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### **Establishment of Project Management Office**

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## **Establishment of Project Management Office**

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### **Abstract**

This paper presents a framework for the steps and processes required to establish a successful Project Management Office (PMO). This framework is driven by the different functions and roles that may be performed by a Project Management Office (PMO) as well as the type of PMO that would best serve organizations. Significant gains can be achieved by using the proposed framework. This framework is driven by implementing PMO's best practices that drive PMO success and the prevention of all pitfalls that lead to most PMO failures.

**Keywords:** PMO framework, PMO success, project management office, project management, PMO, establish PMO, PMO start process

## **1. Introduction**

Several organizations have established a project management office (PMO) to ensure successful management and support projects in their organizations. PMOs provide a wide range of functions spanning from designing and maintaining project procedures to strategic selection and initiation of projects to align them with organizational vision and objectives (Kerzner, 2009; Project Management Institute [PMI], 2008). The evolution of the PMO as a concept and important entity in organizations has continued to evolve since the early days of the U.S. Air Corps; later, the U.S. Air Force used PMOs to assist in monitoring and controlling aircraft-development projects during World War II and Cold War periods (Benson, 1997). Currently, PMO consists of well-established concepts in organizations.

Achieving PMO success is difficult. Although some researchers have adhered to its importance in project success (Hurt, and Thomas, 2009; Aubry, Hobbs, Müller, and Blomquist, 2010), Stanleigh (2006) found that 75% of PMOs in the information systems and technology domain shut down within 3 years of formation (Stanleigh, 2006). Presently, no globally defined standard or model to define the structure, steps, or outline of PMO formation exists. This research introduces a PMO framework intended to guide practitioners on how to establish a new PMO and ensure its success.

## **2. Definition of Project Management Office**

Various definitions of PMO and its implementation have been presented. According to PMI (2008), a PMO is an organizational body or entity signed with various responsibilities that elated the centralized and ordained management of those projects under its domain. The responsibilities of the PMO span from providing project-management support to being

responsible for the direct management of projects (PMI, 2008). Kwak and Dai (2000) defined a PMO as an entity that consists of full-time employees providing managerial support, administrative, training, consulting, and technical services. Other researchers referred to PMOs by different names, such as project support office (Bolles, 1998; Murphy, 1997), the project-management center of excellence (Ibbs & Kwak, 2000), and project office (Whitten, 2000); moreover, some authors tried to meet the PMI

The deflection of PMO and some entities were given names such as Project Office (Kerzner, 2003; PMI, 2004, p. 17), Centre of Excellence (Hill, 2004, p. 50), Centre of Expertise (Dai & Wells, 2004, p. 524), or PMO (Rajegopal, McGuin, & Waller, 2007, p. 27). Pellegrinelli and Garagna (2009) defined PMO as organizational constructs created in response to perceived needs whose relevant value decreases as the need decreases. Some authors noted that a universal definition for PMO is not possible due to the difficulty in the customization of individual PMOs to fit all organizational needs (Desouza & Evaristo, 2006, p. 415).

### **3. Why Have a Project Management Office?**

As the number and complexity of projects throughout the business world have increased, the need to have a centralized project-coordination function has increased commensurately. The popularity and expansion of PMOs among organizations appear to be related to this increase (Dai&Wells, 2004). Consequently, organizations are increasingly implementing PMOs.

In 1994, the Standish Group found that only 16% of projects were successful in time, budget, and technical specifications (Crawford, 2001). In follow-up research in 1998, the

group observed an increase in the success rate of projects from 16% to 26%. Among the reasons offered for the improved success rate was the enhanced use of project management and standard project procedures as a consequence of the implementation of the PMO. According to the State of the PMO 2010 survey, 84% of organizations are currently implementing PMOs in their organizations, a jump of 36% from the year 2000 (PMI, 2012). Organizations with PMOs report more projects completed on time, within budget, and meeting business goals. According to PMI's 2011 *Pulse of the Profession* Survey (PMI, 2012), PMOs help reduce the number of failed projects, deliver projects on or under budget, improve productivity, deliver projects on or ahead of schedule, and increase cost savings. Furthermore, PMOs add value by monitoring project-performance governance, providing training, and setting or defining standards (PMI, 2004). As companies realize their strategies are being achieved through projects and therefore, it's critical to have a way to manage these projects, PMOs have gained popularity (Hurt & Thomas, 2009, p. 55). Furthermore, PMOs coordinate multiple projects across an organization, act as mentors or centers of best practices, and improve project management capabilities in an organization (Hobbs & Aubry, 2007).

#### **4. Types of Project Management Offices**

Authors classified PMOs in different ways, some as broad functional groups (Dai & Wells, 2004; Hill, 2004; Hobbs & Aubry, 2007) whereas others attributed their importance to the role it plays in developing organizational project-management maturity (Hill, 2004). PMI (2013) identified five PMO frameworks. In a survey conducted by PMI (2013), 53% of the surveyed participants said the types listed below either perfectly or partially matched the PMO in which they work. Classifications are considered to be more relevant to professional

practices as they are driven by the type of PMO functions and scope of integration in the organization.

1. Organizational Unit PMO/Divisional PMO/Departmental PMO. This type of PMO provides project-related services to support business services or units. As the most dominant type, 54% of organizations having a PMO entity reported having this type, mostly found in the fields of information technology (IT), consulting, and telecommunication organizations (PMI, 2013).

2. Project Support/Control Office PMOs provide enabling processes to continuously support the management of work throughout the organization. Of PMO practitioners, 44% reported having this type of PMO in their organization (PMI, 2013). This type of PMO is found in organizations in IT, government, and manufacturing.

3. Enterprise PMOs are the highest-level PMOs in organizations having one, responsible for aligning projects and programs to corporate strategy, establishing and ensuring appropriate enterprise governance, and performing portfolio management functions to ensure alignment with strategy and benefits (PMI, 2013). This type of PMO is found in government, manufacturing, and energy organizations.

4. Center of Excellence PMOs provide the organization with methodologies, standards, and tools to enable project managers to deliver projects successfully. In addition, this type of PMO ensures organizational success through good practices, tools, and processes. As the central point of contact for project management in the

organization, 35% of PMO practitioners reported having this type of PMO function (PMI, 2013)

5. Project-Specific PMOs provide project-related services to a temporary entity established to support a specific project or program; 31% of PMO practitioners reported having this type of PMO function in their organization (PMI, 2013)

## **5. Functions of the Project Management Office**

Although PMO's functions and services may vary depending on the organization's size or objectives (Kwak & Dai, 2000), many researchers defined the major responsibilities of a PMO, ranging from providing project-management support to directing the management of a project (PMI, 2004, p. 369). Bates(1998) and Frame and Block(1998) summarized PMO functions around project support, developing and enforcing standards and methods, and project management training and mentoring. According to the PMI *Pulse of the Profession* (2013), a PMO can provide the organizations it serves with a wide range of functions. The nature of service a PMO provides is driven by the type and scope of the PMO. Below is a list of functions a PMO may provide and perform.

### ***Standards, Methodologies, and Processes***

This function focuses on project-management methodology definitions, metrics definitions, process development, and improvement.



### ***Project/Program Delivery Management***

This function includes project resource management; project schedule, cost, or scope management; project risk management; stakeholder management; communications; and project integration.

### ***Portfolio Management***

Portfolio management includes project prioritization, strategic alignment, portfolio reporting, resource-management allocation according to project prioritization and organization strategic objectives, opportunities and investment analysis, risk management, and benefits realization tracking and reporting.

### ***Talent Management***

This function pertains to training; career paths and development; capability and skills development; and certifications, qualifications, and credentials.

Governance and performance management are focused on an organization's performance, issue escalation, information distribution, metrics, key performance indicators, compliance, financial management, and PMO performance management.

### ***Organizational Change Management***

This function focuses on and addresses customer and stakeholder satisfaction, managing resistance, readiness assessment, stakeholder management, and communications.

### ***Administration and Support***

Administration and support revolve around tools provisioning, implementation, and support. In addition, the PMO can provide a consulting and IT/information systems support role in the proof of concepts, selection, contracting, and implementation.

### ***Knowledge Management***

The knowledge-management functions are cared to define knowledge-management policies, manage intellectual collateral and property, lessons learned, content management, and collaboration.

### ***Strategic Planning***

Strategic planning relates to confirming strategic priorities, defining business goals and aligning to initiatives, environmental scanning, and opportunity analysis.

## **6. Steps to Establishing a Project Management Office**

The PMO process must be treated as a project in itself with planning, execution, monitoring, and control processes, as illustrated in Figure 1. In addition, it is essential to identify the objectives and goals of the PMO to be established, its stakeholders, scope, and timeline. Establishing early alliances and drawing a PMO charter, communication plan, and transition and execution plans to embed the new PMO in the existing organization are also equally important.

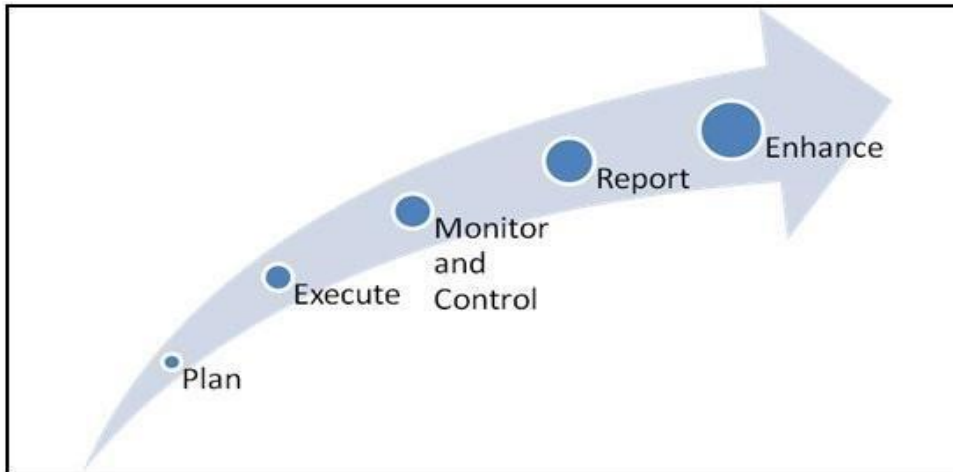


Figure 1. High-Level Phases of Establishing a Project Management Office.

In this research, a framework of 12 steps or aspects deemed necessary to establish a successful PMO is proposed; each step should ensure achieving one or more of the requirements and deliverables that are acknowledged through best practices as necessary to establish a successful PMO. They are summarized in Figure 2 and detailed hereafter.

### **6.1 Understand the Organizational Definition of Success**

Most PMOs mistakenly focus only on defining methodology, processes, and templates without first focusing on understanding the organization's vision, strategic goals, business objectives, culture, and departmental interdependencies and relationships (Millhollan, 2009). By aiming to understand, PMOs can determine the path to best implement and facilitate effective and efficient project-management methodologies tailored to the organization's strategic objective. Aligning project-management methodologies and processes to organizational strategic objectives is not only important to ensure PMO policy effectiveness,

but also is crucial in ensuring vital senior management support for those policies and procedures.

## **6.2. Define the Mission, Objectives, and Strategy of the PMO**

The PMO mission is a general statement that aligns the PMO with the value it provides to the organization. It describes what the PMO does, how it is done, and for whom (TenStep, 2010). An example of a PMO mission is “The PMO will enable the organization to deliver projects on budget, on time, and with higher quality, leading to more organizational efficiency and higher customer satisfaction.” PMO strategy defines, at a high level, the process and roadmap to achieve the PMO mission. The strategy also focuses on how to achieve the long-term objectives of the PMO, how to make organization project-management practices more successful, the reason for establishing a PMO, the functions it should provide to the organization, and the types of services or gaps the PMO should fill. The PMO’s mission and strategy must align with and support the organization’s mission and strategy. It is incorrect, for instance, for a company to set up its PMO success criteria around budget when the organization’s overall focus is

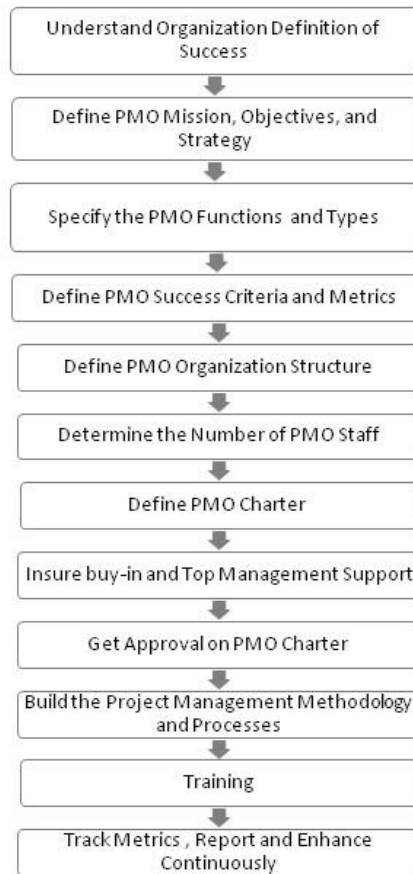


Figure 2: Proposed PMO framework

innovation. For example, at IT giant Google, delivering cost-effective and timely projects is not as important as coming up with cutting-edge thought leadership (PMI, 2012). In defining its mission, vision, and strategy, the PMO should focus on short-term tactical objectives and long-term strategic objectives. Short-term objectives should be attainable within relatively short periods to ensure quick triumphs and success stories to increase PMO support in the organization and encourage its value in the future. For instance, a tactical objective of the PMO might be to standardize project-management methodology and project or portfolio delivery management. Long-term strategic objectives evolve to address project or portfolio governance, change, and talent management. The key to success in his challenging endeavor

of establishing a PMO is to start with simple goals that are easy to attain to maintain momentum and encourage long-term success.

### **6.3. Specify the PMO Functions and Types**

PMOs can vary based on their organizational context, structural characteristics (such as where the PMO is located in the organization), and roles or functions. First, define the type of service and objectives expected of the PMO. Looking at the Table, all PMO types provide the service of defining standard project-management methodologies and processes, project program delivery, and administration support. As the scope of the PMO function increases in the organization, the more strategic and enterprising role it takes. For instance, the Enterprise PMO focuses on strategic aspects of organizations and how to align and prioritize project portfolios with the organization's strategy and objectives.

Simple, straightforward types of PMOs are more effective, with whose scope and services are limited to a specific project, portfolio, or department. As the maturity of project management practices increases, managers can navigate to a more mature and sophisticated type of PMO, such as an Enterprise or Center of Excellence PMO. The Table matrix maps each PMO type with its expected functions, driven by the feedback of several hundred PMO professionals surveyed in the PMI Pulse of the Profession survey conducted in November 2013.

*Table 1: Project Management Office Type and Function*

Function	Divisional/ department al	Project support/ controls	Enterprise PMO	Center of excellence	Projects specific
Standards project management	PXM O	ofX fice	X	PXM O	PXM O
Portfolio management	X	X	X	X	X
Project/program delivery	X	X	X	X	
Talent management			X	X	
Strategic planning			X	X	
Administration and	X	X	X	X	X
Governance and			X	X	X
Organizational change			X		
Knowledge management			X	X	

#### **6.4. Define PMO Success Criteria and Metrics**

Defining a set of metrics that measures PMO performance and indicates its performance is important. Metrics should be driven by the type of the PMO as well as its mission and strategic objectives, aligned with the organization's mission and objectives. In addition, the PMO sponsor and top executives should be involved when defining the metrics, along

with reporting the mechanism, tools, and frequency. According to the PMI *Pulse of the Profession* survey (2013), the majority of PMO organizations are being measured by:

- a. Project delivery vs. schedule evaluation
- b. Customer feedback evaluations
- c. Performance against financial goals
- d. Project cost vs. budget evaluations
- e. Formal evaluations of project managers and PMO staff
- f. Stakeholders feedback evaluations
- g. Project owner feedback evaluations; in case of project-specific PMO type

#### **6.5. Define the PMO Organizational Structure**

Building a logical organization is critical to the success of the PMO and the organization, as this defines the PMO-integration approach in the organization and how people interact and communicate with those in other divisions. The PMO must define transitional activities needed to integrate the PMO into the existing organization. The factors that drive the logical structure of the PMO itself and where it is located in the organization depend on the types of the PMOs to be established, and the extent of authority and responsibility top management is prepared to delegate to project managers. Hence, before establishing the PMO, the organization must define specific aspects of the project manager's job, degree of authority, and relationship to project staff and other units in the organization (PM4DEV, 2007). In addition, it is equally important to define and specify communication channels and methods of conflict resolution.

This is most important in a matrix project-management organization.



According to the 2013 PMI *Pulse of the Profession* survey, 33% of PMO practitioners stated that their organization PMO reported to a divisional vice president or director, 19% reported to the CEO, whereas 12% reported to other top executives (PMI, 2013). Due to their nature, objectives, and mission, Enterprise and Center of Excellence PMOs usually report to the highest level entity in the organization structure, such as the CEO, president, vice president, or board of directors. In contrast, Divisional, Project-Specific, or Project-Support PMOs usually report to a divisional or functional manager such as the chief information officer, a division director, or a vice president.

#### **6.6. Determine the Number of PMO Staff**

The type and number of staff needed for the PMO depend on the type of PMO to be established as well as the number and complexity of projects or portfolios to be serviced by the PMO. The type of PMO staff ranges from project managers and managers to project staff. According to the PMI *Pulse of the Profession*(2013), after surveying PMO professionals who operate or manage a PMO, the percentage of project managers in the PMO was 16%, managers were 3%; project staff was 26%; whereas 12% were other types of staff such as administrative assistants and IT support. As the scope and role of PMO functions, the number of PMO staff needed increases. For instance, the number of PMO staff for a Center of Excellence or Enterprise PMO is expected to be higher than a Project-Specific or Division-Specific PMO.

## **6.7. Define the PMO Charter**

Establishing a PMO should be treated as a project. Hence PMO objectives, vision, type, success criteria, scope, budget, timeline, and integration processes should be documented in a PMO charter, communicated to key stakeholders, and approved. Consequently, there is no misunderstanding or ambiguity in the organization about what will happen, when, and how. It is important to get formal approval on the PMO charter from the PMO executive sponsor. Once that is accomplished, holding a formal PMO-launch meeting with all key stakeholders marks the start of the PMO initiation and execution process, and marks the end of the planning phase.

## **6.8. Ensure Commitment and Top-Management Support**

One key factor to ensuring PMO success is proper alignment and collaboration among the organization's teams and functions. The PMO should encourage collaboration between project professionals and various functional departments in the organization. Focus on collaboration rather than policing is always preferred to improve support and longevity (PMI, 2012). After defining the PMO project charter, with objectives, business case, mission, and scope, it is imperative to ensure key stakeholders and top management commit to and support the PMO. The PMO charter must include a comprehensive understanding of organizational norms. Documented or not, processes and procedures exist in organizations. Enforcing methodology and procedures without first understanding how things are done may lead to resistance, or worse, passive noncompliance (Millhollan, 2009). If a defined project-management methodology already exists, work to integrate parts of it into the new PMO; have the existing methodology audited to see if the process is followed, determine any gaps

between the two, and understand the reason behind such. Processes may have been developed based on theory or experience without consideration for organizational norms or factors that influence the practical application of the defined methodology.

In most cases, the initiative of having a PMO stems from a need to enhance efficiency and address existing problems in delivering projects successfully within scope, budget, and time. As a result, to ensure that newly established PMOs are viewed as a business partner rather than as police or an auditor, understand how projects are prioritized, how project team members perform their daily activities, how resources define and resolve problems and conflict, and how team members and stakeholders interact with each other. Understanding the organizational culture and norms will help establish better communication and advance project-management methodologies. Peer level is important to gain the necessary support and alliances to maintain the approach and level of control of the PMO

.

## **6.9. Build the Project-Management Methodology and Processes**

Using a project-management methodology, managers define the processes, procedures, templates, best practices, standards, guidelines, and policies that are used to manage projects (PMI, 2004). In addition, processes for project requests, evaluation, and funding ensure that approved projects are aligned with business goals and objectives. The PMO must define the project-management methodology to be used and adopted. The methodology and its processes may not be strict but must be adaptable to meet the changing demands and needs of the business and the organization. The methodology should add value to the projects that use it rather than hinder them. In addition, integration between the project-management methodology and processes and any existing processes and methods such as software-

engineering development, product management, sales, and presales should be considered and ensured. According to Daptive (2012), implementing a methodology without a framework that defines how to integrate with existing processes and methods is one of the main pitfalls of PMOs. The project management methodology should be deployed into the organization through one or more serving projects to allow monitored practice and evaluation of the methodology (TenStep, 2010). This allows for continuous enhancements and adaptation of the methodology over time in a manner that fits the organization's culture and needs. In summary, the PMO defines a flexible and adaptable methodology yet simultaneously continues to support and update it to ensure it is relevant to the organization.

#### **6.10. Training**

Training should be provided to all members of the organization to ensure the PMO mission, objectives, processes, templates, and framework integrate and personnel will be able to interact with those in other organization divisions and to ensure that functions are all well understood. Training should be provided to all stakeholders at all levels spanning from executives, project managers, and staff, to functional managers and all levels of employees. Even the most qualified project managers should be trained on the specific aspects of the organization's project management methodology and processes, as each organization has its own specific culture to be considered. In addition, the PMO managers should ensure the establishment of project-management professionalism in the organization by providing mentorship, training, and guidance to project teams as they learn and adopt project-management processes and best practices, encouraging employees to attend training and apply and follow the newly applied project-management methodology. Employees should

provide needed feedback, encouraged by tying feedback to employees' annual appraisal, employee reorganization, and career advancement in the organization.

#### **6.11. Track PMO Metrics and Ensure Continuous Status Update**

Once execution and implementation are underway, track, monitor, report, and enhance. A PMO case of failure starts when the value of the PMO is questioned due to having projects that are incomplete and undelivered within the defined budget, time, and deliverables objectives. To avoid failure, PMO managers should perform several assessments over time to provide insights into whether project-management processes are being successfully integrated into the organization, providing the opportunity to enhance and refine PMO processes and methods. Although failure to deliver results is disheartening, failing to communicate PMO results upward is a major reason several organizations have perceived failure (Daptiv, 2012).

One of the main functions expected of a PMO is to provide common, roll-up reporting on the status of all projects and portfolios of the organization. According to *The State of the PMO in 2011* (PMI, 2011), only 15% of project managers who report to the vice president of IT believed their firm acknowledges the value of a PMO (PMI, 2012). In addition, 70 % of respondents to the global *State of the PMO* study said that the PMO's value was questioned among senior management (PMI, 2012). Consequently, it is imperative to ensure that all concerned stakeholders and top managers are aware and current about the PMO status, progress, and obstacles. Reporting PMO performance status should focus on reporting the current status or challenges related to the metrics chosen to track PMO success. Performance reporting can be performed weekly, monthly, or quarterly, depending on the type of PMO

and the stakeholders. For instance, an Enterprise PMO might report on performance against financial goals quarterly, whereas a project-specific PMO might report on project delivery versus schedule weekly. To ensure continuous PMO success, continuous improvement and enhancements are necessary. Monitoring, collecting metrics, and reporting on them are useless if not leveraged with continuous review and enhancements of PMO processes, mission, objectives, and strategy. This process presents the opportunity to cultivate the organization to become a culture built on the best project-management practices, gearing the PMO to encompass a more mature scope and influence, perhaps moving toward an Enterprise or Center of Excellence PMO in the organization.

## **7. Conclusions**

Research on the PMO framework outlines a PMO driven by an organization's strategic objectives, business needs, and mission. In addition, the framework is driven by the functions expected of the PMO to ensure alignment with the organization's strategic objectives. Consequently, these functions drive the type of PMO to be established, as well as its criteria to determine success. This research outlines and defines the steps needed to establish a PMO. In addition, this study brings emphasis to the best practices necessary to ensure a more effective PMO. With the information presented in this study, PMO managers are in a better position to reengineer their provision of services and support to execute an organization's portfolio of projects and strategic initiatives. Ensuring continuous executive support, as well as collaboration across the various divisions of the organization, will enhance success. In addition, measuring, reporting, and tweaking processes and methods while undergoing the PMO implementation path is vital. Flexibility and adaptability in applying project-

management processes and being open to feedback and input from various stakeholders are all equally important.

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