Everything You Need to Know About PMOs

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Introduction

The emphasis on PMOs (Project or Program Management Offices) is increasing, even though they have been around for many years. With regard to PMOs, this white paper will address several main questions:

I. What is a PMO?

II. What is the Business Value of a PMO?

III. PMOs: Why One Might Be Needed

IV. Establishing a PMO – How Do We Do That?

V. Integrating the PMO Into the Organizational Culture / Creating a PMO That Lasts

What is a PMO?

A PMO can be considered as the coordinated project management of multiple projects – usually those within a program but can also be a company resource to be used by all projects within that company.

This is a very textbook definition and does not provide the detail required to accurately describe the true functions of a PMO.

At a high level, a PMO exists to perform five core functions:

1. Provides guidance and support to all projects in the program or company.
2. Enables successful definition, integration, acceptance and implementation of all deliverables within a program.

3. Provides a single point of contact for the customer (internal or external), enabling effective communication between projects, PMO and customers, the end result being higher customer satisfaction.
4. Provides consistency and reliability of all deliverables and processes within a program or company.
5. Minimizes gaps and overlaps between projects.

Before we proceed to examine the value and benefits of a PMO, we need to understand more specifically the core functions.

Provides Guidance and Support

A PMO provides a common approach to all projects covered by the PMO. It does this by:

- Providing templates for tools used on all projects so that they all have a common look and feel;
- Providing guidance for projects on how to plan and implement common quality and risk management policies;
- Acting as a community of senior project managers (PMs) to mentor the project managers (PMs) of the component projects.

This will have benefits for individual PMs, the program(s), and in the longer term, the company, as PMs standardize their approach to projects.

Enables All Aspects of Successful Deliverables

A PMO can provide a central and coordinated point for definition of all requirements, integration of deliverables from different projects or suppliers and coordinated acceptance and implementation of the deliverables from each project and the overall program. This applies whether you are a supplier providing project services for an external customer or you are providing project services internally to your own company,

Improved Customer Satisfaction

Having a single point of contact with the customer – whether internal or external – allows the customer access to one source for reporting progress, status of either the program or individual projects, issues, risks and changes either at the project or program level. This will avoid the customer having to chase down the individual PMs within a program to obtain information which may then be inconsistent and even contradictory. If the customer has an issue on any of the constituent projects, they know who to contact for answers or resolution.

The Basis for Consistency, Reliability, and Reduced Risk

Consistency within a program is a sign of professionalism. A PMO provides oversight on all projects and requirements, enabling a more efficient and consistent approach to the planning, integration and implementation of requirements with reduced overall risk. Different business units utilize different standards, documents, contents and processes; the PMO can ensure that deliverables are a unified production. For instance, integration of the schedules from constituent projects enables a unified schedule for the whole program, allowing the PMO to:

- Highlight the critical path through the whole program taking into account the dependencies within individual projects
- Evaluate and manage the impact of risk and change from one project on another
- Improve the reliability of the resulting system by ensuring deliverables are more consistent and integrated.

Minimizes gaps and overlaps between projects

Just as with a project-based work breakdown structure (WBS), a PMO level WBS will reduce overlaps and gaps between projects and their deliverables as viewed from the higher level. This will enable planning to be more comprehensive and complete, reducing the opportunities for negative impacts on the key baselines.

II. What is the Business Value of a PMO?

Now let us turn to the business reasons and incentives for having a PMO, including how they can be cost justified and provide a positive ROI.

A PMO is often packed with senior and expensive resources, so there has to be a good business case for this expenditure.

Not all programs can justify the cost of a PMO. Consideration has to be given not so much to the cost but to the “value” of a PMO. Typical measures include:

- How much does it influence the success of the project?
- How much money can it save?
- How much additional cost would there be and could the program objectives be successfully met without one?

There are certainly additional metrics that your organization may measure. Let us examine some of the features of a PMO and how this could be cost justified.

Baselines

At the project level there are three key baselines:

- Scope
- Cost
- Time

It is the project manager's responsibility to establish and then meet those baselines. In a program composed of multiple related projects, each of those projects will have their own baselines and there may be a program manager who is in charge of the entire program. However, the program manager has a finite limit regarding the number and complexity of projects in the program that they can manage alone. It will not take long for the program manager to start recruiting additional resources to assist in managing various aspects of the program. This expansion of resources can escalate and morph into a PMO, whether recognized or not.

Constraints

One thing most projects will do is to evaluate constraint priorities – the flexibility matrix. What is the key driver for each project – time, cost or scope/functionality? If different projects have different priorities, there is a high chance that the program will not be totally successful due to conflicting project priorities. For example, if the program is time-driven, the whole program must be complete by a certain date. Unless each individual project manager understands that time is the key driver, they could cause the program to slip by focusing on one of the other constraints instead. Enabling a time-driven program to coordinate and amalgamate individual project schedules and milestones will enable identification of the program's critical path, i.e. which projects are on the critical path. The PMO can then ensure the focus on these projects is to attempt to ensure critical timescales are met. This could provide major benefits to a company in terms of reducing cost of slippage of a time-driven program and have a direct impact on the bottom line of the program and the company.

If the program level critical path changes, the PMO should be aware of this and shift their focus to the new critical path projects, again maximizing the chance of overall success. Missing a time deadline can have serious financial implications for a company, and the reverse is true – meeting contractual or defined deadlines can save or gain additional revenue.

Information and Reporting

Without relevant coordination and management of the constituent projects at the program level, senior management may not be able to obtain a consistent view of the program objectives and status without a lot of digging. One of the major functions of a PMO would be to gather information from the constituent projects: objectives, plans, status reports, deliverables, etc. The PMO can then combine the disparate content into a set of higher level overall program reports for easier understanding by management. These reports should indicate developing issues at the earliest time, together with any action required to put a program back on track.

Risk

Some tasks that the PMO will undertake at the program level may include overall risk management. Because the PMO has a higher level view it can assess how a risk on one project might impact other projects. If a risk materializes, the PMO can immediately assess action required on other projects to minimize impact effects.

Quality

The PMO can ensure a consistent look and feel for each project it manages. It provides templates that can be used to ensure the constituent projects are coordinated and are not just a mixture of random projects thrown together. This may not have a tangible bottom line benefit but it will improve the final product of the program.

Managing a Program versus a Company-Wide PMO

All the above considerations were in regard to multiple related projects in a program. Now consider a company PMO where the PMO is not managing a program of related projects but is there to provide assistance on all projects being undertaken by the company. Many of the benefits detailed above apply to this scenario, but there are also additional considerations.

Having led a PMO for a major computer company, the author can highlight some of the benefits experienced. Before there was a company PMO, all projects were little islands of work. The company-wide PMO was staffed by several of the most senior PMs in the company and the main roles of the PMO were to:

- Train all PMs in the company methodology. This was compulsory for all PMs.
- Provide a consistent framework to review all potential projects to ensure that any response to a request for proposal (RFP) that the company submitted had considered all the relevant areas of the plan, had achievable baselines and risk was contained.
- Provide the framework for quality audits or reviews of all major projects in execution to ensure consistent application of the company methodology, in particular financial, time, quality and risk management.
- Provide a formal mechanism for mentoring less experienced PMs.

- Allow for consolidated monthly reporting on all projects to assess any problem areas and attempt to even out risk among all company projects.

- Provide templates and tools that could be used not only throughout the US projects but that were also accessible globally.

- Implement a standard and comprehensive change management process for all US projects.

There are many quantifiable benefits of having a PMO for both a group of related projects in a program or as a company-wide function to improve project management over time. There are also many intangible or soft benefits of a PMO such as common standards, methodologies, tools and templates that will have an eventual impact on the bottom line of a company even if they cannot be quantified at the individual project level.

After evaluating the benefits, an organization needs to determine if the requirements exist to establish a PMO.

III. PMOs: Why One Might Be Needed

With clear purpose and an understanding of the benefits gained from a PMO, an organization needs to evaluate if it has the requirements to create a PMO. It will require resources to establish an effective PMO, so there needs to be a clearly identified need to establish such an office.

To do this, case studies serve as an effective way to illustrate requirement analysis. Consider a standard project with a PM, several team leads and various team members. The planning would normally be performed by the PM and team leads with possible input from senior team members or subject matter experts (SMEs). The plan would include the three basic baselines of scope, time and cost. Finally it would consider the other key elements such as risk, quality, resources and communications, among other things.

When the project goes into execution, the PM will normally have a weekly status meeting. At that time he/she would determine the current status of milestones and deliverables (scope), how well this is being performed compared to the schedule (time), all relevant costs (cost) and would probably review risk. During this meeting, he/she can implement corrective or preventative actions as necessary.

Now consider a very large project with several sub-projects. During planning there may be a need for a high level view of scope, time, cost, risk, quality and resources covering all of the sub-projects. The sub-projects may each have a PM, so the overall PM is now managing a team of PMs in addition to the overall baselines of the project.

Another situation may arise where a program exists with several or many projects. This is an expansion of the previous case, and unless the overall program manager is careful, it will be easy to lose control and become a statistic for project failures.

The answer for both of the last two cases is probably a PMO, elevating the functions that spread over multiple projects to a PMO team. This team will consider and evaluate the effects of one project on other projects in the program and, where necessary, institute proactive activities as soon as possible.

Other considerations for implementing a PMO include:

1. Possible resource efficiency improvements across the program, and

2. A much improved change management process that evaluates the impacts of changes in one project on all the other projects before deciding to approve or reject that change.

Where is the line drawn between having a project manager and a PMO? A PMO can be relatively small, maybe the overall PM plus the individual project PMs, so although it may not be called a PMO it could be the embryo of a PMO. The larger the project or program gets, the more likely the PMO is to include:

- A risk manager to review risk of the overall endeavor

- A quality manager to ensure consistent quality goals and "look and feel" across all projects

- A scheduling manager to create the overall schedule, dependencies, milestones, deliverables, etc.

- Other specialist personnel

The benefits of a PMO exist at an organizational level. Costs could be collected and reported at the PMO level, as could overall status and progress reports, to give management the relevant level of detail they require.

Another major benefit of the PMO is the customer interface, whether for internal or external customers. It relieves individual PMs from interfacing with the customer, but probably more importantly, it gives the customer one focal point of contact for the program rather than multiple individual PMs. The customer will be able to have a coordinated view and assessment of the program rather than having to piece together different reports from each project.

In short, there is a grey area between PM and a PMO and it is a subjective judgment as to when one morphs into the other. One big element of the decision of whether to have a PMO or not is cost – both the cost of having a PMO and the cost of not having one (potential project / program failure).

Another type of PMO that can be deployed is one at the company level rather than project or program level. Several major companies have PMOs not tied to specific projects, but to act as an oversight for all projects and programs being performed by the company. This type of PMO would normally:

- Consist of senior PMs
- Perform project audits at various stages of a project life cycle
- Define and implement project quality measures, tools, techniques and templates to be used across the company, providing a common look and feel for that company's project deliveries
- Provide mentoring for the more junior PMs in the company.

A PMO at this level will be particularly interested in lessons learned from individual projects to improve project ability for a company. If a company has not established a methodology, tools and templates, the PMO could be the entity to develop, train and implement these standards across the company.

In the end, the decision of whether or not a company should have a PMO is a judgment made by senior management. It is a highly subjective judgment based on things such as the company's risk and quality policies, financial justification and requirement for improvement of project success over time, among other things.

IV. Establishing a PMO - How Do We Do That?

If an organization reaches the conclusion that it needs a PMO to make programs, the project portfolio or the company more successful, it will need to be properly constructed. The person tasked with managing this function must consider the number and types of skills desiredas well as the process of bringing one to life. In the following sections, the term program is valid for larger projects.

Some of the questions you may ask during this consideration are:

1. If there are multiple projects in the program, should the individual PMs be part of the PMO or not?
2. How well established are the methodology, tools, infrastructure, and previous project history database?
3. How technical is the project?

4. How inter-related are the projects? Are they mainly independent of each other or highly dependent?

5. What is the generic level of risk for the program?

6. What is the projected cost of the program, including the PMO? If it is for an external customer, what is the projected profitability of the program and what is the potential cost of failure of the program to your customer and to your company?

7. What is the projected length of the program?

8. For an external customer, should customer representatives be included in the PMO?

Before examining the factors that may affect the size of the PMO, one consideration that likely does not have a major impact on size is whether the program is for an internal or external customer. All programs need to be planned for success whether the customer is internal or external, so the size of the PMO should not be significantly affected by this.

PMs In or Out of the PMO

As a rule, the cost difference will be negligible because there is little additional time or expense involved if the PMs are established as members of the PMO or not, unless there are traveling expenses involved. On the other hand, having all PMs together to discuss status, progress, issues, risks, etc. will usually have a significant impact on the success of the program because of the level of communication between the PMs which will enable the PMs to be more proactive on their project. There are substantial benefits to having individual PMs included in the PMO rather than have them hanging around the edges.

Methodology, Tools, Infrastructure, Project History Database

If a company does not have a solid methodology, including tools, techniques, and historical project information to review, then it is likely that individual projects will be managed in the style of their individual PM. Projects are unlikely to be well integrated, consistent, solid or repeatable. They are likely to provide the overall program manager with a great opportunity for failure and a need to polish up their profile.

In this situation, a successful outcome will probably involve more people in the PMO just to develop the missing infrastructure, train and support program team members, etc. Having a well-established methodology, tools and techniques will not only raise the chance of a successful outcome but will enable the company to add this experience, lessons learned, plans, etc. to a database of completed programs to enable future similar programs to benefit by previous experience. Not having a well-established project infrastructure will either lead to increased size of the PMO or a decreased probability of success.

Technical Level of the Project

This will impact the number of technical leads and SMEs required in the PMO.

Projects: Highly Dependent or Mainly Stand-Alone

It is possible to have a program with multiple projects that although they are related, may not be highly interdependent. In this case, the size of the PMO may be significantly smaller.

Generic Level of Risk

Where there is a highly dependent set of projects in the program, the issues of risk and scheduling in particular are a serious consideration. In this case a PMO scheduling manager is beneficial, someone who will take each individual project schedule and combine them at the program level to identify dependencies and risks. There may be a need for a PMO risk manager who could assist PMs to be proactive in assessing and managing the risks on their project caused by other projects.

Cost and Profitability of the Program

For both internal and external projects the cost of having a PMO should be compared to the risks and potential costs of not having one. For external customers, it may be necessary to assess the optimum size of the PMO. If the customer will not accept the resultant price of the program the management team often determined that it would be inadvisable to pursue the business. At that point, one option was to reduce the estimated cost of the program by de-scoping certain requirements. If this was not acceptable to the customer, the decision was often to not pursue that opportunity as the likely lack of success would erode any anticipated profit.

Length of the Program

This is a factor in considering the size, consistency and skill set of your PMO. Unfortunately people – even PMO members – tend to want to have vacations, be ill, and leave the company. On a long term engagement, allowance must be made for these inconveniences. One obvious way to reduce the impact is to cross train PMO members to allow for short term absences. In addition, they can perform other background tasks such as assisting and mentoring PMs, working on capturing lessons learned, training project team members in the company methodology, etc.

Customer Representatives: In the PMO or Not

Having the customer represented on the PMO can have an associated risk depending on the maturity level of the customer. An immature customer who does not realize that all programs have issues can be a disruptive force when things go wrong; they may panic and want to implement short term fixes. The more mature customer will be an asset on the PMO provided they work with the PMO cooperatively, and resultant communication will be greatly enhanced. Ideally there will be no finger pointing when issues arise, just a cooperative approach to resolving them.

There are other questions that Program Managers may need to consider in planning the size, consistency, and skill level of the PMO. However, the above list are the primary factors to consider when building a PMO.

V. Integrating the PMO into the Organizational Culture

The analysis concludes with considerations for integrating a new PMO into the organizational structure. This integration must be performed in such a way that the PMO is not considered a novelty; a novelty that loses its luster fairly quickly. In other words, how does an organization internalize the necessity and contribution to strategic goals of a PMO to provide maximum contribution to the company and justify the high cost in terms of its even higher value?

There are two main types of PMOs:

- Those that are created to manage a major project or a program (for the duration of this article referred to with the generic term “program”) and will disassemble at the end of the program, or

- A Company PMO that is established to form a “Center Of Expertise” for project management. It is there for the benefit of all projects undertaken by the company and remains in existence as different projects form and finish.

Program PMO

Consider the program specific PMO first. This is created to manage a specific program and is created generally during Initation and remains until the late stages, probably into the formal Close. It is customized for that specific program, so it’s forming and ending will be dependent on the specific needs of that program.

The value of the PMO in the overall control and management of generally a large program can justify the cost by providing significant value. The areas where value can be demonstrated are areas such as:

- Coordination between the projects within the program

- Understanding and managing the potential ripple effects of issues, risks, and changes on one project with respect to all other projects.

With regard to change management, if a change is implemented in one project in a program in isolation, the impact on other projects may not be recognized until final acceptance testing or even worse, in initial live operation. For example, it is critical to understand how changing a database record in one project may impact other projects using the same database.

If a company starts using program-specific PMOs, the value should be immediately apparent, particularly by considering what might have happened if the PMO had not been in place. One major advantage for senior management is coordinated reporting at the program level rather than having multiple project reports. This allows them to now have the overview or "big picture" on the status of the program in one report.

Other key areas where a PMO provides significant value by overseeing all projects in a program are:

1. **Scheduling** – identifying the critical path of all projects in the program, plus the critical path within each critical path project. Any issue affecting an individual project completion date for a critical path project will impact completion of the overall program. It might be a good idea to recognize and incorporate this into the overall plan.

2. **Risk** – if a known or unknown risk occurs on a project and a contingency plan is implemented, does this impact the ability of other projects to complete successfully on time and on budget? Is the overall program under threat? It would be highly beneficial to the overall success of the program to know this.

3. **Quality** – having a common methodology and project tools/templates will result in a common look and feel for all elements of the program and enable interfaces between them to be more easily defined and implemented. It also opens up the opportunity for reuse both within this program and for future similar programs.

4. **Cost** – overall cost of a program is composed of the costs of each individual project, and escalation of cost on one project will impact the overall cost of the program. Forecasting the latest cost of a program will be significantly more accurate by taking an integrated view of the whole project and can lead to one overall financial report rather than multiple financial reports from each project.

For this type of program-specific PMO, the benefits and value of a PMO should be clear, so the use of PMOs should be easy to justify and institutionalize for large programs.

Company or Permanent PMO

A PMO that is established on a more permanent basis for use by all projects in the company has many advantages to the company.

1. It can be the creator and keeper of the company project methodology and historical database. It can create common tools for use on all company projects. (This will allow easy re-use of tools and templates). It can also create and implement a common approach for quality and risk management throughout all company projects.

2. It will encourage all company PMs to utilize the company standards, methodology, tools, etc., leading to a unified company approach to projects and project management. It can also provide project auditors to perform regular or adhoc reviews of projects in execution to ensure all project standards are being met and to gather lessons learned from each project throughout the project lifecycle.

3. It allows members of the PMO to mentor and coach company PMs, again to help institutionalize a company methodology.

4. It can accumulate "best practice" documents that can easily be stored in a library and re-used for all future projects, saving cost by having a group of standard templates such as a quality management plan, a risk management plan, a change management plan and most other "management" plans so that projects are not reinventing the wheel for every project. Once the company quality policies and procedures are created, the quality management plan will be "standard" for all company projects.

The value of either type of PMO should be clear, and the improvement in resulting projects will not only justify the cost of the PMO, but enable higher quality projects with an increased probability of meeting the key project baselines of scope, time, and cost. Once a PMO has been created and used on a major program or multiple company projects, the benefits should justify their use. The PMO will be incorporated into the company approach to projects and become institutionalized.

Conclusion

This paper explored the PMO is detail: the definition of a PMO, , the business value that they bring to a company, why a company might need one, how to establish one and how a PMO might be integrated into the organizational structure. In this way, it can become a valuable asset for a company to use to improve their ability to manage large programs or to establish the framework for management of all projects in a company.

PMOs can be expensive but the value they provide to a company will normally far exceed the cost. They should standardize a company's approach to projects, lead to time and cost savings, gradually improve the project management ability of the company and make projects a valuable tool for a company rather than something to be feared.

About Forward Momentum, LLC

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