

*Development of functions and level in
the organisation for a PMO.
A case study of how the PMO at Caran,
Gothenburg can be improved.*

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DISSERTATION

International Project Management
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PMO- Project Management Office
PMI- Project Management Institute
PMP- Project Management Plan
PM- Project Management
PSO- Project Strategic Office- Project Management office

Communication provides the wings for you to fly to success.

— Anonymous

Abstract

Companies have since about ten years ago realised the benefits a PMO can make for an organisation. Companies establish PMOs to improve project success rates, to implement standard practices and to lower costs in the projects. To develop a PMO will take time, money and some effort from the organisation. The level of the PMO in the organisation will have an influence of the functions and the way the PMO will operate in the organisation. This report will focus on how the PMO mature in the organisation and the different function it can have. To establish a PMO is for the organisation a project that continuously has to be improved to be effective and fit the organisations needs. In the end of the report the result of a case study conducted at a consult firm in Gothenburg will be presented. The case study has focused on how the PMO can be improved and more effective in the organisation. The case study also investigated one of the most important functions a PMO can have, progress reporting, and how it can be improved.

1. Introduction

1.1 Purpose

The purpose with this master degree dissertation is to investigate how the internal communication influences the company and how to manage the internal communication. This report will investigate the way managers at the company, project managers and the project management office can influence the project in the right direction, by having a good and effective communication, and utilize the internal communicative resources to secure the objectives for the project. The report will also investigate what a project management office (PMO) is and how it works in different organisations. To be able to do this the author will do a literature review in the subject, to get more understanding and information of the subject. A case study will be conducted at WM-data Caran's office in Gothenburg. The outcome of the case study will evaluate what improvements that can be done for the PMO and one of the PMO's most important functions, i.e., progress reporting of the projects, to better fit the organisations needs and optimise the way the employees handle and execute the projects.

1.2 Aim

The aim for this dissertation is to evaluate how a PMO can influence the whole company and how it can help the company to secure the outcome of the projects. In the literature review, the aim is to get more information in how companies and organisations using a PMO approach can be more effective in the project management. The literature review will also show how the PMO can influence the organisation at the development stages the entity goes through in order to be more efficient and more productive in their functions.

2. Background

2.1 Delimitations

Information about PMO is a widely written topic, many authors have written about the topic and many of them have their own experience and way of express their thoughts in the topic. Authors have through decades, been presenting many different aspects and theories about PMOs. During the past 15 years, the benefits of using a project office have become apparent and more and more PMOs have been established in different kind of organisations. This report will mostly focus on how a project management office can help the organisation to increase the efficiency in the projects and how it can have an impact of the organisation's information flow. Due to the limited size of the report, it is not possible to present all theories in the topic, therefore, some assumptions has been done and the author has focused on the functions a PMO can have in the organisation, where in the organisation a PMO can be established and how the PMO will mature in the organisation. Many of the authors in the topic have their point of view in the matter and almost every author has their experience from different branches and the theories of the topic are many.

2.2 Literature review

In this chapter, the author will present the theoretical framework for the study. This chapter will sort out some of the concepts of project management office (PMO) and clear out why it can be so important for an organisation to understand the meaning of the PMO concept. In the literature review, the reader will find out the how the PMO can mature in the organisation and the different placements a PMO can have.

2.3 Project Management Office (PMO)

2.3.1 What is a PMO?

The project management office can in other contexts be called program office, project control office, project office etcetera. The way the project management is named is often according to the position it got in the organisation and which duties it has. According to a survey conducted by Brian Hobbs in 2006 the most common name for this kind of entity is project management office, 59% the those who had this function called it PMO.

In this report the author chose to call the entity for project management office (PMO). California state university (<http://it.csumb.edu/departments/data/glossary.html>, accessed 10 May, 2006) describes PMO like “an office or department responsible for establishing, maintaining and enforcing project management processes, procedures, and standards. It provides services, support, and certification for project manager”. In other words, a PMO's main function is to focus on fostering project management excellence throughout an organisation. Project management excellence is only achieved when standardised processes, procedures, tools, training and support functions are established, implemented, and continuously improved upon by a PMO. This sets a

strong foundation for the successful management of strategic project initiatives (Boyd and Madaboosi, 2005).

More and more organisations are implementing PMOs to improve project performance and ensure ongoing quality of delivery. Reduced funds, lack of necessary resources, and internal politics have prevented PMOs from being established or taking root (www.pmsolutions.com).

A PMO is a group of people with a mission to support project managers in the successful launch, implementation, executing and completion of projects. It includes performing any tasks that can benefit current or future projects. This mission can be interpreted narrowly or broadly, depending on the budget and overall objectives of a PMO (Whitten, 2000).

A project management office is an umbrella support organisation for all the projects in an organisation and does not have any operational responsibility. The organisation in question may be the entire corporation or one division, such as the IT division. In 2003, about two thirds of organisations with IT departments had PMOs, either inside or outside of the IT department (Hoffman, 2003). Briefly, a PMO is a centralised organisation dedicated to improving the practice and results of project management. Some PMO initiatives are minimal, involving part-time staff to help out on projects as needed. Other initiatives involve huge infrastructure, with rigid centralized planning, control and methodology (Kendall, 2003).

The project management office is an organisation which is developed to support the project manager to carry out his/hers duties (Kersner, 2001). The support functions are those that help project managers do their jobs better by providing assistance and clarity in project management processes. They include such facilities as status reporting, procedures for starting and ending projects, and a process to establish priorities among projects. The support functions also include help for project managers who are also team participants and for those who are called upon to manage multiple projects (Hallows, 2002).

The major responsibility of the project manager and the project office personnel is the integration of work across the functional lines of the organisation. Functional units, such as engineering, R&D, and manufacturing, together with extra-company subcontractors, must work toward the same specifications, designs, and even objectives. The lack of proper integration of these functional units is the most common cause of project failure (Kersner, 2001). The development functions are those that involve recruiting, training, and developing project managers. The goal is to provide a pool of experienced, talented project managers who are capable of tackling any project in the organisation and of managing it successfully.

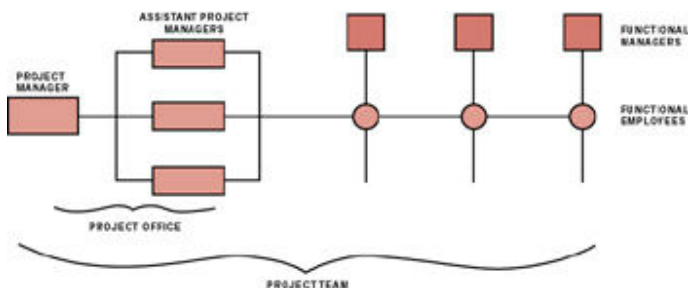


Figure (1). Project team and the PMO. Source: Kersner (2001).

Many times a project office is staffed by promotion of functional specialists. Unless careful examination of individual qualifications is made, disaster can easily result. This situation is quite common to engineering firms with a high percentage of technical employees (Kersner, 2001).

2.3.2 Why project management office?

It is often too easy to lose control over the project portfolio and the coordination of all the different projects in it. It is important for the company to be able to support the project manager with suitable way of working, models, methods, tools and be able to set up a competent manager with commitments and responsibilities for the project. It is common that the costs are exceeded and the outputs are not the same as planned (www.projektspecialisten.se).

There are according to Wysocki (2003), at least four reasons why an organisation would choose to implement a PMO:

- The organisation needs to establish procedure for how the projects should be run. This can be an action of the growth of the number and complexity of the projects in the project portfolio.
- Increased need for qualified project managers. To ensure the regrowth of project managers the PMO have to develop education and support for new project managers. The experienced project managers also need continued education and training to be able to efficiently manage the larger more complex projects. The PMO are the responsible entity for the development and education of the project management in the organisation. The organisation can have big difficulties in having control over needed education and support for the project managers and many organisations therefore chose to establish a PMO that can keep control over the project managers needs. The PMO becomes the entity with most knowledge of the projects in the organisation and continuously work for improvements for the project managers.
- The third reason for establishing a PMO is if the organisation has lack of standards and polices. Lack of these factors can effect the efficiencies and the productivity in the project. Increased failure rate of projects is the product of the lacked factors. Through the establishment and enforcement of standards and practices, the PMO can have a positive impact on efficiency and productivity
- The last reason, according to Wysocki, for an organisation to change to a PMO approach is the greater demands for resources. Since the projects are becoming larger and larger and the number of them increases the demand for resources are greater. Shortage of information technology professionals can become a barrier to project success. By paying attention to the demand for skilled project teams and the inventory of skilled team members, the PMO can maintain the proper balance through training.

If an organisation has several projects under way and no PMO, the project managers are probably not learning from one another. They are probably not sharing project management best practices or being challenged to incrementally and continuously improve their skills and knowledge in managing projects. Furthermore, there is a strong temptation for project managers to be overtly

influenced by the product managers to whom they directly report, and make emotionally or politically driven decisions rather than the best business decisions.

2.3.3 PMO in the organisation

There is a movement in many organisations to consider the PMO in terms of a series of levels. A level-one PMO might support just one project, a level-two PMO would support several projects under the same program, a level-three PMO would support a division or department in the organisation with all of its projects, a level-four PMO would support the organisation in its projects, and a level-five PMO would be placed strategically at an executive level and would support business strategy decisions and resource allocations at the enterprise level. At level five, the PMO is comparable to the description of its functions in PMI's Program Management Office Specific Interest Group (www.pmi.org). The organisation structures its methodologies, processes, procedures, controls, tools, people, training, and all necessary components required to integrate existing projects, manage the portfolio, control the required functions, and successfully deliver an organisation's business objectives. The figures below explain in a simple way the different levels where the PMO can be positioned in the organisation.

The Figures 2A-2D shows the different responsibilities for the projects the PMO can have depending on the level it exist in the organisation. Figure 2A the PMO is positioned on the lowest level and are only responsible for one of the projects in the organisation.

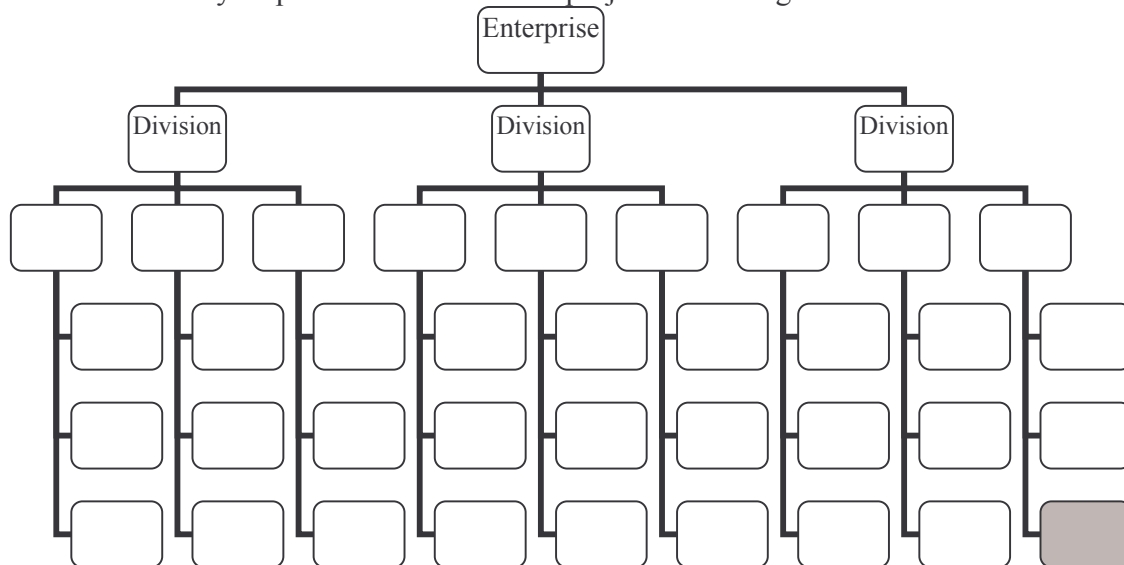


Figure (2A). A level-one PMO in an organisation. Source www.pmi.org.

Figure 2B shows the PMO responsibilities for the projects in the organisation if the PMO is positioned at an operational level in the organisation.

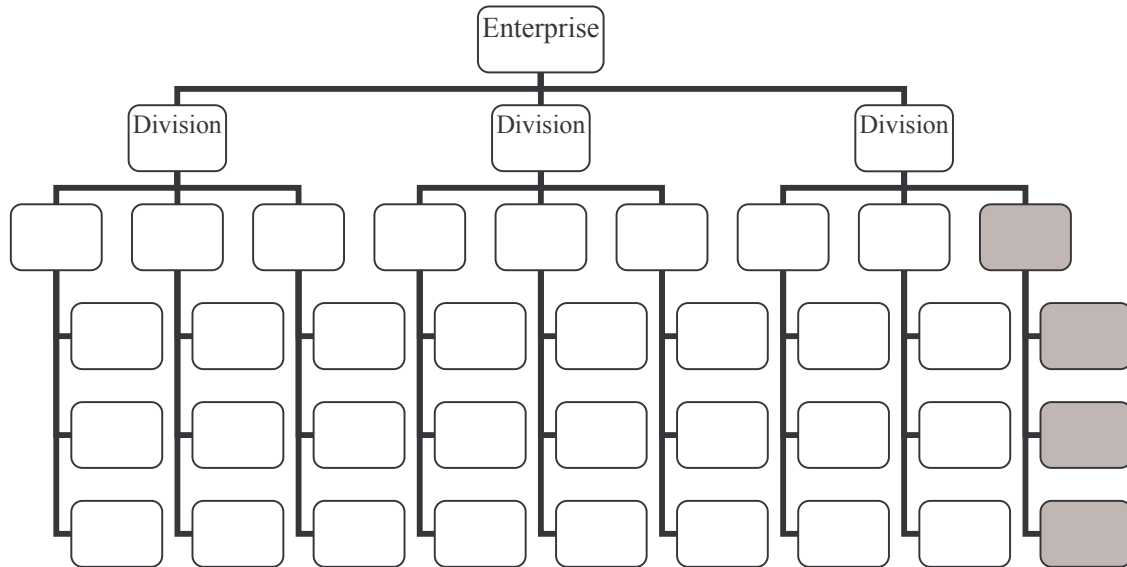


Figure (2B).A level-two PMO in an organisation. Source www.pmi.org.

Figure 2C shows the PMO's responsibilities for the projects in the organisation if the PMO is positioned at a divisional level in the organisation.

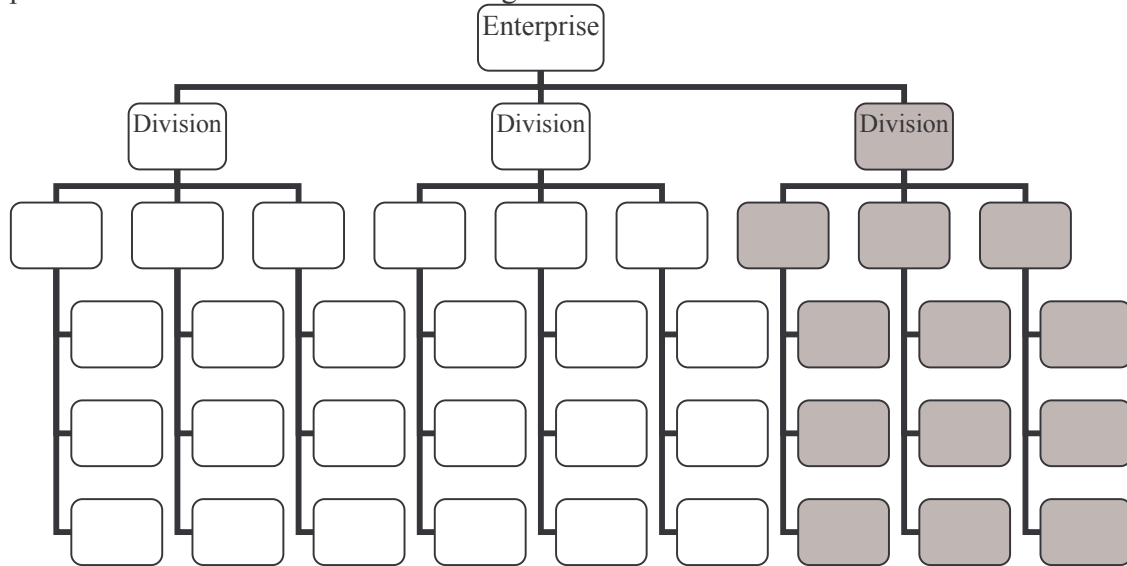


Figure (2C). A level-three PMO in n organisation. Source www.pmi.org.

Figure 2D shows the PMO's responsibilities for the projects in the organisation if the PMO is positioned at a universal level in the organisation.

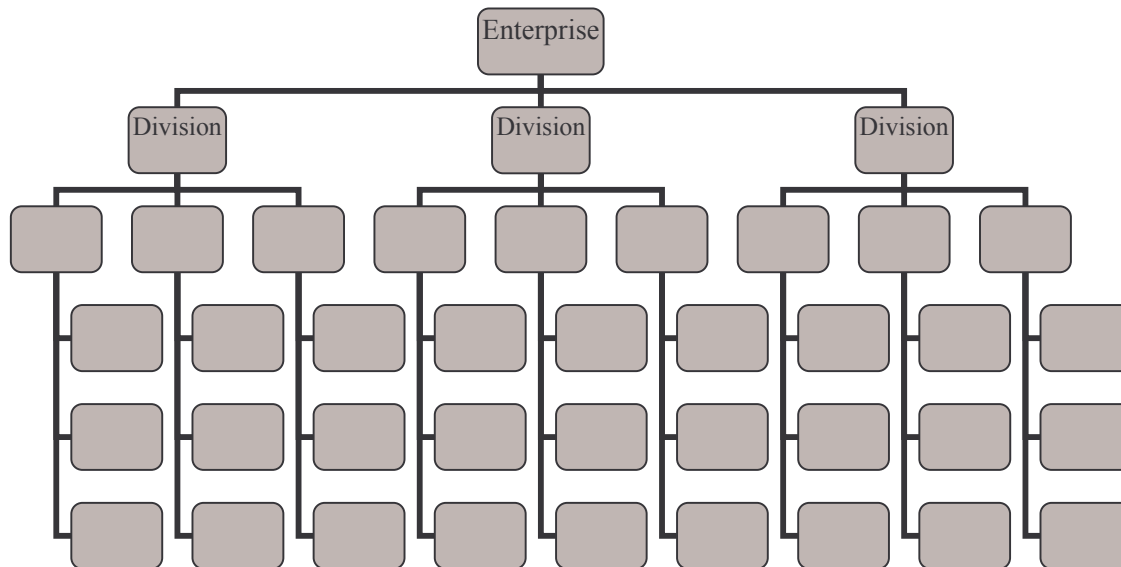


Figure (2D). A level-four PMO in an organisation. Source www.pmi.org.

Probably the most widely used descriptions of functions are those that assist projects. If these are complemented by organisation-oriented functions, then the resulting PMO will be an exceptionally effective unit in achieving project management maturity and more importantly, in facilitating higher profits and in maintaining the competitive advantage of the organisation. The PMO then essentially acts as the interface between the project managers and the organisation. Even at this point, the PMO can change the entire direction of the organisation to one in which there is enterprise project management. Alternatively, the organisational goals and needs might dictate adoption of only a small set of these functions (Rad, 2002).

2.3.4 Project Management Office's responsibilities

To make a project management office successful, it must be organised in a way that fits the structure of the company. The company must also have patience in the establishment and development of the PMO. A PMO are not likely to be successful in the first years, hence it will take time for the PMO to establish suitable strategies and resources for the organisation. For one thing, there is no uniform recipe for success, it is important that the PMO structure closely hews to a company's corporate culture. PMOs also will not give organisations a quick fix or deliver immediate, quantifiable savings. Companies with PMOs report that they don't necessarily yield easy to use cost-saving benchmarks and performance metrics (www.cio.com).

To place the PMO in a central role and expose it to the life cycle of multiple projects from initiation and planning to execution and closing, places PMOs in a unique position to take a major strategic role in organisations (Tinnirello, 2002). See Figure (3) below.

The exposure of a PMO to multiple projects places it in a good position to both manage communication among projects, and between projects and other parts of the organisation. This role may extend to providing executive updates on projects to an executive group. Communication can be mediated either by direct communication such as by providing newsletters and presentations, or indirectly by providing access to project repositories such as shared directories or intranet sites. These roles become more important for larger organisations or organisations with many projects. In these cases, a PMO has the potential to provide a summarized and focused overview of projects (Tinnirello, 2002).

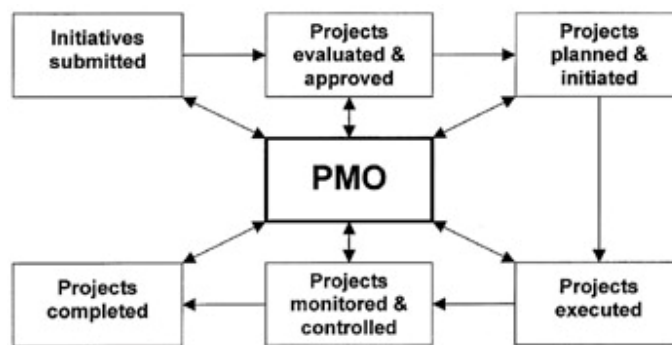


Figure 3. The central role for the PMO makes it more effective in the organisation. Source: (Tinnirello, 2002).

2.3.5 Functions for a PMO

There are many descriptions for the functions of a PMO. The primary reason is that this concept is evolving, and therefore some descriptions tend to be outgrowths of the previous descriptions (Rad, 2002). The present author have divided the different functions that the PMO can have into six main headings, project support, consulting and mentoring, methods and standards, software tools, training and project manager resources. Under the six headings you can read more of what is included and why they are important.

The PMO objective, in contrast with those of a single project, is to complete all projects to best achieve the goals of the organisation. The PMO's responsibilities include project portfolio management, strategic resource planning, internal project coordination, overall project oversight, cost estimation, contingency planning, quality assurance, external provisioning, project managers' professional development, process management, and tool support (Miranda, 2003).

2.3.6 Project Support

As the number of projects grows and the scale of them grows larger, the associated administrative requirements also expand. The administrative work is not often reflected directly in project deliverables and thus can represent a distraction to the core project team (Dai, 2004). The PMO project support services are an attempt of the part of the PMO to remove as much non-value-added work from the project team as it can and place it in the PMO. To remove the administrative

work from the PM's makes it possible for the PM's to have more focus on the work of the project (Wysocki, 2003).

Another important function the PMO got is to archive all reports; this makes it possible for the organisation to learn from old mistakes and to not redo them. To build up a bank of knowledge within the organisation will gradually build up a more effective project process (www.krkab.se). If the PMO is uniquely positioned to gather and archive best practices from around the company, makes them particularly valuable as a resource to project teams (Wysocki, 2003).

There are several reasons why it makes sense to have all project archives in one place. For example, this is a great place to keep "lessons learned." A smart person learns from his or her mistakes. But a wise person learns from other people's mistakes. Archives are also useful in case of legal repercussions from any past project work. Also, records of individual accomplishments and work performed can be helpful when recruiting for future projects (Kendall, 2002).

Representative areas include records of project performance such as status reports, variance analysis and changes to the baseline plan, risk lists and other risk management documents, information on prior successful and unsuccessful projects and a database of lessons learned (Dai, 2004). The PMO sets up and supports a common repository so that prior project management deliverables can be candidates for reuse by similar projects, further reducing project start-up time (www.pmostep.com).

For more examples of the support functions the PMO can have see Appendix I.

2.3.7 Consulting and Mentoring

As organisations become more sophisticated in project management it needs to move from an ad hoc to a more strategic PM approach. A PMO can contribute by providing the following areas of consulting and mentoring: assistance in employing PM methodologies and responding to risk events, mentoring on unique measures that must sometimes be taken to foster project success (and sharing those same ideas with upper management) and group sharing sessions for project managers (Dai, 2004). The PMO should help and coach the PMs if there is a need for it (www.krkab.se).

A consultant, according to an online dictionary, is a professional who provides expert advice in a particular domain or area of expertise (www.wikipedia.org).

Mentoring is a different form of consulting. Mentoring is working with a person to help develop his/hers skills and increase his/hers effectiveness in a specific area of interest (Whitten, 2000).

The PMO professional staff members should be available to project teams and project managers on an as-requested basis. They should stand ready to help with any specialised assistance (Wysocki, 2003). The mentor should work side by side with the team member for as long and as often as necessary until such time that the team member and/or the project manager feel comfortable that the team member can perform his or her functions without direct intervention by the PMO staff member (Rad, 2002).

The senior PMs can act like professional consultants for the PMO, their experience are broad and deep. They will be able to help the project manager even in the most complex of circumstances (Wysocki, 2003). The PMO can provide important help for projects in trouble. Every troubled project should be analysed to determine root causes for the trouble. If it is a skill issue, then training or skills development must be provided to prevent it in the future. If policies or measurements caused the problem, these must be changed to avoid wasting time and also to avoid making the PMO become nothing more than a search and rescue unit (Kendall, 2002).

Senior PMs can be beneficial help in the planning session of the project. The PMO consultant is the ideal person to conduct a project planning session. That relieves the project manager from the facilitation responsibility and allows that manager to concentrate on the project plan itself. The PMO consultant can concentrate on running a smooth planning session. This PMO consultant will have better planning facilitation skills than the project manager by virtue of the fact that he or she has conducted far more planning sessions. It is a win-win situation (Wysocki, 2003).

2.3.8 Methods and Standards

The PMO should be responsible for the development and maintenance of the project method for the organisation. To develop and maintain the method for the project is the most fundamental activity for the PMO (www.krkab.se). A PMO can develop and maintain a set of standards and methods, becoming a steward of documented PM expertise within the organisation. These standard procedures should be detailed enough to provide guidance but not so excessively detailed as to inhibit creativity. The following list includes representative areas: proposal development, change management, risk assessment, documentation standards and project closeout (Dai, 2004).

Methods for how to do things are needed in every organisation for project management. This PMO function should be to provide expertise, marketing and encouragement without bureaucracy or a police force. The focus should be on how to use the minimum necessary methodology to ensure predictable results (Kendall, 2002).

Wysocki's (2003, Accessed: 24 November 2005) list contains the services that could be included in this function:

- Establishing, monitoring, and enforcing standards
- Project selection for the portfolio
- Work Breakdown Structure construction
- PERT/CPM Network development
- Maintenance of tools/process library
- Bid preparation
- Risk assessment
- Status reporting
- Change management
- Documentation
- Change orders

The establishment, monitoring, and enforcement of standards are major undertakings for a newly formed PMO. The method and standard function is a function that can affect the culture and operation of the organisation. It is beneficial if the plan to put standards in place involves as many stakeholders as possible to make sure the change will be as beneficial and advantageous as possible (Wysocki, 2003).

The PMO establishes and deploys a common set of project management processes and templates, which saves each project manager or organisation from having to create these on their own. These reusable project management components help projects start-up more quickly and with much less effort (www.pmostep.com).

To make sure the project methods are followed and the projects are done in a similar manner each time is a way to ensure the quality in the project. The PMO could also minimise the misunderstanding in the project work, by ensuring that the projects having common processes, deliverables, and terminology. There is less misunderstanding and confusion within the organisation if everyone uses the same language and terminology for project related work (www.pmostep.com). Furthermore, the PMO should equip the PMs with adequate tools to make the project management easier and more effective (www.krkab.se).

2.3.9 Software Tools

Every PMO should be looking for productivity improvements. As teams become dispersed, it is essential that they remain productive. In this technology-crazed business environment, you can not let time and distance erect barriers to performance. The PMO are responsible for soliciting, evaluating, selecting, and contracting with vendors of these tools. Wysocki (2003, Accessed: 24 November 2005) lists the services that the organisation depends on the PMO to provide:

- Software evaluation
- Software selection
- Vendor negotiations
- Software training
- Software management and maintenance

2.3.10 Training

The PMO should play a major role in developing a standard, high-quality training strategy for the organisation. The most successful programs are the ones that offer participants many choices, as well as some mandatory programs to build the common language. Also, because many project managers view their work as a profession, the PMO should have a professional development approach and career track that makes training significant to highly motivated project managers (Kendall, 2002). To ensure that the organisation got access to competent and qualified project managers, it is important that the PMO equip the organisation with continuously improved training for the PM's (www.krkab.se).

Project managers, like all professionals, cannot truly understand how to best perform their jobs unless they have been properly trained, and are then coached and mentored while performing as project managers on active projects. The benefits of assembling project managers across an organisation into a single department that focuses on the needs and nurturing of project managers can have a profound positive impact on the success of projects and the professional maturing of project managers. Project managers must continuously learn from lessons of prior projects, as well as learn from the latest thinking in good project management. The likelihood that project managers can steadfastly and objectively grow to master the profession of project management is slim to nonexistent if they are reporting to many different areas scattered across an organisation (Whitten, 2000).

If the organisation should have maximum impact on the practice of project management in the organisation, a project management curriculum must be built around an established project management methodology (Wysocki, 2003).

Training in project management has probably been around longer than any other methodology an organisation is likely to have. It is important that is a central approach that is followed as a result of their training. Otherwise it can result in that everyone is still doing his or her own thing. Some will follow the approach they had been taught, others do what they have always done, and yet others teach themselves.

According to Hobbs (2006), customised training programs are the preferred method of training with facilitation either by internal staff or a combination of internal staff and outside consultants.

Wysocki (2003, Accessed: 24 November 2005) lists the training services the PMO could provide;

- Project management basics
- Advanced project management
- PMP exam preparation
- Specialised topics
- Support of the training department
- Development of courses and course content
- Delivering courses
- PM training vendor selection

When it comes to project management training, the relationship between the training department and the PMO must be a collaborative effort. The development of the project management curriculum should involve both the curriculum development experts from the training department and the subject matter experts from the PMO. The delivery of the curriculum can be done either by the PMO or by the training department. If it is to be done by the training department, then the curriculum design must have followed a facilitative design (Wysocki, 2003).

2.3.11 Project Manager Resources

The function of project manager resources of PMO includes a number of human resources services revolving around project managers. The list encompasses assessment, development, and deployment services (Wysocki, 2003, Accessed: 24 November 2005).

- Human resource development
- Identification/assessment of skills
- Selection of team members
- Selection of project managers
- Assessment of project teams
- Professional development
- Career guidance and development

It is important that the PMO make sure its ability for the project managers to professional develop their skills and status as PMs. To certify the PMs according to PMP is a natural way to have a possible career in the PMO as a PM (www.krkab.se).

Since the PMO is responsible for the training of the PMs it is crucial for the PMO to identify the assets of skills for the PMs in the organisation, otherwise the organisation can spend a lot of money on unnecessary a training.

The function of the PMO can differ a lot from organisation to organisation; the mentioned function in this chapter is a combination of many different authors' opinion of the functions a PMO should have. It is only a suggestion of the functions and since it is no right or wrong answer for which function a PMO should have, it is possible that some organisation's PMO has fewer functions. The functions are usually developed during the time the PMO exists; and this makes it possible to be a more effective working unit in the organisation.

To keep in mind is that if the PMO works as a project archive and instructor, PMOs can advance organizational learning and avoidance of previous mistakes through lessons learned repositories and training (James, 2002).

According to a study conducted by PMI (Hobbs, 2006 *p10*), the top five most important functions for a PMO are:

1. Report project status to upper management
2. Develop and implement a standard methodology
3. Monitor and control of project performance
4. Develop competency of personnel, including training
5. Implement and operate a project information system

The most important function according to the PMI study was to report project status to the upper management, 83% of the asked persons thought that reporting about the status of the project was the most important. On the second place in the survey came develop and implement a standard methodology.

The third function and the first one are strongly connected to each other. To be able to report status of the project the PMO has to monitor the performance in the project. To ensure the quality of the outcome of the project the PMO has to have control over the project, and this control can be done by doing project reports in the project.

At the same percentage, 65%, as monitor and control project performance came develop competency of personal, including training.

The fifth most important function for a PMO according to the study conducted by PMI is to implement and operate a project information system, 60% of the asked consider this function important. For more information about the placement of the functions, see Appendix II

2.4 Evaluation of the PMO

How to measure the success of the PMO can be a difficult issue, and different organisations have different approaches. Some look at the cumulative success rates of the projects and see if the PMO is responsible for improving that overall rate (for projects that produce products that are actually put into use). Some look only at the improvement of estimated time and cost versus actual time and cost for the projects. Some base PMO success on the opinion of stakeholders for all of the projects (Brandon, 2006).

Client and team viewpoints on project performance are fundamentally different. For best results, the project must be rated and evaluated at regular and frequent intervals during the life of the project (Rad, 2002).

To evaluate the PMO in a, for the organisation appropriate manner, is a effective way to mark what progresses the PMO have been able to conduct and set new objectives for the entity. It is important that the PMO constantly is striving for new objectives and new way of improve the project management in the organisation.

The list below shows PM Solutions (www.pmsolutions.com, accessed: 12 January 2006) identified top ten critical success factors for a PMO.

- The PMO has senior executive-level support.
- A superior process for selecting project managers and teams has been established.
- Project teams include participants from multiple business functions and disciplines.
- A high standard of truthfulness and integrity exists within the PMO.
- The PMO serves as an ambassador, communicating with all internal and external stakeholders.
- Training of project managers is competency-based (rather than purely academic).
- Project management methodologies, tools and templates are standardised.
- A useful knowledge library of best practices is maintained as part of the PMO.
- The PMO is involved in all projects from start to finish.
- The organisation's project portfolio is managed by the PMO.

An evaluation of the PMO presented www.computerworld.com is based on these ten critical success factors. The evaluation makes it possible to rate how well the PMO performs in these areas. The rating scale are from 0 (could not be worse) to 3 (we have got it covered). By doing this evaluation the PMO can get some suggestions of what areas the PMO are performing well and which areas the PMO needs to focus more on in order to be more effective and successful. More complex and deep going evaluation of the PMO can be conducted by different companies that are specified in project management and development of PMOs.

2.5 Development of the project management office

PMOs can help chief information officers (CIOs) by providing the structure needed to standardise project management practices and facilitate project portfolio management, as well as determine methodologies for repeatable processes. A PMO is also a driver, since it forces companies to keep closer watch on project expenses and progress.

PMOs are no panacea for project challenges, including battling today's tepid business climate. To keep in mind is that a PMO is not a uniform recipe for success- it is very important that the PMO is structured in a way that fits the organisation and the corporate culture that it is operating in (Santosus, 2003).

A PMO is not established one day to be a perfectly working entity the next day. According to a survey conducted by PMI, 40% of 500 interviewed said that it took longer time than planned to implement a PMO (Hobbs, 2006).

To establish a PMO and make it according to plans will take time. There is a strong link between the length of time a PMO has been operating and project success rates: The longer the better (Santosus, 2003).

In a research done by CIO and PMI (Santosus, 2003) with 450 people involved revealed an increased success rate for organisations with PMO's. The rate of success in the project is likely to increase the longer time the company got a PMO. The result of the research can be seen in Figure 4 below. Moreover, another result of the research was that the company is less and less interested in tracking the project success the longer the PMO is established. This can be because of the high percentage of project success that the company is in less need for tracking the project success since it is not losing so much money anymore. Another reason for not tracking the project success can be that the company feel a confidence in their project management and feel that they do not have to rate the project success so often anymore.

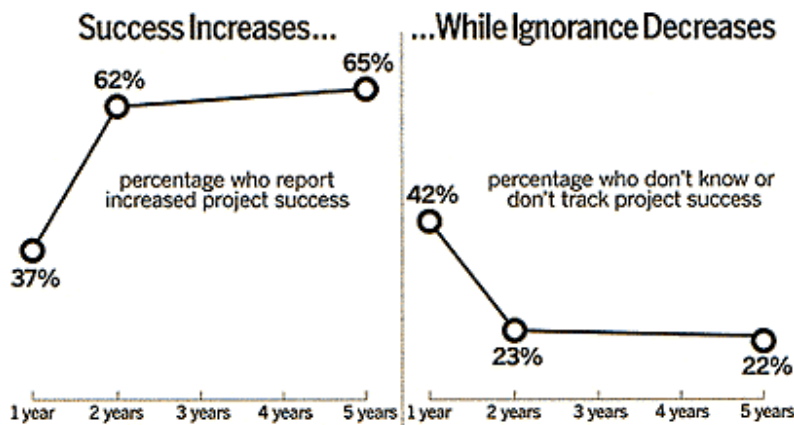


Figure (4). Project success rate with a PMO. Source: Santosus, 2003

The top two reasons for establishing a PMO, according to the survey: improving project success rates and implementing standard practices. In a finding that indicates PMOs' importance, a survey-leading 39% of respondents said the PMO is a strategic entity employed at the corporate level, meaning it sets project standards across the enterprise and is supported by upper managers (Santosus, 2003).

All organisations go through a maturity process, and that this maturity process must precede excellence. The learning curve for maturity is measured in years. Companies that mature in project management, and reach some degree of excellence, achieve and exploit a sustained competitive advantage (Rad, 2002).

The maturity ranking is affected by project objectives, project management practices, organisational infrastructure, organisational objectives, and organisational commitment. Maturity ranking is further influenced by personnel capability, clarity and specificity of procedures, and organisational performance in assignment of ample resources to projects. Tracking the organisational maturity status on a regular basis will serve as an indicator of how effectively an organisation is meeting its goals in managing projects and in meeting business objectives.

A maturity model can be used to determine the existence of realistic and effective project management policies and procedures. A serious distinction should be made between having procedures on the shelves in every office without ever using them and using the existing procedures on a regular basis. Further, the methodologies associated with a maturity model can be used to assess the effectiveness of the prevailing project management policies and procedures, which in turn will signal how often and how regularly the project personnel follow the established procedures.

Higher maturity levels signify more effective project procedures, higher-quality deliverables, lower project costs, higher project team morale, a desirable balance between cost-schedule-quality, and ultimately improved profits for the organisation. The more mature organisation is the one that can manage processes. In such an organisation, there is an objective, quantitative basis for judging quality and analysing problems. As such, expected results for cost, schedule, functionality, and quality are achieved. Further, roles and responsibilities are clearly defined, and customer satisfaction is expected, as the norm.

By contrast, lower maturity levels are normally consistent with organisational environments that encourage fixing problems in the field instead of doing it right the first time. Therefore, it is entirely possible that project personnel might repeat the same errors in multiple projects or even in the same project. A low ranking could also be a symptom of an organisation that has unnecessary or redundant procedures, which in turn are usually concurrent with an organisation having a history of misdirected improvement efforts. In an immature organisation, there is no objective basis to judge product quality since processes are improvised, since activities to enhance quality are often curtailed or eliminated, and since there is no objective basis to judge or process problems.

Benefits of using a project management maturity model include the ability to assess an organisation's current project management capabilities and the ability to identify organisational strengths and weaknesses in project management.

2.5.1 Maturity level of Project Management Office

Maturity, according to the Random House Dictionary, is defined as full development or a perfected condition. It also connotes understanding or visibility as to why success occurs, and as to ways to prevent common problems. In terms of project management, this relates to capabilities that can produce repeatable success in project management (Schlichter, 1999).

2.5.2 Level one: Initial

There may be some processes and tools for project management, and some may be using them on an informal basis. Project management training is nonexistent, and help may be available on an informal basis at best (Wysocki, 2003).

Level one is characterised as ad hoc or basic. Organisations at this level do not have formal project management procedures, and thus experience infrequent project performance predictability. Project management is performed inconsistently across the organization. It is highly probable that projects of these organisations experience cost overruns, schedule delays, and defective deliverables. Proper execution and on-time delivery are rare occurrences and are normally effected through heroics by the project team. Project management training is not provided. Isolated success stories are results of competent people, individual effort, and unusual sacrifices (Rad, 2002).

Rework is expected on projects because quality is imparted to the deliverable as a result of inspections rather than through plans. Inspections and audits are conducted primarily at the request of customers. Status reports and progress reports are prepared, and project reviews are held, only in response to customer requests. Many projects are not formally closed out, and therefore files are not archived and maintained in a fashion that promotes sharing of lessons learned, even if those lessons could be identified (Rad, 2002).

Figure 5, below shows the different functions a PMO can have in this maturity level and what the PMO can do to quicker reach the next level in the process.

2.5.3 Level two: Repeatable

Level two is described as consistent or repeatable. Level two is a documented project management process available (Wysocki, 2003). The emphasis is to introduce project management tools and techniques and have them accepted at the project level in the organisation. If an organisation is ranked at level two, then there are indications that a project management methodology has been adopted by the organisation, and that project management roles and responsibilities are defined. Project plans are prepared according to established procedures, and probably there is a project management office. The PMO provides templates and forms to assist in the planning process (Rad, 2002).

The PMO establishes a procedure for project planning, including lists of the desired contents of a project plan. The PMO also establishes some project management procedures to track cost schedule and performance. Proper and timely project management training is provided to the project team (Rad, 2002).

Training topics include the generic project management competencies, but also instruction on the proper execution of the organisation's project management procedures.

Level-two projects focus on disciplined formalised project management on all projects. Project management procedures result in visible effectiveness in managing cost, schedule, scope and quality. Project charters are prepared, a work breakdown structure is formulated and used, a project schedule is prepared and issued, and a schedule baseline is established for project control. In addition, resource planning is conducted, cost estimates are prepared, and a cost baseline is established for project control. Project problems are recognised quickly and corrected expeditiously. Quality audits and inspections are planned and conducted. Project roles and responsibilities are established, and team-building activities are conducted throughout the project life cycle. Project risks are identified, analysed, and reviewed methodically, and response strategies are developed for the major risks. Procurement planning is conducted.

However, it is entirely possible that, in organisations at level two, underlying disciplines are not well understood or consistently followed. Therefore, project success still is largely unpredictable, and cost and schedule problems are the norm. But, there is a tendency to collect data and to evaluate the effectiveness of the plans that are in place and to assess project performance. Status reports are prepared, and project review meetings are held. Supplier and subcontractor performance is monitored and reviewed (Rad, 2002).

2.5.4 Level three: Defined

The transition from Level two to Level three is dramatic. The project management processes are fully documented, and project management has been recognised as critical to business success by senior management. A formal PMO is established and staffed and given the responsibility of ensuring enterprise-wide usage of the methodology. Enforcement is taken seriously. A solid training curriculum is available. There is some sign that project management is being integrated into other business processes (Wysocki, 2003).

In this level is where the PMO can really begin to make an impact on the practice of the project management (Wysocki, 2003).

A level-three ranked organisation has a centralised project management entity, the PMO, which facilitates functional units' understanding of basic project management practices; well-defined performance management policies; and a clear path for improvement of those policies and procedures. In these organisations, projects use software tools to manage multiple projects and to link resource usage between projects. Project management processes are documented, standardised, and integrated. Proper project management tools and techniques are adopted and used throughout the organisation. Problems are methodically anticipated and efficiently prevented so their impacts are minimised. Information is collected, shared, and used across projects. Project teams work together in predefined structures, and training is planned and provided according to roles and responsibilities of project personnel (Rad, 2002).

The PMO collects historical information and makes the information available throughout the organisation for use in development of project plans. Life-cycle cost analysis is conducted regularly. The PMO routinely conducts reviews of activities in terms of scope, cost, schedule, quality, human resources, communications, and procurement. Another function of the PMO is to collect metrics to assess project performance on a project-by-project basis and across the organisation and to analyse the trends. The PMO continually refines project checklists so that they are increasingly more effective. The PMO documents causes of variances for lessons learned, and establishes a repository for project documentation. Working in partnership with the Procurement Department, the PMO establishes a lessons-learned database as procurement information which is archived for future use (Rad, 2002).

2.5.5 Level four: Managed

Successful project management is viewed as a critical success factor by the organisation. A complete training program and professional development program for project managers is in place. The PMO is looked upon as a business, and project portfolio management is of growing importance. The project portfolio is an integral part of all business planning activities (Wysocki, 2003).

In these organisations, there is organisational-wide commitment to the project management culture. The emphasis is to ensure that project management supports the business goals of the organisation. Therefore, detailed quantitative measures of effectiveness of project management are collected and used by upper management. Quantitative project objectives are set to measure progress in implementing project management procedures and to determine the effectiveness of these procedures. In level-four organizations, project success is more uniform, partially because project management is recognised as a professional core competency. In addition, performance in the areas of quality, cost, and schedule conform to the plan (Rad, 2002).

The PMO takes the lead in establishing quantified project objectives to improve project management performance and in monitoring the performance in meeting these objectives. The PMO collects information to be used to determine the value of project management, and to ensure that project management supports the organization's business goals. The PMO also

collects information on the status of the organisation's best practices in project management. The PMO leads the organisation's efforts to determine which of the potential projects the organisation should pursue. Another key responsibility at level four that the PMO performs is to coordinate resource use through the integrated management of projects and the coordination and management of multiple, related projects (Rad, 2002).

Then, to ensure that the needs of the entire organisation are met, the PMO regularly reviews the classification system for scope changes. For the purpose of comparisons across projects, the PMO establishes a facilitative method for documenting cost estimates. In the area of risk management, the PMO provides the following guidance: evaluation of threshold criteria for action, risk scoring and interpretation methods, checklists for risk identification and analysis, and a description of qualitative and quantitative risk analysis techniques. The PMO serves as the focal point for project management activities so that information about make-or-buy costs are compared to costs on previous procurements as part of the decision-making process. The PMO collects data on the effectiveness of the use of various types of procurement documents, contracts, and supplier performance indices (Rad, 2002).

2.5.6 Level five: Optimised

In level-five organisations, project management roles and responsibilities are well understood, and there are organisational objectives for improvements in project management. Project management procedures are regularly fine tuned to achieve organisational objectives. Common causes of project management problems are prioritised and systematically eliminated. There is participation in benchmarking forums as a way to continue to generate ideas for improvement and as a way to refine project performance metrics. In these organizations, continuous improvement of the project management process is enabled by timely feedback on project cost and schedule performance and by fostering innovative ideas and technologies (Rad, 2002).

The PMO is the critical component of a continuous quality improvement program for project management. Progress in the successful use of project management is visible, measured, and acted upon (Wysocki, 2003).

Further, in level-five organisations, project success is the norm, and projects meet, or surpass, objectives in the areas of cost, schedule, scope, and quality. In these organisations, it is recognised that projects depend on successful and effective processes that projects are a reason for success, and that projects are an integral part of the business.

The level-five PMO is responsible for a project management improvement plan with quantitative objectives for project management improvement, resource requirements, and training needs. For people to understand the importance of these initiatives, the PMO provides training in continuous improvement because this is an expected area of emphasis for each individual (Rad, 2002).

At the end of each project, the PMO formally measures customer satisfaction. The PMO serves as the organisation's representative in external communities of practice, such as project management knowledge networks. The PMO coordinates and integrates resource planning, resource acquisition, and resource assignment. As part of this process, the PMO provides forecasts for use in human resource management as project portfolio teams conduct project selection and

prioritisation. Thus, the PMO facilitates enterprise resource forecasting, planning, and integrated decision making. Working in partnership with customers and suppliers, the PMO ensures an integrated team support for each project (Rad, 2002).

Wysocki (2003) showed in the following figure (see Figure 5) the different functions the PMO can have at the different maturity stages it is going through. Figure 5 also shows what the PMO can do to quicker be able to reach the next step in the process.

Current PMO Maturity Level	Characteristics of PMOs at This Maturity Level	Initiatives that Will Move the PMO to the Next Maturity Level
INITIAL (1)	<ul style="list-style-type: none"> • Some defined PM processes are available. • Informal support to teams as requested. • No PM training is available. 	<ul style="list-style-type: none"> • Assemble a task force to establish a PM process. • Document the PM process. • Make PM training available.
REPEATABLE (2)	<ul style="list-style-type: none"> • A documented PM process is in place. • Part-time support to teams available. • Limited PM training is available. 	<ul style="list-style-type: none"> • Establish programs to increase PM process usage. • Establish a full-time PMO staff to support teams. • Monitor and enforce compliance. • Increase available PM training.
DEFINED (3)	<ul style="list-style-type: none"> • Fully documented and supported PM process. • Full-time support to teams is available. • All project teams are using the PM process. • PM processes are integrated with other processes. • More extensive PM training is available. 	<ul style="list-style-type: none"> • Projects are made part of the business plan. • Put project portfolio management in the PMO. • Give the PMO an active role in project staffing. • Offer more extensive training. • Create a career development program in the PMO. • Staff project managers in the PMO.
MANAGED (4)	<ul style="list-style-type: none"> • PMO responsible for professional development. • Complete PM training is available. 	<ul style="list-style-type: none"> • PMO begins identify and adopt best practices.

	<ul style="list-style-type: none"> • Project portfolio is managed as a business. 	<ul style="list-style-type: none"> • Metrics are defined to track process quality. • Project reviews are used to monitor compliance.
OPTIMISED (5)	<ul style="list-style-type: none"> • A continuous improvement process is in place. • There is measured improvement in project success. 	

Figure (5). PMO's function in different maturity levels. Source: Wysocki (2003).

2.6 Progress report

Running a project is simple: Meet all activity completion dates, and the project is on track; miss one, and you are in trouble. Keeping the project on schedule, therefore, means ensuring that all activities finish on time and that all milestones are met (Hallows, 2005).

Projects become more and more complex and higher demands are claimed on the project managers. The project manager is supposed to take care of many different tasks at the same time, the most common problems for the project manager is:

- Poor communication and structure in the project
- Difficulties to involve and inform the project members, customers and other involved in the project
- Insufficient control over the project and difficulties to run and follow up the project.

(www.projektplatsen.se, Accessed, 17 October 2005)

The most common regularly-scheduled, written project communication is the project-progress report. A project-progress report reviews what has happened during a performance period, describes problems and the corrective actions needed, and previews what is planned for the next period (Portny, 2001).

The Swedish project management society describes a progress report as a document that describes the status in the project for a specific time. Progress reporting is to gather and distribute information about project performance/ status in order to secure the projects continuation. According to www.wenell.se the purpose with a progress report is to describe the present situation in the project and give a prediction of the quality, performance, time and costs and consumption of resource in the project.

The objective for the progress report is to enable the manager or sponsor of a project to make informed decisions about the future of the project.

(<http://www.ecf.utoronto.ca/~writing/handbook-progress.html>).

Progress monitoring and reporting is essential to ensure project control (Smith, 1997). The report shall clarify the needs of support from the customer or other involved in the project. The progress report should also show the opportunities and the warning signals involved in the project. A progress report should give the customer and the project board a current view of the situation in the project (www.wenell.se).

A project-progress report is a convenient way to keep key audiences involved in the project and informed of anything they have to do to support your ongoing performance. In addition, preparing the report gives an opportunity to step back and review all aspects of the project enabling recognition of accomplishments and identification of situations that may require early intervention.

To prepare the progress report in a standard format makes it easier for the reader and/or listener to know where to look for specific types of information. The most frequent type of meeting is the project status meeting. These meetings offer the project manager the opportunity to solicit feedback, status, information, and ideas from the team on various aspects of the project (Cook, 2005).

As a rule, the information in a progress report should be organised so that planned versus actual results can be easily compared. Significant deviations should be highlighted and remedial action points clearly identified. Many of the project management software packages that can be purchased contain standardised report formats and pro formats (Smith, 1997). Progresses reports keep everyone informed of what is happening and allow ongoing adjustment of plans and resources. Team members find the process of producing reports a helpful discipline to keep things moving and on target (Smith, 1997).

2.6.1 What should a progress report include?

There is a tendency to over-engineer the consolidated progress reports. To design a report that contains a lot of information on each project, and the report could go on and on for many pages but the receiver of the report does not want to see much detail, and they do not want to see a long report. The receiver basically want to see a snapshot of what is going on and they want an indication of the projects that are at risk or definitely having trouble. Therefore, you want to design a consolidated Status Report that provides as much information as possible in as simple a format as possible (<http://www.pmostep.com>).

Progress reporting involves six aspects:

1. **Status reports** How is the project right now? Current project status: How much on track to cost, time and quality is the project?
2. **Performance reports** How complete is the project? How much more work remains?
3. **Forecasting** Will this project end on schedule? Will the project be on budget? How much longer will this project take? And how much more money will this project need to finish?
4. **Scope** How is the project meeting the project scope? Future status: What is the best forecast of what is expected to happen in terms of deviations in the schedule, cost, performance or scope of the project? What specifically will this mean?

5. **Quality** What are the results of quality audit, testing, and analysis?
6. **Risks** What risks have come into the project and what has been their effect on the project?
Status of critical tasks: What is happening about particularly critical or sensitive tasks?
High risk tasks and those being performed by external agencies or subcontractors over which the project manager has limited control, should also be given special attention. Are any new risks being identified that may impact on any aspects of the project? Information relevant to other projects: What has been learned in terms of project strengths and areas for improvement that should be applied to other current or imminent projects in the organisation? (Phillips, 2004; Smith, 1997).

Progress reports on activities should be produced by the project member responsible and discussed constructively at project team meetings. Reports on key activities will be prepared by the project team leader and discussed with the team prior to being submitted to/discussed with the project sponsor or commissioner (Smith, 1997).

It is crucial for the project that the PM makes sure all team members understand the content of the project progress report, that when an activity is said to be complete, it is complete (Hallows, 2005). If there is a misunderstanding in the status of the project it can be a disaster. If the project is apprehension as having no complications, when the situation is the opposite the project outcome is risked to not be to the customer's satisfaction. If there are no complications in the project and involved people misunderstand it the project can be more costly than necessary.

The appearance of the progress report sheet can look different form organisation to organisation. All is depending on what is most profitable for the organisations' needs. It is designed to report summary information to upper management on the three aspects of the project objectives: schedule, cost, and scope (Richman, 2002).

To make the progress report easier to read and in a quick way be able to see the status of the project, it can be good to have some kind of indicators. Below you can see one way of using indicators of the progress report.

Green/yellow/red status indicator. The meanings of the colour indicator are:

- Green if everything is fine and on track.
- Yellow if the project is at risk, but is not yet in trouble.
- Red if the project is in trouble and will not meet its commitments for cost, schedule or requirements.

This classification of the indicators is pretty rough and there can be a differentiation in what one PM apprehended as yellow, some might say that the status in the project is yellow and some might say the status is red. It is important that the indicators mean the same to all PM's to minimise misunderstanding.

Brandon (2006) suggests another way to classify the factors that the progress report includes, see Table 1. This classification is more detailed and the percentage division makes is easier for the managers to get a great and quick overlook of the situation.

The table presented by Brandon (2006), is a comparison of the planned schedule for the project and the actual status of the project at the reporting moment. For example if the variance from the budget is more than 10% but less than 20% the project get two points. The PM has to do this comparison for all the reporting activities in the project ,if the total number of points below is 9, then the project is considered healthy; 9 to 15 is rated as caution, and over 16 is rated as danger. The recommended approach herein is to make vital signs that correlate with project critical success factors (Brandon, 2006).

The disadvantage of this report is that it does not tell anything about the future of the project and what activities the project should go through in the near future.

Table (1). *A classification of a progress report*

Vital Sign	Variance		Points
Schedule Delay	< 10%		0
	10% to 20%		1
	> 20%		2
Milestone Delay	< 10%		0
	10% to 20%		1
	> 20%		2
Deliverable Delay	< 10%		0
	10% to 20%		2
	> 20%		4
Unresolved issues	No issues		0
	< deliverables		1
	> deliverables		2
Cost Over Budget	< 10%		0
	10% to 20%		1
	> 20%		2
Resource Shortage	< 10%		0
	10% to 15%		2
	> 15%		4
High Probability, High	1 - 3 risks		1
Impact Risk Events	4 - 5 risks		3
	6 - 7 risks		5
Disposition of Team	Good	0	

Vital Sign	Variance		Points
	Fair	2	
	Poor	4	
Sponsor's Commitment	Good	0	
	Fair	3	
	Poor	6	

Source: Brandon (2006).

The way the progress report constructed and what information those include are differing from company to company, the PMO should undertake the response for that the progress reports are structured in a way that suites the need for the company/organisation. The PMO are also, in many organisations, responsible for the process of the progress reports. The PMO should ensure that all involved in the project receive appropriate information about the project. It is important that the PMO do not do the progress report to a big brother function.

In this manner, it is easy to see why a PMO could be seen as a threat to the project manager who is struggling with a difficult assignment. Many people see this kind of reporting as unnecessary overhead. Few people like to report bad news and most people find a way not to (Kendall, 2003). The PM s should not feel like the progress reports are done to mark all the things that are not done in a right way. The PM should instead see the progress reporting system as an opportunity to make sure everything is on track. Reports are most helpful when they clearly explain the purpose of the report and the action requested (Richman, 2002).

2.6.2 The frequency of progress reports

How often a progress report should be done differ from author to author. To keep in mind is that the need for spreading information in the project can differ from the different phases the project is going through. Early identification and mitigation of problems can minimise their impact on the project (Richman, 2002).

Every project is unique and the project teams that are working on the project face a new challenge with every new project they are working in (Vijay, 1996). The communication in a project environment refers to the exchange or sharing of message and information to transfer knowledge and ideas between and among the project manager, internal stakeholders and external stakeholders.

Many of the crises in the project can be avoided if a good job is done in the beginning of the project. It does not cost anything to do it right from the beginning, but it costs a lot to repair done faults (www.projektspecialisten.se). The number of meetings and the frequency of reviews are related to the project lifecycle and can be described by Figure 6 below.

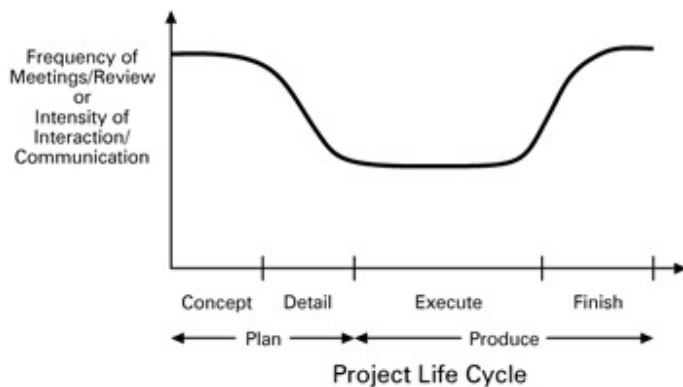


Figure (6). Frequency of meetings during a project life cycle. Source: Vijay (1996).

To have a frequent and effective communication is particularly important in the initial phases of the survey development and project planning process. This because many crucial decisions are made in this part of the project and to make a change in this phase of the project are less expensive than to make it in a later phase in the process (Church, 1998).

Once the concepts are finalized and project team members are working on the detailed design, fabrication or assembly of the components, the number of meetings and reviews may be reduced. Frequency of reviews may increase again towards the end when loose ends have to be coordinated. Such reviews are helpful in avoiding the use of significant time and resources during the last 10 percent of the job, when close coordination and integration is often necessary (Vijay, 1996).

Certain important issues that are being closely watched might warrant report generation more frequently than usual. It is necessary to be sure to strike a balance between providing up-to-date information often enough and overloading a stakeholder with too detailed or too frequent reporting (Hobbs, 2004).

3 Case study

3.1 Background WM-data Caran, Gothenburg

WM-data Caran AB was grounded in 2003 based on two already well-known companies, Knight and Caran. Today WM-data Caran in Gothenburg has approximately 300 employees and about 1000 employees in eleven offices in Sweden, spread from Malmö in south to Stockholm in the middle of Sweden. Caran has also one office in London, Great Britain. Caran is specialised in product development with great design, function and productivity as cornerstones. Since 1999, Caran has been a part of VM- data.

In today's situation an information management system exists at Caran's office, but this is not fully used. This complex system makes it hard to use and many of the employees are not comfortable in using the system, hence it is seemed to be easier to do it by hand than doing it in

the computerized system. Some of the managers use their assistances to receive the information that they need from the system.

WM-data Caran's office in Gothenburg today consist of, three divisions that are handling all projects at the office. There are both inhouse projects and projects executed at site at the customers company. The sizes of the project are very varying and the ways they are managed are depending on the project manger and the project management office. The project management office exists of two employees and it has existed in many different constellations since 1999. Caran is one of the leading suppliers of industrial design, product development and business development to Swedish and international industries.

Caran is a company that focuses on long personal relations with the customers and marketing is done through customers relations. Compared to the company's market share very little money has been spend on marketing.

3.2 Method

This chapter in the report will describe the methods used to conduct the case study at WM-data Caran in Gothenburg, Sweden. To conduct a case study a lot of information must be gathered in order to be able to evaluate and make a standpoint based on the gathered information. A questionnaire was sent out and was thought to be the basis for the gathered information. The objective of the questionnaire was to find out how the internal communication and how the information flow in the company works today and how it could be improved and optimised to better fit the structure of the organisation and its needs.

3.2.1 Participants

All the participants in the survey are working for WM-data Caran's office in Gothenburg. The questionnaires were sent out to the project managers, employees in the project management office and managers in the company. Three different questionnaires were sent out depending on the position of the employee. Some of the questions were the same for everybody while some were only ask to project managers and managers at Caran. The participants in the survey were both females and males, in different ages and with different work experience in the company. All the participants in the survey were chosen from recommendation from the manager at the division.

The number of respondents to the questionnaire was too low to have as a basis for a conclusion in the study. To be able to make a proper conclusion from the collected data a more qualitative research was conducted in form of face to face interviews with employees at Caran Automotive, Gothenburg, Sweden.

3.2.2 Research questions

The questionnaire that was sent to project managers mainly focused on how they spread information about projects. Manager's at Caran questions were mostly focused on how they want to receive the right information of the projects, in a, for them, effective and efficient way. Hence, effective communication is to communicate the right information at the right time and to the right person, this case study will try to evaluate who and how the information has to be communicated.

The questions that were sent out had fixed reply alternatives, with some abilities to further comments in the end of every section of questions. The questions were related to internal communication, the project management office and progress report for the projects. There are many way to make the internal communication work in a better manner, the way a company choose are normally depending on the structure of the company and the different needs for the company and the different stakeholders.

The main reason of the questions was to get information about the how well the project management office and the progress reports works.

The data received from the questionnaires was not enough to make an adequate conclusion; hence, the author did not receive enough answers.

To be able to make an adequate result for the case study, interviews where conducted with managers, the manger for the PMO and PMs at Caran, Gothenburg. The questions in the interviews where posted to the manager at the PMO, three managers and four PMs at Caran, Gothenburg. The interviewees were chosen randomly with no concern of age, gender and experience of their work. The questions in the interviews where mainly focused on the PMO and the progress reporting system that exists at Caran, Gothenburg. The questions about the PMO where focused the different functions the PMO have in the organisation and how the PMO have developed. The aim of the case study was to investigate how the interviewees thought the PMO and the progress reports could be developed and improved to better fit the organisations needs.

3.2.3 Research methodology

Three interviews were made with the division managers of the company, two were made with the employees at the project management office and two project managers were interviewed. From the beginning was it planned to do more interviews with the project managers but many of them were out doing project on site.

The case study will make it possible to make a reasonable and correct analyse on the situation in the topic. It will also make it possible to get enough information to evaluate how or if the internal communication can be improved in the organisation.

4 Result

The result chapter is organised with respect to the given interview questions posed to the three categories of interviewees, manager at the PMO, managers at Caran, Gothenburg and PMs. In the result a business plan for the PMO is also presented.

4.1 Result for the manager at PMO

Information

How do you receive needed information of the projects?

The information from meetings with the project managers, were sometimes sent out by mail, but mainly only given at the meetings. It takes PMO about 3-4 hours a week to get all needed information. There are in total 16 projects in the portfolio. At Caran there is a big meeting once a month, where all the projects at Caran Automotive are going through. The information given at these meetings is mostly received from the progress reports of the projects. At these meetings, the project management and others concerned of the project attend. Most of the information is supplied for the employees who are involved in the project, but all information is not interesting for the all parts at Caran. Therefore, the information is often supplied for the ones that are most involved.

Questions about the PMO

Do you think it is a difference in the quality of the project depending on if it is driven by PMO or not?

If the project has a report obligation or not is depending on how big the project is, and if it is an over 1 million SEK project, the project manager for the project has to do progress report on the status of the project. Projects driven by the project managers at the PMO are always conducting status report for the projects. Projects driven by project managers at PMO can be projects performed at the customer's office or projects that involve more than one division.

The manager at PMO believes there is a difference in the quality of the outcome of the project if the project is driven by the PMO or not. He also believes there is a difference in the quality of the project depending on if progress reports are conducted in the project or not. To conduct a progress report will force the project manger to sum up the status of the project and doing this on a regular basis will make the project manger keener to have control over the whole situation in the project, says the PMO manager. If a progress report is done in the project, the status of the project will automatically be presented at a meeting with managers and other involved in the project process. This makes more people aware of the situation in the project. To have more people informed of the status of the project makes it easier for the project manager to ask for more resources to the project, hence most of the managers are already aware of the status in the project.

The project managers working for the PMO have the advantages to have support from the PMO with all the services the PMO can offer. This can have a great impact of the outcome of the project.

What services can the PMO offer the project managers?

The most important services the PMO can offer the project managers are; a follow-up process of the projects, the ability for the project managers to discuss different issues in the project with experienced project managers, help with the quotation work for the project and development of the project management.

Other services the PMO can offer is brainstorming that provide the project managers with a proper project model, if he/she is unsure how to run the project. The PMO can also be a mentor for the project manager if there is any problem in the project and can also conduct an economical follow-up of the project.

Is there any service the PMO does not provide, that you think it should do?

Sponsorship for new and young project managers would be a good thing to develop. With this, I mean that an older more experienced project manager acts as a mentor and as a counsellor for a young less experienced project manager. Another service that the PMO should provide is to inspect the project before kick off to ensure the project plan is correct and all necessary activities are included, so the project got the right condition to be a successful project. It would also be good if the PMO was responsible for the coordination and the prioritizing of all the projects at Caran Automotive. This would make it easier for the PMO to have a better control over the projects and it will make it easier to provide the different projects with needed resources in form of personnel.

Another thing that would be necessary is to have a “project-acute”, a service where the project managers can turn to PMO with big acute problems. The PMO should in special cases have the ability to revise the project.

The last service the PMO would endow the project managers with is education. In today’s situation, the PMO does not have any education of the project managers in any topic. This is not good.

Do you think the PMO get enough influence?

No, we are today at the same level as the other divisions at Caran Automotive. It would be better if we have a position where we could have control over the entire Caran, not just the office in Gothenburg, Sweden.

Progress reports

What kind of information do you think a progress report shall include?

The project manager is responsible for time plan, risks, problems and budget for the project or the part of the project. The report shall also include an estimation of what the future will bring, if we are able to deliver in time, within budget and to the right quality. It is also important that prospective risks and problems are handled in the report; this makes it easier for the all involved to foresee possible resources needed in the project. The progress report shall also show if there has been any major progress since last time a progress report was conducted. The economical part of the report shall include a forecast of the economical status of the project, how many hours have been done in the project and if it matches the planned budget for the project.

How do you think the progress reports works?

In the cases a progress report is done, I think it is working well but it is not in all projects that a report is conducted. If the progress report process or the follow-up process is done depends on the system the project is run in, if the customer is very much involved in the project it sometimes is easier to run it by their system. It is often much easier for us to adjust our way of working than for the customer, to change to ours.

If the progress reports should change in any way, which changes should you suggest?

I think all projects should be followed up and do progress reports, not just projects over 1 million SEK. Not all projects need to be brought up at a meeting, but I think every project should be obliged to conduct a progress report for the project.

4.2 Business plan for the PMO at Caran Automotive**Vision, objectives and strategy for the project management office at Caran Automotive, Gothenburg**

The vision for the project management office is to be the leading and the most attractive project management office in the consultancy business in the Nordic countries. The focus for the project management office is to handle the project management at Caran and to develop the project model and follow up the projects that are driven in-house. The main objective for the project management office is to secure most of the projects at Caran Automotive Gothenburg, so they can be delivered at right time, with the right quality and to the agreed price. The project management office shall also equip the customer with competent and experienced project manager, which shall lead to increased reputation and create a better value as a supplier of the services.

The strategies to reach the objectives are to co-ordinate the follow-up meetings for the projects and support the individual project managers at Caran Automotive, Gothenburg. This will also include securing that the project got the right condition before it starts and that the project management office takes care of the project portfolio.

To be able to grade the different competence of the project managers a certain certification system will be developed, this will make it possible to increase the fee the customers have to pay for the project managers and to make the project managers aware of the possibility to improve their capability as a project manager.

Competence and solutions to reach the objectives

The core competence for the project management office is project management. The project management office wants to develop from just equip project and customer with project management to have a more overall settlement for the project activity at Caran Automotive, Gothenburg. Caran needs a project management office that leads the development and controls the project portfolio.

The project management office will increase their services to include the following areas:

- Follow-up process for the projects.
- Coordination of the projects.
- Prioritising of the projects.
- Project help-desk.
- Sponsoring activity for the younger project managers.
- Quotation work for the projects.
- Examination of the projects before it starts, this activity is to make sure that the projects have all necessary activities included in the project plan and to make sure the projects are likely to meet its objectives.

The project management office wants to continue with the education of their project manager in order to have more “senior project managers”. The PMO want to develop a classification system for the project managers, that will make it possible for the managers to be certificated to a certain level of project management and thereby be able to verify their capability in the topic. The recruitment of new project managers will be done both internal and external. It is important that the customers and employees within Caran Automotive have faith in the project management office.

It is important that the project management offices act both inside and outside Caran Automotive. This activity can increase the capability to manage projects within the whole company and increase the business development of the entire company. To act both outside and inside Caran Automotive will make Caran Automotive a natural home for projects that includes more than Caran Automotives office.

PMO will continue to develop the internal project activity and continuously present proposals to decrease the administration process for the projects.

The PMO will prioritise the internal project activity and focus on how Caran Automotive can simplify the way of working and establish routines through the different project phases.

To be able to reach the objectives the PMO must have permission to take control over the project activities at Caran Automotive and the managers realise the importance of the different activities at the project management office. The PMO also has to increase in number of employees to be able to reach the stated objectives.

4.3 Result for the managers

For the study the author interviewed three managers at Caran Automotive, Gothenburg, Sweden. Today the managers at Caran Automotive spend varying time to get the needed information about the projects at their department; and the time spent is depending on the number of running projects. The most used way of tracking the information is by mail, telephone or talking to the

project manager face to face. Caran Automotive also get an economical system where the managers can get much of the information. A great disadvantage is that the system is not so easy to use. How well informed the managers are depending on the size of the project and the risks situation in the project. It also matter if the projects are ran by an experienced project manager or not. All managers think that the information flow in the company is better since there is a new manager at the PMO. One manager mentioned that the structure of the company is well suited for good communication. It is rather flat and not so hierarchic. He also pointed out the importance of not thinking that all needed information will be brought to you without some effort.

Questions about the PMO

What are the most important tasks for the project management office?

- To have the overall responsible for all in-house projects at Caran, Automotive.
- To ensure that the in-house projects has the right quality.
- The PMO should staff the projects with experienced and qualified project managers.
- To support the project managers.
- To develop project models and other tools so project works are similar done in each project.

The managers stated the importance for the PMO to work more on the development models for the projects. They believed that a more standardised way of working in the projects is a benefit for both the customer and the company. To have a common way of working in all projects can be a way to ensure the project is driven the right way.

What improvements of the PMO could be done?

The interviewed managers had some ideas of how the PMO could be improved; the result is shown below:

- Improve the project models.
- All projects at Caran, Automotive shall be driven be managers at PMO.
- Only the best project managers should be working at PMO.
- Qualification system for the managers at PMO, so the project manager is certified as a project manager to a certain degree, this degree can be higher for the project managers who have been working as a project manager.
- Project managers should work for PMO.
- The PMO could take care of all the phases in the project from the offer phase to delivery of the project.
- The PMO should not let on hire consultants that are not project managers.

To improve the project models are important, so all work are done in a similar way in all projects. To work in a similar way in all projects will help the project manager to have better control over the project; with a working strategy for the project, and the manager might be able to cut time in the project without affecting the project outcome.

All the managers thought it would be an advantage if all projects were driven by the PMO, and that it would not be any difference in the value of the project. To have all the projects driven by

the PMO, the managers thought would be an effective way of improve the quality of the projects and its outcome.

To have the “best “project managers working at PMO was mentioned as an additional way of improve the quality of the projects and Caran’s reputation. To have the qualified project managers working at the PMO would make it possible to increase the payment from the customer, and it would be a sort of guarantee for the customer that qualified, and experienced project managers are working at the project.

The qualification system would be a way for the project managers to advance in their career and for Caran to show the customer the qualification of the project manager. To have not qualified project managers working at the PMO was by one manager expressed as “under the worthiness of the PMO”. The PMO should be associated with quality and to have not qualified project managers are not quality.

The managers also mentioned the importance of support for the project managers in their work.

What do you think about the development of the PMO?

The PMO have existed since 1999, but before the present manager for it, the changes were not so much noticed. The present manager has been manager for the PMO for about one year. The interviewed managers think the development of the PMO has gone in the right direction and are positive to the changes that have been done and believe changes are necessary to keep up with their competitors.

To have one big PMO for all the offices at Caran, the managers thought would be beneficial in many ways. For example it can be a good way to take advantage of all the resources in the different offices. It was also mentioned as a way to learn from the other offices advantages and disadvantages, and a way to learn from old mistakes and prevent from doing them again. All offices will be given a much bigger knowledge from different projects than only one can give. Mentioned was also that having the same model for all projects at Caran would be a great way of standardising the way of working.

Hence, the PMO has not developed in the same way as the last year; the natural position of the PMO will grow in the company.

Questions about progress reports

What kind of information should be included in a progress report?

In the interviews with the three managers at Caran Automotive, following ideas of what a progress report should contain came up:

- Deviations from planned project plan. The deviations could be differentiations from the planned schedule in budget, worked hours in the project, risks, time etcetera.

Information that the mangers have to have to decide if the project will be delivered in time and within budget was the most useful information for the managers.

Is there anything in the progress reports that should be changed?

Most of the managers thought the progress report worked well. Below you can see the thoughts of improvements for the progress reports:

- A scaled graduation of the situation in the project compared to the plans would make it easier to see how the project is processing. High on the scale means the project differentiate much from the project plan and low on the scale means little or no differentiation. If the project is located high on the scale, the project manager has to have a plan of action for the project. To have a scaled graduation would avoid unnecessary analysing of the project.
- The progress reports should be more synchronised to the economical system. To conduct the progress report at the same day as the accounting day at the end of the month was thought as an advantage; hence, it would minimise the risk of faulty information in the report.
- The project managers should use the same “language” in the progress report. If the situation is critical it should mean the same for everyone. Today the word “critical” can range from not so critical to a disaster.

The managers thought by making the project managers do a progress report would actually force the project managers to have control over the project and the risk to forget anything were radically decreased.

One of the managers said he tries to keep himself updated of the situation in the projects so he would be able to see if there are any problems and to support the project manager. That the progress reports were standardised and the meetings were the status of the project presented looks the same every time was conceived as positive.

4.4 Result for project managers

Information

The interviewed project managers are both working and not working under the PMO. The project managers were chosen without any considerations of age, gender or experience as project manager.

They all think that there is rather easy to get needed information about the company and activities in the company. The spreading of information has become better than it has been, with mainly four channels for information; mail, intranet, informal communication and the company’s own business paper. The intranet is by one of the interviewed mentioned as one of the foremost source of information. At the intranet the company publishes information about what is going on in the company and articles that can include good information of different kind. The intranet has become a great source of information. Since there are not so many meetings with the management; the intranet has become a natural way of getting information. Mail is also well used in the search for certain information. The company’s own business paper is providing the employees with rather “slow” information, information that the employee do not need to have immediately. In the paper, there are articles and information from all the different offices at

Caran. One of the project managers said the spreading of information is good but information will always be an insatiable market.

Questions about the PMO

What are the most important tasks for the PMO?

The most important tasks for the PMO are according to the project managers the following bullets:

- Run projects.
- Support all projects at Caran Automotive.
- Develop the skills in project management.
- Follow-up the internal projects i.e. ensure the projects are progressing as planned.
- Provide project managers with a clear and effective model for how projects should be driven.
- Assist the project managers in different situations.
- Help the project managers in the work with the offers.
- Support the project managers, create a network for the project managers so they can support and help each other.
- Improve Caran's capability and abilities of conducting projects.
- Ensure that Caran Automotive got competitively strong project managers.
- Show the customer that Caran is good in project management and that the company has competence and are willing to develop the skills further.

The most important task for the PMO is to run projects and to develop ways to make the work for the project managers easier. It seems like the project managers want some support and assistance from the PMO in their project work. To have a network for the project managers were discussed by all the interviewed. One project manager mentioned that it would be good if the PMO could support all the inhouse projects at Caran, Automotive. This was according to this person a way to improve the project management at Caran, so it could be better and make it possible to get more projects.

Is there anything that the PMO should not do that it does?

According to the project managers' answers at this question it seems like the PMO is doing almost everything that the project managers expect it to do. The only thing that they could improve was to promote their services better. One of the interviewed did not know that the PMO did exist until the PMO call for a meeting. This person did not know anything about which persons that were working at the PMO or which services the PMO support the project managers with.

Do you believe there is a difference in quality of the outcome of the project depending on if it is driven by PMO or not?

The result of this question showed that all the interviewed persons thought that the quality outcome of the project would be affected positively if the project was driven by the PMO compared if it was not. The result showed that by progress reporting the status of the project

would have a good influence on the project as well. To do progress report in the project was conceived as a help to keep control of the project and that every project would benefit of it. To have the project driven by PMO was also conceived as a security, hence the progress of the project was seen by more people and more people could discover if something was wrong or if the project had any other problem.

How do you think the PMO works today?

The PMO work does is conceived as positive, especially since the new manager at the PMO started. The result showed that it was conceived as good to have a link between the project managers and the managers in the different projects. One of the interviewed did not had have so much contact with the PMO. This person thought that it was good to have a PMO for the company although this person was not sure how this PMO was working due to the lack of experience of it.

The PMO was mentioned as an important factor in the development of the project management at Caran and the establishment of a clear picture of how project should be managed at Caran. The progress reports for the internal projects have been improved in a good way, and the result of the interviews shows that the project managers are satisfied in the way the progress reports are constructed.

What improvements of the PMO could be done?

The PMO could be improved in some ways; like development of the network for the project managers, so the project managers could support each other in different situations. Mentorship for the not so experienced project managers was also brought up as an improvement. This would benefit the young project managers and effectively help them to progress their skills in management of the projects and introduce them to the model of handling the projects at Caran. Marketing the services the PMO provide, was also mentioned in the interviews. Marketing of the PMO would, according to the interviews, be a helpful way for the project managers and the managers to detect the way the PMO can be used.

To standardise the way of managing project more, would according to one project manager be a good way to improve the management of the projects. The way the projects today are calculated differs a lot from one project manager to another. By standardising this so it will fit most of the projects were mentioned to be an effective way to decrease the misses in the calculation. Hence, the economical system used at Caran, Automotive is pretty hard to understand, the calculations are made by the project managers. An introduction course to the economical system would, according to the interviewed project managers, be helpful in their work.

Which services do you use to use in your projects?

Of the services the PMO can offer to the project managers it was only two the interviewed project managers utilized. Below you can read the consulted services:

- Use to consult them with different problems.
- Help with the calculation of the offers.

Three of four said they did not know what services the PMO could offer. Only one of the interviewed project managers could mention some services he/she had used. This person also

mentioned that he/she had not been able to go to any of the meetings the PMO arranged for the project managers. The interviewed person was interested in these meetings but the time did not match this person's schedule.

Do the PMO have enough influence in the company?

The result of this question differed; two thought the PMO got enough influence and support to carry through their plans to make improvement in the management of the projects more effective. One thought the PM was on the right track, but it sometimes could be difficult to carry through the plans and more support from management could be increased, so the plans could be executed quicker.

The last interviewed thought the PMO should have more have more influence. The PMO is for the moment just a department in the company, and the manager for the PMO has the same influence as the other managers at Caran. Since the PMO is handling development of the company, the interviewed thought it would be better if the PMO get more influence and power.

Have the development of the PMO at your satisfaction?

One of the interviewed persons did not have any opinion in how the PMO had developed, since the person did not know so much of the PMO and its development. The person did know that it had developed, but not in the way.

The rest of the interviewed project managers agreed that the PMO had not been as active as it is since the PMO changed manager. The new manager became manager for the PMO in 2005. Since 2005 the PMO had been able to do some changes in the right direction, and the biggest change is, according to one of the interviewed persons, that now the PMO and the manager for the team work more actively has become leading in project management. It had also been more focused on that the project managers should be involved in the offer works that are proceeding at Caran. The new manager at the PMO is also more engaged in the development of the team at the PMO.

Questions about progress report

What do you think work well with the progress reports?

The way the project managers today do the progress report for the projects is rather new, and it have only been used for about six months. The new way of conducting the progress report was done by the PMO. Before the project managers were called to a meeting about the progress in the projects. It was hard to get all called persons to the meetings; the interest in the projects was conceived as low from the board of the project. It was up to the project manager if the progress reports were done and how often it should be done. The information in the progress reports differed from project to project depending on who the project manager was. Before the project management trusted the project managers that the work in the projects was progressing as planned. "The trust was a good thing, but it was not so good when the project did not progress as planned and there were problems of different kinds in the project", sad one of the interviewed project managers.

Today the projects worth more than one million SEK are obliged with progress report. The information the project managers should report in the progress report are today the following:

- What have been done since the last progress report?
- The status of the project.
- Problems in the project.
- Risks in the project.
- What you as a project manager plan to do in the near future in the project.
- Some information about the resources in the project.
- Other questions.

It is today the PMO which is calling the board of the project to the meetings of the progress in the project. The progress reports are standardised so all progress reports are constructed in the same way and include the same information. The result of this improvement has been, according to the interviewed persons, a change in the right direction. According to the project managers it is good to have more people knowing about the situation in the project. This can reduce the risk of missing something in the project. It was also conceived as positive to conduct progress reports and presenting the status in the project; hence this forces the project managers to have control in the project. Some of the project managers saw the progress reporting as an opportunity to link knowledge between the projects and to present if there are any problems in the project. To do the progress reports more continuity was, according to one of the interviewed, a good way to ensure the quality in the project. To do the reports more continuously forces the project managers to have control over the situation and the calculation in the project.

None of the project managers conceived the progress report as a controlling function, that the managers got to increase their power and control. It was also mentioned an advantage that the information in the project were passed forward to the management of Caran Automotive.

Is there anything in the progress reports that should be changed?

Most of the interviewed project managers seem to be satisfied with the progress reports. The construction of the reports and the information that it should include is relevant. Since the system of conducting the progress report is rather new the interviewed had not been able to get an opinion in how the progress reports works and in what way it could be improved. Therefore, only two possible improvements came up during the interviews:

- Necessity of progress report. In a big project it is possible that not so much happens in a month's time, and to report the progress can feel meaningless. How often the progress report should be done maybe should be adjusted to the project and which phase the project is in. One project manager gave an example that the progress report could be done every two months and every month if necessary. This should be decided depending on the status of the project and the need for reporting by the PMO after conversation with the project manager in the project.
- Follow up the prediction the project managers do in the project report. One project manager thought it would be good if the project managers did the prediction of the project as accurate as possible, since it is hard to affect the history but it is possible to

affect the future. To do the prediction of the project as accurate as possible can help the project in many ways. For example, it can be much easier to have qualified people in the project if the departments know that the project needs a special kind of employee to a special date, the interviewed person thought.

What kind of information should a progress report include?

The progress report should according to the interviewed project managers include:

- Economical information about the project. In this part the project manager should report about the costs in the project and the economical prognosis for the project.
- The objectives in the project. The project manager should make a clear picture about the objectives in the projects and if there is any change in the objectives. In this part, also all progresses since the last report are stated.
- Risks in the project.
- Staffing situation in the project. In the report the manager should give details about the staff in the project, if there is any problem with the staffing situation, does the project have enough qualified staff or does it need anyone special person? This part will also give details of the future staffing situation in the project. To do the prognosis as accurate as possible can be helpful if the project need more people.
- Time spent in the project. This section in the report is crucial to keep control over not only spend time but also the price for the hour.
- Further questions and basis of the decisions.

These six bullets are the most needed information a progress report should obtain according to the interviewed project managers.

5. Discussion

5. 1 PMO

5.1.1 Functions

The PMO at Caran does not have so many functions as it could have. To take on more responsibilities and functions in the organisation does not only helps the PMs in the organisation, it also helps the entire organisation to be more effective and competitive on the market. The PMO's main function is, according to Boyd and Madaboosi (2005), to focus on fostering project management excellence throughout an organisation. Project management excellence is only achieved when standardised processes, procedures, tools, training and support functions are established, implemented, and continuously improved upon by a PMO. This sets a strong foundation for the successful management of strategic project initiatives.

The PMO at Caran has developed some of these functions but some have to be developed further. The manager at PMO believes that the most important functions the PMO has is to do the follow-up process of the projects, help the managers with the quotation work in the project, support the PMs in different situations and develop project management at the company. The managers think

the most important functions the PMO is to have responsible for all in-house projects at Caran and to ensure the projects have the right quality.

The managers also believed that the PMO should be responsible for that the project is provided with a proper for the task PM and support the PM. To have more tools and models for the PMs so the project work would be similar in every project was also an important duty for the PMO. The PM stated also this was an important function the PMO has. To develop and maintain the method for the project is the most fundamental activity for the PMO, according to Kjell Rodenstedt at krkab, a company which is focused on project management and PMO.

Methods for how to do things are needed in every organisation for project management. This PMO function should be to provide expertise, marketing and encouragement without bureaucracy or a police force. The focus should be on how to use the minimum necessary methodology to ensure predictable results (Kendall, 2002). To provide the organisation with methods and standards can be a way for the organisation to develop the skills for the PM, so they can be more effective in their work in the projects. This can also help the entire organisation to be more professional in their work and be more competitive on the market.

5.1.2 Improvements of the PMO

Both the managers and the PMs thinks the PMO should improve the project models more and standardise the project work more. The improvements of this kind should continuously be done at the PMO so the organisation can provide the most effective way of working in the projects. The PM also asks for development of a network, so the PMs can support each other in different situations and ask each other for help. The PMO should according to the website pmostep.com, establish and deploy a common set of project management processes and templates, which saves each project manager or organisation from having to create these on their own. These reusable project management components help projects start-up more quickly and with much less effort. To develop the project model and have a more standardised way of working will be a good help for the PMO in order to accomplish the rest of the improvement it can do.

To have the project management more standardised will help the PM much in the way that the work will be more similar in every project and the work can be recognised from time to time and there will be no surprises in the way the project is handled.

Develop a mentorship for the younger not so experienced PMs can be beneficial in many ways. First, it will be an effective way to learn the younger PMs the method that are used in the organisation and they will also have a more experienced PM to ask and have support from in different situations in the project management.

The mentor should work side by side with the team member for as long and as often as necessary until such time that the team member and/or the project manager feels comfortable that the team member can perform his or her functions without direct intervention by the PMO staff member (Rad, 2002). The mentorship function will also be beneficial for the organisation hence the introduction of the PM will be shorter and more deep-going if the PMs will learn by doing.

Another improvement the PMO could do according to the managers is to have classification of the standard of the PMs at Caran. Having only the best PMs working at PMO can be both good and bad. The advantage in this way of thinking is that it will ensure that the PM is qualified and experienced in their work, the disadvantage is that it can from other PMs been seen as a closed club and the members in it is more “exclusive” than the “ordinary” PMs. To have the classification system within the PMO can be a better way of handling the situation. The classification system will also encourage the PM to become better and better. PMI have a certification system that can be used in this situation. To have certification system can be a good way to motivate the PMs to accomplish a better work.

The existing software at Caran, Automotive is not to the PMs or the manager satisfaction, many of them did not have the knowledge to proper handle it in their work. The need for an education in the software is strong in order to make the users more effective in their handling of it and to be more optimised in the utilisation of the software. The PMO is, according to Wysocki, (2003), responsible for this kind of education and the maintenance of the software.

The PMO must marketing their services internal so the PM and the management knows what function it got. On the question what services do you as a PM use to use, many of the PM did not know what services the PMO could offer them. To market the functions can be a way for the PMO to increase their functions and develop their functions to another group of interests.

5.1.3 Level in the organisation

Every interviewed manager and many of the PM thought that the position of the PMO in the organisation might be changed in order to make it have more influence and control over every project in the organisation.

At today the PMO at Caran is somewhere between level two and level four. It supports the projects in the organisation, but not all of them. To have a PMO at a higher level in the organisation can be beneficial. Hence, it will have more influence in the organisation and have more power to develop their objectives and goal for the PMO. If the PMO has a higher position in the organisation it can also manage all projects in the organisation or also manage other offices projects. To manage all Caran’s projects would, according to the author, be beneficial in the way that more retransfer of the knowledge and experience for the entire company would be possible. It will also make it possible for the company to adopt bigger and more complicated projects, which involve more disciplines if PM from different offices can provide the project with their knowledge.

To have one big PMO can also make it possible to locate the resources better and be more effective in the staffing of the projects.

5.1.4 Maturity

The maturity level of the PMO at Caran is not so high that it should be according to the ladder model by Rad (2002) and Wysocki (2003). The PMO has existed from 1999 and according to the maturity model; the PMO should have been able to develop more functions and should be more

respected in the organisation. The present PMO is at level 1 or the initial maturity level, and to move to the next step in the maturity model the PMO could among others make PM training available. Today the only training available for the PMs are provided by WM- Data and not focused on the project management conducted at Caran.

The former manager for the PMO has not been so focused on developing the functions the PMO can provide for the organisation and PMs at Caran. The focus was on other more external factors that can influence the management of the projects. The current manager has more focus on the project management and how the management of the projects in the organisation can be more effective and standardised.

The different improvements that the interviewed persons suggested for the PMO can be a good strategy for the PMO to be more important in the organisation and at the same time get a higher position in the organisation.

To evaluate the PMO on regular basis and have time frame for their objectives is according to the author essential in order for the PMO to continuously development the functions.

A quick evaluation of the PMO can be conducted on www.computerworld.com (Accessed: 12 January 2006). The evaluation is based on the ten critical success factors www.pmsolutions.com presented, in the evaluation the PMO will be rated according to how well it performs in the ten areas. This evaluation can be a way for the organisation to evaluate if the PMO are on the right track in the development of the PMO.

5.2 Progress report

The interviewed managers at Caran seem to have lower expectations of what a progress report should include, and most of the focus is on the deviations in the project. They have a need to know about how much the project progress differs from the planned progress in the project. The need for this kind of information is in order to ensure the project is delivered on time. One of the interviewed managers also talk about the need to have the same word for the situation in the project. If it is chaos in the project it should be called chaos for all the PMs. To grade the reported details could be an effective way to minimise the risk for misunderstandings and make every PM talk the “same” language. To have indicators like green/yellow/red can be good and if more specific indicators are needed the indicator table by Brandon (2006) can be used. Caran might have to modify this table to better fit their needs: Having this table as a base in the development the progress reports can be a way to get more ideas in a way to develop it to both fit the managers’ and the PMs’ wishes. To keep in mind when a progress report is developed is that the reports are most helpful when they clearly explain the purpose of the report and the action requested (Richman, 2002).

The answers from the manager at PMO and the project managers were more specific in what they thought a progress report should include. Both the PMs and Roland mentioned all parts that a progress report should include according to Smith (1997) and Phillips (2004). The managers did

mention many of them but they seemed not to see the benefit in having a forecast in the project. The author got the impression that most of the interviewed managers were satisfied by “only” knowing the status of the project at a specific moment. To estimate the future in the project is a way to handle the resources in the organisation as effective as possible, and a way to ensure the needed resources is the project to hand in right time. To change the progress reports to the way the manager at PMO and the PMs want it to be can be a good way to make the PMs at Caran more secure in their work. Many of the interviewed PMs thought it was beneficial to let the managers know about what is going to happen in the project and letting more people know about the status in the project which make them feel more certain that problems and other difficulties could be discovered in time so changes could be done before it becomes too big.

One of the interviewed PMs mentioned it might be beneficial to have different frequency of how often the progress report is done. This came up because the project sometimes is in a phase which the progress in the project differ little or nothing from one reporting occasion to another and sometime it is in a very progressing phase. Some of the projects at Caran can last for years and the phases in these projects can last for several months. To do a progress report for a project in one of these phases and have to report no progress can make the managers less interested in the project. Instead to adjust the frequency of the progress report can save time for both the managers and the PM of the project. The frequency of the report might be adapted to which phase the project is going thorough or it could be beneficial to have different progress reports depending on the phases in the project. If the project is in the early phase it might be good to have a more detailed progress report. According to www.projektspecialisten.se, many of the crises in the project can be avoided if a good job is done in the beginning of the project.

Many crucial decisions are made in this part of the project and to make a change in this phase of the project is less expensive than to make it in a later phase in the process (Church, 1998). To have more focus on the project in the early and the ending phase can, according to the author, be a way to avoid some of the problems and the crises in the project.

The process of the progress report should be handled in a way the PM s should feel like the progress reports are done to mark all the things that are not done in a right way. The PM should see the progress reporting system as an opportunity to make sure everything is on track. Reports are most helpful when they clearly explain the purpose of the report and the action requested (Richman, 2002). The interviewed PMs at Caran did not feel like the progress report is a controlling function from the organisation. They thought the progress reports were good to ensure the outcome of the project and to minimise the risks of problems in the project. The PMs feel more secure in their work when they were manager for a project where progress reports were done. To do progress reports for every project at Caran, Automotive can be a good way to make the PMs feel more comfortable in the work that they are doing and to make sure that new PM adapts the method of working in the projects. Today only some of the projects are doing progress report. To have more projects doing reports of the status of the project will cause more work for the PMO, but it can also strength the position of the PMO in the organisation.

5.3 Further research

This research is focused on the PMO and how the way the progress report is handled in this organisation. Further research in the topic is for every organisation with a PMO needed in order to ensure the development on their PMO is constantly progressing and make it more effective and adopted to the organisation. Caran should frequently do investigations of the different needs of the different functions that the PMO can provide and if the organisation needs have been changed. Further research in a similar manner can also promote the PMO maturity level and make it more important in the organisation. This research did not involve all the managers and PM at Caran. A larger research at the company could be a way to have a better result, although a larger research might be good but a less comprehensive study can provide a clue of what the employees think is a good development of the PMO and its duties.

6. Conclusion

To work or lead a project does not need to be difficult, if you can focus on the right things and do not have to do unnecessary administration work (www.projektspecialisten.se). To have a PMO in the organisation can be a strategic way to manage the projects in the organisation more effective and to be more competitive on the market.

To believe that a PMO is the solution for all the problems in the organisation is a common mistake, a PMO can be helpful in many ways in the project management and a way for the organisation to handle the resources and the capacity in the organisation in the most effective way, but to think the PMO will work effectively the same day it started is wrong. A PMO need to have time to grow in the organisation and it will constantly adapt new ways to make sure the project work is done in the most, for the organisation, effective way. One of the most common and most known duties for a PMO is to handle the progress reports in the organisation but a PMO should have more duties in the organisation. The duties can differ from organisation to organisation and is often depending on how long the PMO has been established in the organisation.

One of the most important function of the PMO is to have control over the projects in the organisation, there are several tools that the PMO can use to have a better control over what is happening in the projects, for example by using progress report system for the projects. To do a progress report in the project is a way to make the PM and other involved in the project work aware of the situation in the project. To frequently report the status in the project can be beneficial for the outcome of the projects in the organisation.

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APPENDIX I

Functions of a Project Office	✓
Development Functions	
Recruiting project managers from within the organization.	
Hiring project managers externally.	
Defining a project manager training path and ensuring that it is followed.	
Providing mentors for novice project managers.	
Establishing a mutual assistance program for project managers.	
Conducting project reviews to determine if a project manager needs help.	
Evaluating project managers at the completion of each project and recommending steps for improvement.	
Support Functions	
Providing an escalation path for project issues.	
Developing procedures to help project managers who are also team participants balance the demands on them.	
Providing assistance to project managers who are required to manage multiple projects.	
Providing a central source of data gathering for costs and time.	
Producing standard reports on the status of projects such as performance against budget or schedule.	
Establishing standards for initiating and closing projects.	
Providing a mechanism for managing changes to project scope.	
Establishing a process to define priorities among projects.	
Helping project managers negotiate for needed resources.	
Implementing project management tools such as software or methodologies.	
Providing a forum for mediation when a project manager and a customer dispute aspects of the project such as scope changes.	
Providing templates for project management deliverables such as the project charter or project plan.	
Control Functions	
Providing line management for project managers.	
Assigning project managers to projects.	
Defining mandatory project requirements such as status reports, team meetings, or project plans.	
Reviewing project management deliverables to ensure that they are produced and to validate their quality.	
Establishing project management standards.	

Source: Hallows (2003). Different functions of the PMO.

APPENDIX II

PMO Function	% of PMOs where important
Report project status to upper management	83%
Develop and implement a standard methodology	76%
Monitor and control of project performance	65%
Develop competency of personnel, including training	65%
Implement and operate a project information system	60%
Provide advise to upper management	60%
Coordinate between projects	59%
Develop and maintain a project scoreboard	58%
Promote project management with organization	55%
Monitor and control performance of PMO	50%
Participate in strategic planning	49%
Provide mentoring for project managers	49%
Manage one or more portfolios	49%
Identify, select and prioritize new projects	48%
Manage archives of project documentation	48%
Manage one or more programs	48%
Conduct project audits	45%
Management customer interfaces	45%
Provide a set of tools without an effort to standardise	42%
Execute specialized tasks for project managers	42%
Allocate resources between projects	40%
Conduct post-project reviews	38%
Implement and manage database of lessons learned	34%
Implement and manage risk database	29%
Benefits management	28%
Networking and environmental scanning	25%
Recruit, select, evaluate and determine salaries for PMs	22%

Source: Hobbs (2006). Report on the Survey “The Reality on Project Management Office”

