matrix organization

When tasks, responsibilities and authorities in a matrix organization are not covered properly, we will encounter the following problems:

1. Employees are managed/directed by the line as well as the processes.
2. Employees are told by one manager that the one particular task is very important and by the other that the other task is more important.
3. Alignment between line management and process management is fought over at the expense of the employee.
4. Employees are continually chased.

One thing is for sure, all this will result in deteriorating services and subsequently lead to growing customer dissatisfaction.

THE PROCESS MANAGEMENT MATRIX (PMM)

Organizations have very different characters and objectives. Depending on the character and the objectives, the management model needs to be set-up in such a way that it results in maximum performance.

Differences in character can be diverse, ranging from variances in an organization's size, to its culture, type of product or service, and routes to market. The objectives of organizations can also differ in the same way, varying from profit to non-profit, focused on market penetration and maximum profit margins, to simply creating employment. Depending on the type of organization, a choice will be made on the use of processes for the realization of organization's objectives. The weight of process management in the management system may differ considerably from organization to organization.

In addition to having a clear view on the role of the processes, it is also important how these processes will be managed. It is even more important to understand and accept the consequences of these choices. Depending on the choices made, an organization will be fully or partly managed through processes.

The section below describes various typical variations, starting with a control model in which processes do not exist at all, and ending with a control model that is completely determined through processes. The differences and consequences will be listed for each variant. It is very important to show that there is no *best* position in the PMM. This completely depends upon the conditions, culture, and views of an organization.

PMM1: the pure line organization

The pure line organization is often represented as the familiar rake, a hierarchy scheme. All responsibilities are determined top-down; cross-connections cannot be recognized. The line manager is responsible for controlling his team, which consists of staff or line managers. The performance of the organization is the sum of the performance of the departments. As such, the department's results are a direct responsibility of the department manager.

Despite being a "pure" organization, the situation only *appears* to be simple. Often, in line organizations, interrelationships between teams do exist (temporary or not). Such interrelationships mean that the line manager of the department isn't the only one with authority for the working methods or management of the department. This is often caused by centralization of specific responsibilities - which means that these responsibilities have been taken away from the departments where they were previously managed.

An example of this is the Finance or Human Resource department. Often, these kinds of departments are centralized departments that support all business units or other teams and report directly to the CEO. It is generally accepted that these departments have their own responsibilities and that they do not belong to the line departments.

Another example is the creation of a project team with employees from different departments. This example becomes clearer when the project manager reports to the CEO directly. In this situation, the line manager still has the hierarchical authority for managing and awarding the employee, but will have to give up part of the functional management of the employees, for at least the duration of the project.

The moment an organization decides to appoint responsibilities outside the line, the line organization is no longer solely responsible for the results of the organization.

PMM2: the line organization recognizes some processes

In terms of managing, this organization is still a pure line organization. But in addition to PMM1, an organization now recognizes a flow pattern of activities. By laying down these patterns in a process description, the organization determines which activities must be executed, their order, and the quality criteria with which they must comply. Recognized processes are often cross-departmental. In this variant, the management of the department executing the activity and the staff involved bear exclusive responsibility for correct communication and collaboration.

Describing the processes and the associated activities is often done as part of a project. A lot of ERP projects were done that way. The project is responsible for the process description, the KPIs, the tools support and the initial training of staff. After the project, the project organization is dissolved and the line organization becomes responsible for the correct execution of the agreed procedures.

Not implementing process management with this variant is an explicit choice. Reports are not based on processes, but are limited to team performance reports for customers and line management.

PMM3: tactical process management

In this variant, the organization not only recognizes process-based relationships in its activities, but it also decides to make someone responsible for the set-up and maintenance of the process. The person responsible must also report on the process.

A crucial characteristic of this variant is that someone is appointed to the position of process manager and thereby made responsible for creating and maintaining the process description and the manner in which the process is executed. As a result, the line management is no longer *exclusively* responsible for the management and results of the organization. The added value of the correct execution of well-structured processes and the negative consequences of their failure must be demonstrated not only by the process set-up, but also - and especially - from the reports.

Introducing process management creates a light form of a matrix organization and limits the responsibility of the line management and their authorities and tasks. This is even the case when the role of process manager is connected to the role of a line manager. Whereas line management was responsible for the management of the organization and (either recognized or not recognized) processes with PMM1 and PMM2, in PMM3 they will need to give up part of this responsibility.

Further, PMM3 is characterized by the fact that process management is not actively involved with the execution of the processes, but re-actively involved through reporting on process performance, analyzing these reports, and possibly deciding on the adjustment of the process set-up or underlying tools. Line management is responsible for correct execution of the prescribed processes, and process management is still set at a distance. Despite this position of process management, its influence on the behavior of the organization must not be underestimated; process reporting can show the effectiveness and efficiency of the line management and therefore influence their behavior.

PMM4: operational process control

In this variant the process management, in addition to the responsibilities from variant PMM3, is also tasked to monitor the correct execution of the defined process set-up and address deviations. In this case, “correct” means that the process is executed in conformance with the process description and within the constraints of the agreement with the customer. “Monitoring”, however, does not automatically mean correcting the execution, but is still limited to detecting deviations and, if necessary, escalating this information. This means that the process management must be aware of the manner in which process activities are executed. It must also report (possible) deviations from the prescribed operating method or SLAs to the stakeholders, and inform them of the situation. In this variant, process management isn’t responsible for correcting staff who are involved; process management’s responsibility is limited to informing those hierarchically responsible, on possible irregularities. In addition, employees involved in the execution of process activities need to provide information on the progress of their tasks.

Thus, the responsibilities of process management in this variant are extended, with the monitoring of the process execution and escalating possible irregularities. Possible irregularities that have to be noticed by process management are, for instance, an unauthorized deviation from a prescribed sequences of activities (e.g. deployment before testing), not executing certain activities (e.g. skipping the user acceptance in a change) and not executing activities on time (conform SLA).

The effect of this addition may seem small but will be significant in practice. The position of the process manager goes beyond department borders. An insight across departments and up-to-date information on the progress obtained by active monitoring will provide valuable information for executives and line management (possibly informed through escalation). As

a consequence, executives and line management will listen to suggestions from process management. Assuming that everyone within the organization aims to contribute to its success, nobody will ignore valuable suggestions, if only because they don't have to explain why correct suggestions weren't followed afterwards.

Still it is not always wise for employees and line management to follow the directions of process management. It could very well be that, from a one-sided process perspective, certain suggestions are sensible but that line management needs to make choices between other sensible suggestions, possibly coming from different processes. In this variant, ultimately the employees, possible directed by their managers, will remain responsible for making a choice.

PMM5: operational process direction

In variant PMM5 the organization decides to grant the process managers a mandate of directing resources. The main characteristic of this variant is the transition of decision rights from line to process, and the transition of the escalation responsibility from process to line management. In variant PMM4, the staff or manager decides whether they will follow the suggestion of the process manager. If the process manager does not agree with his choice, they must decide whether they wish to involve higher levels of authority in the conflict, or will accept the decision made.

Typically for PMM5, process management has the task to make a decisive recommendation for the involved employee to follow whenever necessary. If the involved employee feels that it is unwise to act upon the recommendation of process management, the employee needs to escalate this to higher layers in the line organization. If higher layers of authority are not able to convince the process management of their vision, the recommendation of the process management holds. Process management can only be overruled by their principal.

The recommendations of process management are process-based directions. This means these directions need to involve the sequence and pace of activities. Directions can also involve the accuracy of the execution of, for example, registration activities. Furthermore, in this particular variant process management doesn't interfere with directions on technical content.

PMM6: operational and content direction through processes

While less obvious, it is possible to *also* authorize the process management to decide which department - and which individuals in that department - must execute activities. As a result, process management influences content-related aspects. Process management will select the most suitable department and staff member with regard to the situation. In this variant, the line management's role is virtually reduced to *resource management.* The line manager must ensure that the department has adequate resources with sufficient knowledge to execute the activities. In this variant, process management decides on deployment of the resources.

PMM7: full process direction

This is primarily a theoretical variant. It is the last step in allocating more responsibility to the process management. This variant allocates the responsibility for resource management, which in PMM6 still remains with line management, to the process management. The result is "process departments", meaning that all activities that must be executed for a process are executed by resources from those departments.

An example is the creation of an Incident Management department with all knowledge (quantitative and qualitative) to solve all incidents with their own resources. A more likely alternative is in situations of intensive outsourcing , where the Incident Management department still has the first-line knowledge available (quantitative and qualitative), but is responsible for managing the outsourced activities in terms of second and third-line activities.

PMM alternatives

Like any model, the PMM describing seven variations is actually a simplification of reality. In practice, every organization needs to determine in more detail what the tasks, responsibilities and authorities of the different managers are. And there could, of course, be alternative positions in between the seven variations presented here. The seven variations in PMM describe the major, characteristic and distinctive positions.

A choice of a variant for one process does not have to apply for all processes. For example an organization may chose PMM5 for its operational processes, based on the large number of calls that should be managed in a standardized way across the organization, and PMM4 for the tactical processes, where there is generally more time to discuss the order in which activities should be executed.

Main positions in the PMM

The matrix in table 2 summarizes the different variants of the PMM.

PMM position	Line management	Processes recognized	Processes managed	Processes controlled	Who escalates	Who allocates resources	Wo manages resources
1	Y	N	N	N	n/a	Line	Line
2	Y	Y	N	N	n/a	Line	Line
3	Y	Y	Y	N	Process	Line	Line
4	Y	Y	Y	Y	Process	Line	Line
5	Y	Y	Y	Y	Line	Line	Line
6	Y	Y	Y	Y	Line	Process	Line
7	N	Y	Y	Y	n/a	Process	Process

Table 2 The seven main positions in the PMM

It is important to recognize that, following the variants from PMM1 to PMM7, there are systematically more tasks, responsibilities and authorities granted to process management (see figure 3). Simultaneously, this means that the very same tasks, responsibilities and authorities should be removed from line management.

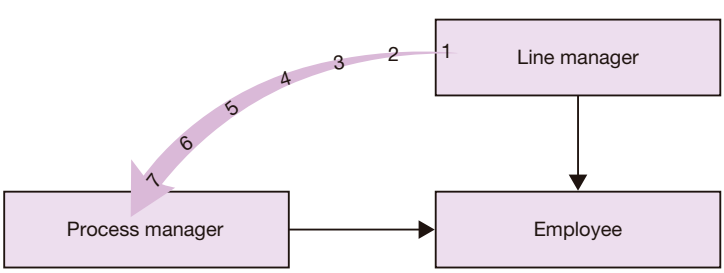

Figure 3 The shift in responsibilities and authorities

Tasks, responsibilities and authorities remain the same for employees with the variations from PMM1 to PMM 7. The main difference for employees is just who manages them. When the line and process management function is properly set-up this shouldn't lead to conflicts as the different managers are only directing based on their own responsibilities.

APPLYING THE PROCESS MANAGEMENT MATRIX (PMM)

Applying the PMM requires insight in the factors that also influence an optimal organizational set-up. Although not always possible, there is a logical sequence for the set-up choices. An insight into the consequences of these choices will help with the successful implementation.

Factors of choice

Determining the most effective or desired position in the PMM is a choice that is influenced by different factors. A few of them are listed below.

Size of the IT organization

Processes ensure the accurate execution of activities and largely determine the communication. Every organization needs accurate execution of activities and proper communication, but for smaller organizations the number of activities and communication lines are limited and therefore easier to structure. When deciding upon a process and process organization, it is advisable to be cautious not to create an overkill situation where you try to organize everything. The short lines in small organizations make it ineffective to grant a lot of tasks, responsibilities and authorities to process manager roles.

Type of delivery

Organizations that deliver products have a different kind of interaction with their customers than organizations that deliver services. Organizations that deliver products have a different balance between their processes. Generally, the change and incident processes are less prominent in product-oriented organizations than in service-oriented organizations.

Management culture

Organizations with a strong hierarchical culture are less suitable to grant a lot of responsibilities to process manager roles at once. A culture where the department manager is heavily involved in the performance of the department doesn't suit the presence of a process manager who has an influence on the line manager's department (strict directions, strict accountability).

Process experience

Organizations that have experience in working with processes have the opportunity to intensify the process manager role. In this situation, line managers are used to not being the only one responsible for the business outcome, and employees are familiar with the effect of direction from several roles.

Hierarchical positioning

Although theoretically unnecessary, in practice it helps when the hierarchical position of process management is comparable to that of line management, with a comparable package of tasks, responsibilities and authorities. E.g., a soldier on guard-duty who needs to stop everybody without valid papers, has the correct tasks, responsibilities and authorities, but it will be inconvenient for the soldier to stop a general. For the general it will be inconvenient to be stopped by a soldier in front of his sergeants. Despite the fact that formally everything

is correct, the situation that occurs is hard to work with. So, when processes and process management play a crucial role in an organization, it is important not to position process management too low in the hierarchy. If process management is to be taken seriously, we prefer the process management role to report to the CIO directly, being part of the CIO's management team.

Roles and functions
The size of the process management role depends on the granted tasks, responsibilities and authorities, and the size of the organization. With bigger organizations the role of a process manager can be so extensive that it fills a full day's job. In this case, the process manager role can be a full-time job. For smaller organizations, the process manager role will be a part-time job.

Order of choice
The time to make a choice is often determined by the situation. However, there is a preferred order to adhere to when possible.

Determining delivery position
Within an organization, the question of what the organization delivers to the customer will get many different answers. Answers vary from PCs, network, infrastructures or information systems, through application management, system administration or help desk, to services.

An important difference between product and service delivery is that generally with service delivery the interaction with the customer is much more intensive. The production chain of the supplier needs to be aligned to this. In addition, the service delivery often has a more continuous character. Both effects mean that it is important to draw-up internal collaborative agreements. For this reason, organizations that deliver services are more in need of processes than organizations that deliver products.

Determining process position
When the delivery position is acknowledged, the choice needs to be made of which role the processes are going to play in realizing the delivery. If there is lots of customer interaction and the delivery of the service requires a lot of successive activities to be executed by many different people and departments, processes will soon show their value. In particular, change and incident management processes may be the first because of the huge numbers of calls that need to be handled under pressure conditions. Also the configuration, problem and production processes can quickly contribute to improved service quality. The importance of processes will be expressed in the accuracy they are worked with, in the way they are supported by service management tools, in the strictness with their implementation and - maybe the most important - in the way process reports are used for guidance in the management and set-up of the organization.

Positioning process management
The more important the processes, then the more important is the position of process management. In cases where processes are expected to make an important contribution to the successful support of the service, than such processes need to be managed properly. In particular, careful consideration needs to be given when determining the suitable package of tasks, responsibilities and authorities for the management of processes in relation to the line management. The position in the organization hierarchy will also be a crucial factor in

successfully working with processes. E.g. in PMM4 and higher, several process managers may be part of the organization's Management Team.

Differentiating between processes
It is not necessary to give all process managers similar responsibilities. A differentiated division of responsibilities can, for example, be based on process characteristics such as the number of call per process, or the time pressure that comes with the handling of calls. Organizations could opt to choose a higher position in the PMM for incident and change management than for configuration management or problem management.

Aligning the process and line management relation
Most important is perhaps the alignment between tasks, responsibilities and authorities of process and line management. The tasks, responsibilities and authorities granted to process management should not be on the line management's list and vice versa. As in most situations with the set-up of process management, line management already exists, and this always implies that line management loses tasks, responsibilities and authorities. Too often this consequence is not acknowledged. While this can be painful, management needs to make a clear and unambiguous choice. The solution is not a vague description that people can interpret any way they like. Again, clear choices are crucial here.

The choices made can be set out in collaboration agreements between line and process management. They need to be detailed in terms of (adjusted) job descriptions of line and process management.

Appointing roles and/or functions
After completing the division of tasks between line and process management, roles need to be appointed. Keep in mind that the role of the old line management is changed. Check whether roles are, and remain, full-time jobs, or whether functions can be combined. Combining line and process management roles is an option, but whether it is actually possible depends on the nature of the local functions. While processes in IT service organizations can be standardized, the organizational structure varies a lot, e.g. depending upon culture, size, and history of the organization. In small organizations we will see many combinations of roles in one employee, simply because of the low numbers of staff. In larger organizations we may find more specified roles and combinations, e.g. an organization with 25 services may have five services managers, and one service manager may also be the line manager of an application development team, or the problem manager may manage one of the operations teams.

Standing by the consequences
Besides influencing management, the choices made obviously also affect employees. As was stated previously, the choices made for process management do not change the task package: all tasks still need to be executed. However, the way these tasks are managed can change. When more management tasks are granted to process management, this means that the employee will be managed more from the position of process management, and consequently line management will loose some of its power. Both process and line management need to stand by the chosen policy to prevent the employee from ending up in an undesirable situation that may be full of tension.

Publish all choices
All people who are involved should be aware of the choices made. Therefore it is highly recommended that all organizational choices are accessible for everyone. This prevents organizations from having to spend their time in useless discussions. A good example is the creation and publishing of a matrix where all process activities are cross-referenced with all functions or roles. For each activity at least one role should be Responsible, Accountable, Consulted or Informed (RACI).

Evaluating and collaborating
It is recommended that the collaboration between line and process management should be evaluated frequently, with adjustments made where necessary. When the process and line reports are properly set-up, they can make important contributions in determining the quality of the collaboration. Changes to the set-up of the collaboration between line and process management can be caused by changing delivery positions: organizations often develop from product suppliers to service suppliers, and this may well, in turn, have effects upon the position of process management. Changes may also be driven by experience with process management: after some time, the organization may be capable of introducing a more intensive form of process management. Alternatively, choices made at the time may require adjustment because they simply didn't turn out to be most effective.

Consequence of choices

Learn to escalate
With the appointment of process management next to line management there are two different management structures present in an organization. In the classic line organization, vertical escalation (informing a higher layer in one of the management structures, as opposed to horizontal "knowledge" escalation) is easily seen as crossing the hierarchy, which has a negative connotation. Vertical escalation can be a useful mechanism for extra verification when necessary. If employees or managers feel that a decision will result in damage to the organization, we believe they are obligated to escalate the issue.

In the matrix organization there are two management structures that make choices from their own position of responsibility, so now there are two routes for vertical escalation. This complexity increases the chance that one of the management structures is missing the required overview, which will lead to making the wrong choices.

Roles
In many organizations the role of process manager will not be a full-time job. As such, this is nothing special: the same goes for line manager roles. Often, the solution is found in granting combinations of executive tasks to one manager or making one manager responsible for several departments.

The same solutions can be chosen when constructing process management roles. However, there is one relevant distinction. A common characteristic of many processes is that they cross department borders, so that several departments are involved with the execution of a process. By connecting the process manager role to the role of a line manager, a situation can develop where the one *line* manager appears to interfere with the work of the other *line* manager - which can lead to conflicts. A combination regularly used is to combine the roles of service desk manager (line) and incident manager (process). However, when the responsibility of the incident manager then requires corrective action to be taken against,

for example, the system administration department, this can lead to a conflict as the system administration department may feel that they being managed by the service desk manager. Combinations like these should be avoided where possible.

Logically, the combination of roles is often based on where they overlap. Therefore, combining the roles of incident manager and service desk manager may seem logical but at the same time may create a situation where managers control themselves.

Output responsibility
The setting up of process management means that line management is no longer exclusively responsible for the organization's output. As a consequence, process management contributes to the realization of this output and should (also) be accountable for it. This should be made explicit in the job description. In addition, the way a process contributes to the organization's output should be indicated in clear process reports.

CONCLUSION

Every organization should choose the set-up structure that is most effective for realizing their objectives. In particular, processes can provide essential contributions to the realization of the business outcomes for service providers.

The introduction of process management in an organization causes a complex but also desirable matrix organization. To gain control of this matrix, explicit choices need to be made. A frequently jammed matrix is often not caused by explicit choices but by the lack of choices. Not insisting on certain choices creates a situation where line and process managers are made to be each other's natural opponents. By definition, the set-up of process manager roles has consequences for the position of line managers.

The PMM position chosen by an organization totally depends on the conditions. Good and bad only have a meaning in the way the choice supports the organization's objectives.

The PMM has been used in practice over the past five years and it turned out to be a powerful instrument to explain the possibilities and consequences with the (re) set-up of organizations. The application of the PMM has made it possible to have structured discussions that improved the transparency and consistency of decision processes.

The development of the PMM is a continuous process, based on new experiences. With this publication we hope to receive useful comments from the market that will lead to further improvements in the way the PMM can be used in practice.

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5.4 Improving the IT organization using the team model (MOF)

Most improvements to IT service delivery using the ITIL framework take several years before an acceptable level of maturity, reliability and availability is achieved. Marcel Burghoorn, Paul Leenards and Hans Vriends describe how you can bring about IT service delivery improvement within a year by using the MOF Team Model as guidance. A key success factor here is a well structured IT organization.

INTRODUCTION

Changes in the technology context that affect IT organizations

Technology itself plays a key part in the way IT is organized and how IT organizations are developing themselves from being purely technology-oriented towards service-oriented organizations. When the personal computer was introduced in the 20th century, the need arose for end-user support and, therefore, for service desks and a multi-tiered support organization. Nowadays front-offices tend to be set-up to support customers, but back-offices are mostly organized in stovepipes with all their own technology expertise. Employees working in these back-offices are responsible for running their part of the back-end infrastructure, but they also participate in projects and resolve incidents that are related to their own stovepipe. There are some key changes in technology that have affected IT organizations in recent years.

Convergence of technology

Network management, server management and management of the telephony infrastructure were, for decades, different disciplines that had very clear boundaries. However, as a result of the convergence of technology these boundaries have become blurred. Telephony is provisioned via the same infrastructure as office automation and uses the same network infrastructure. Network components look the same as server components and use the same operating system.

Standardization and bandwidth

The number of different operating systems and databases used by organizations has reduced over the last decade or so. This has been caused by cost-cutting operations and led to a few dominant platforms in the market. The abundance of network bandwidth has made it possible to centralize the IT infrastructure in a limited number of data centers and, therefore, standardization of the IT infrastructure was a necessary precondition for successful management of this infrastructure. Through this development, the IT organizations evolved from small local IT organizations with their own specific skills to larger IT organizations that require a more professional structure.

Management tooling

Nearly every component in the IT infrastructure can now be managed remotely. Traditionally every stovepipe had its own system management tools but developments in recent years

mean that all parts of the infrastructure can be coupled to the same console. This has had a significant effect on how monitoring and control activities are organized in back-offices, often because the management tools offer the opportunity to monitor end-to-end services.

Developments in the Dutch market

Most of the case study implementations used in this article were undertaken in the Netherlands. We shall now look at the context of IT usage in the Netherlands. In the Dutch market outsourcing is a growing business. All multinationals with headquarters in the Netherlands have either outsourced their IT or are planning to do so in the next few years. Most of the large companies are busy with centralization and consolidation of their IT infrastructure. By doing this, economies of scale are realized, mostly at the national level. There is an increasing need for compliancy. The most important reasons for this are:

- new legislation from both the Dutch government and the EU
- international relations forcing Dutch companies to comply to US legislation
- emerging ISO-standards like ISO20000.

Because of the long history in the use of ITIL® as a process framework, the maturity of IT processes in the Dutch market is relatively high. The number of certified ITIL service managers is also high. Most companies already have basic IT processes like incident and change management implemented.

What is the MOF Team Model

The Microsoft Operations Framework is created by Microsoft. It is based on ITIL best practice, combined with Microsoft's own experience from application development and project management as described in the Microsoft Solutions Framework (MSF), plus the best practices of the day-to-day operations their own IT group performed. The best practices from ITIL were mostly adopted in the MOF Process Model. In this model the ITIL processes are structured in four quadrants as is shown in figure 1.

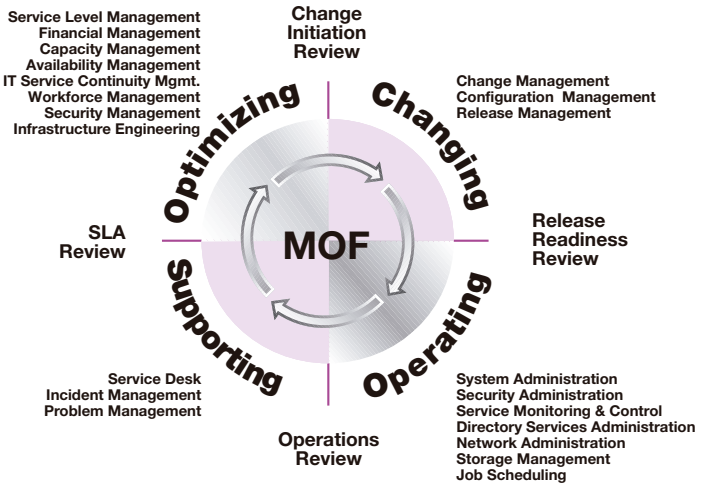

Figure 1 The MOF Process Model

The main principle of the team model is to separate conflicting tasks and responsibilities. By separating, for example, reactive ad-hoc tasks from proactive repetitive tasks, it will ensure that the latter tasks will get done. This separation of tasks is accomplished by creating virtual teams and adding resources to these teams. This is done so that staff are not assigned to more than one team at any one time.
There are seven teams in the MOF Team Model:

Team	Tasks and responsibilities	Quality Goal
Release	Tracks changes and lessons learned in a corporate knowledge base. Tracks inventory and changes in a configuration management database (CMDB). Acts as liaison between the change development team and the operations groups; it encompasses the ITIL disciplines of configuration management and software control and distribution.	Controlled release and change management, and accurate inventory tracking of all IT services and systems
Infrastructure	Defines physical environment standards. Manages physical assets. Maintains the IT infrastructure and oversees IT architecture evolution. Coordinates building and office moves, expansions and acquisitions, and physical environment changes such as wiring, lab space, and user connectivity.	Efficient management of physical environments and infrastructure tools
Support	Provides technical support for internal and external customers, resolving incidents and problems using highly automated tools and knowledge based systems. Provides production support for line-of-business (LOB) applications. Gives feedback to the development and design team.	Quality customer support and a service culture
Operations	Ensures that daily, routine tasks are performed reliably within specific technology areas and production systems (messaging, system administration, etc.). Performs scheduled and repeatable processes such as data backup, archiving and storage, output management, system monitoring and event log management, and file and print server management.	Predictable, repeatable, and automated day-to-day system management
Partner	Defines and manages partnerships in a mutually beneficial and cost-effective manner. Includes both the internal manager responsible for the relationships with external parties, and those parties themselves.	Protected corporate assets, controlled authorization to systems and information, and proactive planning for emergency response
Security	Ensures data confidentiality, data integrity, and data availability. Influences business policies, such as defining exit procedures to follow when an employee leaves the company.	Efficient and cost-effective, mutually beneficial relationships with service and supply partners

Team	Tasks and responsibilities	Quality Goal
Service	Ensures that all of the IT services being provided to customers are aligned with the customers' need for them. Maintains a working relationship with customers, understanding their need for IT services, and managing the introduction of new services, service improvements, and (eventually) service reductions and retirements.	Delivery of a portfolio of business-aligned IT services

Table 1 The seven teams of MOF Team Model

How we use the team model

If the objective is to make an IT-department more effective (better services, more agility) and efficient (better processes, lower cost) it is very important to look at the organization first. The most important reason for this is that, frequently, organizational changes cannot be done overnight, but they do take time. In our experience a lot of inefficiencies in an IT department are caused by the way IT is organized. Employees have to spread their attention over a number of roles and therefore tend to prioritize their time on what is important for the organization.

Division of responsibilities

We use the team model to make a clear division in responsibilities. The seven teams that the team model uses are in line with requirements from both ISO standards and compliancy legislation. The division is necessary to give the teams focus on their own objectives, as mentioned in section "What is the MOF Team Model". Many IT departments tend to be organized along the lines of technology. At the employee level the consequence of this is that most of the IT employees have different roles in the IT department that cause conflicts. If employees have to choose between resolving incidents (support team) and pro-active server management (operations team) most of them tend to choose the first. The pressure to do reactive tasks first is difficult to resist for most employees. Therefore it is better to avoid these kinds of choices by organizing differently. Some of the divisions of responsibilities are also enforced by compliance legislation, for example a division between employees undertaking internal audits in line with security policies (security team) and those employees that are involved in day-to-day security management (operations team).
For efficient delivery of IT projects the division between support and operations on the one hand, and project oriented work (release team) on the other is also essential. This is important for ensuring that service levels are met by carrying out efficient IT management and also that projects are delivered on time. As work for the agreed IT services is planned first, the risk of losing stability in an IT environment because important business projects require a lot of resources, is avoided. On the other hand, work on a project is planned better and therefore more predictable because the appropriate employee resources are guaranteed for the duration of the project.

Accountability

At the end of the 20th century most IT departments were organized on the basis of technology. When they became more process oriented, a lot of IT departments chose to become matrix organizations, where line managers were typically accountable for the different platforms and the employees working on those platforms, and the process managers were only accountable for the processes. These departments were directed from two different perspectives. A major benefit of this development was that most (especially) back-office employees became aware of the fact that customer orientation was important.

The downside to these matrix organizations was that is was very difficult to make managers accountable because they did not have complete authority over all of the means they needed to accomplish their objectives.
The team model is useful to avoid these types of conflict by making the manager of the support team not only accountable for the employees but also for the processes that logically belong to the team cluster.

A central concept of the model is that the manager of the support team becomes accountable for the helpdesk, the incident management process, the problem management and the registration of all CI's that are in the offices. The manager in the operation team becomes accountable for all processes in the operating quadrant and the registration of all the CI's that are "behind the wall". Technical processes of the optimizing quadrant (service continuity, capacity management and availability management) become part of the infrastructure team. The manager release is responsible for the release management process. The manager security becomes responsible for security management (setting the policies) but not for security administration (working according to the policies). Ultimately the manager service becomes responsible for the service level management process.
The only exception in practice is that the manager of the release team is not made responsible for the change management process. The interest this manager has in bringing changes quickly through to production is simply too great.

Quality goals
The third aspect of the team model is the definition of quality goals. By using the team model, the number of different goals that employees have to live up to is limited. This is important because most employees tend to realize objectives that are easily feasible. The consequence is that difficult objectives are avoided. The team model illustrates to employees that achieving an important team objective is only feasible through cooperation with their colleagues.
In implementations it is important to align the quality goals of the team model with the overall mission and vision of the IT department. This integrates the team model objectives within the overall strategy of the IT department. In practice the team model objectives prove to be generic enough to fit in with every kind of business strategy.

Knowledge sharing
Knowing and trusting each other are very important aspects for working in a successful team. For this reason it is essential that the support and the operations team are brought together into a limited number of physical locations. If rooms are equipped for meetings then the quality of this work increases and the knowledge transfer from more experienced employees to juniors quickens.
In a traditional three-tier support model, employees have the tendency to complain about the quality of the tier beneath them. So the second tier support complain about the helpdesk and the third tier support complains about the lack of knowledge of the second tier.

BENEFITS OF THE APPROACH

General benefits

There are a number of general benefits that have been realized in our implementations in the past. These benefits occurred in all of the projects and are related to both the approach and the chosen organizational model:

- There is a clear distinction between ad hoc urgent activities (support) and repetitive day-to-day tasks (operations). Before the implementation, the non-urgent operating tasks were not executed, there was never time or attention. The supporting tasks, such as incidents and service requests, would take up most of the time and energy of the IT staff. And if there was some time available, then there would be a project requiring some resources. By separating the operational tasks from the support tasks, and by consistently reserving resources, the model helps to ensure that the operational tasks were carried out. Because the operational tasks, such as monitoring and maintenance, were undertaken this meant that possible incidents were prevented from happening. Thus after some time there was less need to maintain a large support staff and these resources could be freed for projects.
- The tension between the organizational hierarchy and process responsibilities is resolved by making the team leaders responsible for their own processes. In many ITIL process framework implementations the organizational hierarchy remains intact and a second process hierarchy is put in place (matrix organization). The effect is that, in many cases, the process managers or owners do not have a mandate to assign resources, or to escalate if this is needed. By implementing the MOF team model, the organizational hierarchy is changed so that it aligns line management with process management responsibilities. The result is that the team manager is responsible for his staff and for the quality goals of the team.
- There is organizational control through a reporting structure based on both performance and maturity of the processes. This structure provides guidance on the constant improvement of the processes' performance and maturity in line with the business forecast and expectations. Because the approach is more focused on the outcomes of the ITIL/MOF processes than on the inputs of the processes, a reporting structure is needed early in the implementation to be able to react to the outcomes. This reporting structure, or management system, is created as an overarching structure over all the individual processes. With this reporting structure, processes do not have to be implemented perfectly (100%) before results will be visible. Because of the reports on outcome (the results of the processes) it generates the input for the teams to discuss possible improvements.

Benefits realized in cases

In this section several case study examples are used which were previously described in the Dutch version of ”IT Service Management global best practices”. These are cases were the MOF team model was used to create a new IT organization, as in the example of Deloitte, or to improve an existing IT organization, as in the case of the Dutch Railways and Bouwfonds. There is a short description of the background to each case study before the realized benefits are described.

Deloitte

In 2003 the new datacenter of Deloitte Netherlands was built to enable a more centralized IT infrastructure and support system for the more than 30 local offices. The new datacenter would also enable a portal solution for the customers of Deloitte to outsource some of their administration. Our project entails the creation of a managed infrastructure through the use of architecture standards as well as the implementation of the new IT service organization based on MOF.

The following results were achieved during the implementation of MOF in the Deloitte ICT Services organization:

- Due to centralization and efficiency in operations, the number of employees decreased from 200 to 150, which was the target in the ICT Services business plan.
- Due to the centralization, the number of infrastructure and office automation servers decreased from 400 to 250.
- There was a controlled implementation of changes in relation to the production environment, achieved by means of using the Release Readiness Review in combination with a separated preproduction environment.
- Clearly documented procedures and tasks, leading to consistent execution of daily operations and ensuring that the teams do not become dependent on individual employees.
- Smooth cooperation with the service desk on monitoring events that could potentially become breaches in the quality of service.
- Ability to plan, schedule, and automate all activities, thereby optimizing the use of systems and resources.
- In May of 2004, Deloitte ICT Services earned its ISO 9001-2000 certification. In December of 2003, Deloitte ICT Services earned its BS7799 certification.
- The maturity in processes grew on average from SPICE (Software Process Improvement and Capability dEtermination) level 1 to SPICE level 3 in the MOF Operating Quadrant and Changing Quadrant in nine months. In the Supporting Quadrant, the maturity grew on average from SPICE level 2 to SPICE level 3 in five months.
- Deloitte Portal Services was introduced on schedule in December of 2003, nine months after the start of the project. The objective of Deloitte Portal Services was to acquire 1,450 new customers in 2004. At the end of May of 2004, the number of new customers was already 500 percent above the target for the entire year.

Bouwfonds

At Bouwfonds, a financial services organization in the Netherlands, the IT department was going through changes after the merger of two IT departments: IT operations and IT staff (projects, IT policies and IT strategy). The new team for Infrastructure Services needed to transform from a reactive to a proactive attitude. Bouwfonds decided to use the MOF guidance around operations management as the basis for this transformation.

The MOF implementation project made a significant contribution to improving the overall service levels for the customer. Figure 2 shows the number of client-related incidents as well as those for server or back office-related incidents. Most of the 800 to 1000 client-related incidents per month were service requests, ranging from password resets to requests for new laptops. The server-related incidents had an effect on multiple users at the same time and made applications unavailable to them.

During the MOF implementation project, which took three months to complete, the number of server related incidents started to decrease significantly. Based on these numbers there is a correlation between the implementation of MOF and a decrease in the number of incidents (in this case with about 100 per month: equating to 54%) at the server side of the ICT infrastructure.

The number of people working on support activities has decreased in the year following the MOF project. The number of people working on releases has also decreased, even though the total number of changes has stayed more or less the same (the number of supported workspaces decreased due to an organizational change within the company). Only the number of people in operations has increased from around one FTE to about five FTE. This

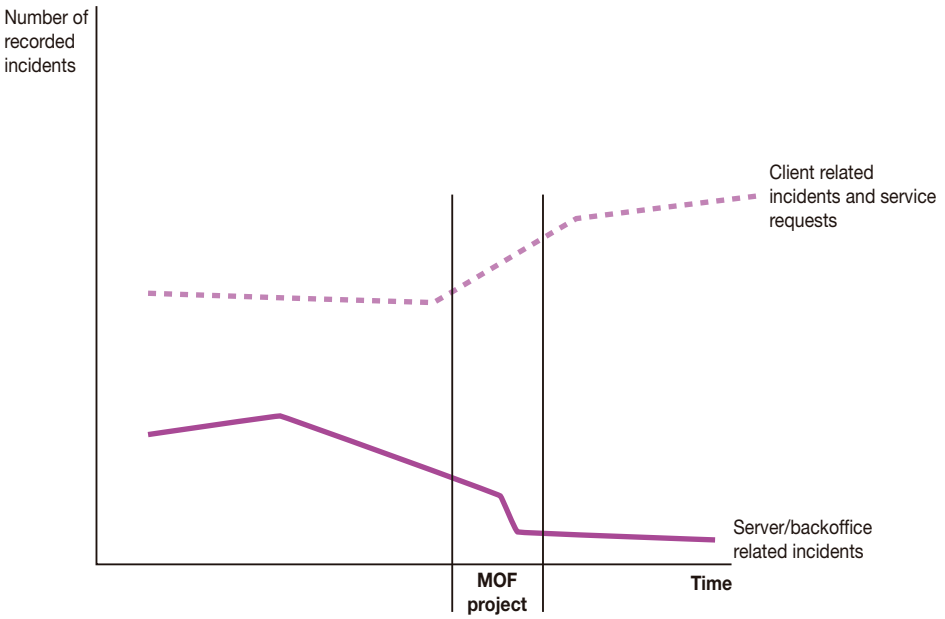

Figure 2 Absolute number of reported incidents

means that with a slightly decreased number of staff (from 18 to 16,5 FTE) the same amount of changes and service requests can be handled.

Dutch Railways

The situation at the Dutch Railways (Nederlandse Spoorwegen - NS) differed from the previous two cases in the sense that most of the management of the IT infrastructure is outsourced to multiple suppliers. In this situation the upgrade of the Operating System (OS) of the workstations and the back-office was needed. With this upgrade the service management organization, specifically the demand organization at the NS, needed to be improved and transformed. ITIL and MOF were used in combination to help guide the transformation of the IT organization.

In the case of the Dutch Railways, the benefits of using the MOF team model didn't lead to an improved performance of the IT services. With the IT services outsourced to external providers, the performance improvement was not in scope. However, it resulted in a better understanding of IT governance and on how to manage the external suppliers. In some sense using the team model helped the IT staff to get a better grip on what is needed and who is responsible. In combination with the NS-specific model on outsourcing (based on service layers), the MOF team model provided guidance on helping to decide what the responsibilities were of the central IT organization in comparison to those of the external service providers.

OUTLINE OF THE IMPLEMENTATION APPROACH

In this section the approach to the implementation is presented in the form of a generic case study. This approach is based on our experiences at several organizations in implementing the MOF Team Model.

Program structure

The overall structure used to implement MOF is based on the principle that the process improvements will follow on from the changes made in the IT organization. As discussed in the section "How we use the team model" most IT departments are not well organized. In order to reach the improvement goals, a vision of the new organization firstly needs to be established and communicated. This is done in the form of a organizational blueprint using the MOF team model for guidance. The first steps to create this blueprint are taken in a number of workshops that look at business IT alignment and design considerations. Based on the progress made in these first steps, a program can start containing a number of parallel projects intended to implement the process clusters or MOF teams. This is illustrated in figure 2.

The projects are all based on the same principles:

- A short design phase to align the current activities with the best practices theory. In workshops with the involved staff, the process principles and quality goals of the teams are shared and approved. This phase should take about two to four weeks.
- An implementation phase of about three months where the MOF consultant takes the lead. Working with the assigned process manager, the phase is shaped around the reported outcomes of the processes. Therefore this phase is as much about reporting, planning and control as it is on creating the right work instructions and procedures.
- At the end of the implementation phase the MOF consultant hands over the responsibility for the process to the process manager. This is done when the process manager feels comfortable with being in control and is recognized as such by their manager. The consultant shifts to a coaching role and the organization now assumes control.
- The operation phase ends with the process managers presenting their plans to manage, control and improve their processes. These process improvement plans are the basis for the continuous improvement phase or production phase, signaling the end of the program.

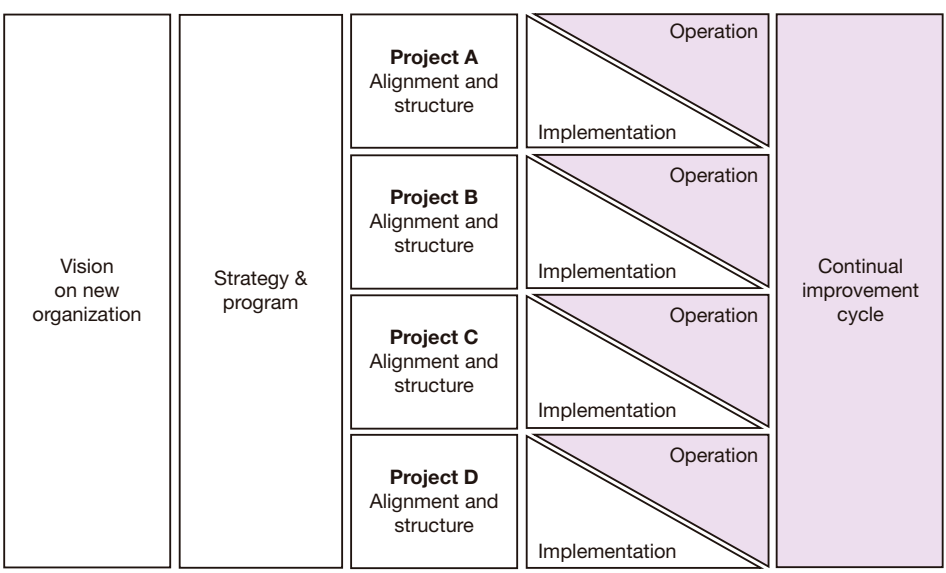

Figure 3 The program structure

Generic case: starting with the team model, creation of a blueprint

Senior management and team leaders organize a kick-off meeting for the implementation of the MOF Team Model for the IT department. Before this kick-off meeting, a workshop with representatives of the business is organized to present the business vision and strategy and what is needed from IT: the business-alignment workshop. During this workshop, a group of managers, team leaders, and senior specialists are enlisted to participate in the project and to become the process owners and managers in the new organizational structure. Team leaders responsible for operations participate in this workshop and explain their current way of working: many tasks are performed, but there is a lack of process structure and knowledge sharing.

At the kick-off, the CIO explains the need for changes in the organization by showing that strong division of responsibilities produces better results in management of the infrastructure. The CIO gives examples that illustrate the relationship between issues addressed during the business alignment workshop and issues caused by the current organizational structure. The presentation has three components:

- team model theory
- the company's vision and strategy objectives, and the project team's perception of the changes needed in the organization
- design considerations and guidelines to be used as the basis for the organizational blueprint

The purpose of the presentation is to create a shared vision with senior management to use in establishing the guidelines for the project. In order to make the implementation of the organizational blueprint a success, it is important to achieve a clear understanding of these guidelines because they will be used to explain the organizational change to the employees. The presentation ends with a slide in which the team model is mapped to the current organization. Following this presentation a discussion on the design considerations of the new organization takes place.

Design of the blueprint

On the basis of the design considerations, an organizational blueprint is produced during several interactive sessions with the senior management of the IT department. Because the blueprint is built one step at a time, it results in a shared vision. After the blueprint is presented, the IT department decides to merge all *release- and project-oriented* departments into a single department named Release. This department is designated to be responsible for innovations, proof of concepts, and projects. The design of the *support* and *operations* groups is created with the managers of these groups and senior management. The *Infrastructure or Architecture* group starts as a very small team around the lead architect. The more *staff-oriented* groups (*security or quality* and *partner*) are decreased in size and integrated. A new group, the *Services* group is created with the service level manager and the change manager as its core. Figure 6 shows an example of the organizational blueprint.

In the end, the blueprint design process includes the following:

- a presentation explaining the reasoning behind the blueprint, and its relationship to both the company vision and the targets of the IT department
- an organizational outline written in a hierarchical structure that includes numbers and names of employees
- all roles in the hierarchy, with descriptions of their tasks and responsibilities based on the content of the team model

Blueprint implementation

The employees of the IT department are informed of the project's goals and implications during three sets of meetings that are held for all employees. The first meetings are awareness sessions that explain the reasoning behind MOF and its relationship to the company's vision and goals. Secondly, every employee attends one of the MOF training sessions. In this one-day training, the focus is on the importance of working with processes derived from MOF. Thirdly, in a meeting of the entire IT department, the overall layout of the new organization is presented. Team managers have additional planning workshops covering the essence of the team model and its consequences in terms of the planning and teamwork for which they are responsible. These workshops produce good results; the team managers begin to understand each other's problems and discover immediate solutions.

Some of the process managers (either team managers or coordinators) are appointed to their roles prior to the organization-wide meeting for pragmatic reasons: They become familiar with their new roles in advance and they are extremely motivated to deliver good results in the process-design phase of the project.

The role descriptions are also integrated into the company-wide HR (Human Resource) model. By integrating the roles, the results become institutionalized throughout the entire organization.

Generic case: process cluster or team implementation

As described above, the process cluster or team implementation project consists of four phases: design, implementation, operation and production. In figure 4 these four stages are shown, together with the deliverables involved.

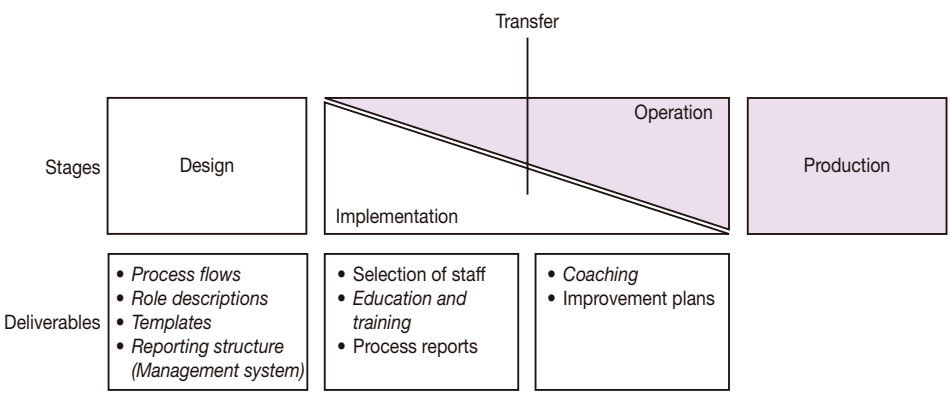

Figure 4 The four stages of the process cluster implementation project
(The deliverables in italic are the responsibility of the MOF consultant or project manager. The other products are all the responsibility of the team leader or process manager.)

Design phase

During the design phase, a MOF consultant works closely with the process managers and designated process owners. In this phase the consultant has responsibility for designing the MOF processes and aligning them with the organization. It is also the consultant's responsibility to ensure that process managers and process owners learn on a theoretical basis how each of their processes should work.

As part of their contribution to the design phase, the process managers demonstrate or explain their current best practices, which are then aligned with and integrated into the MOF processes.

To ensure that all responsible parties agree with the design, the consultant organizes a formal handoff to the next phase. In a session with all parties involved, the process managers present their designs and considerations and explain the way they intend to plan the implementation. This session ensures that the process managers take responsibility for the processes they are going to manage.

Implementation phase

During the implementation phase, real-life situations in the existing organization are evaluated as examples for improvement. This approach means that instead of templates and procedures being produced in the original design, they are created based on real needs in the daily operation of the IT department. In order to find these examples and to give management a higher level of control, a weekly operating report is introduced.

These weekly reports, in combination with monthly operations review meetings, show the people involved where progress can be made and how to apply the process model. They also show the subsequent improvement of service levels and management control. The effect of this approach is that the IT organization starts to be more proactive and assertive.

Employees with new roles are asked to participate in the project and to record their daily procedures. In order to ensure that all roles are clear and that all employees are trained in their new way of working, the IT department organizes information sessions and workshops delivered by the process managers and the MOF consultant.

It is the responsibility of the MOF consultant to coach the process managers in their new positions and roles. When focusing on the operating quadrant, therefore, the MOF consultant has to coach a group of process managers, not only in their process roles but also in their line management roles. This method of implementation creates an environment in which the employees take ownership of the new ways of working.

The implementation occurs in two directions:

- bottom-up, based on the technology (products), working out the details of the frequent tasks related to the specific products – for example, Microsoft Windows Server™ 2003
- top-down, in line with the design strategy; through the structure of the ITIL or MOF processes, creating the details for required policies and procedures

During the implementation, both directions came together, resulting in a set of policies and procedures sufficient for running a smooth operation.

When the project starts, employees are not used to planning their activities; this needs to be addressed. In order to ensure that all activities are planned and synchronized with other processes, planning workshops are implemented for all employees: support staff (ad-hoc activities), release staff (planned activities), and operations staff (repetitive activities). These workshops convince process managers to consider the workload of the entire organization when planning their group's activities and roles, with the ultimate goal of service quality.

Consolidation of the results

To ensure that the organization can be agile in following its business demands, the MOF project continues to implement a constant quality improvement process, controlled within the organization and audited against criteria of, for instance, ISO20000, ISO 9001 and ISO27001. Because ISO and MOF build on the concept of constant quality improvement, a single quality system for the IT department is created.

Within this quality system is a strong division of responsibilities based on the MOF Team Model. The ISO audits are successful, indicating that the division of responsibilities is appropriate.

MEASURING PROGRESS

During the implementation and production phases of the implementation program, progress is measured based on the desired outcome of the IT service delivery. The desired outcome is derived from the business requirement and is specified in the business alignment workshop. Measuring the actual outcome is difficult, since the contribution of IT to business results is often indirect. Also, it is very much about business perception of the IT performance. It is easier to measure the outputs or performance of the IT department and relate these to the business results.

Output measurement

The contribution of a process to the overall performance of the IT organization can be presented in Key Performance Indicators (KPIs). In the design workshop of the process these KPIs are identified and the goal or norm of the KPI is set in relation to the business requirements and desired outcomes. The number of KPI's should be limited to about three and no more than five. The norm of the KPI should be set above the current level and within reach after a couple of months. For instance the maximum time to resolve an incident should be lower than the current maximum (based on monthly reporting) and it should attempt to find ways to control and lower the resolution time for the support group. Also, the KPIs should be measurable and it should take little (but some) effort to report on them.
Using the KPIs the process managers have to create a monthly report on the status. This report should show the actual KPI in relation to the past results. It should address the reasons for the performance and should come up with possible improvements where necessary. This report will be discussed with the MOF consultant in the implementation and operation phases to improve measurement and reports. The report should be shared with all other process managers, higher management and staff.
The reports are discussed in the review meetings that should be put into place. MOF describes several review meetings that are either production-based (continual) or release-based (projects). There are two pre-described production-based reviews: the operations reviews and the service level reviews. The operations review takes place on a monthly basis. In this review the performance reports produced by the operational process managers are discussed and possible improvements are indentified. The outcome of the operations review is used as input for the service level review. In this review the customer, i.e. the business, will discuss their perception of the performance with the IT organization. Both reviews will lead to possible improvements, in performance as well as in measurements.

Maturity measurement

Traditionally the progress of an ITIL implementation is measured in terms of maturity. The problem with this type of measurement is that the maturity scale (levels 1 to 5) doesn't help in showing progress during the implementation project. To report every month that the maturity is still at level two does not help to show that the implementation is moving forward. These kinds of levels are not discriminating enough. In MOF implementation projects a different type of reporting on maturity was used. In the implementation, when the IT department was growing in maturity, the project was controlled by process maturity in order to bring the entire organization to a consistent level of operations, with measures taken of the areas for improvement. This reporting was based on a checklist of maturity components and how many of these components were in place and actually used by the organization. Instead of only showing the level of maturity, the reports showed how much was accomplished on any level and gave a percentage of the maximum maturity that could be reached. This made it possible to report on the maturity components of a higher maturity level: for instance, quantitative management is a level four requirement, but many components (measuring

and reporting) were already used early on in the implementation. This reporting also made it possible to show progress on a monthly basis, which is very important in terms of psychology.

HOW THE ORGANIZATION DIFFERS FROM A TRADITIONAL ORGANIZATION

This section summarizes the differences between a traditional IT department and a MOF team model-based IT department. It addresses the three main differences between those two types of organization.

Planning of resources

In all implementations strict guidelines are used for the planning of work for employees. By creating a strong division between reactive work (support team), proactive work (operating team) and planned work (release team) the availability of employees on a daily basis can be better guaranteed than in a normal setting.

When it comes to the planning of employees, the support and operating activities are planned first. The number of employees required for support activities is based on historical data. The number of FTEs needed is a key factor in ensuring that all roles in the support team are fulfilled on a consistent basis.

The operating team numbers are planned based on the amount of pro-active tasks that have to be performed. Following on from this, the number of employees who are available for projects and changes is calculated. This method helps IT departments to plan more effectively for their employees and prevents the department from turning down work (particularly of a proactive type) because employees are busy doing other things.

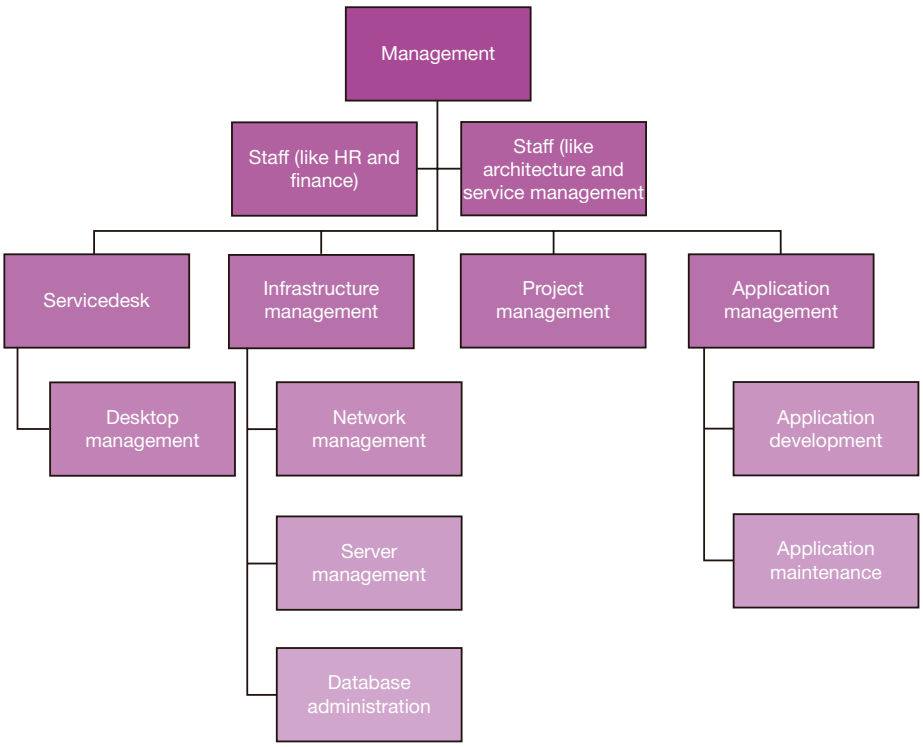

Figure 5 Normal outline of an IT organization

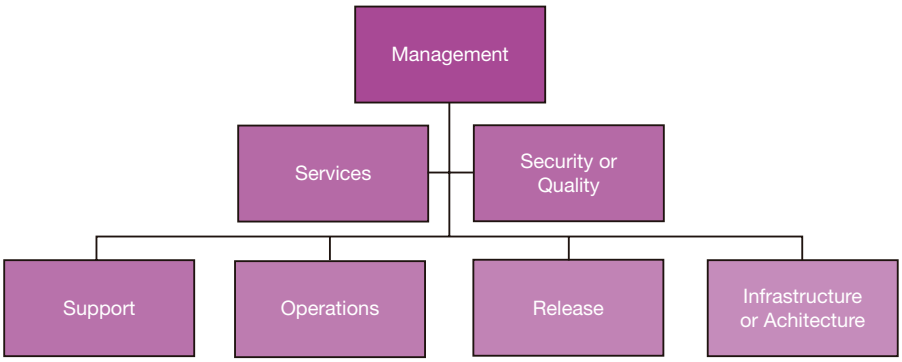

Figure 6 Basic outline of an organization based on MOF team model

Clear accountabilities

Because IT management in itself is complex, it is very important to make roles and responsibilities clear. Figures 5 and 6 show the differences in hierarchy between a normal IT organization and one based on the MOF team model. The main difference is that most organizations as shown in figure 5 are structured in a way that reflects technology. By using the MOF team model, processes become the basis for organizing the IT department.

As discussed earlier in section “How we use the team model”, most of the processes are performed in only one team. This makes the accountability clearer because in most of the classic IT departments the processes run through all parts of the department. Managers of a MOF team cluster are accountable for all the employees and processes in their own team.

From product focus to customer focus

The quality goals in the team model help IT departments to become more customer focused. In a classic IT department, IT management primarily focuses on the platform (we make sure our Unix platform is available) and much less so on end-to-end services. In the MOF team model the focus is on all customer services (support team) or on the availability of all components that provision services to customers.

CONCLUSIONS AND RECOMMENDATIONS

The implementation of an organizational structure is the most important activity in an overall MOF, or even an ITIL, implementation. The MOF team model is necessary for separating roles and for creating checks and balances in the organization. The most important effect of using the MOF team model from a managerial perspective is that the IT department becomes more transparent. The demands on the competences of IT managers are higher because their accountability is more visible to the rest of the department. In practice it is difficult for a manager to manage people, process, technology and performance all together. It is advisable, therefore, to train the manager in their new role.

The main feedback from MOF implementations is that organizations tend to be less hectic and more under control. Employees appreciate the fact that they don't have to do everything but can focus on the kind of work they like (proactive operations, reactive support, or planned projects).

The following concepts and processes proved to be of value during this project and will be used in future, similar projects:

- Base the design upon the vision of the organization. Agreements and decisions made during this design phase are useful for settling differences of opinion later.
- Move ahead with the implementation as soon as possible and maintain constant communication during the steps that you take in the process.
- Demonstrate what the value of an organizational change is in terms of the business case.
- Plan some preparation time (study and questioning) for the new process owners and managers.
- Make sure you create an official handoff process from the design phase to the implementation phase.
- Do not leave all the design work to the external consultant. It's important that the process owners and managers be involved in the design process.
- Avoid allocating too long a period for the design phase. Don't spend a lot of time thinking of all the "nice to haves" for the project. It is important to get started on the implementation. You will be able to make adjustments as the project progresses.

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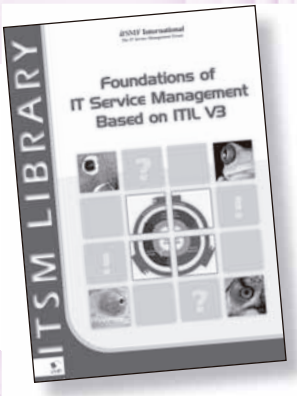

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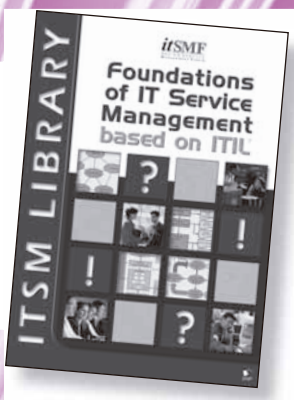

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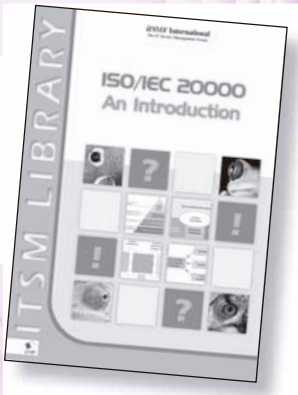

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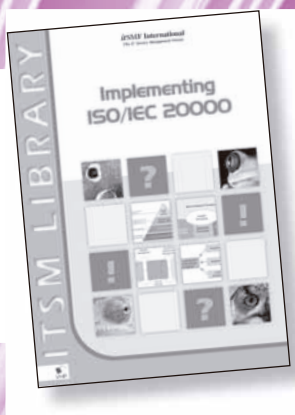

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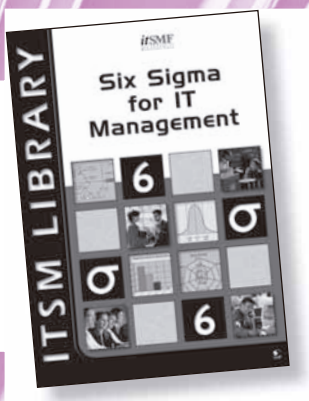

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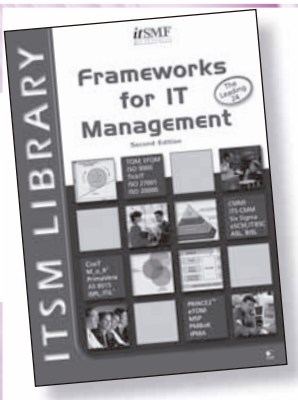

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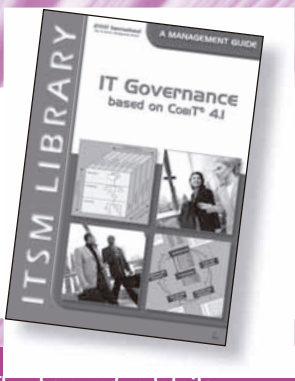

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