

PMO: Its Impact on Project Success and Measuring Its Performance

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Abstract

As the number of IT failed projects is high, a growing number of organizations are looking to contain this problem with the help of an organizational unit called a project management office or PMO [5]. This unit is responsible for standardizing management resources used by all projects, such as project methodologies, processes, tools, and performance indicators. Standardizing project management-related assets across the entire organization might lead to higher success rates for projects. It is important to study the aspects of the structure, function, and roles and responsibilities of the PMOs that run these projects. In addition, PMOs have come into the spotlight due to the high success rates associated with their usage.

Measuring performance of a PMO is critical to its existence. Not evaluating a PMO on a regular basis may lead to disagreements about its actual value. Also, in organizations that are already convinced about the importance and usefulness of a PMO, gauging performance can help improve current practices by identifying weak areas and promoting corrective actions. Moreover, performance measurement processes can showcase the effectiveness of a PMO to the entire organization and solidify the foundation for this organizational unit responsible for project management.

Introduction

Continuous improvement in all facets of the business is key to financial success for an organization. As successful initiatives can directly translate into significant growth and increased profits for a company, many managers are looking at company processes for handling new initiatives. One of the areas where companies have traditionally struggled is effective project management [6]. To combat this issue, many project management methodologies have been created, and they have improved tremendously over the past few decades [1]. They employ unique ways to mitigate issues that may impact the triple constraints precariously. Similarly, to ensure the consistency of project management methodologies, processes, and metrics across the entire organization, PMOs are created within organizations, which can greatly enhance the chances of project success. This research paper discusses some of the important facets of PMOs.

What Is a PMO?

Project Management Institute's *Project Management Book of Knowledge* defines a project management office as “a management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques” [9]. PMOs are established to achieve organization-wide standardization for project-related processes and help projects come in under budget and on time, achieve an agreed-upon scope, and reflect satisfactory quality. PMOs provide a framework for instruments and expertise in project management. They also maintain a list of best practices for project management, which may lead to the success of organizational projects and underscore the importance of having a formalized project management process.

A PMO may achieve the objective of consistent project management methodologies, processes, and metrics across the entire organization by providing mentoring and training facilities for project participants. Many PMOs with a high degree of involvement in projects provide consultation services to project teams, promoting better communication across the organization. As PMOs are created to improve business performance, they act as agents for spreading the significance of having standard project management practices and a culture of project management throughout the organization.

It is important to understand that goals of a PMO can vary greatly, depending upon the organizational priorities such as enhancing project performance, improving business unit operations, and boosting organizational performance by creating a central repository for standard project management policies, procedures, and methodologies [5]. These goals may also differ based on the type of PMO. Generally, an enterprise-wide PMO generally has following main functions [1]:

- Standardization of project management methodology
- Alignment of projects with organizational strategies
- Provision for training, mentoring, and consultation
- Compilation of project performance metrics

Today, PMOs are created to increase organizational and project efficiencies. There can be numerous reasons for developing this organizational entity. Recognizing the reasons behind the creation of PMO may help quantify its effectiveness and impact on the success rates of projects.

Need to Create a PMO

For project-based organizations, successful execution of projects is the main business revenue generator. When projects fail, an organization may incur enormous losses in addition to increased risk of losing marketshare. Due to such dangers, organizations tightly control their projects, programs, and portfolio, making sure that they align with the strategic goals. As billions of dollars are spent annually on projects, high-level leadership is always looking

for ways to handle projects more efficiently as failure may lead to the downfall of an entire organization. Organizations with less successful project management practices may lose staggering \$280 million for every \$1 billion spent on failed projects [8].

Even though billions of dollars ride on the success of projects, many troubling issues emerge when analyzing the management of projects:

- Sometimes the leadership of an organization may not have a complete view of the organization with respect to planning, execution, and benefit realization of projects [12]. This issue especially arises when no centralized authority acts as a liaison between top- and mid-level management, which actually controls and executes projects.
- A decentralized system for proposing projects and taking initiatives can lead to only partial analysis of mission-critical dependencies, which may be not fully documented [12]. In a worst-case scenario, these dependencies may even be overlooked. This situation can negatively affect the outcome of a project.
- Situations may arise where inadequate or inappropriate resources are allocated to projects [12]. The selected project team may not have sufficient experience and/or expertise in the project management, in addition to lacking the knowledge of the business needs, values, and impact of the project.
- There may be differing views between the project team members as well as customers, who may view project as a success or failure based on their own assessment [12]. To combat this situation, a set of standard metrics is needed, allowing for an unbiased assessment of project performance.

These are some of the motivations for creating an organization-wide system for handling project management. PMOs can “introduce and enforce good project methodology, continually measure the progress of various initiatives and deliver a clear, organization-wide picture of performance for senior management, and to help more projects deliver on their promise” [5].

Delivering Value to an Organization

At the beginning of previous decade, PMOs existed only in large organizations with the economic muscle to implement one. Now, PMOs are almost ubiquitous in organizations of varying sizes [10]. The growth in number of PMOs can be attributed to the ability of these functional units to meet expectations and return a profit on the investment. Following are some of the most important aspects of successful PMOs:

Alignment with Strategic Objectives

Organizations undertake projects to derive some type of benefit. Project documents such as the charter and the business case describe such benefits and plan the implementation. An effective PMO ensures that the projects have true benefits and are in line with the company's most important goals and objectives. It is the duty of a PMO to decide what effect a changing business atmosphere will have on active projects. Depending on these analyses, a PMO must decide if certain projects need to be redefined, postponed, or, in some cases, cancelled. If a project is not contributing positively to the bottom line of an organization, the PMO may choose not to support such project.

A study by Dawson, Ramos, Davidson, and Paterson [1] asked organizations about the reasons for project failures, finding that almost 20% cited poor alignment with the goals and objectives of the organization [1]. A survey conducted by Project Management Solutions, Inc. found that 29% improvement was achieved in projects that aligned with business objectives through the efficient and effective use of PMOs [7].

According to a PwC global project management report [11], in organizations where the correlation between the portfolio and business strategy was high, the number of projects meeting financial constraints exceeded 75% [11]. This demonstrates the strategic importance of PMOs and their impact on project success rates. An organization with a PMO is more likely to achieve better project completion rates than others.

Length of Existence

A positive relationship has been reported between the length of existence of a PMO and performance of successful projects [11]. Generally, organizations that continue to employ a PMO do so in order to institutionalize processes and increase familiarity and adoption of project management. It was reported that 68% of organizations where a PMO has existed for six years or more have disseminated the standards for project management across all business units. On the other hand, organizations with shorter term PMOs have 47% dissemination rate [11]. In managing projects, it is essential to have a robust, well-designed, and standardized process to achieve success. Therefore, creating and empowering the PMO can increase project success rates over time.

It was reported that organizations with newer PMOs have reported lower performance. Data gathered by PwC indicate that established PMOs report much higher quality in delivering projects at 74 % and achieving anticipated benefits at 62 % [11]. A strong correlation between the length of the PMO and project success rates was noted during the research. This means that established PMOs can directly impact the quality and business benefit realization in a positive way. The researchers found a noticeable improvement in the project performance with respect to the triple constraints [11]. It can be surmised that as a PMO matures, its benefits with respect to the triple constraints, the quality, and the business value increase dramatically.

Management Support

Having management support is crucial to any project; an ever-present executive backing is needed for a PMO to work and effectively support practices across an organization. To secure such support for its survival and success, a PMO must, at all times, align with organizational objectives and strategies. This alignment should be maintained even during constant changes.

According to the estimation by Cooch [10], almost half of the PMOs fail to achieve success because of their misalignment with the organizational objectives. This can be attributed to miscommunication with the executive management about purpose of the PMO. If management is uncertain about the PMO's value, it will certainly not support its cause. Cooch notes, "For example, an organization may create a PMO and base its success criteria round growth of revenue, as the focus of that company may be invention. At IT giant Google, for example, delivering cost-effective and timely projects is important, but not as important as coming up with cutting-edge thought leadership. The PMO has to have an environment where ideas can be created. Sometimes that means the budget and schedule are lower priorities" [10]. These cannot be achieved if management is unwilling to back the PMO. Gaining confidence from the management can undoubtedly help PMOs better manage projects and execute its strategies [4].

Having a PMO that can innovate and create new methods to perform traditional project management functions and communicate such methods with management will gain executive approval. This can greatly improve the chances of a project achieving desired results. PMOs must provide necessary project resources, enabling success while ensuring that its actions are in-line with the position of the management.

Capability

Mature and enduring PMOs can be effective entities for managing IT projects, programs, and portfolios. They can also help manage customers and vendors, both internal and external. If provided, because of the long-lasting nature of this organizational structure, a PMO may even operate as a unit, where management capabilities for projects and programs are developed and institutionalized for stable, recurring, and successful project management services [7].

A survey was conducted to understand PMO capabilities and importance to an organization [7]. The capability for a PMO was defined in five separate tiers [7]:

- *Basic*: Basic project management processes are performed inconsistently.
- *Established*: Standard project practices are used consistently only in few areas.
- *Institutionalized*: Standard project management processes are followed throughout the organization.
- *Strategic*: PMOs engage in standard portfolio management process throughout the organization.

- *Best in class:* PMOs engage in a continuous enhancement process throughout the organization.

This survey also correlated the capability of a PMO with an organization’s overall performance. The researchers noticed that in high-performing companies, PMOs have more ability to perform project management-related process with greater freedom. Low-performing organizations have basic project management processes that are inconsistently used [7]. If an organization implements a PMO successfully, it can move toward the “strategic” or even “best in class” tier in the list above. In other words, the organization will continually improve its processes for managing projects and perform project management activities on regular basis with consistent tools, methods, and processes.

Measuring the Success of a PMO

As the role of the PMO grows in an enterprise, it becomes crucial to support the strategic business functions. In organizations where PMOs have been created, it is important to justify their value and hold accountable PMOs for their projects. Hobbs notes, “the value of PMOs and the justification of the expenses they generate are often brought under scrutiny and questioned. Many PMOs are under pressure to justify their existence and show value for money. . .” [3].

Most companies face problems when measuring the effectiveness of their PMO or responsibilities that are undertaken by the PMO. Some of the most common problems include

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|-----------------------------------|---------------------------|
| • Too little data | • Too much data |
| • Inferior data | • Absence of current data |
| • Irrelevant measurement criteria | • Absence of baseline |

Because of the above problems, sometimes PMOs are disbanded, even though they do add value to the bottom line. In research performed by ESI International [2], the head of the PMO for a company noted, “It was the third attempt at setting up and running a PMO within the company in the last eight years, but each time they have either been closed down to save money or never gained full support of the business” [2]. In other words, a PMO must be able to prove its value to management; otherwise, it will certainly be disbanded.

There are many ways to solve the problem of a PMO not being able to prove its value. Currently, PMOs are viewed as cost centers in companies. This means that a PMO does not directly generate revenue for the organization. It is critical to provide research suggesting that the PMO produces positive changes in project management area. There is a need to provide education regarding the potential of PMOs.

An organization must know the purpose of its PMO, its goals, and the timeline to accomplish such goals [4]. A PMO can act in a wide range of roles, ranging from simple support to direct control over all projects through a team of project oversight managers. The most important

step is to analyze the organization by understanding the potential structure, roles and responsibilities, culture, and any other nuances that may affect the workings of a PMO. This analysis should also note any constraints applicable to the PMO. Historical information about company operations can be used to create a context-specific PMO procedural handbook.

Underscoring the importance of a PMO, Hobbs notes that “PMOs do not exist in a vacuum, rather they imbue the culture and context of their respective organizations. Accordingly, no two PMOs are truly identical as each organization, itself, is unique. This is an important recognition since any future guidance regarding the implementation and maintenance of successful PMOs must always consider the organizational context in which each PMO resides” [3].

Another important aspect is buy-in from the stakeholders [4]. A PMO should be responsible to a higher body of executive management. As a PMO is generally viewed as a cost center, stakeholders should have a consensus on selected methods to measure a PMO’s performance. More often than not, definitions differ for what constitutes a successful project or even business units. Having different definitions for success can seriously hamper the efforts of a PMO to gain traction in a company. Therefore, a PMO must communicate with higher-level management about the measurement of critical success factors. Also, a PMO must make tough choices in addition to performing thorough analyses of potential projects, based on current investment priorities and strategies of a company, and communicate them up the chain of command. Failing to keep management informed may make a PMO a barrier to enterprise solutions. Also, while measuring performance, management should actively engage the PMO to understand all aspects of its functions.

As performance measurements for a PMO are created, it is important to map them to the business environment. Only after this is done should metrics be created, so that PMO performance is measured against a baseline. This will lead to identifying capabilities as well as gaps in the business unit functions. Such analyses can be used to determine the authorization and funding for future projects, which can then be monitored and controlled again to conduct performance evaluations.

After creating a framework for measurements and evaluation metrics, these tools must be integrated in some type of value management system [4]. Such systems may integrate some of the most important aspects of project management, including scope, schedule, budget, resources, and milestones for a project, greatly simplifying the process of measuring performance and creating visual representations of the data.

Simplifying the process used for data collection, reporting, and analysis is key to measuring performance. In this process, it is important to measure the input of various project resources used for project duration. In addition to this, the process of project management and outcomes of the assessment process must also be studied and measured to create a comprehensive picture of PMO performance.

According to Kendrick, establishing a baseline ensures that metrics are used properly and are actually useful in determining PMO performance. Creating a baseline entails using historic project performance data. In today's world of "big data," industry benchmarks can be found and compared against proper population samples with required input from various business units [4].

There are many important key performance indices (KPIs) that can be used for PMO performance assessment. These KPIs may only be focused on the areas of organization that face outward, such as marketing. Using such KPIs can make the PMO be seen as a profit center and justify investment, while not being seen as a cost center. KPIs can include

- *Time to market*: Time passed from conceiving an idea to delivery of products
- *Service availability*: Time needed to start a project compared to an ideal start date
- *ROI on projects*: Actual revenue generated based on investment for revenues
- *Sales growth*: Current sales compared with past sales
- *Service utilization*: Simplification by increasing service availability [6]

After creating the measurement metrics and assessing performance, conclusions must be drawn based on the analysis. An organization may use the most advanced methods to gather data on performance of the PMO and create a comprehensive picture about its workings, but if no conclusions are drawn based on sound logic, the measurement process is impractical and meaningless. The results from such performance measurements must be used for undertaking corrective actions to improve the current state. According to Kendrick [4], these correction actions may include

- Cut costs, reexamine schedule
- Amend scope, requirements
- Redraw baseline
- Change implementation plan
- Change personnel
- Reorganize

Performing internal performance inspections regularly with the help of KPIs will confirm whether or not the PMO is realizing set goals. When assessing the results of such measurements, it is important to pay attention to the current PMO structure, roles and responsibilities, and duties. Based on these results, necessary changes should be made to eliminate or at least mitigate current shortcomings and build on strengths.

Improving a PMO

A project management office enables standardization of various resources used throughout the project life cycle. For a PMO to optimize performance, continuous improvement is crucial. Problems with performance measurement may even lead to the demise of a PMO. If warranted, changes must be made to parts of PMO structure, processes, and tools that will enhance the performance.

Generally, IT project managers tend to have project management experience with certification to prove their expertise in the field [11]. As one of its main objectives, a PMO may train project management teams. In many organizations, such training is given only to project managers and not to other staff members such as business analysts or other IT professionals [1]. It is important to improve performance of the project management resources to provide needed education to all project management personnel. This will eliminate any possible knowledge and awareness gap between project managers and other IT resources, and lower-level project management staff recognizes the higher-level project management techniques, improving the overall success of projects.

Conclusion

Many variables can affect a project in both positive and negative ways. Based on the evidence provided above, it is clear that establishing a PMO does, in fact, improve the performance of a project and chances of success. Strategic alignment with the business can enable a PMO to select only those projects that are in sync with organizational strategy. Over time, PMOs mature and direct projects with more experience and vision, leading to greater project success rates. Management support is crucial for a PMO to manage projects well. If management trusts a PMO in making critical decisions and entrusts it with greater responsibility in executing and managing projects, project management practices can be continually improved, enhancing the overall performance of an organization.

Even though PMOs can improve the project success rates, it is important to accurately measure their performance. To achieve this goal, organizations must be able to gather useful and relevant data regarding the performance of the PMO. These data must then be interpreted properly and findings communicated with involved stakeholders, including the PMO. Based on the results of various analyses, proper corrective actions should follow. Having a well-constructed plan can significantly improve the functions of the PMO, allowing it to focus on managing projects more effectively and efficiently.

References

- [1] Dawson, D., Ramos, C., Davidson, A., & Paterson, R. (2012). *The Well-Structured Program Management Office Keys to Managing IT Demand*. Chicago and Dallas: Booz & Company, Inc.
- [2] ESI International. (2013). *The 2012 Global State of the PMO*. Sydney: ESI International.
- [3] Hobbs, B. (2007). *The Multi-Project PMO: A Global Analysis of the Current State of Practice*. Quebec: Project Management Institute.
- [4] Kendrick, J. (2009). Measures and Metrics for PMO Success. *Project Management Office Summit*. Washington, D.C.: P2C2 Group, Inc.
- [5] Keyedin Solutions. (2012). *A Strategic Guide to the PMO (Project/Program Management Office)*. Minneapolis: Keyedin Solutions.

- [6] O'Brochta, M., & Finch, C. (2011, November 10). *Key Performance Indicators for the PMO: Metrics for Success*. Retrieved from <http://www.pmhut.com/key-performance-indicators-for-the-pmo-metrics-for-success>
- [7] PM Solutions. (2013). *The State of The PMO 2012*. Glen Mills: PM Solutions.
- [8] Project Management Institute. (2013). *PMI's Pulse of the Profession The High Cost of Low Performance*. Newtown Square, PA: Project Management Institute.
- [9] Project Management Institute. (2013). *PMBOK Guide and Standards*. Newtown Square, PA: Project Management Institute.
- [10] Project Management Institute. (2012). *The Project Management Office in Sync with Strategy*. Newtown Square, PA: Project Management Institute.
- [11] PwC. (2012). *Insights and Trends: Current Portfolio, Programme, and Project Management Practices*. New York: PwC.
- [12] Visitation, M. (2009, October 16). *Making the Case for the Next-Generation PMO*. Cambridge, MA: Forrester.

Biography

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