CHALMERS

Project Management Office in International Organizations

A case study with main focus on how to successfully implement PMO and maintain it as a long term entity

Master of Science Thesis in the Master's Program International Project Management

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ABSTRACT

Project Management Office (PMO) is a rather young and unknown phenomenon within the industry. Its purpose, role and benefit remains questioned in many organizations. Regardless of that, PMO exists in many larger international organizations as the department that manages the largest projects and has the project overview of the entire organization. Why is this questionable entity implemented into organizations? What are the challenges of implementing PMO? And how can this entity overcome the factors that diminish it or completely shut it down?

To begin with, an intensive theoretical research was performed in hope to find answers to these questions. Following that, a case study was performed and four international organizations were interviewed. This provided improved understanding of how PMO works in real life. By combining the data gathered it was possible to give views on the posed research questions from both theoretical and practical point of view. This provided a good demonstration on how the real life functionality of this entity can differ from what is stated in the theory. Project Management Office can be found in many forms and variations within organizations and is therefore not easy to be identified. Its purpose is variable between organizations but valued very high in those organizations involved in the thesis. In contravention of what the theory states, PMO is a long living entity according to the case study results and implementing a PMO can be a difficult task, but easily accomplished if done properly with the organization characteristics in mind.

Key words: project management office; PMO; implementation of PMO; PMO lifetime; challenges of PMO; benefits of PMO

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Preface

This master thesis is a part of a master program, International Project Management at Chalmers University of Technology, Gothenburg, Sweden. The research presented in the thesis is based on the author's interest to find answers to the questions that remain about Project Management Office (PMO). In the pre-stage of this thesis work the author had limited knowledge about PMO. Below is a quotation written by the author as an answer to a question in an exam in Project Management course:

> *What is project management office? Describe the role of the project management office and in what way it contributes to the management of projects:*
>
> Project management office is either outside of the firm or a department inside the main organization that can be brought to projects to take care of or assist with the project management.
>
> Main roles:
>
> -Monitor and control project performance
>
> -Development of project management methods
>
> -Multi project management
>
> -Strategic management
>
> -Organizational learning
>
> With these roles, PMO is able to help organizations to reach better project performance.

Despite lack of knowledge about the function this answer came close to the truth. PMO became an interesting and exciting topic to write about where the goal was to understand the concept of PMO in international organizations and gain knowledge of this rather young and unknown entity. With this in mind this thesis can be helpful for organizations that struggle with their PMO implementation, functions or battle with the question; should we implement PMO or not? Furthermore this research and knowledge will be beneficial for the author in upcoming future.

In order to fulfil the aim of the thesis a thorough theoretical framework is presented and a case study was conducted. Four large international organizations from different industry sectors took part in this thesis, all of which are market leaders in their field. This provided a wide view of the PMO function and I would like to thank those involved from each organization for their contribution and the valuable time that they gave a way for this thesis.

I would like to thank Inger Bergman, my supervisor, for being a great source of advice and guidance from idea to finish line. Furthermore I would like to thank my examiner, Petra Bosch, for support and encouragement. Without her support this thesis would not have been written during summer time. At last, I would like to thank Davíð Þór Fritzson for reading it over numerous of times and providing valuable comments that only improved this thesis.

Gothenburg September 2012
Bjarma Magnúsdóttir

List of Abbreviations

CIO	Chief Information Officer
PBOs	Project-Based Organizations
PM	Project Management
PMO	Project Management Office
PMP	Project Management Professional
PMs	Project Managers
PMOLCM	PMO Life Cycle Model
PPM	Project Portfolio Management
OPM	Organizational Project Management
OPMM	Organizational Project Management Maturity

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1 Introduction

Due to increased competition over the last decade, organizations are facing challenges that are increasingly characterized by reinforcement in competition, product rates, service and innovation and increasing emphasis on delivering on time and within budget. In order to respond to these challenges and be competitive on market, organizations respond by developing new and flexible organizational entities where the emphasis is on projects that are more numerous and strategically important than before (Aubry et al., 2008). This opens up new opportunities that will require different ways of working within organizations. Consequently in order to utilize these emerging opportunities organizations require new innovative solutions. One example of this development is the creation of a new organizational entity, Project Management Office (PMO). PMO is a new innovative way to monitor and follow up on projects within organizations.

In contrast to traditionally executing projects in functional silos, with no defined common ground, PMO provides assistance and guidance to all existing projects of the organization. By having all project work monitored in the same entity, organizations are able to share the knowledge and experience from previous projects in order to improve the execution of future projects. Furthermore PMO is usually run by experienced project managers that utilize their knowledge and experience to continuously improve project management methods and tools of the organization. Along with that they introduce new methods to other project managers within the organization as well as training them up to a certain level that enables them to employ them independently (Aubry et al., 2008; Andrés 2010; Sheaff 2011). In overall, PMO is like a parent to a project, providing guidelines and values to the project managers which should enable them to make the right decisions in difficult situations.

Despite the qualities above, PMO has not succeeded as well as hoped for in real life. One reason for this can be because PMO is not able to show value for its work since it can be rather difficult to measure how much PMO contributes to the project performance improvements within the organization. Consequently, in crisis, an entity like PMO that does not directly bring monetary value to the company is often the first to be closed down (Aubry et al., 2008).

Due to short lifetime and the fact that this phenomenon has been changing continuously ever since it first came about, there is little theoretical or empirical research on the topic (Aubry et al., 2008).Therefore this research contains several references from non-theoretical resources. These resources provided different view on PMO and from more practical perspective.

Academics argue about the efficiency of PMOs and organizations question the value of it. Consequently this thesis will speculate hypo is implemented into organizations, what challenges it might face and how PMO is kept alive and a long term entity. At last it will present a model based that will point out factors on how to keep PMO alive. Moreover, it will seek to shed some light on this relatively new organizational phenomenon.

1.1   Purpose and aim

The main purpose of this master thesis is to explore and get to know project management office in diverse international organizations. The project management office will be explored from the beginning of the creation within organizations and to the very end. Questions about why it is opened and why it gets closed down will be answered as well as looking at how it can survive in a long term perspective.

The first step is to analyze the PMO theory and summarize why and how PMO should be implemented within international organizations. This is done by performing a literature research on related articles, books and websites that provide the author with information and more understanding about the subject. The second part is to conduct a case study within international organizations, organizations that run their business in more than one country, in order to analyze how they apply PMO theories in practice. The outcome of the case study will provide comparison to the literature review and hopefully provide valuable suggestions to the thesis questions. The third and last part is to bring up reflections on the research questions in accordance to the case study results and theoretical information. Along with that important points will be highlighted in order for organizations to read as a guideline when implementing a PMO or to improve their PMO in order to become more efficient in running a PMO as a long term entity.

The main goal of the case study is to get insight in how PMO operates in everyday life in international organizations as well as to get information about why this entity should be implemented. By writing this thesis an insight can be gained into the real life of PMO and how PMO theories are applied in practice.

Additional goal of this thesis is to provide useful information to companies that are planning on opening a PMO within their premises. It will save companies work and time if they don´t have to go through all the literature, books, articles and from that analyze this information in order to understand what is most suiting for that particular company.

1.2   Research questions

The goal of this thesis is to reflect on why organizations should implement PMO, how the implementation of PMO affects the organizations and create a model with factors that keep PMO alive. This can become very extensive research and therefore three research questions will be proposed in order to focus on certain aspects and narrow the subject.

- Why should PMO be implemented into international organizations?
- What are the main challenges of implementing a PMO?
- How can PMO be kept alive in the long term?

The relationship between the existing theories and work in practise will be explored along with new findings about PMO. The case study seeks to investigate these factors along with trying to find new aspects of this recently evolving entity.

1.3   Structure overview

The remainder of the thesis has been organized into five major sections as can be seen in Figure 1. These sections are; theoretical framework, methodology, case study, reflection and discussion and at last conclusion.
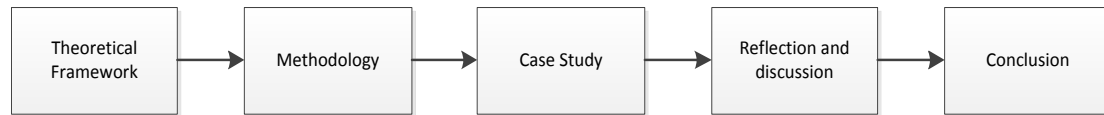
Figure 1: Thesis structure overview

First, a review of relevant literature relating to PMO is presented in the theoretical framework. This literature consists of wide range of different perspectives to keep in mind when implementing PMO into organizations along with theoretical information that is connected to the main thesis questions. Next, the methodology is presented. This is done as an introduction to the case study. It includes the main information about the research, its scope and design. Collection of data is listed in order to inform the reader what the case study consists of. Then a case study is presented where each organization is introduced and results from each organization listed. At last a reflection and discussion part is presented where results from the theoretical part as well as the case studies are combined. In conclusion the main results of this thesis are summarized along with limitations of the study in addition to future research questions.

2   Theoretical Framework

The theoretical framework is intended to provide an understanding of the research topic and to identify the key areas that this thesis will focus on. Six fields are discussed in this section and can be seen graphically in Figure 2, they are; background, characteristics of PMO, implementation of PMO, PMO lifetime

Figure 2: Theoretical Framework structure

2.1   Background

2.1.1   Project Management

The life is one big project! Our daily life is becoming more and more defined by executing different projects. Planning a birthday has been defined to be a project as well as shooting a space shuttle into the sky. A project is a temporary group activity that is designed to produce a unique product, service or result. This can furthermore be seen in how various organizations operate today where many industries have become dominated by Project-Based Organizations (PBOs). A project´s main characteristic is; temporary, unique, goal focused, it has time and cost constraints, consists of people, has low volume and high variety and uncertainty (Maylor, 2010).

Project management is the discipline of planning, organizing, securing, managing and controlling resources to achieve certain goals of a project (Project Management Institute, 2012).Furthermore it is the application of knowledge, skills, tools and techniques to execute projects effectively and efficiently. This field is as well responsible for overseeing change and manage ever changing set of tasks. One of the main tasks of project management is resolution of conflict. The line of authority is often fuzzy since resources are coming from other functions within the organization and this usually leads to conflicts (Maylor, 2010). Due to this, the work of project manager has not been easy. In order to provide a support for project managers a new department has been established in many organizations. This department is called project management office (PMO) and will be the main research phenomenon in this thesis.

2.1.2   What is PMO?

During the investigations of this phenomenon it became apparent that there are various different definitions of what PMO is. This can be traced to the fact that it can serve different meaning in different organizations. PMO stands for Project Management Office and in a business or professional enterprise it is a department or group, within the organization, that defines and maintains the standards of processes that are related to project management (Singh et al, 2009). PMO strives to standardize project work and introduce new ways of working. It assists project managers (PMs) and project teams throughout the organisations to adapt professional practices of project management (Project Smart, 2012).Singh et al. (2009) described PMO as a recent organizational phenomenon within an organization that defines, implements

and maintains project management principles, standards, processes, methodologies, tools and techniques.

A PMO is a formal, centralized control that is usually located between senior management and project management within the organization (Singh et al., 2009). It is either a single or multiple entities, depending on the organization.

Defining a PMO can be a difficult task since each organization is different and there is no "one size fits all" on how PMO should function. Nearly 75 unique functions have been identified, some traditional and others innovative. Multiple studies have been performed but fail to find systematic patterns (Aubry et al., 2007). Each PMO is unique and specific as well as the corporate culture it supports (Nee, 2012). Despite for that there exist various definitions about PMO and here below are two definitions that manage to define PMO in an apparent way.

According to do Valle et al. (2008) PMO is a centre of intelligence and coordination which bridges the gap between the strategic business objectives and the related practical results through organisational portfolio, program and project management.

The Project Management Institute's presents, A Guide of PM Body of Knowledge that defines PMO accordingly (Hobbs, 2010):

> An organisational body or entity assigned various responsibilities related to the centralized and coordinated management of projects under its domain. The responsibilities of the PMO can range from providing project management support functions to actually being responsible for the direct management of a project

The Project Management Office hashed several names through the years depending on the host organizations. Hobbs and Aubry (2010) did a survey where 500 PMOs participated. The survey listed up different names of PMO entities and here below some of the names can be seen;

- Project Office
- Project Support Office
- Project Management Office
- Central Project Office
- Program Office
- Project Management Oversight
- Project Management Centre Of Excellence

In this thesis the name Project Management Office is used as it is the most common used label for this entity (Singh et al., 2009).

2.1.3   PMO history

> The organisation that never changes eventually loses synchronization with its environment, while the one that never stabilizes can produce no product or service efficiently (Aubrey et al., 2010).

In the continuously changing world, organisations are bound to face new threats, new ways of working and increased competition. The increasing number and complexity of projects throughout the business world led to a certain form of centralization

(Aubry et al., 2008). Organisations have responded by increased emphasis on more flexible organizational forms and on time deliveries. The result is that projects have become more numerous and more strategically important parts of organizations. One clear sign of response to this development was the creation of new entity, Project Management Office (do Valle et al., 2008).

The earliest signs of PMO vary between sources. The use of some sort of PMO has a long history dating back to the 1930s according to Dai& Wells (2004). However, it is not until the 1990s that this concept really took shape and expanded into forms we see today (Aubry et al., 2008). In the last decade, PMO started to be recognized as a means of improving project performance. According to do Valle et al. (2008) the first academic reference of PMO appears in the year 1998 when Harold Kerzner described Project Office in his book, (2009). Brian Hobbs and Monique Aubry (2010b) say that first signs of PMO implementation where in 1994 and the first knowledge about written PMO is in 2003 (do Valle et al., 2008). These discrepancies in when PMO first came about really emphasise the diversity of PMO. PMO is an entity that comes in many forms and is therefore difficult to put description on. Here below the main types of PMO will be described in hope to obtain better understanding of this ever changing phenomenon.

2.2   Characteristics of PMO

2.2.1   PMO types and life cycle

Those responsible for establishing or managing a PMO have a great variety of options to choose from. There is a great variety in the roles and functions to include within the mandate of PMO. In overall it is considered that the organization and its culture have the most impact on what type of PMO is implemented. One PMO can have a minimal staff and no direct control over the management of individual projects while another has a large complement of full time PMs and direct control over individual projects (Hobbs &Aubry, 2010).

The PMO type and evolution goes hand in hand with the organizational project management maturity (OPMM). Organizational Project Management (OPM) is the execution of organizational strategies through projects. OPM is combined of portfolio, program and project management. It involves the translation of corporate strategy into projects through portfolio management, as well as the implementation of corporate strategy through programs and projects (Chui, 2007).OPMM is, as it says, the maturity of OPM. As the organizational project management maturity increases so does the function of PMO.

The search for a PMO model to simplify the complex reality can be described by categorization. However, this categorization here below is not the only one that exists (Hobbs &Aubry, 2010).

The PMO types are usually categorized into three main groups, but the name and function of these groups vary between literatures. The Gartner Group identified a growth in PMO functions overtime, through three stages of maturity or PMO models (Singh et al., 2009; Reiling, 2009; Light et al., 2005; Andersen et al. 2007).

1. The "Lite" PMO model, also known as PMO-light or Supportive-PMO. This is where PMO usually begins. PMO acts as a consulting capacity providing PMs with training, guidance and best practices. Responsibilities are limited to the repository of information on methods and standards.
2. The "Coach" model, also known as PMO-Hybrid or Controlling-PMO. PMO coordinates communication, monitors and actively supports projects and people with consulting service or training.
3. The "Manager" model, also known as PMO-Heavy or Directive-PMO. PMO plays more proactive role and is responsible for the project outcome. In some cases PMO may run projects directly. This model is said to be supportive of senior management due to involvement in portfolio management and strategy.

The Gartner Group categorization follows the project management maturity of the organizations. As the project management maturity increases the PMO moves to the next stage. At each stage of the PMO categorization the functions and focus are different, from supporting individual project with standards and methods to supporting senior management in alignment to strategic objectives, project selection and prioritization. This is also called the PMO life cycle model (PMOLCM) and is described more thoroughly in Figure 3 below.
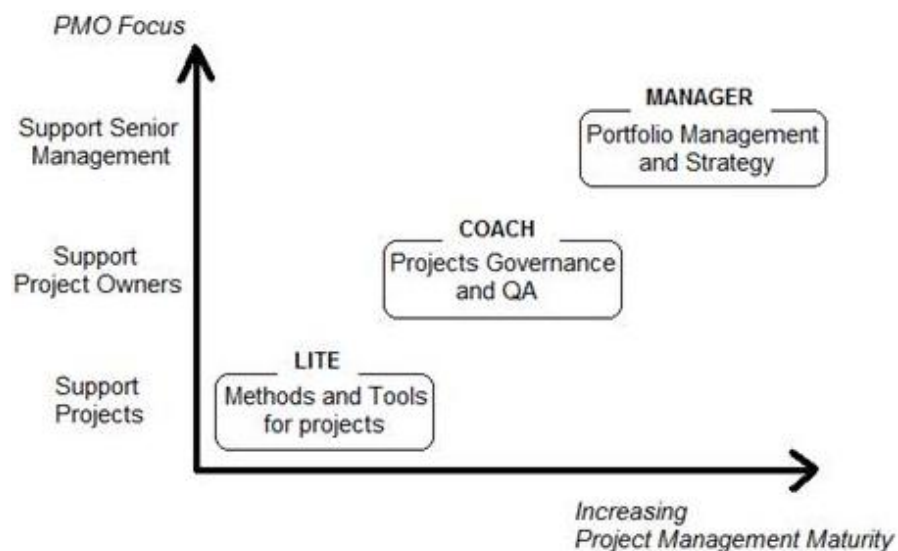
Figure 3: PMO Life cycle (Andrés, 2010)

From Figure 3 it can be seen that as project management maturity increases so does the PMO focus. Newly established PMOs usually do not have sufficient project management practices in place and begin to follow the Lite PMO model at first and work their way up the ladder to the "Manager" model. Not all organizations are interested or have the need to have the highest model in place.

Hill (2004) proposed a five stage competency model for the PMO. The PMO shows detailed change in roles and responsibility as the project maturity of the organizations becomes greater (Hill, 2008).This model is similar to the model above but in this model the PMOs competency has been divided to five stages, not three like the previous one. The five stages are:

1. Project office: Prepares and manages project plans, reports and documents by using established project knowledge management tools.
2. Basic PMO: Introduces essential project information management capability. Develops project management reporting and collaboration procedures. Provides tools for managing information. Creates methods for gathering and using feedback and lessons learned information.
3. Standard PMO: Introduces automated tools and practices for project knowledge management. Installs project management methodology tool. Builds a project management information system.
4. Advanced PMO: Expands knowledge management tool functionality for business use. Develops web-based project team knowledge spaces. Implements a web based project team collaboration tool. Installs on line project portfolio management tool. Introduces an on-line executive dashboard.
5. Centre of Excellence: Analyzes project knowledge management system capability. Examines project knowledge management business value and benefits. Recommends advanced tools and knowledge management capabilities.

These five stages represent a progressive competency that can be attained within the PMO and host organization. Maturity and PMO hold hands in organizations. The greater maturity that the organizations and PMO achieve the greater responsibility PMO achieves. PMO develops from basic project oversight to a Centre of Excellence. This is closely aligned to the strategic business goal of the organization.
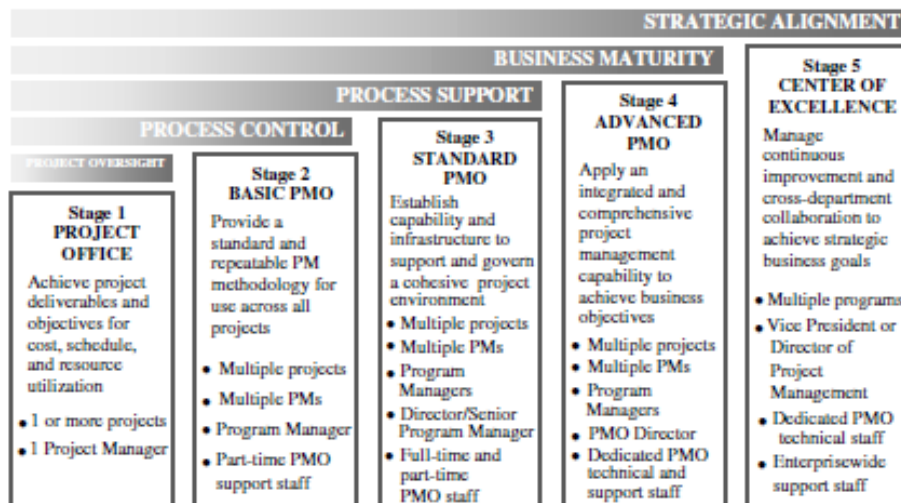
Figure 4: The changing role of PMO (Hill, 2004)

According to Figure 4 it is presumed that at higher stage, the PMO has already reached the competencies in the lower stages. Therefore if organizations want to reach Stage 3, standard PMO, it will have to ensure that it has achieved the competencies prescribed for Stage 1 and 2. It is worth to mention that not all organization may need to have a PMO at Stage 5 of the continuum to achieve their organizational objectives. In fact, most organizations have established Stage 3, standard PMO, which is more than adequate (Hill, 2004).

2.2.2 PMO role and responsibility

As stated above, Project Management Office (PMO) is defined by its core activities and its distinction to the activities of project, program and portfolio management. The roles of PMO vary between configurations, organizational maturity and organizations and therefore the exact role of PMO is difficult to determine since it depends on the needs and culture of host organizations (Project Office Methodology, 2006). As Project Management Office seeks to improve the project work within organizations it uses established project knowledge management tools to prepare and manage project plans and to collaborate on project team performance and consequently impact the overall project result. It helps both the project managers and the host organization to understand and apply professional practices of project management as well as to adapt and integrate business interest into the project management efforts (Singh et al., 2009).

The PMO can provide operational support to different projects in the organizations by supporting the project management processes and even assisting with selection of projects. Along with that it can perform benchmarking of processes and results as well as contributing to the enhancement of maturity and effectiveness of the companies in the project management (do Valle et al., 2008).

Consequently the four main roles of PMO in organisations are (Maylor, 2010):

1. Monitor and control project performance
2. Development of project management methods
3. Strategic management
4. Organizational learning

Despite these four main roles mentioned above it is not necessarily true that all roles are suited for different organizations. Each organization is different and has different problems and needs. Responsibilities can range from providing project management support functions to actually being responsible for the direct management of projects (Aubry et al., 2007). Therefore PMO configurations can have many different roles which lead to a wide spectrum of roles in PMO. Some of these roles have been listed here below for deeper understanding of the main purpose of PMO in organizations. These roles are (Project Office Methodology, 2006; do Valle et al., 2008):

- Identify and solve problems
- Provide ongoing guidance and consultancy
- Cost reduction
- Keep stakeholders informed with up to date accurate information
- Support ongoing improvement in project management
- Support strategic planning in the high level management of organizations
- Develop methodology, reporting, tools, techniques, templates and forms
- Project planning and scheduling, risk analysis and project tracking
- Aligning project delivery with strategic business goals and priorities
- Requiring that every project has an effective project manager
- Implementing an appropriate project management methodology
- Consistent management and oversight of the project portfolio
- Obtaining and maintaining company leadership and support

This list of roles is not finite and does not apply to all types of PMO. It is unlikely that any individual PMO will implement all the roles. PMO is continuously changing and consequently the roles do as well. The most important factor is that the role of PMO is well defined at each time and understood by everyone in the organisations for support in order to prevent it being compromised (Project Office Methodology, 2006).

2.2.3   PMO decision making authority

One of the main problems of PMO is that they may have certain roles to fulfil but the decision making authority might not be in place to support the PMO in order to fulfil those roles. The decision making authority varies between PMOs and host organisations and as it can be seen in Figure 5 the distribution of decision making authority is close to normal distribution (Hobbs & Aubry, 2010). This figure can be related to Hill´s competency model in Chapter 2.2.1. According to his model, most organizations establish stage 3, Standard PMO which has some authority. According to Figure 5 that is the most usual case.
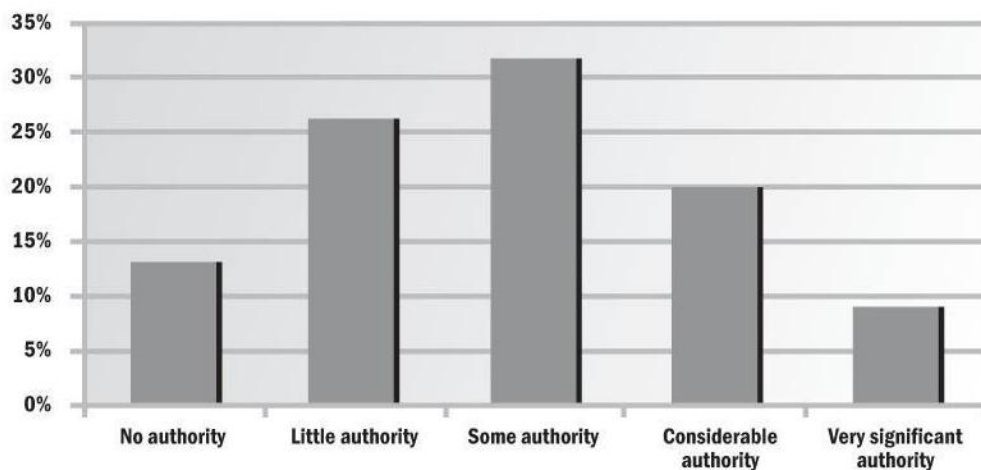
Figure 5: Decision making authority of PMO (Hobbs & Aubry, 2010)

Around 40% of PMOs are in supporting role with little or no decision making authority while around 60% have at least some authority to make decisions to allocate resources or initiate change or cancel projects. This illustrates the great variety of roles that different organizations assign to their PMOs. This leads to the question, how do organizations implement PMO in concern of role, decision making authority and etc.?

2.3   Implementation of PMO

2.3.1   What are the benefits of implementing PMO?

Like mentioned in the Introduction, changed conditions in markets have called for new innovative ways of organizing organizations (Aubry et al., 2008). As organizations grow in size and scope they take on increasingly complicated projects. However they have not necessarily made the same advancements in their project management practices. This can lead to increasing project failure rate and organizations have responded by implementing a new organizational entity, a PMO

(PMI, 2012). In large organizations with many employees it can be difficult to achieve similar procedures and good results from all projects. Many projects take place at the same time and it can be easy to lose control over the corporate strategy, project portfolio and the coordination of the projects. Therefore it is important for organizations to be able to support the project managers with approved models, procedures and a defined way of working. The solution to these problems could be implementing a PMO and organizations will achieve project management oversight, control, support and alignment (Hill, 2004).

Michael Stanleigh (2006) asked 750 organizations in his research why they set up PMO. These are the answers:

- More successful projects (82%)
- Predictable, reusable PM tools, techniques and processes (74%)
- Organizational improvements (66%)
- Helps to build project management-oriented culture (64%)
- Increases staff professionalism in project management (48%)

Implementing a successful PMO can therefore result in reduced cost delivery, improved quality in project result as well as superior source management and more effective results for the organizations. PMO can be a unique and critical entity for the success of a number of organizations. It provides overview of the projects and programmes within the entire organization (Sheaff, 2011).

Table 1: Main benefits of PMO in organizations (Sheaff, 2011)

A. Reduces Risk	B. Keeps Projects on Budget	C. Keeps Projects on Time	D. Ensures Improved Project Quality
Centralised repository for shared risk	Coordinates overall resources	Sets overall policies and procedures	Operates and manages overall project tools
Centralised proactive management initiative to combat project risk	Enterprise management of budget resources	Provides universal templates and documentation	Centralised communication management
		Enterprise management of project timelines	Provides mentoring and skill development
			Repository of best practice information
			Provides Quality Assurance for all projects

Table 1 highlights the benefits of having a PMO in organizations. The characteristics that produce the benefit are listed below each factor. But is it necessary and beneficial for all organizations to implement a PMO?

According to Mastering Project Management (2009), if these factors are in place or happening in the organizations, then there should be no hesitation to implement a PMO:

- Available budget: Implementing and running a PMO is expensive. Therefore this can be a barrier for many organizations.
- High number of concurrent projects: Organizations need to establish procedures for how projects should be run.
- High percentage of failed projects: Lack of standards and policies. This can affect the efficiency and the productivity in the project.
- Repeated project management issues: PMO becomes centre of knowledge and will share the "lessons learned" from other projects.
- High number of inexperienced project managers: The PMO is the responsible entity for developing education and support for new project managers. The experienced project managers also need continued education and training.
- Need for centralized project monitoring and control: What PMO stands for.
- Greater demand for resources: Number of ongoing projects increases and they are becoming larger which leads to that the demand for resources becomes greater. By paying attention to the demand of skilled project teams and the inventory of skilled team members, the PMO can maintain the proper balance through training.

Consequently, PMO becomes the entity with the most knowledge of the projects in the organizations and will continuously be working towards improvement for the project managers. Furthermore PMO enhances sharing of knowledge and learning which prevents the same mistakes happening repeatedly as well as enabling project managers to improve their skills and knowledge in managing projects (Mastering Project Management, 2009). However, in order to reap the advantages mentioned above there are certain steps that need to be followed when implementing a PMO.

2.3.2 How to implement a PMO successfully?

While today PMO is a high-flying feature in organizational project management, the underlying logic that leads to successful implementation is still not understood (Aubry et al., 2010b).

Implementing a PMO within organizations is a decision that has to be well grounded. It is an important organizational change that is a difficult challenge for most organizations (Hobbs et al., 2008; Singh et al., 2009). Based on Michael Stanleigh´s survey (2006) the failure rate of PMO implementations is very high, about 75%. The main reason for failure in implementation is because the PMO fails to demonstrate any added value to the organizations. They are seen as too costly and are contributing diminutive to project and program performance.

According to the findings that Aubry, Hobbs and Thuillier made in 2008there are two points that should be kept in mind when implementing a PMO. First, PMO should not be considered to be an isolated island in organizations, but as a part of an archipelago, defined as the organizational project management. Second point is that the organizational project management and specifically PMO evolve continuously and are

adapting to changes in their external or internal environment. Furthermore they are unstable structures that need to be reconfigured every few years (Singh et al., 2009).

The Methood123 Project Office Methodology (2006) has developed a PMO lifecycle (PMOLC) which deepens the understanding of PMO and provides useful information on how to implement it. The PMO lifecycle is divided into the four following steps:

1. PMO Initiation

To initiate PMO, roles have to be defined and sponsorship obtained. Then the forming team secures funding and a steering committee is appointed which has the role to ensure a complete support of the PMO across the organizations. Organizational goals are defined, physical location of the PMO is established, roles within the team are defined and employees are appointed to these roles.

2. PMO Planning

The next step in PMO Life Cycle is to list the service that the PMO will offer in an execution plan. Once the execution plan is organized, the PMO selects the methods, standards, processes and tools that the organization will adopt. In this phase the following activities should be completed:

- Adopt methodology
- Adopt standards
- Adopt processes and tools
- Adopt software
- Adopt knowledge base

3. PMO Execution

The execution phase is an ongoing operational phase of the PMO. Four types of services are offered during this phase, they are:

- General services are offered by all PMOs
- Supportive services provides support to managers and teams
- Controlling services assess, review and audit project status
- Directive services are used to directly manage projects

4. PMO Improvement

After execution phase has been operating for reasonable period, it is time to expand and improve working methods. This is done by:

- Improving PMO operation by measuring the effectiveness, implementing changes to existing services and adding new services.
- The PMO has access to the overall capability of the organization to deliver acceptable project results on time and within budget. By viewing these factors the PMO can develop and implement a long-term plan to improve project management maturity in the organizations.

The improvements above are quite extensive. They require additional planning and commitment of additional resources to undertake the extensive amount of change required to continue to improve the overall level of project management success in the organization (Project Office Methodology, 2006).

2.3.3　Main challenges of implementing a PMO

When implementing a PMO even though when following the procedures, listed above in Chapter 2.3.2, there will always be some challenges to overcome. Managers often lack the guidance of overcoming the challenges they are likely to encounter and the challenges that are likely to come up vary between organizations as well as between PMO structures. Regarding PMO structure in implementation it has been stated that PMO-light implementations are significantly easier to manage than PMO-heavy. PMO light implementations face lower resistance as they involve lesser degree of change in comparison to PMO heavy (Singh et al., 2009).

Singh et al. (2009) present the top challenges and some series of action that can be taken to consideration before and while implementing a PMO:

- Rigid corporate culture and failure to manage organizational resistance to change
    - Have a strong PMO defender who evangelizes the value of PMO
    - Start small and demonstrate the value of the PMO with some early success
    - Identify and seek support from opinion leaders within the organization who favour the PMO implementation
- Lack of experienced project managers and PMO leadership
    - Hire an experienced program manager who understands the culture and power relationships within the client organization
    - Bring the most talented project managers into the PMO implementation team
- Lack of appropriate change management strategy
    - Adopt a flexible change management strategy that fits the organizational needs
    - Employ process standardization prior to PMO implementation

Among these challenges above there are many aspects that have to be taken into consideration. PMO tools are difficult to implement unless the project management culture has been established. Project management must be a part of the company´s culture and the culture has to be open for new way of working in order for the PMO to become successful (Singh et al., 2009).

A clear mission from the beginning and a goal that everyone is following is crucial in order to succeed. In some organizations, low position of PMO in management structure is inhibiting the PMO to become as successful as it could. Therefore it is important for everyone to agree upon structure and scope of governance in the PMO. In the literature the PMO has been seen as too authoritative and trying to micromanage projects. Among these points here below are four pitfalls that PMO implementations attend to fall in (Singh et al., 2009):

- Not defining PMO value proposition
- Lack of perceived impact of PMO on project delivery abilities
- No buy-in from senior functional managers
- PMO creating unnecessary overhead

According to results from Singh et al., (2009) research, the main road block in implementing a PMO is the human resistance to change. It is difficult to change the way people think and are used to do things in organizations. The common thoughts are; "it works the way we do it then why change it?", "I have always done it like this". Successful implementation requires a change in mindset and a shift towards a more project-centred organization (Singh et al., 2009).

The PMO team should consist of people who are the most experienced in project management, have operational roles and responsibilities that require these skills. The qualities that make for an effective PMO director may be quite different from qualities that make for an excellent project manager. Project managers might be better at coordinating and influencing their work within the team, but they often fail to manage the clients' requirements and expectations at a strategic level (Singh et al., 2009). In situations that require a lot of interaction with various stakeholders, the person who fits the best for that is the one that has been in the organization for years and is trusted and accepted by the key stakeholders. This person understands the culture and power relationships within the client organization and should take on the role of program management to guide the program in consultation with the stakeholders to oversee the PMO implementation (Singh et al., 2009). PMO implementations often get into trouble when there is a lack of understanding and participation by some stakeholders.

PMO implementation involves managing all aspects of change in the organizations, including people, process and structure issues. Therefore one of the most difficult aspects of establishing a PMO is to evolve and implement a clear change management strategy that looks beyond the immediate needs of the PMO project (Singh et al., 2009). The change management strategy has to manage the change process while implementing a PMO but also make sure that the implementation process will be harvested in the daily work of a PMO.

One strategy of dealing with rigid corporate culture and overcoming resistance to change is to start small and to demonstrate the value of the PMO with some early successes. Start small with pilots and pathfinders, introduce and influence them about the benefits of implementing PMO. When they get excited about the value and personal benefit from the implementation, they become additional supporters for the organization and will help with the rest of implementation (Singh et al., 2009).

2.4 PMO lifetime

Corporations are spending millions of dollars on project cost overruns and despite the money being spent; the project outcome does not reach customer expectations. Along with this the wrong internal resources are often being applied to projects, further decreasing their chance of success. Therefore organizations are losing billions in wasted project spending. This waste is more often hidden from management and investors. One of the main reasons why projects fail is that metrics and best practises for project management are few and far between each other in order to work. Furthermore projects are not aligned with the goals of the organization (Stanleigh, 2006). Organizations have set up PMO as a tool to improve the situation but without much success. Evidence show that PMOs fail more often then they succeed, over 75% of organizations that set up PMO shut it down within three years because it didn´t demonstrate any added value to the organization (Stanleigh, 2006). This brings up the question: Why are PMO´s continuously failing?

2.4.1 What factors weaken PMO?

2.4.1.1 Wrong PMO strategy

The reason why most PMOs fail is possibly because they don´t have good strategy in place. According to Stanleigh (2006) there are four key factors that will immediately make a difference for PMO and organizations. They are;

- Ensure that all projects are strategically aligned. How?
  - Review lessons learned from previous projects
  - Develop criteria against which all projects can be prioritized
  - Align projects with corporate and departmental strategic plans
- Create a culture that supports a project management environment
- Implement strategic project management best practices
  - PMO must hold "Project Close-out Meeting" as soon as possible after project completion
  - Outcome of meeting is document of "Lessons Learned"
- Create a strategic project measurement system

When projects are in alignment with corporate goals, they are more likely to be able to meet profitability targets and generate necessary return on investment. It is important that the organization is working as a whole to reach the corporate goals and this includes the PMO.

2.4.1.2 Tensions between PMO and the host organization

The PMO should no longer be considered an isolated island within an organization (Aubry et al., 2007). PMO is deeply embedded in its host organizations and they two co-evolve (Aubry et al., 2008). Organizational tensions are among the primary drivers behind the implementation and reconfiguration of PMOs. These tensions bring out the importance of organizational politics. PMOs and other structures that are put in place to manage multiple projects are part of a political system that plays an important role in organizations. Power and politics should be examined at organizational level and integrated into organizational project management (Aubry et al., 2008).

Empirical evidence shows that PMO life expectancy is approximately two years (Aubry et al., 2010b).PMOs are dynamic entities created to solve problems within organizations and by that they need to enforce some kind of a change. That implies short life expectancy for PMOs. The major reason why PMOs are short term entities or fail is because they do not fit in the organization´s context. They are too ambitious, enforce changes that not all employees agree with and the last but not least they often lack management support (Andrés, 2010).

Mark Perry senior vice president of Operations for BOT internationals (Gale, 2010) does not agree with this. He says that PMOs lack vision, mission and have no measure of success in place. Because of that they get labelled as administrative overhead and fall prey to budget cuts.

The first step in delivering what the organization needs is to know what the organization wants. "A good PMO leader should go to the executive team and ask, " What are your top three problems" and then set a mission and goal around solving them" says Mr. Perry, author of business driven PMO setup. Then at the end of the

year there is no doubt that the PMO was successful and that is how PMO survives (Gale, 2010).

De Mello Pires (in Gale, 2010) says that one of the PMO let downs is the failure to get everyone in the organization on the same page. Executives want transparency and project managers need an advocate. By working across all levels of the organization, PMO help project teams and the company leader's to work in harmony. It is important to talk to both sides. When the strategic and important projects of the organizations are completed with success and with the expected return, the value and importance of PMO is recognized by all.

But if the wrong strategy is in place or has been from the get go, is it possible to change the PMO without closing down and starting it up again? Yes, reconfiguring an existing PMO is common in most organization and if it is done right it can succeed and become successful solution to the organization (Gale, 2010).

2.4.2   Reconfiguration of an existing PMO

Reconfiguring an existing PMO is an important organizational change. Given the ever changing nature of organizations and its culture it can be said that PMO is organizational innovation in the sense that it is a recent and important phenomenon that changes and still evolves. It may take a considerable time before a discernible pattern is to emerge in PMO, if it emerges at all (Aubry et al., 2008).

As mentioned before, research results have shown that the average age of PMO is approximately two years (Aubry et al., 2010a), after two years the PMO is either shut down or reconfigured due to change in the organization and culture. This change is often part of a wider organizational reconfiguration. PMO is a socially constructed entity that in turn shapes the organization. The PMO and its host organization co-evolve. Figure 6 below describes the reconfiguration process where possible patterns are found that could simplify and explain the reconfiguration.

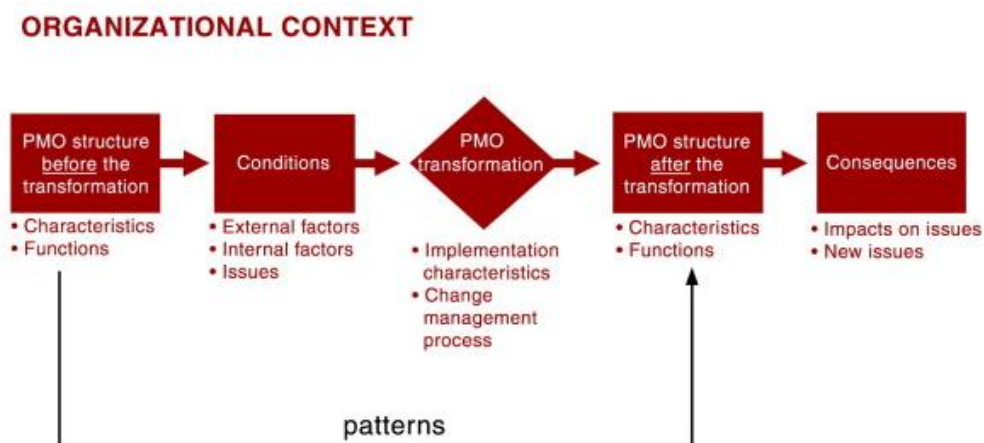*Figure 6: Conceptual framework for PMO in transformation (Aubry et al., 2010b)*

Organizational tensions are among the primary drivers behind the reconfiguration of PMOs. PMO structure before the transformation is influenced by political forces and tensions that shape a new political environment (box 1). Tensions often build up slowly as conditions (box 2) until a breaking point is reached at which time a change

in the structure will take place, modifying or eliminating the source of tension (box 3, diamond shaped). New PMO structure is replaced after transformation (box 4) and it is not perfect like anything else in life. Tensions are present at both ends of the structuring process (box 2 and box 5). They serve as a set of conditions and once a new structure is put in place, new tensions emerge as consequences of the new structure, see Figure 6. These conditions act as drivers for PMO transformation and have been divided into internal and external drivers in figure 7 here below.

When new PMO structure has been implemented impacting the previous issues new issues arise that come with the new PMO structure. These issues are consequences from the transformation but work the same as conditions as before. From this a pattern can be seen that PMO tensions are difficult to solve despite continuous reconfiguration (Aubry et al., 2010a).

Five tensions have been identified: economic-, political-, client relationship, standardisation versus flexibility and controlling the project machine. These tensions will be described here below (Hobbs et al., 2008):

- Economic: The source of economic tension is double. The cost of running a PMO and the project performance. PMO´s are expensive for organizations. Their return on investment should be positive but in most cases it is not (Stanleigh, 2006). Project performance is often used as key performance indicator for PMOs. If it is poor it brings PMO legitimacy into question. The PMO are often under the pressure to show value for the money and in some cases if project performance is improved the PMO is no longer seen as useful.

- Political: Political tensions emerge around issues of power and control. The power to manage projects is the most important tension. The power is sometimes unclear or PMs have a hard time taking orders from staff members of the PMO. PMOs sometimes play a detective role to make sure that no information is hidden. Due to this the climate of trust is difficult to establish and tensions can become very apparent.

- Client relationship: From PMO perspective there are two types of clients: Their own clients from their deliverables and the clients of projects that are realised in the organizations. The tension is primarily on the second type. A PMO can easily be discredited when it has the wrong perception of projects.

- Standardisation/flexibility: PMOs often have the responsibility of developing and standardizing methodologies. The development of these tools is very often with contributions from all entities involved in project deliverables. When it is time to put the methodology in application, confrontation is rather the norm. This is related to the issue power and control.

- Controlling the project machine: This expression is used to evoke two versions of the same tension; the machine should be upgraded or raced out of control. Increasing the organizational capacity to deliver projects brings up problems around resource allocation. Reducing this capacity is more subtle and brings tension between PMOs and functional or business units.

As demonstrated above in figure 6, there are set of conditions that act as drivers towards PMO transformation. These PMO drivers can be divided in two categories from their origin, external and internal context. See Figure 7 below:
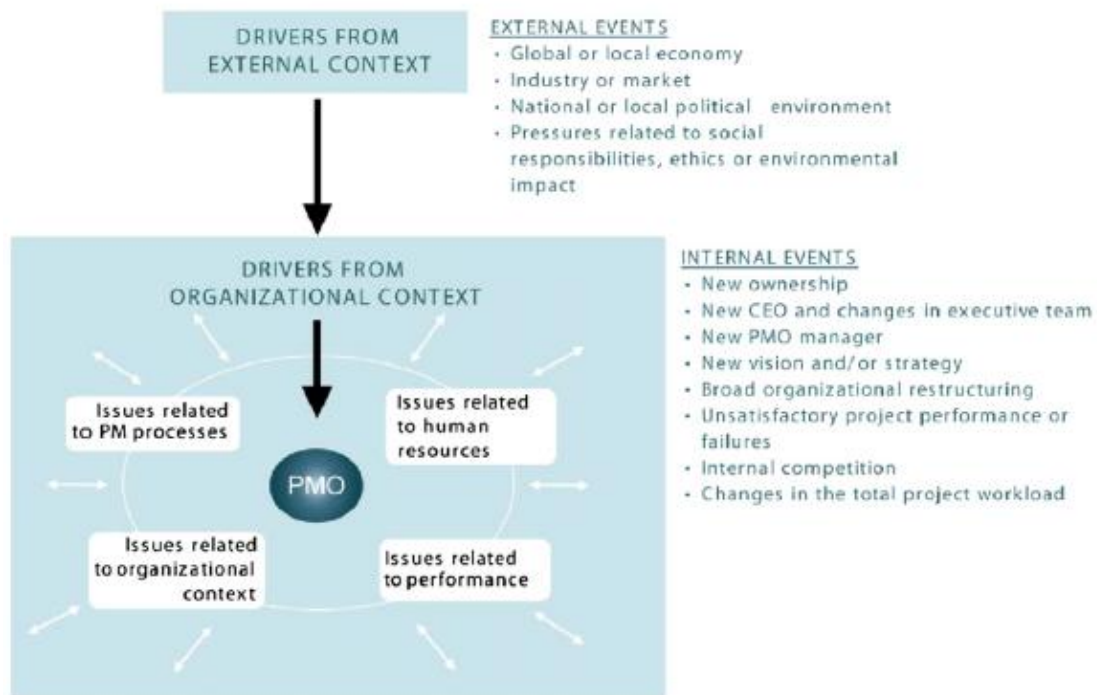
Figure 7: Drivers of PMO transformation (Aubry et al., 2010b)

In the internal context there are three events that appear the most and are altogether the most important category of internal drivers. They are: Global reorganization, new CEO and new PMO manager. These events happen often together. When or if these events happen it is important to be aware that they might lead to PMO transformation.

In the external context there are different events that come up, for example, political environment, environmental issues, economy etc. These events, both internal and external, have different power, some might be more powerful while others might play important role in certain circumstances. In Figure 7 those drivers are listed more carefully.

3 Methodology

The main purpose of having a methodology description is to explain how the progress and justification of this research will be done. It gives a different view of how the work was conducted as well as why and in what way the researcher chose the specific method. It is very important to get a persuasive research result, therefore the choosing of one or several suitable methods can be the vital part of the research work.
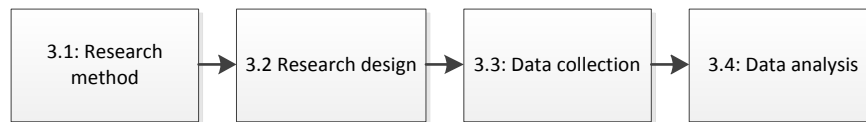
Figure 8: Methodology structure

3.1 Research method

There are several ways available to perform a research according to Yin´s book, Yin (2009). They are: the case study, field experiment, panel study, focus group and survey. This thesis will follow the case study method due to certain conditions of the topic. When choosing a method it depends upon three conditions; a) type of question, b) the control an investigator has over actual behavioural events and c) the focus on contemporary as opposed to historical phenomena (Yin, 2009 p.11). The situation that distinguishes the case study method from the other methods is when; a) "how" or "why" questions are asked b) the investigator has no control over events and c) the focus is on contemporary phenomenon within a real-life context (Yin, 2009 p.15).

A case study is an empirical inquiry that investigates contemporary phenomenon, like PMO, in depth and within its real-life context, especially when the boundaries between the phenomenon and the context are not clearly evident (Yin, 2009 p. 18). The case study is used in many situations to contribute to our knowledge on organizational phenomenon. The case study method for research purpose remains one of the most challenging of all social activities. Despite that the case study is designed to gain an in-depth understanding of the situation and meaning which are involved. The interest is in the process rather than the outcomes, in context rather than specific variables, in discovery rather than confirmation. It allows the investigator to get the holistic and meaningful characteristics of real-life events, such as organizational and managerial processes that this thesis will focus on. In other words, the case study provides the opportunity to collect data as well as receive deeper understanding of both the PMO in real-life and the host organizations, but such understanding encompassed important contextual conditions (Yin, 2009 p.22).

The examination of multiple cases is considered more compelling and the overall study is regarded as being more robust (Yin, 2009 p. 53). Therefore in this thesis four case studies were performed in separate organizations.

The qualitative approach was chosen for this subject because of limitation of resources and time. The goal is to expand and generalize theories and not to enumerate frequencies (Yin, 2009 p. 55). Qualitative methods are based on facts which are socially constructed rather than objectively and are based on peoples experience. Qualitative research is an inductive approach where theories are generated out of collected data (Norr, 2008). This approach was found most appropriate for this thesis since it uses people´s experience in project management office.

3.2   Research design

A research design is the logic that links the data to be collected and the conclusions to be drawn to the initial question of the research (Yin, 2009 p.40). As mentioned above the case study was selected for this research. The advantage of case study inquiry is that it benefits from the prior development of theoretical propositions to guide data collection and analysis (Yin, 2009, p.18). The theory will provide strong guidance in determining what data to collect and the strategies to analyse the data. Therefore before the actual data collection is executed it is important to develop a theory (Yin, 2009, p.36).

The theory is in some way the basics for the case study and therefore the literature review is important factor of this research. From that the research questions are drawn which is the main purpose of this thesis. The theoretical framework is presented in Chapter 2.

By having more than one case study to show support to the same theory a replication may be claimed but the empirical results may be considered more potent (Yin, 2009, p.39). As mentioned above a multiple case study was chosen for this research, where the same study is performed more than once in different organizations. The chances of doing a good case study increase with multiple case´s, compared to performing a single case study. Although multiple-case study can require extensive resources and time, its distinct advantage is that the evidence from multiple cases is often considered more compelling.

Figure 9: Research design (based on Yin´s book, p.57, 2009)
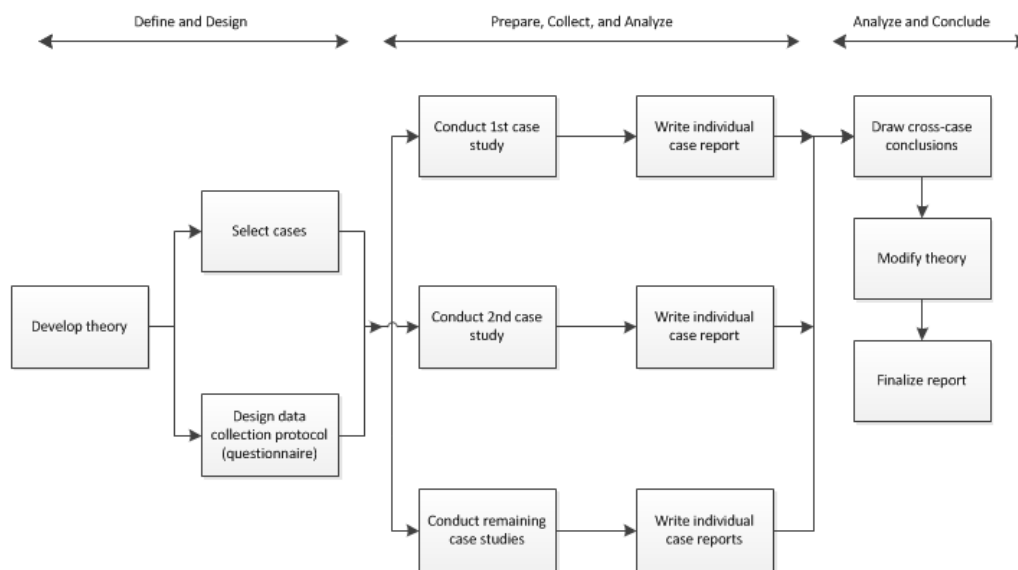
Figure 9, above, demonstrates the setup of this research that can be seen graphically.

3.3   Data collection

Data collection is crucial to all research. Through this process, researcher accumulates empirical material on which this research is based upon. According to Yin (2009, p. 39), there are six important sources: documentation, archival records, interviews,

direct observation, participant-observation, and physical artefacts. They can be generally divided into two categories: primary data; and secondary data.

Primary data is collected for fulfilling the needs of specific research. Primary data does not yet exist and must be collected. Secondary data is, on the other hand, previously published data not purposely collected for specific research. Secondary data can be found both within an organization and outside it. Common forms of secondary data include books, articles, company material, internet sources, etc. In this study, both kinds of data are included.

In this thesis the main sources of data collection were; documentation, archival records, interviews and direct observation. As mentioned in Introduction in Chapter 1, this research contains several records from non-theoretical resources. These records were taken from the internet with no clarification of its significance. Despite for that, these records were either consistent with the literature or provided different view on PMO from more practical perspective. The authors of these records were either PMO managers or had worked in PMO for more than few years. Due to these reasons and that PMO is rather undiscovered entity, the author decided to use this data.

Three principles were kept in mind while collecting a data. They are;

1. Use of multiple sources
2. Create a case study data base
3. Maintain a chain of evidence

The contemporary event involved in this thesis is the daily work of project management office in the four companies involved.

3.4   Data analysis

Data analysis is the last task but one of the most difficult ones because it consists of examining, categorizing, tabulating, testing, or otherwise recombining evidence, to draw empirically based conclusions. The data was analyzed by basing on the knowledge that was gathered through the literature review.

The theoretical framework comes from a subjective selection on literature which is most relevant and useful for this particular case study. There is always a risk that the selection could have been done in another and better way, articles could be misinterpreted or even missed. However due to broad and thorough literature search with that in mind that the author has several years of experience from reading and interpreting management literature should help ensure an appropriate theoretical framework.

The results from the case study, that is, interviews and the questionnaire, were interpreted in relation to the type of PMO and how long the PMO has been in the organization. The purpose of this was to be able to discern differences in perception of the entity. This was then analyzed in a logical sequence and compared to the analytical framework.

The main purpose of this study was to find answers to the main research questions by comparing the results from organizations with the theoretical framework in Chapter 2. This resulted in some new findings of PMO and new suggestions were made.

4 Case study

4.1 Introduction

This case study was performed in order to get to know main operations, implementation and structure of PMO in international organization. Main goal with the case study was to gain answers to the main research questions of this thesis, presented in Chapter 1.2. An insight was established on how Project Management Office (PMO) is operated in international organizations. The organizations involved in this case study are large, international and come from different industry sectors but they all have one thing in common; they are all market leaders in their field.

4.2:Organization 1, SCA	→	4.3: Organization 2, Marel	→	4.4: Organization 3, SonyMobile	→	4.5: Organization 4, Rio Tinto	→	4.6: Combined case study results
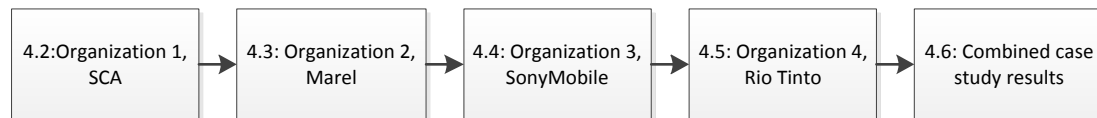
Figure 10: Case study structure

Here below the organisations will be introduced with short description. Then the Project Management Office will be described in each organization in order to understand what type of PMO is operating. Following that is a short case study result which demonstrates the main results within each organization.

4.2 Organization 1 – SCA

Figure 11: SCA´s logo (SCA, 2012)

4.2.1 Company description

SCA is a global hygiene and paper company that develops, produces and markets personal care products, tissue, forest products and packaging solutions. SCA was formed in 1929 as a holding company for ten Swedish forest-industry companies. Since then it has outgrown and today SCA operates and has sales in more than 100 countries under many strong brands (SCA, 2012).

SCA´s headquarters are located in Stockholm, Sweden. Jan Johansson is SCA´s President and CEO. In 2011, SCA had annual sales of SEK 106bn and about 44,000 employees in 60 countries. SCA main markets are Germany, Great Britain, US, France and Italy. SCA´s main brands are for example TENA, Tork, Libresse, Libero, Tempo and Zewa (SCA, 2011) and can be seen in Figure 12.

Figure12: Example of SCA´s products (SCA, 2012)

SCA creates value by fulfilling the needs of customers and consumers in a spirit of innovation, through continuous efficiency enhancements and with a clear desire to contribute to sustainable development. SCA´s main business is to develop, produce and market personal care products, tissue, packaging, publication papers and solid-wood products. For that they own about 2.6 million hectare wood land (SCA, 2012).

4.2.2 PMO in SCA

SCA has one Project Management Office (PMO) within the entire organization. The PMO has been around since 1996 with constant slow changes in developing. The formal implementation of PMO is not known since there has always been certain way of working in place. The main milestone for the founding of PMO was with the implementation of PRIME, SCA´s very own project management model. The PMO in SCA is difficult to define. First and foremost the PMO serves as a resource pool for the project management industry. PMO´s main tasks are:

- Resource pool
- Ownership of Prime, providing templates and website
- Training and coaching on Prime
- Ownership of Project Portfolio Management (PPM) process and system; define and maintain this system, develop, keep life and updated

Within PMO are 12 project managers working fulltime. These tasks above are the main tasks that are done in PMO along with working on projects. PMO only takes on projects that follow up to certain standards. These standards are that the projects have to be large, complex and multicultural. Each project manager is responsible for 2-3 projects which in total make 24-36 projects that are under supervision of the PMO at the same time.

Other projects that do not follow under these standards are not managed by thermo. General project management is in place in the organization. It gets guidance and training from PMO but concerning authority and decision making it is not under the

power of PMO. In this context the PMO can be described like a mother that guides its children and gives them good advice in hope that one day they will make the right decisions.

The PMO in SCA was located in Global Hygiene Category (GHC) but due to changing times in the organizations while this case study took place the new location of PMO will be in Global Hygiene Supply (GHS), market with red dot on Figure 13 here below.

Figure 13: SCA´s organizational structure

4.2.3 Case study results

The case study result is based on a single interview with two individuals that have been working in SCA for over 25 years and work now within the Project Management Office in Gothenburg. Individual number one is a director of PMO in SCA. His main responsibilities are to manage the 12 project managers within the PMO. Individual number two is an international business project manager that is one of the 12 project managers working within PMO. His main responsibilities are project management, education of other parts of the company and development of processes and tools.

These key informants provided documents and other informative information about the organization, the PMO and its main responsibilities and functions. This information was gathered by email discussion and a face to face interview that consisted of questionnaire about the PMO function.

4.2.3.1 Why was PMO implemented in SCA?

The implementation of PMO in SCA is difficult to describe since it did not happen by intention. In mid late 90´s a project management model, Prime, was implemented into the organization along with full time project management. SCA´s main projects are developing and launching hygiene products. After the implementation of Prime the

projects became more successful in terms of meeting targets and expectations. They later began to register all projects in the organization into one database and by doing that they saw how many projects were taking place that they did not know about. By this they were able to organize and coordinate the project work. Similar issues got addressed in different projects and this database helped by sharing the knowledge gained by solving those issues. The culture in SCA did not become a barrier for the implementation of PMO, mainly because the implementation itself happened slowly and in a long period of time. The implementation in SCA was, like the interviewers described it, "it was evolution, not revolution".

Now a day the PMO is located in a rather low level in the organizational chart and according to the interviewer they would like to see the PMO located in a higher level if possible. That would allow them to proving the priority and deciding on which projects to take on and provide them the authority to have the overview of resources to be able to take the consequences of PPM decisions.

The location of the PMO within SCA is between the line managers and senior managers. This can cause a power struggle between those two entities and the PMO. The line managers occasionally need to give resources away for project work which creates a struggle in the power balance among them and the PMO. Along with that, the senior managers are beginning to demand on more authority in projects which is causing an irritation within PMO.

4.2.3.2   The benefits and challenges of implementing a PMO within SCA

The main benefits SCA gained by implementing PMO are; a common structure is in place, it is easier to communicate and more common mistakes disappear as well as it provides more overview and full control of what is happening within the organization. Along with that the PMO contributes to sharing of knowledge by organizing procedures, roles and way of working. Training of employees for Prime and general project management procedures is another benefit of PMO. At last the PMO organizes and throws annual project meetings where people from different organization come together and talk about different issues regarding PMO functions. By this the sharing of knowledge is established outside the organization as well and the PMO is provided with new information, fresh ideas and evolves accordingly.

Despite for this, lessons learned or improvement areas within SCA are not among the benefits of PMO. According to the interviewers they state that it does not work to implement a database with this kind of information. Employees have shown that instead of searching in a database to read about previous lessons learned they rather ask other employees that they trust about guidance or simply learn from their own mistakes.

The main challenges the interviewers mentioned about implementing a PMO is to provide the understanding about the value of PMO to the people in the organization. There must be an understanding of the value that this entity will provide to the organization in order for it to become established and successful. Employees are the biggest barrier concerning changes and convincing the employees that this is some kind of a solution or improvement is a difficult task to overcome. Another important challenge is the increase in bureaucracy that takes away valuable time from employees but with understanding of the value of PMO this time will be not be considered wasted.

4.2.3.3 PMO lifetime

The PMO in SCA has blown out all records of PMO lifetime. The PMO has been around since 1996 or 16 years. This is eight times longer than regular PMO that tend to get closed down after 2 years according to the theory. The main reason that the PMO has been around for so long is because of slow changes that constantly are taking place within the PMO. The employees get time to adapt between changes and adjust to them. By this the PMO has grown within the organization and become part of it. The PMO continuously evolves and keeps up with the organizational changes.

Those interviewed find that the main reason behind a short lifetime of PMO is because organizations change and models stay the same. There has to be better connection between these two. Models become outdated and therefore no longer relevant to the work that is taking place within the organization.

When this research took place the organization was going through changing times and the fate of the PMO was still undecided. Despite for that the PMO in SCA has high value in the eyes of participants and in their mind PMO brings high value to the organization by making strategies come alive.

4.3   Organization 2 – Marel

Figure 14: Marel´s logo

4.3.1   Company description

Marel is a leading global provider of advanced equipment, systems and services to the fish, meat and poultry industries. Marel is a single source provider for food processors and a global leader in integrated systems for fish and poultry industry segments. Marel´s service is from harvesting raw material to packaging the final product and from standardized standalone units to all inclusive integrated turnkey systems, sees Figure 15. Products are designed solely to meet customer´s every need. Main products are marketed under three key brands: Marel, Stork Poultry Processing and Townsend Further Processing (Marel, 2012).

Figure 15: Marel´ food processor and products (Marel, 2012)

As a provider of advanced equipment and systems for food processing, Marel has an obligation to bring new technologies to the market that add value for their customers and shareholders. But as a global leader, the company´s responsibility extends well beyond that, to embrace sustainable and ethical business practices and ensure that its operations benefit society at large. (Marel, 2012).

Marel´s statement:

> To be the customer's choice in supplying integrated systems, products and services to the fish, meat and poultry industries. (Marel, 2011)

Marel is an international organization, with global distribution network which includes offices and subsidiaries in over 30 countries and approximately 100 agents and distributors around the world. It is a multinational company with over 4000 employee's worldwide, see Figure 16. In 2011 Marel´s revenue was amounted EUR 668.4 mil compared to 2010 when the revenue was EUR 582.1 mil (Marel, 2011).

Building on their knowledge of the market and customer needs, the local teams sell, market, distribute, install and service Marel´s standard products. Main business units are located in Netherlands, Denmark, the United States, Iceland, Slovakia and Singapore. The largest number of employees is based in the Netherlands, followed by Denmark, United States and Iceland (Marel, 2012).

Figure 16: Marel´s global distribution network (Marel, 2011)

4.3.2 PMO in Marel

The PMO in Marel was implemented around 11 years ago or in 2001 and the implementation is still going on according to the company's resources. Marel has one Project Management Office (PMO) within the entire organization and it is only functioning in the facilities in Iceland and Denmark.

Fourteen project managers work within the PMO and their main role is to run sales projects of different sizes. Therefore, it can be stated that the main role of PMO in Marel is carrying out sales projects. When sale has been done, project team get established. Projects are designed, manufactured, shipped, installed and implemented. The project managers' role ends with customer signature of acceptance. Each project manager runs around 4-30 projects at the same time, depending on size and type, which in all makes around 56-420 projects within the responsibility of PMO.

As it can be seen in Figure 17, Marel is split into four Industry Centres (IC); meat, poultry, fish and fp (food processor), which all have their own project managers. These project managers from the IC´s then belong to a sales community (SSUs) which is in kind of an umbrella above to profession of employees. This sales community is a focus group called Project Management. The PMO in Marel is located within this focus group. In Figure 17 here below, the PMO location is market with red dot.
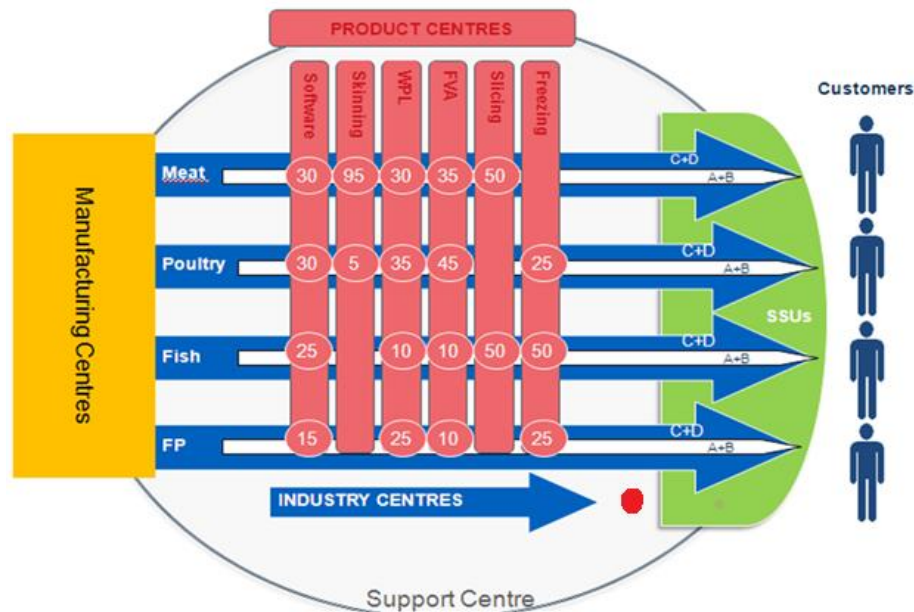
Figure 17: Marel´s organizational structure

4.3.3 Case study results

These case study results are based on interview with one individual that has been working for Marel for 11 years. When he joined Marel the Project Management Office had recently started and he took part in defining and evolving it. For the last 5 years he has been a community leader of Project Managers of Sales Projects and been running the PMO in Iceland. Along with that he has been the leader of Project Managers of Sales Projects and Project Engineer in Marel Industry Center Meat (IC Meat) for last 6 months.

His main responsibilities and daily tasks are:

- Distributing work toward IC Meat Project Managers and Project Engineers.
- Maintaining same work procedures across Industry Centre through Marel Sales Community
- Other various tasks inside IC Meat

This key informant provided documents and other useful information about the organization Marel, the PMO within Marel and its main responsibilities and function. This information was gathered by email discussion and a qualitative questionnaire.

4.3.3.1 Why was PMO implemented in Marel?

Main reason why PMO got implemented in Marel, 11 years ago, is because the organization wanted to separate the project management from the technical details. Experience showed that without defined project management in place, there is a risk that the responsible person becomes too involved in the technical part of the project. This could lead to that the project manager becomes too focused on the solution instead of the whole project. The solution might come out good technically but the overall communication towards the project team and customers would be lacking. A need was in place to put the project manager´s role into some kind of a box, for a

better and clearer definition of his role. By combining the PM´s in one group, employees began to understand the function of the project manager and the need to have one person in charge to run the project but not working in it. With PMO in place the roles became more visual because of the structure of PMO, employees began to work in a better manner and project outcome improved. The PMO provides support to the project managers and their co-workers gain better understanding of what the role of a project manager is.

The implementation of PMO took a long time according to the informant but the main impact that it had on the organization was a more structured work approach. Employees can now expect same working methods being followed in different projects in different locations. To establish that, working methods had to change and become more unite. That process was difficult and time consuming because employees expected that they would work in same manner as before despite structural changes had taken place.

The main learning factor that Marel could draw out from the PMO implementation is that a top-down support and participation from managers is crucial from the beginning. The effects need to be clearly explained to all employees as well as the reason why the change is done and how it will function. Last but not least there needs to be some kind of buy-in from other employees which will work according to the new structure. That is, it is not enough to announce the establishment of a PMO if the employees which will work inside projects being run under the PMO umbrella do not have the understanding of the PMO role, and their own role in the project. Then only the title is active but not the role and little or no changes will take place. Therefore the employees need to understand and see the benefits of the new setup for the company and themselves. With this in place, employees will assist with the implementation instead of being against it, a so called buy-in.

The PMO and organizational culture are in a way dependent upon each other in many ways. The culture became a barrier to the implementation of PMO because the organizational background was characterized by that the project managers knew everything and did everything. For some employees it was therefore difficult to understand the change. The culture needs to be open for project management structural approach no matter what project management method is used. The education and understanding of the need for a real project manager, not the title, within the organization is taken in baby steps in order for the culture and employees to accept it.

The implementation resulted in better understanding of what is expected and needed from Project Managers in projects. Along with that it became more visual what the project manager's role is. Concerning project procedures, they are changed regularly but after the implementation the PMO assists in keeping them in place and up to date.

PMO has become a necessary entity for project managers because of the support it provides to their work. Inside PMO the best practices can be discussed between the project managers and agreed on. Along with that a distribution of knowledge has become a large part within the PMO and the entire organization.

4.3.3.2   The benefits and challenges of implementing PMO in Marel

The main reason for implementing PMO into international organizations comes from the fact that as more diverse the organization becomes the need for PMO increases. The culture is not only by country level but also by company level and even though companies bear the same name, culture is different depending on location. The structure that PMO provides has written procedures on how to work and assists in getting the same understanding across borders.

The main benefits of implementing a PMO within Marel area more structured working method and the PMO becomes a common ground to develop way of working in projects. The aligning of project management performance forces them to work in the same manner.

The main organizational losses are the added overhead of running a PMO.

The main benefits of implementing a PMO for an individual employee working inside PMO is that he receives more support as he is a part of a group of other employees working on same or similar projects. With powerful PMO, the project manager's work becomes more visual.

The main individual flaws are less space for flexibility which is sometimes a problem. Every mistake is easily seen which is maybe not good on individual level.

The most important success and failure factor when implementing a PMO is not getting full and real support for the change. People tend to not do what they say or, like the informative described it: "Walk the walk and talk the talk". It is important to explain the benefits to affected employees and why the change is done. Employees need to understand why they should work this way and agree upon it.

In order to overcome the main challenges it is important to keep employees updated on why the changes are done and how they will be performed. Along with that it is helpful to get the employees to participate in the change instead of only accepting it. By that they establish ownership of the change and hopefully become proud of it and by that, support it.

4.3.3.3   PMO lifetime

The PMO in Marel has as well as the PMO in SCA extended regular lifetime. According to the informant in Marel the PMO is now around 11 years old. The main reason why the PMO in Marel has been running for such a long time is because the employees are allowed to participate in the PMO evolvement. By that they understand the procedures and purpose of the PMO and gain ownership and pride of this entity. The main reason why PMO´s get closed down is because of downsizing, PMO is expensive department to run or another reason can be because there is a minimum amount of people/projects that require PMO.

The PMO in Marel has very high value for the interviewee. He finds PMO vital to back-support for project managers to align processes and distribute knowledge around the organization.

4.4 Organization 3 – Sony Mobile Communications AB

Figure 18: Sony Mobile´s logo

4.4.1 Company description

Sony Mobile Communications AB, formerly known as Sony Ericsson Mobile Communications AB, is a multinational mobile phone manufacturing company and an utterly owned subsidiary of the Japanese electronics company Sony Corporations. It was founded in 2001 as a joint venture between the Japanese firm, Sony, and the Swedish telecommunications equipment company Ericsson, under the name Sony Ericsson. In 2012 Sony acquired Ericsson´s share and became Sony Mobile (Nilsson, 2012).

Sony Mobile Communication is a leading global innovator of audio, video, game, communications, key device and information technology products for both the consumer and professional markets. With its music, pictures, computer entertainment and online business, Sony Mobile Communication is uniquely positioned to be the leading electronics and entertainment company in the world (Sony Mobile, 2012).

Sony Mobile Communications has research and development facilities in Sweden, Japan, China and United Stated. Its headquarters are located in Lund, Sweden but will be transferred to Tokyo, Japan in October 2012 (Sony Mobile, 2012).

Figure 19: Sony Mobile´s facilities

4.4.2 PMO in Sony Mobile

Sony Mobile has around five to ten PMOs in the entire organization. PMO can be found in; IT, Operations, Finance, Development, HR etc. Sony Mobile has had PMO function within the organization for more than 13 years. The PMO that took part in this research is in Corporate IT department and has been in the organization for 5 years. This PMO is the only PMO entity in Sony that will be referred to in this part.

When the PMO within Corporate IT was first implemented it was a smaller team that reported to the CIO (Chief Information Officer). During the last couple of years the PMO has grown to be a bigger team with more Project Managers but at the same time it has been lowered in its position on reporting level in the organization. In other words, the PMO has become more of a Project Managers resource function that can be compared to an in house consultant company where the costs are pushed out to the projects so that the PMO line costs end up on zero.

At the moment the PMO consists of 15 project managers and the PMO follows around 30-50 projects at the same time. The 15 project managers are all equal though some are more senior than other. They report to steering group when working in projects but when not they report to the head of PMO.

Now days the current PMO manages only projects that Corporate IT takes part in. These projects that PMO manages need to fulfil certain standards, which are; involve several teams within Corporate IT, have significant budget, be complex or be an implementation of something new. Along with this the PMO owns and manages a project model based on PROPS.

The PMO´s main strategy is to keep a high level of Project Managers, a working project model and process. Most of the Project Managers within the PMO are PMP (Project Management Professional) certified and have good knowledge of the entire organization. The success of PMO is measured by each project, based on budget, time and functionality fulfilment. By this, the value of PMO becomes more available and the life existence is more likely to outgrow.

4.4.3 Case study results

The case study result below is based on an interview with single individual that has been working for Sony Mobile Communications since 1999. When she began working for Sony Mobile Communication a PMO was already in place. Today the interviewer is heading up the PMO function in Corporate IT department and has been in that position since May 2010.

Her main responsibilities and daily tasks are:

- Collecting information regarding incoming projects and assign Project Managers to them
- Planning and making sure that different skills in the team are used in the best way
- Coordinating a program as a Program Manager
- Responsible for the Project Process including continuous improvements when it comes to the model and process itself, templates, training and information sharing

The key informant provided documents and all informative information about the organization Sony Mobile Communications AB, the PMO and its main responsibilities and function. Due to location and distance between participants, this information was gathered by email discussion that consisted of questionnaire and at last a phone interview.

4.4.3.1 Why was PMO implemented in Sony Mobile?

The reason for PMO being implemented in Sony Mobile is because there was a need for one standardized way to manage projects to make it easier for the employees involved. That is, same roles, phases, documents, decision points etc. Along with that it was important to have one place providing overview of all major on-going projects in the organization.

The implementation had an impact on the organization in a way that some employees got moved from the application teams and into the PMO. Project Managers (PMs) became general PMs, not specialized. That is considered a good act from the project management point of view but from other point of view employees tend to find PMs too general, that is, not skilled enough in their specific area. However the plan is that the PMs are general and the PMO has specialized competence in the application and infrastructure teams. It is difficult to have all competences as well as project management competence in the same person, background and experience. In a way the PMO became a career possibility for people that wanted to develop in the area of management and leadership.

The implementation of PMO in Sony Mobile has resulted in overall improved project outcome in a way that the quality of project management is higher because of the use of one common model and that there is now one place where the CIO and others can turn to when an overview of the current project portfolio is needed. Along with that the project procedures changed and the project model that PMO follows got implemented on a broader scale and is continuously improved.

4.4.3.2 The benefits and challenges of implementing a PMO within Sony Mobile

The main benefits of implementing a PMO into the organization according to the interviewee is; a common way to run projects and one place for the project portfolio.

The main benefits of establishing PMO from individual point of view are the wide perspective they achieve by being involved in all kinds of projects, areas and organizations. The PMO opens up a great variety in projects, departments, organizations, people etc. This enables the person involved to learn a lot in a short period of time. However, a PMO manager has no power to make decisions in projects. The only decision power is in how projects are run, that is, what project model to use, processes etc.

One of the main challenges that Sony Mobile mentioned is to keep the functional competence among the Project Managers. The PMO at times becomes too general and the Project Managers can be seen as too administrative and less skilled in the area in question. This is overcome by rotating people within the organization as well as allowing employees to work closely together and by that they gain understanding of different positions and become more understanding towards each other.

4.4.3.3 PMO lifetime

The PMO in Sony Mobile has been running for 5 years. This lifetime is rather standard according to the theory, but a regular lifetime is 2 years. The reasons for PMO being alive for this time are because necessary conditions are in place. These conditions are; a certain amount of projects is in place, working project models are maintained, skilled Project Managers are employed and the entire organization among the management sees and acknowledges the benefits of the PMO. Without some of these factors the existence of the PMO might be jeopardized.

The PMO in Sony Mobile is considered valuable for the participant involved in this research. It is important that projects are performed in a controlled way and the PMO makes sure of that.

4.5 Organization 4 – Rio Tinto Alcan

Figure20: Rio Tinto Alcan´s logo (Rio Tinto Alcan, 2012a)

4.5.1 Company description

Rio Tinto Alcan is one of the largest aluminium producers in the world. Their work involves finding, mining and processing the earth´s mineral resources. Rio Tinto Alcan is the result of combination of two organizations, Rio Tinto Aluminium which started in Australia in the mid-1950s and Alcan Inc which started 1902 in Canada. In 2007 the mining organization, Rio Tinto combined with Alcan, resulting in Rio Tinto Alcan (Rio Tinto Alcan, 2012a).

As a global leader in the aluminium business and the largest producer of bauxite, alumina and aluminium in the world, Rio Tinto Alcan has worldwide operations in N-S-America, Australia, Africa, Asia and Europe which provides a global ranking in bauxite and aluminium production, see Figure 21. Its global headquarters are located in Montreal, Canada (Rio Tinto Alcan, 2012a).
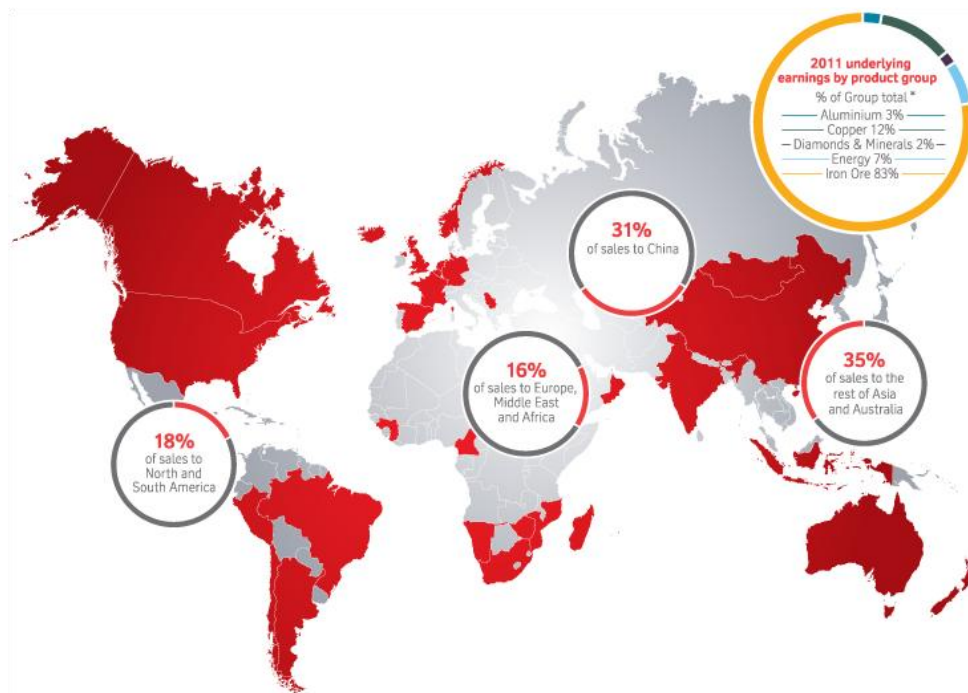

Figure21: Global facilities of Rio Tinto Alcan (Rio Tinto, 2011)

Rio Tinto Alcan creates around 4 million tons of aluminium every year. This is in accordance to their strategy which is;

"To be the leading global mining metals company"(Rio Tinto Alcan, 2012b)

As global as Rio Tinto Alcan is, they have implemented PMO into their facilities to improve the overall project work. Here below is a description of the PMO facilities within the organization.

4.5.2   PMO in Rio Tinto Alcan

Rio Tinto Alcan has had PMO offices within their organization since 2004 or for 8 years. At least four PMOs are within their premises. These offices are located near all the larger business units in Europe, Australia and North-America.

Today the PMO consists of five project managers and the PMO manages and follows around 30 projects at all times. The PMO reports to a Senior Manager.

The PMO main function, role and responsibility consist of;

- Define best practice for projects
- Write standards
- Define issue training
- Control training
- Mentor Project Management team
- Act as gate keepers for projects (Project Portfolio)
- BUIC Organization (Business Unit Investment Committee)

These are the main roles of PMO today, but like any other organizations the roles and responsibilities of PMO progress through the years.

The PMO´s main goal is to get the right projects for the company. That is, by being in line with the company´s strategy and ensuring that the project managers manage the projects in correspondence to time, cost and scope.

4.5.3   Case study results

The case study results below are based on a qualitative questionnaire that was answered by employees in PMO facilities located in France.

The individual that answered the questionnaire has been working for Rio Tinto Alcan for 2 years and is a part of the PMO team. When he began working for Rio Tinto Alcan the PMO was already in place.

His main responsibilities and daily tasks are:

- Project Planning
- Defining best practise for projects
- Writing standards
- Define and issue training
- Control training
- Mentor the Project Management team

The key informant provided informative information about the PMO within Rio Tinto Alcan. Due to location and no direct communication with the informative, the

questionnaire was the only source of data from the PMO. Other information was gathered from the official website of the organization.

4.5.3.1 Why was PMO implemented in Rio Tinto Alcan?

The main reason why PMO was implemented in Rio Tinto Alcan is because there was a need to improve project performance in relation to cost, time and quality and it is possible to say that these factors have all improved after the implementation according to the interviewee. The answer for how PMO improved these factors will be described in the next subchapter.

Another reason why PMO got implemented is because of the fact that culture and practice is different between areas which lead to different work procedures between areas. The PMO solves this problem by standardizing working methods and making the entire project work more unite. Along with that PMO assists in making important decisions regarding projects and is the only place in the organization that keeps track of lessons learned from previous projects. This is one of the most important factors in improvement of project work, without knowing the failures and how to fix them, it is difficult to improve.

PMO acts as gate keepers in Rio Tinto Alcan. It decides upon what projects to take on and what not as well as having the power to stop projects that is not performing in accordance to the Rio Tinto Alcan work of rules. Due to that the PMO has to have sufficient decision making authority and trust within the organization. This role has resulted that projects that are in accordance to the corporate goals have been chosen which improves the entire organizations and facilitates the organizations to reach their goals.

4.5.3.2 The benefits and challenges of implementing a PMO within Rio Tinto Alcan

The main benefits of implementing PMO are standardized working methods, prioritization of projects, same vocabulary in the entire project base, better and more efficient resource sharing in regard to time and cost, development of project managers and at last these factors above should lead to overall lower cost within the organization. PMO contributes to sharing of knowledge by lessons learned database and integration of best practises to the project managers.

With these benefits listed above must lead to the question, how is PMO implemented successfully?

In Rio Tinto Alcan the main success factors of PMO implementation are clear roles. The role and responsibility has to come from the top management and from there lead to the PMO. This method solves the role and power issue that PMO entities attend to face.

The main challenges that the implementation in Rio Tinto Alcan met were;

- Misunderstanding of the roles and responsibility of PMO. Employees did not understand the purpose of the department and without that the PMO lacked support.

- No clear roles and therefore no power. Everyone is doing something and therefore nothing.
- No budget and therefore no PMO function.
- Change in the organization every year. The PMO needs to adapt to the organizational changes in order to being up to date with the organizations.

Along with these factors listed above, the organizational culture became a bit of a barrier for the implementation due to the fact that PMO has the responsibility of informing project managers on how to perform projects and execute them. This became a problem among the project managers that had done their work sufficiently before. The reason why this change is done has to be explained to all and the PMO has to prove its value amongst those project managers.

To overcome the main challenges the PMO has had clear road map for the next years. A clear roadmap allows each and every employee to know where the organization is heading, the corporate goals, vision and mission. With this clear the entire employee base is working towards the same goal. The same is needed for the PMO department. With a clear goal and purpose, the PMO will receive sufficient support from the employees as well as the PMO will work towards reaching the corporate goals

Furthermore, frequent personnel changes have shown positive effect on the PMO quality. New employees bring fresh ideas and are full of energy to face the changes and upcoming challenges.

4.5.3.3 PMO lifetime

Rio Tinto Alcan has established a measurement system for the PMO which works that way that the success of PMO is measured by number of days/hours the PMO uses to train and guide the project management team. This measurement system might be a large factor for the reason that PMO has been alive for 8 years in Rio Tinto Alcan. Along with that the informant pointed out that necessary conditions that enable PMO to stay alive are a clear road map for the organization, as stated earlier.

Main reason why PMO does not survive in organizations is because of lowering of budget which usually leads to the closing of the PMO. As mentioned before, the PMO attends to be one of the first entities to get closed down when things go bad for organizations. Another failure factor is the distance from the PMO to project teams. The PMO loses its touch on the project work, that is, loses the control and overview which can become a problem. Without good communication between project managers and PMO the main purpose of PMO is jeopardized.

Another reason why PMO´s will not survive is, according to the informant, a stable organization. Rio Tinto Alcan finds stable organization threatening to the PMO lifetime. This is due to the fact that the role of PMO is to develop and implement new standards and methods to the project work and without that the PMO isn´t improving the project work and therefore unnecessary. This is an interesting point because the PMO in its self is responsible for bringing new methods and standards into the organization and without that the project work is stable and the PMO worthless.

The interviewee found PMO highly important for Rio Tinto Alcan in a way that it improves the projects with lowering cost and time.

4.6   Combined case study result

Table 2: Combined results from each organization

Organization	SCA	Marel	Sony Mobile	Rio Tinto Alcan
PMO number	1	1	5-10	At least 4
PMO lifetime	16 years	11 years	5 years	8 years
Main function, responsibility and role of the PMO	A resource pool for PMs. Cross functional project integration. Ownership of Prime & PPM process and systems. Train & coach PMs.	Contains PMs who are responsible for carrying out sales projects.	Manages specified projects that Corporate IT takes part in. Owns and manages a project model based on PROPS.	Define best practice. Write standards. Define and issue training. Control training. Mentor Project Management team. Gate keepers. Portfolio of projects consolidation.
Benefits of implementing PMO	Common structure. Easier communication. Common mistakes disappear. Overview& control.	Structured working method. PMO is a ground to develop project management.	To have one common way to run projects & one place for project portfolio.	Standardize work. Prioritise projects. Same vocabulary. Recourse sharing. PM developing. Lowering cost.
Challenges of implementing PMO	Getting understanding of the value of PMO.	Getting understanding & agreement on how to work.	To keep the functional competence of the PMs.	Misunderstanding of role & responsibility No clear role & no power. No budget. Organizational change.
Necessary factors that keep PMO alive	Continuously evolving, keeping up with the organization & making slow changes.	Allow employees to participate in the PMO evolvement.	Certain amount of projects, working project model, good PMs & organization that sees the benefits of PMO.	Clear road map for organization, budget and a clear vision on the purpose of the PMO.
Main reason why PMO get closed down	Organization change & models stay the same. Decision power.	Downsizing. Minimum amount of people that need PMO.	If some of the factors above are not in place.	Lowering of budget. Stable organization.

5 Reflection and discussion

In this part of the thesis, the main research question from Section 1.2 will be listed and answers from the theoretical part and the case study will be combined. In general this part will summarize the main findings that this thesis provided.

5.1 Main research questions

5.1.1 Why should PMO be implemented into international organizations?

Most organizations aim to fulfil the customer needs, whether it is lowering price, having the product closer to the customer or increasing the diversity and quality. With this organizations are hoping to become successful and in the global world today, many organizations have to be located in more than one country in order to reach that goal. This increases the diversity within the organization and the more diverse organization are the more important it gets to have written procedures on how to work. Culture is not only by country but also by organizations and even though organizations bear the same name the culture varies between locations. One offspring of these changes and a rising entity within international organizations is project management office (PMO).

First of all the main benefits of implementing PMO is to have one common ground to develop project management within the firm. By this an overview and control is gained over the entire project database within the organizations. Furthermore, organizations are able to establish one way to manage projects as well as having one common entity that has overview of the entire project status within the organization. In international organizations it can be difficult to control projects and expect same working methods and standards between different departments, cultures and countries. As the organizations enlarge and become more diverse the more the need is for a common ground.

PMO develops and establishes a project management model that provides structured working methods between project managers. This project management model introduces a certain way of working with standards, methods and other descriptions that enforce projects to be done in a certain, specified way. This contributes to project managers working more organized and organizations can expect more successful project outcome in regards to time, budget and quality.

By having a PMO, a common structure for project work and project portfolio is established. It becomes easier to communicate between projects, choose the right projects, gain information about different projects and most and foremost common mistakes disappear due to better communication.

PMO provides guidance to assist project managers in different settings which is vital in order for project work to become successful, especially because there are experienced project managers in PMO that are able to share their experience with other PM´s. This provides control over the project status and enhances project success. PMO is intended to be a collaborative point for sharing of knowledge where project managers in the entire organization can seek assistance along with gaining access to the project database. By this the structure that PMO provides assists

organizations transferring same knowledge across borders and sharing lessons learned in getting the same understanding across borders.

PMO contributes to overall organizational improvement and knowledge sharing. This is because PMO throws meetings for other PMO functions in different organizations, shares information between projects and staff, trains employees and evolves according to the external environment. This is beneficial for the organization because knowledge sharing is one of the main factors in organizational success.

The main benefits of implementing a PMO for an individual project manager are that he becomes a part of bigger unit and receives more support from the other employees that are working on the same or similar projects. The project manager's role is put in some kind of a box in order to support the role and make it clearer for the entire organization. This creates separation between project management and the project work itself which is often needed in organizations. It is important to have one person or team in steering the project and another team working on it. Along with that a vital support comes from the PMO to a project manager that was not there in the first place.

With powerful PMO´s, organizations will achieve project management oversight, control, support and alignment as well as the project manager's work becomes more visual.

5.1.2 What are the main challenges of implementing a PMO?

Results from the case study vary between organizations in this matter. The implementation in some organization did not meet many major challenges in the implementation face. The main reason for that is because the implementation took place during long time and each change got adjustment time as well as baby steps were taken towards the change. However, other organizations faced some challenges and in the modern world things need to happen quickly, increasing the potential of difficult challenges to come up. Here below the main potential challenges according to the case study and the theory are listed in hope to assist upcoming PMO entities to become successful.

The main challenges when implementing a PMO into international organizations is the corporate culture and the organizational resistance to change. Organizations are built on their employees and they are the biggest barrier for PMO implementation according to the theory and the case study. Providing understanding about the value and benefit of PMO is a difficult task to conquer but one of the most important ones in order to ensure a successful PMO implementation. This can be overcome by explaining the benefits to the employees, allowing them to participate in the implementation and at last but not least, taking baby steps during the change. Rushing into implementations has proved to be a fatal mistake. Employees and organizations need to adapt and accept the change before another step is taken.

However if this is overcome another challenge will probably follow that can be equally hard to overcome. It is not guaranteed that employees will act as they say and follow the new protocols despite an understanding of the value of PMO has been ensured. Implementing a PMO is time consuming and brings high amount of bureaucracy. People tend to talk the talk without walking the walk hence consequently lacking progress in action, like one participant mentioned in the case study. How is it possible to get employees to perform in a different way than they have before? To overcome this challenge it is important to repeatedly explain the reason for change

and the benefits it brings until an understanding has been reached. Along with that, allowing employees to participate in the change instead of only accepting it has shown to be effective. By that the employees gain ownership and pride of the change and are more likely to accept it.

The third challenge is lack of experienced project managers and overall lack of leadership within the organization. This is important to have since the PMO is based upon experienced project managers and as one of the interviewee in the case study result mentioned; the PMO is a career possibility for people that want to develop in the area of management and leadership. If this is not in place in the organization this can become a barrier that will have to be solved by either training or hiring qualified personnel.

At last, if the appropriate change management strategy is not in place it can be difficult to implement PMO. PMO is an entity that enforces change upon the organization. Due to that a strong change management strategy is vital to be in place. This can be solved by employing process standardization before PMO implementation or by adapting a flexible change management strategy that fits the organizational needs.

5.1.3 How can PMO be kept alive in the long term?

Theoretical evidence shows that PMO life expectancy is in average approximately two years. PMOs are dynamic entities created to solve problems within organizations and by that they need to enforce some kind of a change. Because of this they do not fit within the organization´s context. They are overambitious, enforce changes that not all employees agree with and the last but not least they often lack management support. This implies short life expectancy for PMOs.

The companies involved had all in common that their PMO had exceeded regular lifetime. According to the case study, the main reasons for PMO´s getting closed down is the need for downsizing, minimum amount of people that need PMO, minimum amount of projects in place, working project model is not maintained, lack of skilled project managers and the entire organization and management does not see and acknowledge the benefits of PMO.

Stanleigh (2006) listed four key points that he finds facilitate PMO existence. These points are in some accordance to the case study results and are listed here below:

Ensure that all projects are strategically aligned is the first point. This is done by reviewing lessons learned; develop criteria which projects will be prioritized by or aligning them with corporate strategic plans. Therefore PMO should work in accordance with the project portfolio that should be in place in the organization. When projects are aligned with corporate goals they will be able to meet profitability targets and generate necessary return on investment.

Second point is to create culture that supports project management environment. This is in accordance to the case study results that were achieved from Marel. One of the main factors that keep PMO alive is allowing employees to participate in the PMO evolvement and by that employees get to know the PMO function, gain belief in it which hopefully delivers in support. This is an important factor to embrace because as mentioned in theory it is important to have leaders and strong spokespeople to support the PMO and by this these people will be achieved.

Third point is to implement a strategic project management best practice which is a large factor that all the PMO functions in the case study have in common. All the PMO´s above have a project management model in place that was invented and developed by the organization. Around this model a PMO has been established, like in SCA for example. In SCA they implemented the project management model PRIME and around that the PMO developed. This is an important factor to have because this is what PMO is all about, a common ground to run projects which is achieved by mutual project management model.

Fourth point is to create a strategic project measurement system that will be able to measure project success and then the value of PMO for the organization. Two organizations involved have a specific measurement system to measure the success of PMO and they are Sony Mobile Communications AB and Rio Tinto Alcan. It was based on measuring the budget, time and functionality fulfilment as well as the number of days/hours the PMO uses to train and guide the project management team.

These findings above have been combined in an explanatory figure here below which demonstrates the factors that keep PMO strong and the factors that weaken the PMO. The factors within the large circle make PMO stronger and enlarge the circle; the factors outside the circle weaken it.
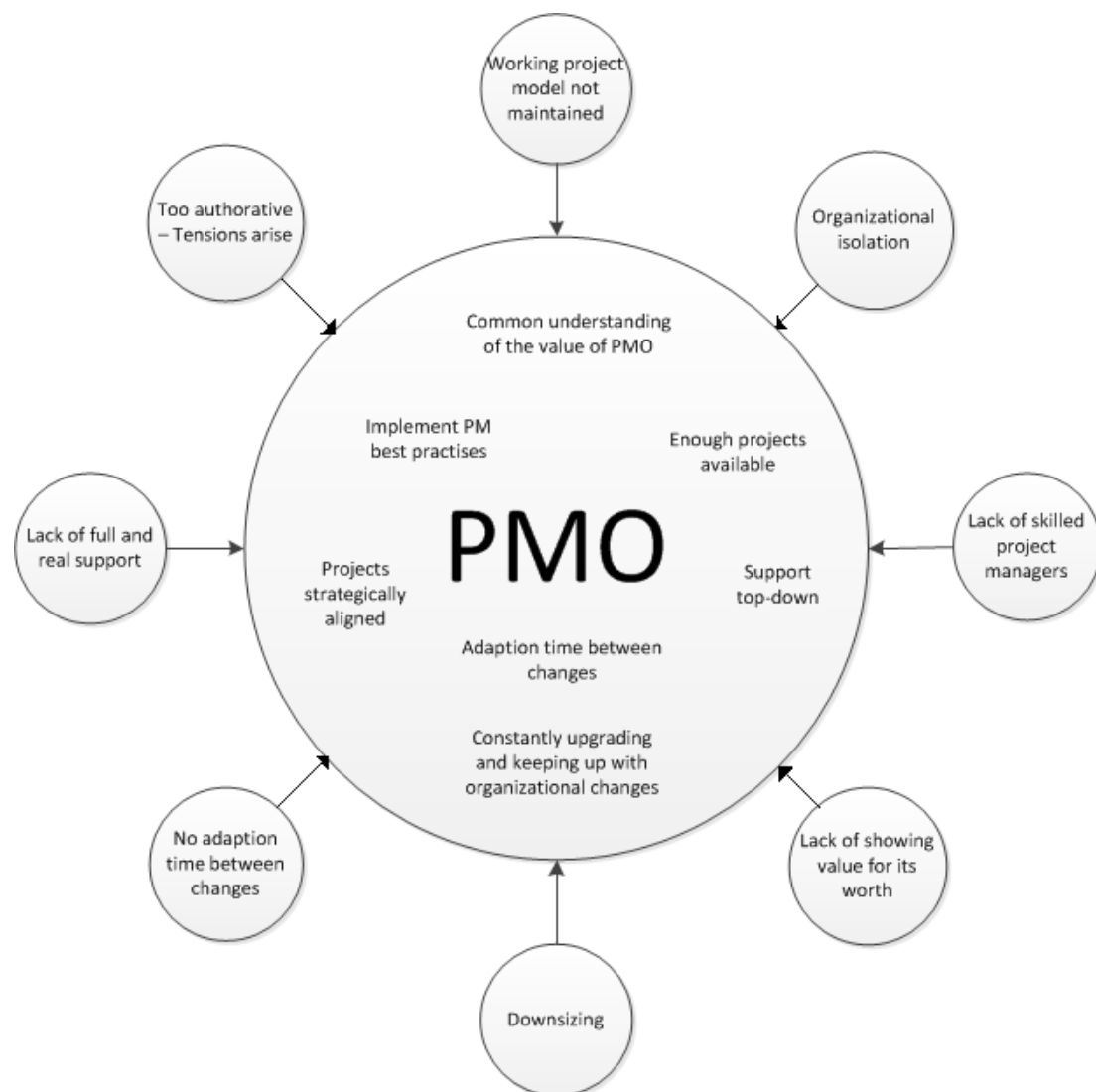

Figure 22: Supportive and diminishing factors of PMO

These points listed above and in Figure 22, show main supportive and diminishing factors according to this thesis. The PMO is a fragile entity that can improve the organization and bring success. But if an understanding of the entity is not available then it most likely will become an overhead to the organization. The factors in Figure 22 might help in identifying the factors that might be missing or the factors that might be harming the PMO function within organizations.

6   Conclusion

6.1   Limitations to the study

Limitations are an important factor for case studies and can change the whole perspective of the reader on the main outcome of the research. Each reader has to decide on his own how much value is possible to put in considering the limitations that are listed here below.

First of all the results are based on a limited number of resources. This thesis is constructed by a single student which was only able to perform limited research in the time given. The second constraint is that project management office is not a well-known entity in industries and therefore it became difficult to find it within organizations. This difficulty set the thesis work behind schedule for about 4 weeks. From the beginning the goal was set to collect five organizations to this case study. This goal was not succeeded due to difficulties in finding a PMO within organization as well as to get an interview with organizations.

Due to limited number of organizations, time and resources, this research method will not provide the ground for statistical generalisation of findings. Nevertheless, the attempt was made to collect reasonable data and get perspectives of different stakeholders. This is considered to be fulfilled. The organizations involved were international; however, only one or two persons got interviewed in each organization. Nevertheless these spokespersons are relative people to this study. These are employees that either run or have worked for a long time for the PMO and the organization involved and are therefore more than qualified to answer the thesis questions.

6.2   Summary and main conclusion

It is clear that there is no one answer to the questions that were asked in the beginning of this thesis. Project Management Office is heavily depended upon the organization that it is in and organizations are as diverse as they are many.

PMO can be a vulnerable and unpopular department since it brings drastic changes and does not show easily value for its work. In some cases it interferes with other departments like taking resources or interlope with the projects and at last it calls for changes in the organization. The main challenge for PMO is to get employees and the culture to become more approachable and implement change in their mind set and by that they will become more open to the changes that PMO brings.

If the challenges are overcome, PMO can bring great benefits to large organizations that have big project base or facilities in different countries. PMO ensures an overview of the entire project load as well as implementing standards and ways of working so each project is done in a similar way by the same standards. PMO has different roles, each varying with levels of importance dependent on the age of the PMO and the level of organizational project management maturity within the organization.

There is no manual for how to implement PMO into organizations. Each organization is different from the next and the implementation has to take that into consideration. There has to be a bit of instinct when implementing and running a PMO. If the culture of the organization does not accept the entity then that is a problem that needs to be

solved. PMO becomes a long term entity when it is showing better project results, when employees understand the value of it and when it gets support from top down. As De Melló Pires (in Gale, 2010) said one of PMO´s let downs is the failure to get everyone in the organization on the same page. Managers want transparency and project managers need an advocate. Therefore by working across all levels in the organization, the PMO can help project teams and company leaders to work in harmony. PMO needs to fulfil different needs and therefore it is important to talk to both sides. When the strategically important projects of the organization are completed with success and with the expected return, the value and importance of PMO is recognized by the entire organization.

PMO might be rather young entity within industries, but with its fast development and its multisite it is more approachable to organizations. Industries today are more and more based on projects and projects have become big part of our daily lives. With that being said, the future prospects of PMO are that it will progress more efficiently through the years and become larger and more common part of organizations in the upcoming future.

6.3 Future research

As mentioned before the PMO theory is quite young and undiscovered. Therefore many unresolved questions about its value and purpose in organizations remain unanswered. The following areas could be a potential material for a new thesis and would be interesting to research further in the upcoming future.

How to measure the success of PMO in order to demonstrate the benefits of having it? It could be interesting to get a case study within an organization and demonstrate the total value of PMO to the entire organization. This could be done in collaboration with organizations with that in mind to develop and deliver some kind of PMO measurement system for that organization.

Secondly it would be interesting to find out what kind of firms PMO is beneficial for, what has to be in place for the company to gain value of the PMO. By that it would be interesting to take equal amount of organizations that failed to keep PMO alive and organizations that succeeded and have PMO within their premises and try to find difference between them. This could be in terms of; certain amount of employees or projects, certain project maturity has to be in place etc.

Last but not least it could be appealing to see what changes occur in the overall project work when a PMO is implemented. This could be related to mapping the evolvement of PMO from the beginning to what it has become today and try to map that process.

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8   Appendix

8.1   Thesis description for organizations

MasterThesis

Project Management Office in international organizations

Thesis description

This thesis is a part of a master program at Chalmers University of Technology called International Project Management. The main focus of this thesis is on Project Management Office (PMO) in international organizations. Over the last decade organizations are facing more and more challenges that are characterized by reinforcement in competition, product rates, service, innovation and increasing emphasis on delivering on time and within budget. Organization's respond by developing new and flexible organizational entities where the emphasis is on projects and they are more numerous and strategically important than before. As part of this new challenge many organizations have implemented a new organizational entity, Project Management Office (PMO). Due to young age of life and continuously changing phenomenon there is little theoretical or empirical research on the topic.

Purpose and research questions

The purpose of this thesis is to research the theory of Project Management Office and compare it to the real situations in large international corporations. By doing this I hope to gain a deep understanding of what Project Management Office is, its responsibilities and how it is implemented, both from theoretical and practical perspectives.   I first of all want to summarize why and how PMO should be implemented within organizations. Secondly, a case study within few organizations will be done in order to analyze how the PMO theories are applied in practise. This case study will be focused at answering the following questions:

- Why should PMO be implemented into international organizations?
- What are the main challenges of implementing a PMO?
- How can PMO be kept alive in the long term?

The third part of the thesis is to explore the relationship between the existing theories and work in practise along with new findings about PMO. This will hopefully enable the researcher to provide new aspects of this recently evolving entity.

6. June 2012

Bjarma Magnúsdóttir, International Project Management at Chalmers University

8.2   Questionnaire

Questionnaire for Master thesis: PMO in international organizations

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Personal Data

1. What is your position in the organization?
2. For how long have you been working in the company? How long in this position?
3. What are your responsibilities and daily tasks?
4. Have you been involved in any PMO implementation?
    a. How many?
    b. What was your role?

_____

PMO Data

1. Could you describe the main function, responsibility and role of the PMO within your company?
2. Have the main roles and responsibilities of the PMO progressed after the implementation?
3. How many PMO does the company have?
4. Where in the organization is PMO located, could you show it on the organizational chart?

_____

The implementation of PMO and international organizations

5. Why did your organization decide on implementing a PMO?
6. How did the implementation of PMO impact the organization?
7. Did the organizational culture become a barrier for the implementation?
8. How does the PMO depend on the organizational culture?
9. Is it possible to say that the implementation of PMO has resulted in better project outcome?
    a. If so, in what way?
10. Did project procedures change after implementation of PMO? How so?
11. What would you say is the most important success and failure factors when implementing PMO?
12. What benefits and losses would the establishment of PMO bring for you as an individual? (Power, support, responsibilities)

_____

The benefits and challenges of implementing a PMO

13. Why should PMO be implemented into international organizations?
14. What are the benefits of implementing a PMO in an organization?

15. **What are the challenges of implementing a PMO in an organization?**
    a. **How can organization overcome the main challenges of implementing PMO?**

_____

PMO lifetime

16. **For how long has the PMO been in the organization?**
17. **What are the necessary conditions that enable PMO to stay alive for longer period?**
18. **What would you say is the main reason why PMO get closed down?**

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Additional PMO information

19. **What is the PMO´s main focus on/strategy?**
20. **How are different roles of staff in PMO defined? And are they defined clearly and understood inside and outside of the PMO?**
21. **On the scale 1-10 how valuable/important do you find PMO to be for your company? Why?**
22. **How many people are working in PMO?**
23. **How many projects does PMO follow at the same time?**
24. **To whom does your PMO report to? (Senior Managers, Project Managers, etc.)**
25. **How is the effectiveness/success of PMO measured in the organization?**
26. **Do you experience power struggle between PMO and PM´s (Project Managers)?**
27. **Do you find PMO contribute to sharing of knowledge? How?**
28. **How much decision making authority should the PMO have? How much authority does it have in your organization?**

_____

Your comments regarding the questionnaire

Thank you for your input to this thesis! If you wish to leave any feedback or comments regarding the questionnaire or thesis, please do it in the space below: