The PMO Maturity Cube, a Project Management Office Maturity Model

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Abstract

At the end of the 1990s and the beginning of the 2000s, the theme of project management offices (PMOs) was beginning to be widely discussed in various books (Block & Frame, 1998; Dinsmore, 1999; Bolles, 2002; Crawford, 2002; Englund, Graham, & Dinsmore, 2003; Kendall & Rollins, 2003; Hill, 2004; Williams & Parr, 2004; Letavec, 2006). Studies are more recent in academic literature (Dai & Wells, 2004; Hobbs & Aubry, 2007; Aubry, Hobbs, & Thuillier, 2008; Hurt &Thomas, 2009), and their conclusions about the contribution or value of PMOs are "ambiguous" (Hurt & Thomas, 2009, p. 55). In addition, one of the discoveries in the first study that presents a "reliable portrait of the population of PMOs" (Hobbs & Aubry, 2007, p. 82) was that the function of 50% of the PMOs studied was to "monitor and control their performance." In other words, PMOs are concerned with assessing and measuring their own performance.

Recent qualitative studies (Aubry, Hobbs, & Thuillier, 2008, p. 43) indicated that there is a degree of instability in the historical analysis of PMOs. This is a complex phenomenon and one that demands tools for evaluating the performance and constant reinvention of PMOs. Therefore, a maturity model, as applied to PMOs, was developed and tested with the objective of helping to take an academic discussion to another level of complexity and making it possible for PMOs to carry out their own self-assessment. On developing the model, the authors came to a conclusion that the better the PMO delivers its services, and only the ones related to the needed functions, the more the PMO is perceived delivering value to its organization.

Introduction

Since the end of the 1990s, there has been a major movement worldwide toward the creation of PMOs (project management offices) and this has grown in intensity during the present decade (Dai & Wells, 2004, p. 524; Hobbs & Aubry, 2007, p.74). Despite the common perception that a large number of the major companies in the market have, at least one PMO in their organizational structure, Hurt and Thomas (2009, p. 55) indicated "the sustainability of PMOs is a tenuous issue."

In fact, PMOs arose because of different needs, but the vast majority had a greater objective in common: to obtain better results in those projects developed by the organization.

Over the last few years, while some of these initiatives have prospered and matured and created noticeable value for the organization, others have lost their vigor and support and have suffered cuts and reductions or have even been eliminated altogether. Additionally, Hobbs and Aubry (2007, p. 74) saw that there was a significant variation in the structure, the roles assumed, and the perceived value of PMOs, demonstrating the instability and the diversity of PMOs' performance.

Successful PMOs are constantly being challenged to find the best way to ensure that their practices continuously mature. This observation shows that, generally speaking, the perception of the value of those PMOs that are not capable of evolving tends to diminish over time, because as the organization itself matures, there is a demand for a PMO that is aligned with the new needs arising from this process of organizational evolution. Aubry, Hobbs, and Thuillier (2008, p. 43) analyzed the history of four PMOs and saw that they underwent a complex phenomenon of transformation every two years, on average, and that this came either from the evolution process or from organizational instability. In other qualitative research, Aubry, Hobbs, and Thuillier (2008, p. 554) concluded that organizational tensions are the primary motivation behind the implementation and reconfiguration of PMOs, i.e., issues of organizational power and politics have to be considered, and these issues further increase the complexity of managing PMOs.

Over the last few years, renowned authors (Crawford, 2002; Hill, 2004; Kerzner, 2005), institutions (Software Engineering Institute [SEI], 2000), and even the Project Management Institute (2008) have developed organizational maturity evaluation models. The objective of which is to facilitate the maturity process in organizations by providing a structured path based on best market practices and to foster continuous improvement. On the other hand, in this same period, if one ignores the fact that the maturing

process of the organization as an entity is something very different in many aspects from the maturing of a PMO as an organizational unit, no relevant initiative for creating specific points of reference for supporting the evolution of a PMO has been identified. Despite there being a strong correlation between these two types of maturity, reality shows that it is possible for a little prepared, i.e., immature, PMO to exist in more mature organizations, given that the maturity of the PMO involves the degree of sophistication with which it is capable of performing its functions and reaching its objectives.

One of the discoveries of the first study that presents a "reliable portrait of the population of PMOs" (Hobbs & Aubry, 2007, p. 82) was that 50% of the PMOs studied have the function of monitoring and controlling their own performance. In other words, PMOs are concerned with evaluating and measuring their performance. And considering the lack of knowledge that exists about the maturity of PMOs, this article suggests a specific new model for evaluating their maturity. Its objective is to allow a PMO, based on its mission, to objectively evaluate its maturity level, considering the degree of sophistication with which it performs each of the functions for which it is responsible, while also taking into consideration both the most common functions of PMOs in the market (Hobbs & Aubry, 2007), as well as its own specific interests and needs.

The Operating Philosophy of a PMO

But, what is a PMO? In literature (Block & Frame, 1998; Dinsmore, 1999; Bolles, 2002; Crawford, 2002; Englund, Graham, & Dinsmore, 2003; Kendall & Rollins, 2003; Hill, 2004; Williams & Parr, 2004; Dai & Wells, 2004; Letavec, 2006; Hobbs & Aubry, 2007; Hurt &Thomas, 2009), there are countless different responses to this question. Generally speaking, they all agree on one thing: it is the area in which certain activities (also called functions) relating to project management are centered, and its objective is to help organization achieve better results through projects.

Among these activities or functions, we can highlight some, (e.g., providing the methodologies and tools needed for managing projects; supporting top management by supplying reports and executive information; lending support when it comes to planning and controlling projects; and even taking over altogether by providing project managers from the beginning or helping "rescue" the management of certain projects) that are considered strategic and are in trouble in terms of meeting objectives and providing benefits. All these functions were highlighted in a recent study by Hobbs and Aubry (2007), who mapped out the 27 common PMO functions after receiving contributions from 500 professionals involved with PMOs worldwide.

A PMO is often seen as a support area within the organization, in a similar way to the accounting, marketing or IT areas. In most organizations, these areas are not considered to be an area that have their own raison d'être, since their purpose is to support the development of the company's principal activity. However, we see crucial differences that make PMOs somewhat different from a traditional support area.

The requirement that the PMO should generate value is, in fact, something much more critical than the demands normally seen in traditional support areas, the value of which is translated into benefits that are not always noticeable or measurable. Unlike these areas, a PMO is being constantly questioned regarding its contribution to the organization and is often seen as a type of operational overhead. The fact is that few people would question the need for the existence of a marketing department or an accounting department. Nevertheless, these same individuals would probably question the need for a PMO if the value generated by the PMO is not clearly perceived.

So, in analyzing PMOs from another viewpoint, we can see that a PMO is truly a service provider within the organization, given that an external service provider could have its contract cancelled at any time because it is not adding sufficient value. In the same way, a PMO may also inadvertently lose all the support and backing it has because it is unable to generate value and perceptible benefit that justify maintaining the investment made.

Therefore, a PMO that intends to survive the ups and downs of the organization and the market needs to see itself as a service provider that has customers whose needs must be fully served. This PMO evolves as the organization matures, which means that its customers start having different and generally increasingly sophisticated needs.

In other words, the success of a PMO involves its capacity to understand who its customers are, what their needs are, and how to meet those needs by creating clear and sufficient benefits and generating perceptible and measurable value. Its maturing process involves the skills to meet the new needs arising from the maturing process of the organization and its customers, by offering new services, and making the level of service more sophisticated in response to the demands that are made of it.

Types and Functions of PMOs

The complexity of the PMO phenomenon gives rise to a difficulty when it comes to establishing a standard way of typifying them. By observing different PMOs in various organizations, it is possible to notice

that there are significant differences, which make the task of summarizing into just a few types the diversity of structures and ways of operating found in the complex world today.

In considering the extensive literature that exists on the subject it is possible to identify various attempts that have been made at standardizing the way of typifying PMOs. Englund, Graham, and Dinsmore (2003), for example, presented five types of PMOs: the single control project office, directed toward just one project and that is more operational in the way it operates; the strategic project office, directed toward the whole of the organization, and that operates strategically; the business unit project office, directed at an area or department and that operates either strategically or tactically; the project support office, directed toward the whole company, but that has an operational role; and finally, the project management center of excellence, which focuses on continuous improvement and innovation.

The proposal of this PMO maturity model sums up the main standard ways of typifying PMOs in essentially two principal dimensions: scope and approach.

The scope of a PMO comes from how wide reaching its actions within the organization are. Basically, there are three mutually exclusive possibilities: the project-program PMO, the scope of which covers just one of the organization's projects or programs; the departmental PMO, which covers an area, department, directorship, or business unit, i.e., just a part of the organization; and finally the corporate or enterprise PMO, which covers the organization as a whole.

Approach has to do with how the PMO operates with its customers. This may be strategically, tactically, or operationally, or it may operate with all three simultaneously. In fact, the driver of the approach of a PMO must be its mission, which will define how strategic, tactical, or operational it should be. This approach classification was ratified by Desouza and Evaristo (2006) when they identified that the roles of a PMO could always be classified on three levels: strategic, tactical, and operational. Additionally, Hobbs and Aubry (2007, p. 75) identified that different authors use different properties to characterize the typology of the PMO. One of these properties is how the PMO provides services from the operational to the strategic approach often associated with a progression from project management to portfolio management.

Common sense might lead us to a simplification of the idea that a PMO that covers the whole organization (enterprise PMO) could be summed up as taking a strategic approach (strategic PMO). However, the organizational practice is more complex. It is common to have an enterprise PMO that operates

strategically, tactically, and operationally when it respectively provides service to top management, by supporting portfolio management (strategic), providing a common methodology for the organization (tactical), and also managing some important projects (operational). The reality may be a combination of these three approaches in the scope each one provides (organizational, departmental, or program-project).
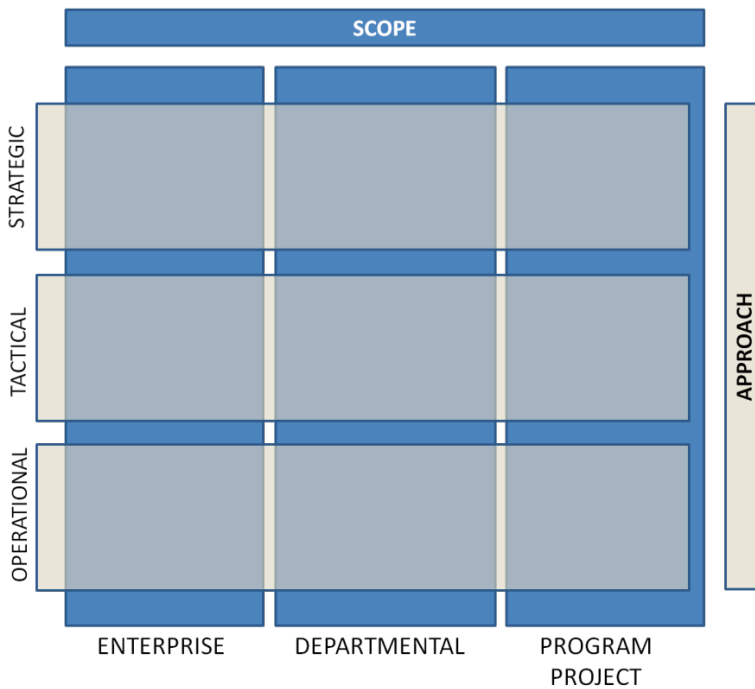

FIGURE 1. The Nine Quadrants Resulting From the Relationship Between Scope and Approach

Acting in a strategic way involves offering customers services that, in some form or other, have a link with strategic issues of the organization, such as how to manage the organization's portfolio of projects, programs, and other work; provide information to top management for decision-making purposes and to prioritize the portfolio and rebalance it as required; and monitor and implement strategy, etc.

Acting in a tactical way involves offering customer's services that serve the needs of a group of projects or individuals, such as developing a project management methodology, providing project management tools, and training for managers and teams, etc.

Finally, acting in an operational way involves offering customers' services directed at a project or individual, such as supporting project planning and control, coaching/mentoring, managing a strategic project and recovering a problem-beset project, etc.

From research published by Hobbs and Aubry (2007), the 27 most common functions of PMOs were identified. These functions represent the major services provided by PMOs and have become the reference point for the models presented in this paper.

Considering the definitions for strategic, tactical, and operational approaches and based on the academic and professional experience of the authors, each of these services was evaluated from two aspects: if it was applicable to each and every type of scope of PMO, i.e., if it was valid for enterprise, departmental, and project-program PMOs, and if it was service of a strategic, tactical or operational nature.

Services	Scope			Approach		
	Enterprise	Departmental	Program - Project	Strategic	Tactical	Operational
1. Report project/program status (information) to upper (senior) management	√	√	√			√
2. Develop and implement a standard project management methodology	√	√	√		√	
3. Monitor and control project/program performance	√	√	√			√
4. Develop the competences (skills) of professionals, including training	√	√	√		√	
5. Implement and operate project management information systems	√	√	√		√	
6. Provide top management with advice	√	√	√	√		
7. Coordinate and integrate the projects in the portfolio; prioritize these projects and rebalance them as required	√	√		√		
8. Develop and maintain a project scoreboard	√	√	√	√		
9. Promote project management awareness within the organization	√	√		√		

Services	Scope			Approach		
	Enterprise	Departmental	Program - Project	Strategic	Tactical	Operational
10. Monitor and control the performance of the PMO itself	√	√		√		
11. Participate in strategic planning	√	√		√		
12. Provide mentoring for Project Managers	√	√	√			√
13. Manage one or more portfolios	√	√		√		
14. Identify, select and prioritize new projects	√	√		√		
15. Manage project files/documentation; setting up a knowledge management repository	√	√	√			√
16. Manage one or more programs	√	√	√			√
17. Audit projects and programs	√	√	√			√
18. Manage customer interfaces	√	√	√		√	
19. Provide a set of tools that can be customized to meet the specific needs of programs and projects	√	√	√		√	
20. Provide specialized tasks (services) for project managers	√	√	√			√
21. Allocate (and share) resources between projects	√	√	√		√	
22. Carry out post-project management reviews (lessons learned)	√	√	√			√

Services	Scope			Approach		
	Enterprise	Departmental	Program - Project	Strategic	Tactical	Operational
23. Implement and manage the database of lessons learned or knowledge repository	√	√	√		√	
24. Implement and manage the risk and issues database	√	√	√		√	
25. Manage program benefits	√	√	√	√		
26. Networking and environmental scanning, mapping project relationships and environment within the organization and external to it	√	√	√	√		
27. Recruit, select, evaluate and decide on the salaries of project managers; establish a project management career path	√	√			√	

FIGURE 2. The 27 Functions (services) of Hobbs and Aubry (modified slightly), and their relationship with the different types of scope and approach.

This being the case, it is possible to conclude that there are 21 possible types of PMOs, considering the three mutually exclusive scopes (enterprise, departmental, project-program) and the seven possible approaches (strategic, strategic-tactical, strategic-operational, tactical, tactical-operational, operational and strategic-tactical-operational).

What, therefore, defines the type of PMO is a combination of its scope and one of the seven possible different approaches resulting from the services offered to its customers.

The Maturity of the PMO

The degree of maturity of a PMO results from the extent to which it is capable of generating value for its customers and for the organization as a whole. In a first analysis, it might be possible to suppose that the maturity of a PMO might evolve in the sense of operating less operationally and more strategically. However, a more careful assessment may provide us with a different view of the process by which a PMO matures.

In a simple analogy that will help us have a better understanding of the issue, we might imagine a company's organizational structure. At the lowest level we have, for example, a cleaner (acting operationally), and at the highest level we have the president (acting strategically).

The question is: What is a mature cleaner? Is he a president? Or is he a professional who is capable of using the best cleaning techniques and practices in order to comply with his operational mission? On the other hand, what is an immature president? Is he a cleaner? Or is he a president with little experience and knowledge, and therefore, incapable of fully fulfilling his strategic mission in the company?

In other words, the cleaner has an extremely important operational mission within the organization and may do it in a simple or very sophisticated way, depending on his or her level of maturity. On the other hand, the president also has his strategic mission within the company and, in turn, may carry it out in a trivial or extremely sophisticated way. It all depends on the level of maturity of each one, considering their respective functions and approach (operational or strategic).

Therefore, how could we state that, in order to mature, a PMO with an operational approach must start adopting a strategic approach? The fact is that if its mission is to be operational, it can perform it in either a mature way or not. The same goes for a PMO whose mission is to be strategic; it can perform it in a very mature way or one that involves very little sophistication.

This being so, it is possible to have operational, or tactical PMOs with a high degree of maturity and extremely immature strategic PMOs. Because a PMO may have multiple approaches (strategic, tactical, or operational) depending on its mission, it would only make sense to analyze its maturity if we focus on what is particular to each of these approaches.

It is, therefore, possible to conclude that a corporate PMO, for example, may have different levels of maturity in each of its possible approaches. It might be very mature from the operational point of view and not

very mature from the tactical and strategic points of view. If the mission of this PMO is, in fact, to be operational we can say, therefore, that it is aligned with its objectives and generating the value expected by the organization.

If we consider, therefore, that the PMO generates value through the functions it exercises, which are translated into service for its customers, the maturity of a PMO may be summed up as being the degree of sophistication with which it provides each service for which it is responsible.

In other words, there are different ways of providing a certain service: from the most trivial and simple manner, which adds little value to the organization, to a more sophisticated and complex way, which translates into more noticeable results and provides the organization as a whole with greater value.

To devise the maturity evaluation model that is proposed in this article, each of the 27 services (adapted from the most common functions in PMOs, as presented by Hobbs and Aubry, 2007) was analyzed to establish how applicable they were to the three different types of PMO scope: enterprise, departmental, program-project (Figure 2).

Then, each of the services was analyzed as to their possible different levels of sophistication for carrying them out, from the most trivial way to the most complicated. This determines the degree of maturity when carrying it out. Some of the services of an enterprise PMO can be seen in the following:

Service: A.1.7 - Managing one or more portfolios (Scope: Enterprise/Approach: Strategic)

Levels of maturity in carrying out the service:

- Level 0 – The PMO does not provide this service.

- Level 1 - The PMO maintains a list of active projects throughout the organization.

- Level 2 - The PMO maintains a list of active projects and programs throughout the organization and establishes their prioritization but does not follow a structured portfolio management process.

- Level 3 - The PMO maintains a list of active projects and portfolios, prioritizes them throughout the organization, and establishes formal processes, acting as facilitator in the definition (identification, categorization, evaluation, selection), development

(prioritize, balance and commitment) and implementation (monitoring, review and change management) of the portfolio.

- Level 4 - The PMO maintains a list of active projects and portfolios, prioritizes them throughout the organization, and establishes formal processes, acting as facilitator in the definition (identification, categorization, evaluation, selection), development (prioritize, balance and commitment) and implementation (monitoring, review and change management) of the portfolio. The PMO uses an integrated system to automate the organization's portfolio management process.

Service: A.2.1 - Develop and implement the project management methodology (Scope: Enterprise/Approach: Tactical)

Levels of maturity in carrying out the service:

- Level 0 - The PMO does not provide this service.

- Level 1 - The PMO has developed a basic methodology for the organization, but it is not used consistently on all projects.

- Level 2 - The PMO has developed a standard methodology for the organization, aligning possible existing methodologies in different areas, and the methodology used in most projects in the organization.

- Level 3 - The PMO has developed a standard methodology for the organization, and it is used by all projects as it is mandatory unless a specific waiver is requested and approved.

- Level 4 - The PMO has developed and improved the standard methodology for the organization focusing on best practices and continuous improvement.

Service: A.3.3 - Monitor and control project /program performance (Scope: Enterprise/Approach: Operational)

Levels of maturity in carrying out the service:

- Level 0 - The PMO does not provide this service.

- Level 1 - The PMO monitors and controls the project /program performance considering time, cost, quality and customer satisfaction and provides follow-up reports without analysis upon request.

- Level 2 - The PMO monitors and controls the project /program performance considering time, cost, quality, and customer satisfaction and analyzes the available data.

- Level 3 - The PMO monitors and controls the project /program performance considering time, cost, quality, and customer satisfaction, analyzes data, and takes preventive and corrective actions working proactively with project /program manager and senior management.

In the proposed model, each of the services offered by a PMO can have up to four levels of maturity, according to their scope and approach, as described in detail in Appendix A.

The PMO Maturity Cube

The PMO Maturity Cube results from unifying the concepts presented previously, which have all been consolidated into one specific model for evaluating the maturity of PMOs for any type of organization.

The three dimensions that comprise the cube are scope (enterprise, departmental, or program-project), approach (strategic, tactical, or operational) and finally the maturity level (basic, intermediate, or advanced).
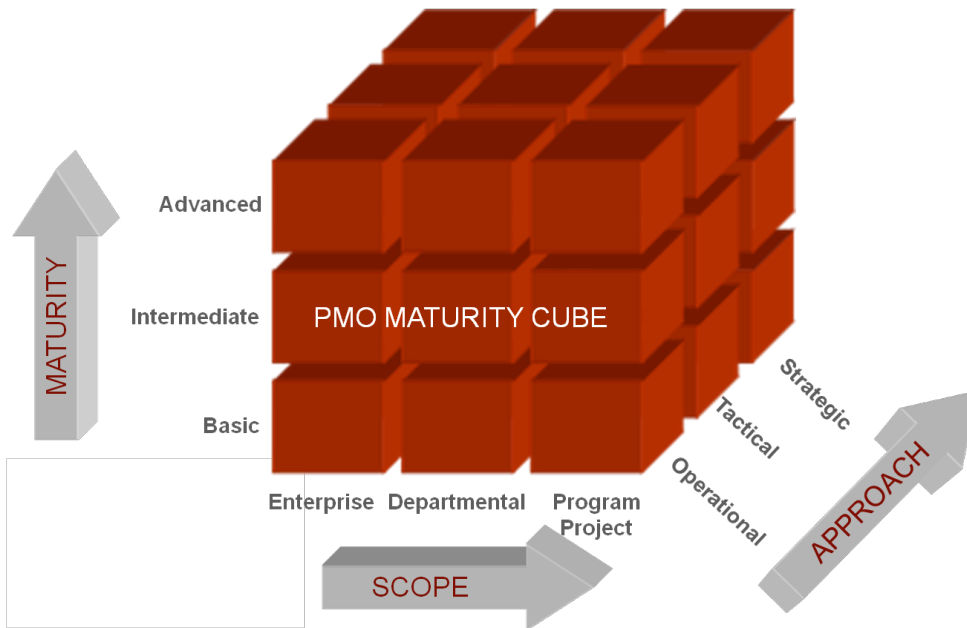
FIGURE 3. The Three Dimensions of the PMO Maturity Cube

Using a specific questionnaire for each PMO scope, the model identifies which services are offered under each different approach and with determines the level of sophistication of their implementation.

Each of the three questionnaires (enterprise, departmental, and program-project) is divided into three parts: assessment of strategic services, assessment of tactical services, and assessment of operational services. When completing the questionnaire, organizations provide information about their current level of maturity in each service provided for that particular scope and the target level of maturity for the PMO that is being analyzed.

ENTERPRISE PMO QUESTIONNAIRE		
Tactical Services Assessment		
A.2.1 - How does the PMO develop and implement the project management methodology?	Current Level	Target Level
Level 0 – The PMO does not have this function		
Level 1 - The PMO has developed a basic methodology for the organization, but it is not used consistently on all projects.	X	
Level 2 - The PMO has developed a standard methodology for the organization, aligning possible existing methodologies in different areas, and the methodology used in most projects in the organization.		
Level 3 - The PMO has developed a standard methodology for the organization, and it is used by all projects, as it is mandatory unless a specific waiver is requested and approved.		X
Level 4 - The PMO has developed and improved the standard methodology for the organization focusing on best practices and continuous improvement.		

FIGURE 4. Example of a question from the PMO Maturity Cube model Questionnaire for an Enterprise PMO

Each level corresponds to a specific number of points, and when the questionnaire has been completed, the total points corresponding to the organization's current situation and the situation desired by the organization are obtained, divided into strategic, tactical, and operational approaches. Based on these scores, the current and target maturity levels are calculated.

The current maturity level in each of the approaches is calculated by comparing the points relative to the current situation in the organization with the total possible number of points for the model as a whole. The target maturity level is calculated by comparing the points relative to the desired situation in the organization with the total possible number of points for the model as a whole.

The current and target maturity levels are represented in percentages. The current maturity level represents to what extent the PMO provides all the possible services of a PMO when it is most mature. The target maturity, on the other hand, represents the level the PMO would like to reach, a situation in which it

would fully adhere to its objectives and mission, considering only those services that are really of interest to it in the target maturity levels.

Maturity levels with percentages between 0% and 33% are considered basic. Levels between 34% and 66% are considered intermediate. Finally, maturity levels between 67% and 100% are considered advanced.

To illustrate this approach, we present real case studies where the PMO maturity cube model has been applied. All these companies were invited to participate and the authors coordinated the application of the model during a formal meeting. The questions were answered by the PMO's leaders supported by their teams. At the end, the leaders were asked for a quick comment about the experience, including their perception about the strengths and weaknesses of the proposed model. Based on this feedback, the authors promoted adjustments in the model and reapplied the questionnaire in these same companies, obtaining these final numbers and the PMO's leaders comments about the experience of applying the model presented in the following.

Company	Sector	Scope of the PMO			Approach of the PMO		
					Strategic assessment	Tactical assessment	Operational assessment
A	Consumer goods	Enterprise	Maturity	Current level	33% Basic	41% Intermediate	57% Intermediate
				Target level	53% Intermediate	62% Intermediate	65% Intermediate

Comments:

The mission of the enterprise PMO evaluated is to serve the needs of project managers, line managers, and top management. Today, the main operating focus of the PMO is still concentrated on operational support services and project planning and control. However, the PMO wants to assume more and more tactical and strategic functions.

Perception of the model by the evaluated company: "The model is really useful for providing an overview of how our PMO can evolve in the right direction" —Manager of the PMO.

Company	Sector	Scope of the PMO			Approach of the PMO		
					Strategic assessment	Tactical assessment	Operational assessment
B	Financial services	Enterprise	Maturity	Current level	48% Intermediate	44% Intermediate	25% Basic
				Target level	59% Intermediate	57% Intermediate	29% Basic

Comments:

This enterprise PMO has been operating since 2004 and is strategic and tactical in nature, with few operational functions. Its objectives are to evolve more strongly in functions relating to portfolio management, in addition to continuing to evolve and spread project management practices to all the organization's corporate projects.

Perception of the model by the evaluated company: "An excellent instrument for self-assessing the maturity of the PMO. The model allowed us to see more clearly exactly where we are and where we can get to"—Executive Manager of the PMO.

Company	Sector	Scope of the PMO			Approach of the PMO		
					Strategic assessment	Tactical assessment	Operational assessment
C	Telecommunications	Enterprise	Maturity	Current level	53% Intermediate	65% Intermediate	15% Basic
				Target level	83% Advanced	75% Advanced	25% Basic

Comments:

The mission of this enterprise PMO is to meet the needs of top management, as well as providing methods, standards, and resources that can be used by projects in the organization. The main objective of this PMO over the next few months is mainly to increase its maturity in the strategic area.

Perception of the evaluated company: "A very good model. Practical, objective and well grounded. It will undoubtedly be very valuable for our development" —Manager of the PMO.

Company	Sector	Scope of the PMO	Maturity		Approach of the PMO		
					Strategic assessment	Tactical assessment	Operational assessment
D	Insurance	Departmental		Current level	31% Basic	42% Intermediate	53% Intermediate
				Target level	58% Intermediate	63% Intermediate	85% Advanced

Comments:

The mission of this departmental PMO is to provide services for the IT area, particularly in meeting the tactical and operational needs of project managers, as well as the strategic needs of the executive management. There are still some significant tactical and operational gaps in the way this PMO operates with regard to existing needs, mainly with regard to operational services. This PMO is going through a restructuring process, which involves expanding its staff numbers so that it can provide the service it proposes.

Perception of the evaluated company: "The results undoubtedly portray the exact reality of our PMO. It's really very interesting to have a reference point like this that can help us outline our action plans" —Manager of the PMO.

Company	Sector	Scope of the PMO	Maturity		Approach of the PMO		
					Strategic assessment	Tactical assessment	Operational assessment
E	Financial services in public administration	Departmental		Current level	78% Advanced	44% Intermediate	72% Advanced
				Target level	78% Advanced	50% I Intermediate	82% Advanced

Comments:

This departmental PMO was established in 2002, and its mission is to provide services for the financial institutions' supervision area. In the perception of its managers, the PMO already has a consolidated operation that provides services on a strategic level and can advance further in services directed at supporting project managers.

Perception of the evaluated company: "We see the great value of this tool since it allows for self-application, intentions to improve can be immediately registered, and we can carry out a comparison over time of the focus of our operations" —Manager of the PMO.

Company	Sector	Scope of the PMO			Approach of the PMO		
					Strategic assessment	Tactical assessment	Operational assessment
F	Energy	Departmental	Maturity	Current level	9% Basic	35% Basic	18% Basic
				Target level	19% Basic	68% Advanced	75% Advanced

Comments:

The mission of this departmental PMO is to provide services to the engineering area, with a focus on tactical and operational aspects.

This PMO was recently set up, but it expects to achieve great results within 12 months. Because of the short time, it has been in existence there are still some big gaps in terms of its current level versus that of its target level, but, action plans are being put together, and the forecast is for results in the short and medium terms.

Perception of the evaluated company: "As we are just starting out a reference point like this is very valuable. There's no doubt that we shall use the model to help us evolve" —Coordinator of the PMO.

Company	Sector	Scope of the PMO			Approach of the PMO		
					Strategic assessment	Tactical assessment	Operational assessment
G	Retail	Project-Program	Maturity	Current level	15% Basic	49% Intermediate	58% Intermediate
				Target level	0% Basic	49% Intermediate	58% Intermediate

Comments:

The mission of this project-program PMO is to support the organization's SAP implementation project, with a particular focus on operational and tactical aspects.

This is an outsourced PMO so its functions are predefined in the contract with the customer. So, from the tactical and operational points of view, the PMO's current levels of maturity are fully aligned with the target levels, given that this is necessary in order to comply with the contract's statement of work and terms and conditions

It is interesting to note that when the model was being applied that this PMO is providing some of the strategic services. However, these do not fall within the scope of the contract and may mean that the PMO is losing focus in its operations. Therefore, we conclude that in the strategic area the PMO may "regress," given that the target level is 0%, i.e., fully discontinuing any service of this nature. In this way, the PMO will begin to be fully aligned with its mission, which is to provide the tactical and operational services that have been pre-defined by contract. The organization further may wish to re-evaluate the operation of the PMO and decide to establish a PMO that is staffed by people who work for the corporation in order to perform the strategic mission of a PMO and using contractor support to focus on operational and tactical aspects.

Perception of the evaluated company: "The model helped us see that we were using our resources for activities that were not part of our objective. Our problem was not a lack of resources, but the poor use of those resources. Instead of focusing on our main objective we've discovered that we are becoming less efficient in other activities that, in fact, in activities that our customer does not expect us to provide" —Director of the consultancy company.

Company	Sector	Scope of the PMO			Approach of the PMO		
					Strategic assessment	Tactical assessment	Operational assessment
H	Textile	Project-Program	Maturity	Current level	22% Basic	45% Intermediate	43% Intermediate
				Target level	33% Basic	57% Intermediate	57% Intermediate

Comments:

The mission of this project-program PMO is to support the program for implementing a new production line, with a focus on tactical, strategic and operational aspects.

The program involves various subcontractors, and one of the challenges of the PMO is to ensure they are integrated. Furthermore, the PMO supplies overall standards for the in-house team and the subcontractors, as well as supplying information to the executive management for decision-making purposes.

Generally speaking, this PMO only needs to fill a small gap in terms of its evolution in order to fully comply with its mission and meet the needs of its customers.

Perception of the evaluated company: "The model was very useful when it came to giving us an overview of our current situation and in which alternatives we must invest in the future. As our program has an end-date, and we have no additional time, we need to ensure that the PMO gets up to cruising speed as soon as possible. I believe the model is fundamental for giving us the speed we need in the decisions we have to take about what is most important to introduce from now on" —Leader of the PMO.

Conclusion

After a detailed assessment of the contribution made by countless books and recent academic literature about PMOs, we were able to confirm the complexity and diversity of the phenomenon. We can see that there is still a need to provide a self-assessment tool in view of the wide range of possible PMO functions. Furthermore, this maturity assessment model provides the required comparison between the functions already existing in the PMO and the whole model and, at the same time, allows the PMO to identify only the target functions, thereby producing an assessment relative to existing and perceived needs. On developing the model, the authors came to a conclusion that the better the PMO delivers its services, and only the ones related to the needed functions, the more the PMO is perceived delivering value to its organization.

In addition, the PMO maturity assessment tool allows the perceived improvement intentions to be recorded when the maturity assessment is being carried out, which helps produce an action plan. The simplicity of the method allows it to be self-applied by PMOs, without the need to hire consultancy services.

Additional research can be performed in this area to refine the model and to raise continually the maturity level of PMOs of those organizations that perceive the value of managing projects.

The PMO Maturity Cube tool can be freely accessed at www.pmomaturitycube.org.

References

Aubry, M., Hobbs, B., & Thuillier, D. (2008a). Organisational project management: An historical approach to the study of PMOs. International Journal of Project Management, 26(1), 38–43.

Aubry, M., Hobbs, B., & Thuillier, D. (2008b). The project management office as an organisational innovation. International Journal of Project Management, 26(5), 547–555.

Bolles, D. (2002). Building project management centers of excellence. New York: Amacom.

Block, T. R., & Frame, J. D. (1998). The project office – A key to managing projects effectively. Menlo Park, CA: Crisp Publications.

Crawford, K. J. (2002). The strategic project office. New York: Marcel Dekker.

Dai, C. X., & Wells, W. G. (2004). An exploration of project management office features and their relationship to project performance. International Journal of Project Management, 22, 523-532.

Desouza, K. C., & Evaristo, J. R. (2006). Project Management Offices: A case of knowledge-based archetypes. International Journal of Information Management, 26(7), 414–423.

Dinsmore, P. C. (1999). Winning in business with enterprise project management. New York: Amacom.

Englund, R. L., Graham, R. J., & Dinsmore, P. C. (2003). Creating the project office - A manager's guide to leading organizational change. San Francisco: Jossey-Bass.

Hill, G. M. (2004). The complete project management office handbook. Boca Raton, FL: Auerbach Publications.

Hobbs, B., & Aubry, M. (2007). A multi-phase research program investigating project management offices (PMOs): The results of phase 1. Project Management Journal, 38(1), 74–86.

Hurt, M., & Thomas, J. L. (2009). Building value through sustainable project management offices. Project Management Journal, 40(1), 55–72.

Letavec, C. (2006). Program management office: Establishing, managing and growing the value of a PMO. Fort Lauderdale, FL: J. Ross Publishing.

Kendall, G. I., & Rollins, S. C. (2003). Advanced project portfolio management and the PMO, multiplying ROI at warp speed. Boca Raton, FL: J. Ross Publishing.

Kerzner, H. (2005). Using the project management maturity model: Strategic planning for project management. New York: John Wiley & Sons.

Project Management Institute. (2008). Organizational project management maturity model (OPM3®) (2nd ed.). Newtown Square, PA: Project Management Institute.

Software Engineering Institute. (2000). CMM - The capability maturity model – guidelines for improving the software process. Pittsburgh, PA: Carnegie Mellon Software Engineering Institute.

Williams, D., & Parr, T. (2004). Enterprise program management, delivering value. Basingstoke, UK: Palgrave Macmillan.

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Appendix A – Enterprise PMO, Departmental PMO And Project-Program PMO Questionnaires

Observation: The 27 functions (services) of Hobbs and Aubry (2007) were modified slightly to become more comprehensive.

A) ENTERPRISE QUESTIONNAIRE

A.1) STRATEGIC ASSESSMENT

A1.1) How does the PMO provide advice to the senior management?

> Level 0 - The PMO does not perform this function.

> Level 1 - The PMO is asked by top management to give its position on issues relating to making strategic decision once in a while.

> Level 2 - The PMO is frequently asked by top management to give its position on issues relating to making strategic decision, however, its involvement is not formally established.

> Level 3 - The PMO is frequently asked by top management to give its position on issues relating to making strategic decision and its involvement is formally established.

A.1.2) How does the PMO coordinate and integrate the organization's portfolio?

> Level 0 - The PMO does not perform this function.

> Level 1 - The PMO identifies interdependencies between the projects and programs of the organization, but it does not keep track of the changes in interdependencies.

> Level 2 - The PMO identifies and tracks interdependencies between the projects and programs of the organization, informing and triggering the managers of project /programs and stakeholders in case of need, rebalancing, and other changes.

> Level 3 - The PMO identifies and tracks interdependencies between the projects and programs of the organization, acting proactively to ensure the realization of the portfolio and providing preventive and corrective actions as required.

A.1.3) How does the PMO develop and maintain a strategic framework of projects and programs (scoreboard)?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides information on projects and programs of the organization, but these are limited to a view on each individual project, with no analysis of the results expected of business and dependencies between projects and programs, risk and deadlines of the portfolio.

Level 2 - The PMO provides information on projects and programs of the organization (with analysis of the results expected of business and dependencies between projects and programs, risk and maturity of the portfolio) in a scoreboard, but this is not often used by senior management to support decision making.

Level 3 - The PMO provides information on projects and programs of the organization (with analysis of the results expected of business and dependencies between projects and programs, risk and maturity of the portfolio) in a scoreboard, but this is regularly used by senior management to support decision making.

A.1.4) How does the PMO promote project management awareness in the organization?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO raises awareness of Project Management to the intermediate level of organization, including mid-level managers.

Level 2 - The PMO takes actions to raise awareness of Project Management at all levels of the organization, including senior management. The PMO develops and publishes policies and guidelines for the management of projects in the organization.

Level 3 - The PMO establishes and implements a structured plan to promote Project Management at all levels of the organization. The PMO reviews and improves policies and guidelines for project management in the organization.

A.1.5) How does the PMO monitor and control its own performance?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO informally asks its customers to feedback on its performance.

Level 2 - The PMO formally ask its customers for feedback on its performance.

Level 3 - The PMO formally asks its customers to gain feedback on its performance and to obtain performance indicators for the processes under its responsibility, continually demonstrating its performance to its customers.

Level 4 - The PMO formally ask its customers to gain feedback on its performance and to obtain performance indicators for the processes under its responsibility, continually demonstrating its performance to its customers. In addition, the PMO shares goals with its customers and structures itself to promote continuous improvement and increases in its maturity, assessing the need for removal, maintenance, or creation of new services.

A.1.6) How does PMO participate in the strategic planning process?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO informally and occasionally participates in the strategic planning process of the organization.

Level 2 - The PMO informally and regularly participates in the strategic planning process of the organization.

Level 3 - The PMO formally and regularly participates in the strategic planning process of the organization.

A.1.7) How does the PMO manage one or more portfolios?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO maintains a list of active projects throughout the organization.

Level 2 - The PMO maintains a list of active projects and programs throughout the organization and establishes their prioritization but does not follow a structured portfolio management process.

Level 3 - The PMO maintains a list of active projects and portfolios, prioritizes them throughout the organization, and establishes formal processes, acting as facilitator in the definition (identification,

categorization, evaluation, selection), development (prioritize, balance and commitment) and implementation (monitoring, review and change management) of the portfolio.

Level 4 - The PMO maintains a list of active projects and portfolios, prioritizes them throughout the organization, and establishes formal processes, acting as facilitator in the definition (identification, categorization, evaluation, selection), development (prioritize, balance, and commitment) and implementation (monitoring, review, and change management) of the portfolio. The PMO uses an integrated system to automate the organization's portfolio management process.

A.1.8) How does the PMO identify, select and prioritize new projects and programs?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO identifies, selects, and prioritizes new projects and programs throughout the organization without defined criteria and without a relationship between strategic goals and the existing portfolio.

Level 2 - The PMO identifies, selects and prioritizes new projects and programs throughout the organization based on criteria, but without a clear and precise relationship between the strategic goals and the existing portfolio.

Level 3 - The PMO provides the entire organization with a formal process of identification, selection and prioritization of new projects and programs based on categories and pre-established criteria.

A.1.9) How does the PMO manage the benefits of the projects and programs?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO monitors the achievement of expected benefits for each project/program of the organization only during its execution, evaluating the results comparing them with the original strategic goals of the project/program.

Level 2 - The PMO monitors the achievement of expected benefits for each project/program of the organization during its execution and after closure evaluating the results and comparing them with the original strategic goals of the project/program.

A.1.10) How does the PMO map the relationships and the environment of projects and programs in and out of the organization?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO identifies the stakeholders of the organization's portfolio and takes actions to develop a strategy for stakeholder management.

Level 2 - The PMO identifies the stakeholders of the organization's portfolio, analyzes their expectations, establishes a strategy to manage relationships and proactively works to implement it. Besides, the PMO looks for benchmarking in project management with other organizations.

A.2) TACTICAL ASSESSMENT

A.2.1) How does the PMO develop and implement the project management methodology?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO has developed a basic methodology for the organization, but it is not used consistently on all projects.

Level 2 - The PMO has developed a standard methodology for the organization, aligning possible existing methodologies in different areas, and the methodology used in most projects in the organization.

Level 3 - The PMO has developed a standard methodology for the organization, and it is used by all projects as it is mandatory unless a specific waiver is requested and approved.

Level 4 - The PMO has developed and improved the standard methodology for the organization focusing on best practices and continuous improvement.

A.2.2) How does the PMO develop skills in project management?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO responds reactively to the organization's project management training needs.

Level 2 - The PMO proposes project management training for the entire organization.

Level 3 - The PMO establishes a plan for developing skills in project management throughout the organization, including training, certification, and graduate courses.

Level 4 - The PMO establishes a specific career path in project management for the entire organization, supported by a plan for corporate development of project management knowledge, skills, and competencies, which includes training, certification and graduate courses.

A.2.3) How does the PMO implement and manage project information systems?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides a project management information system for use throughout the organization, focusing on monitoring and control, which is used by managers of project /programs and stakeholders in most projects/programs of the organization, but this system does not use an integrated database.

Level 2 - The PMO provides a project management information system for use throughout the organization, focusing on monitoring and control, which is used by managers of projects/programs and stakeholders in most projects/programs of the organization with an integrated database.

Level 3 - The PMO provides a project management information system for use throughout the organization, focusing on monitoring and control, which is effectively used by managers of projects/programs and stakeholders in all projects/programs of the organization with an integrated database.

A.2.4) How does the PMO manage interfaces with customers?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO monitors the progress of projects and programs of the organization but is not involved with customer relationship management.

Level 2 - The PMO evaluates customer satisfaction, but does not directly interface with the customers of the organization's projects and programs.

Level 3 - The PMO is responsible for customer relationship management of all the organization's projects and programs.

A.2.5) How does the PMO provide a set of tools for project management?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides tools for use in the organization but they are not standardized and integrated.

Level 2 - The PMO provides tools, available for all organization, that are standardized and integrated to existing processes and methodologies, but the tools are not used in most cases to their fullest extent.

Level 3 - The PMO provides tools, available for all organization, that are standardized and integrated to existing processes and methodologies, and the tools are fully used on most projects and programs.

A.2.6) How does the PMO allocate and share resources between projects?

Level 0 - The PMO does not perform this function.

Level 1 - PMO operates in a reactive form in allocating and sharing resources between projects throughout the organization.

Level 2 - The PMO recognizes the importance of a resource pool, but lacks authority to allocate or share resources between projects in the organization.

Level 3 - The PMO has established a resource pool and has the authority to allocate and share resources between projects in the organization.

A.2.7) How does the PMO implement and manage the lessons learned database?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO stores the lessons learned from projects but does so in an unstructured way.

Level 2 - The PMO consolidates the lessons learned from projects of the organization and has set up a database for them.

Level 3 - In addition, the PMO implements and disseminates a system with a single point of entry to retrieve lessons learned from projects throughout the organization.

A.2.8) How does the PMO implement and manage the risk database?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO has set up a risk database.

Level 2 - The PMO uses a risk breakdown structure and consolidates the risks managed in each project in the organization using a risk database.

Level 3 - In addition, the PMO is able to use the lessons learned database to access risks from other projects in the organization.

A.2.9) How does the PMO select, manage, and evaluate project managers?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO recruits, selects, evaluates, and determines salaries of project managers as requested.

Level 2 - The PMO establishes criteria for use in the entire organization for recruiting, selecting, and evaluating project managers.

Level 3 - In addition, the PMO establishes a career path for project managers and determines the salary structure at each level.

A.3) OPERATIONAL ASSESSMENT

A.3.1) How does the PMO provide specialized services for the project manager?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides the project managers with basic project management support such as: preparing documentation, preparing of schedules, and facilitating meetings.

Level 2 - The PMO provides project managers advanced services and support such as: risk analysis, development and management of contracts, and project recovery.

A.3.2) How does the PMO provide information to senior management of the status of projects that are under way?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO collects status information, prepares reports and distributes them to senior management / sponsors but is not responsible for analysis nor does it take corrective action based on data in the reports.

Level 2 - The PMO receives status information, analyzes it and provides reports to senior management / sponsors and informs them if there are specific problems in which their assistance is needed.

Level 3 - The PMO receives status information, analyzes it, and provides reports to senior management / sponsors of the organization, informs them if there are problems and assists them in resolving problems as requested.

A.3.3) How does the PMO monitor and control project / program performance?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO monitors and controls the project/program performance considering time, cost, quality and customer satisfaction, and provides follow-up reports without analysis upon request.

Level 2 - The PMO monitors and controls the performance of projects/programs considering time, cost, quality, and customer satisfaction and analyzes the available data.

Level 3 - The PMO monitors and controls the performance of projects/programs considering time, cost, quality and customer satisfaction, analyzes data, and takes preventive and corrective actions working proactively with project/program managers and senior management.

A.3.4) How does the PMO provide mentoring for project managers?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides mentoring throughout the organization when requested. The mentoring involves supporting project planning and control and transferring technical knowledge to the project manager or to his or her team.

Level 2 - The PMO identifies needs and proactively provides mentoring throughout the organization. The mentoring involves supporting project planning and control, to transfer technical knowledge to the project manager or to his or her team.

Level 3 - The PMO identifies needs and proactively provides mentoring throughout the organization. The mentoring involves supporting project planning and control, transferring technical knowledge to the project manager or his or her team, and assisting them with the development or enhancement of interpersonal skills.

A.3.5) How does the PMO manage and collect project files and documentation?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO captures and stores documents for projects across the organization, without specific analysis and information retrieval; few people use available data.

Level 2 - The PMO captures and stores documents for projects across the organization, without specific analysis and information retrieval but provides guidance to individuals who wish to use these documents.

Level 3 - The PMO has a structured process with the goal of capturing and storing documents for projects across the organization, analyzing the quality of documentation and providing mechanisms for users to locate needed information.

A.3.6) How does the PMO manage one or more programs or projects?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO assists managers on occasion but does not have a methodology in place or tools to use.

Level 2 - The PMO provides assistance to project/program managers whenever requested but does not have a methodology in place or tools to use.

Level 3 - The PMO provides assistance to project/program managers with a standard methodology and tools for their use.

A.3.7) How does the PMO conduct project audits?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO performs audits upon request or if there is a major problem identified by senior managers who requests feedback.

Level 2 - The PMO acts proactively throughout the organization, following established audit procedures for projects. In addition, the audit results are used to provide feedback. The PMO realizes there is significant resistance from project managers when an audit is under way.

Level 3 - The PMO acts proactively throughout the organization, following established audit procedures for projects. In addition, the audit results are used to provide feedback. The PMO realizes that there is some resistance, but most people recognize the value of the audit work.

A.3.8) How does the PMO conduct post-reviews of project management (lessons learned)?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO facilitates the process of capturing lessons learned, as it is directly involved in project meetings and events.

Level 2 - The PMO facilitates the process, analyzes, consolidates and submits proposals for continuous improvement on projects.

Level 3 - In addition, the PMO provides a process to reuse the lessons learned in future projects across the organization.

B) DEPARTMENTAL QUESTIONNAIRE

B.1) STRATEGIC ASSESSMENT

B.1.1) How does the PMO provide advice to the department senior management?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO is asked by top management to give its position on issues relating to making strategic decision once in a while.

Level 2 - The PMO is frequently asked by top management to give its position on issues relating to making strategic decision, however, its involvement is not formally established.

Level 3 - The PMO is frequently asked by top management to give its position on issues relating to making strategic decision and its involvement is formally established.

B.1.2) How does the PMO coordinate and integrate the department's portfolio?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO identifies interdependencies between the projects and programs of the department, but it does not keep track of the changes in interdependencies.

Level 2 - The PMO identifies and tracks interdependencies between the projects and programs of the department, informing and triggering the managers of projects/programs and stakeholders in case of need, rebalancing, and other changes.

Level 3 - The PMO identifies and tracks interdependencies between the projects and programs of the department, acting proactively to ensure the realization of the portfolio and providing preventive and corrective actions as required.

B.1.3) How does the PMO develop and maintain a strategic framework of departmental projects and programs (scoreboard)?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides information on projects and programs of the department, but these are limited to a view on each individual project, with no analysis of the results expected of business and dependencies between projects and programs, risk, and deadlines of the portfolio.

Level 2 - The PMO provides information on projects and programs of the department (with analysis of the results expected of business and dependencies between projects and programs, risk and maturity

of the portfolio) in a scoreboard, but this is not often used by senior management to support decision making.

Level 3 - The PMO provides information on projects and programs of the department (with analysis of the results expected of business and dependencies between projects and programs, risk and maturity of the portfolio) in a scoreboard, but this is regularly used by senior management to support decision making.

B.1.4) How does the PMO promote project management awareness in the department?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO raises awareness of project management to the intermediate level of the department including mid-level managers.

Level 2 - The PMO takes actions to raise awareness of project management at all levels of the department, including senior management. The PMO develops and publishes policies and guidelines for the management of projects in the department.

Level 3 - The PMO establishes and implements a structured plan to promote project management at all levels of the department. The PMO reviews and improves policies and guidelines for project management in the department.

B.1.5) How does the PMO monitor and control its own performance?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO informally asks its customers to feedback on its performance.

Level 2 - The PMO formally ask its customers for feedback on its performance.

Level 3 - The PMO formally asks its customers to gain feedback on its performance and to obtain performance indicators for the processes under its responsibility, continually demonstrating its performance to its customers.

Level 4 - The PMO formally ask its customers to gain feedback on its performance and to obtain performance indicators for the processes under its responsibility, continually demonstrating its

performance to its customers. In addition, the PMO shares goals with its customers and structures itself to promote continuous improvement and increases in its maturity, assessing the need for removal, maintenance, or creation of new services.

B.1.6) How does PMO participate in the department strategic planning process?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO informally and occasionally participates in the strategic planning process of the department.

Level 2 - The PMO informally and regularly participates in the strategic planning process of the department.

Level 3 - The PMO formally and regularly participates in the strategic planning process of the department.

B.1.7) How does the PMO manage one or more departmental portfolios?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO maintains a list of active projects throughout the department.

Level 2 - The PMO maintains a list of active projects and programs throughout the department and establishes their prioritization but does not follow a structured portfolio management process.

Level 3 - The PMO maintains a list of active projects and portfolios, prioritizes them throughout the department and establishes formal processes, acting as facilitator in the definition (identification, categorization, evaluation, selection), development (prioritize, balance, and commitment) and implementation (monitoring, review, and change management) of the portfolio.

Level 4 - The PMO maintains a list of active projects and portfolios, prioritizes them throughout the department, and establishes formal processes, acting as facilitator in the definition (identification, categorization, evaluation, selection), development (prioritize, balance and commitment) and implementation (monitoring, review and change management) of the portfolio. The PMO uses an integrated system to automate the department's portfolio management process.

B.1.8) How does the PMO identify, select and prioritize new departmental projects and programs?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO identifies, selects, and prioritizes new projects and programs throughout the department without defined criteria and without a relationship between strategic department goals and the existing portfolio.

Level 2 - The PMO identifies, selects and prioritizes new projects and programs throughout the department based on criteria, but without a clear and precise relationship between the strategic department goals and the existing portfolio.

Level 3 - The PMO provides the department with a formal process of identification, selection and prioritization of new departmental projects and programs based on categories and pre-established criteria.

B.1.9) How does the PMO manage the benefits of the departmental projects and programs?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO monitors the achievement of expected benefits for each project/program of the department only during its execution, evaluating the results comparing them with the original strategic goals of the project/program.

Level 2 - The PMO monitors the achievement of expected benefits for each project/program of the department during its execution and after closure evaluating the results and comparing them with the original strategic goals of the project/program.

B.1.10) How does the PMO map the relationships and the environment of projects and programs in and out of the department?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO identifies the stakeholders of the department's portfolio and takes actions to develop a strategy for stakeholder management.

Level 2 - The PMO identifies the stakeholders of the department's portfolio, analyzes their expectations, establishes a strategy to manage relationships and proactively works to implement it. Besides, the PMO looks for benchmarking in project management with other organizations.

B.2) TACTICAL ASSESSMENT

B.2.1) How does the PMO develop and implement the department's project management methodology?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO has developed a basic methodology for the department, but it is not used consistently on all projects.

Level 2 - The PMO has developed a standard methodology for the department, aligning possible existing methodologies in different areas, and the methodology used in most projects in the department.

Level 3 - The PMO has developed a standard methodology for the department, and it is used by all projects as it is mandatory unless a specific waiver is requested and approved.

Level 4 - The PMO has developed and improved the standard methodology for the department focusing on best practices and continuous improvement.

B.2.2) How does the PMO develop skills in project management?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO responds reactively to the department's project management training needs.

Level 2 - The PMO proposes project management training for the department.

Level 3 - The PMO establishes a plan for developing skills in project management throughout the department, including training, certification and graduate courses.

Level 4 - The PMO establishes a specific career path in project management for the department, supported by a plan for corporate development of project management knowledge, skills, and competencies, which includes training, certification and graduate courses.

B.2.3) How does the PMO implement and manage project information systems?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides a project management information system for use throughout the department, focusing on monitoring and control, which is used by managers of projects/programs and stakeholders in most projects/programs of the department, but this system does not use an integrated database.

Level 2 - The PMO provides a project management information system for use throughout the department, focusing on monitoring and control, which is used by managers of projects/programs and stakeholders in most projects/programs of the department with an integrated database.

Level 3 - The PMO provides a project management information system for use throughout the department, focusing on monitoring and control, which is effectively used by managers of projects/programs and stakeholders in all projects/programs of the department with an integrated database.

B.2.4) How does the PMO manage interfaces with customers?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO monitors the progress of projects and programs of the department but is not involved with customer relationship management.

Level 2 - The PMO evaluates customer satisfaction, but does not directly interface with the customers of the department's projects and programs.

Level 3 - The PMO is responsible for customer relationship management of all the department's projects and programs.

B.2.5) How does the PMO provide a set of tools for project management?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides tools for use in the department but they are not standardized and integrated.

Level 2 - The PMO provides tools, available for department, that are standardized and integrated to existing processes and methodologies, but the tools are not used in most cases to their fullest extent.

Level 3 - The PMO provides tools, available for department, that are standardized and integrated to existing processes and methodologies, and the tools are fully used on most projects and programs.

B.2.6) How does the PMO allocate and share resources between departmental projects?

Level 0 - The PMO does not perform this function.

Level 1 - PMO operates in a reactive form in allocating and sharing resources between projects throughout the department.

Level 2 - The PMO recognizes the importance of a resource pool, but lacks authority to allocate or share resources between projects in the department.

Level 3 - The PMO has established a resource pool and has the authority to allocate and share resources between projects in the department.

B.2.7) How does the PMO implement and manage the lessons learned database?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO stores the lessons learned from projects but does so in an unstructured way.

Level 2 - The PMO consolidates the lessons learned from projects of the department and has set up a database for them.

Level 3 - In addition, the PMO implements and disseminates a system with a single point of entry to retrieve lessons learned from projects throughout the department.

B.2.8) How does the PMO implement and manage the risk database?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO has set up a risk database.

Level 2 - The PMO uses a risk breakdown structure and consolidates the risks managed in each project in the department using a risk database.

Level 3 - In addition, the PMO is able to use the lessons learned database to access risks from other projects in the department.

B.2.9) How does the PMO select, manage, and evaluate project managers?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO recruits, selects, evaluates, and determines salaries of project managers as requested.

Level 2 - The PMO establishes criteria for use in the entire organization for recruiting, selecting, and evaluating Project Managers.

Level 3 - In addition, the PMO establishes a career path for project managers and determines the salary structure at each level.

B.3) OPERATIONAL ASSESSMENT

B.3.1) How does the PMO provide specialized services for the project manager?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides the project managers with basic project management support such as: preparing documentation, preparing of schedules, and facilitating meetings.

Level 2 - The PMO provides project managers advanced services and support such as: risk analysis, development and management of contracts, and project recovery.

B.3.2) How does the PMO provide information to senior management of the status of projects that are under way?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO collects status information, prepares reports and distributes them to senior management / sponsors but is not responsible for analysis nor does it take corrective action based on data in the reports.

Level 2 - The PMO receives status information, analyzes it and provides reports to senior management / sponsors and informs them if there are specific problems in which their assistance is needed.

Level 3 - The PMO receives status information, analyzes it, and provides reports to senior management / sponsors of the organization, informs them if there are problems and assists them in resolving problems as requested.

B.3.3) How does the PMO monitor and control project / program performance?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO monitors and controls the project / program performance considering time, cost, quality and customer satisfaction, and provides follow-up reports without analysis upon request.

Level 2 - The PMO monitors and controls the performance of projects / programs considering time, cost, quality and customer satisfaction and analyzes the available data.

Level 3 - The PMO monitors and controls the performance of projects / programs considering time, cost, quality and customer satisfaction, analyzes data, and takes preventive and corrective actions working proactively with project / program managers and senior management.

B.3.4) How does the PMO provide mentoring for project managers?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides mentoring throughout the department when requested. The mentoring involves supporting project planning and control and transferring technical knowledge to the project manager or to his or her team.

Level 2 - The PMO identifies needs and proactively provides mentoring throughout the department. The mentoring involves supporting project planning and control, to transfer technical knowledge to the project manager or to his or her team.

Level 3 - The PMO identifies needs and proactively provides mentoring throughout the department. The mentoring involves supporting project planning and control, transferring technical knowledge to the project manager or his or her team, and assisting them with the development or enhancement of interpersonal skills.

B.3.5) How does the PMO manage and collect project files and documentation?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO captures and stores documents for projects across the department, without specific analysis and information retrieval; few people use available data.

Level 2 - The PMO captures and stores documents for projects across the department, without specific analysis and information retrieval but provides guidance to individuals who wish to use these documents.

Level 3 - The PMO has a structured process with the goal of capturing and storing documents for projects across the department, analyzing the quality of documentation and providing mechanisms for users to locate needed information.

B.3.6) How does the PMO manage one or more programs or projects?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO assists managers on occasion but does not have a methodology in place or tools to use.

Level 2 - The PMO provides assistance to project/program managers whenever requested but does not have a methodology in place or tools to use.

Level 3 - The PMO provides assistance to project/program managers with a standard methodology and tools for their use.

B.3.7) How does the PMO conduct project audits?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO performs audits upon request or if there is a major problem identified by senior managers who requests feedback.

Level 2 - The PMO acts proactively throughout the department, following established audit procedures for projects. In addition, the audit results are used to provide feedback. The PMO realizes there is significant resistance from project managers when an audit is under way.

Level 3 - The PMO acts proactively throughout the department, following established audit procedures for projects. In addition, the audit results are used to provide feedback. The PMO realizes that there is some resistance, but most people recognize the value of the audit work.

B.3.8) How does the PMO conduct post-reviews of project management (lessons learned)?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO facilitates the process of capturing lessons learned, as it is directly involved in project meetings and events.

Level 2 - The PMO facilitates the process, analyzes, consolidates and submits proposals for continuous improvement on projects.

Level 3 - In addition, the PMO provides a process to reuse the lessons learned in future projects across the department.

C) PROGRAM-PROJECT QUESTIONNAIRE

C.1) STRATEGIC ASSESSMENT

C.1.1) How does the PMO provide advice to the senior management about the project/program?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO is asked by top management to give its position on issues relating to making strategic decision once in a while.

Level 2 - The PMO is frequently asked by top management to give its position on issues relating to making strategic decision, however, its involvement is not formally established.

Level 3 - The PMO is frequently asked by top management to give its position on issues relating to making strategic decision and its involvement is formally established.

C.1.2) How does the PMO develop and maintain a strategic framework of the project/program (scoreboard)?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides information on the project/program, but these are limited to a view on the project/program status, with no analysis of the results expected of business.

Level 2 - The PMO provides information on the project/program with analysis of the results expected of business in a scoreboard, but this is not often used by senior management to support decision making.

Level 3 - The PMO provides information on the project/program with analysis of the results expected of business in a scoreboard, but this is regularly used by senior management to support decision making.

C.1.3) How does the PMO monitor and control its own performance?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO informally asks its customers to feedback on its performance.

Level 2 - The PMO formally ask its customers for feedback on its performance.

Level 3 - The PMO formally asks its customers to gain feedback on its performance and to obtain performance indicators for the processes under its responsibility, continually demonstrating its performance to its customers.

Level 4 - The PMO formally ask its customers to gain feedback on its performance and to obtain performance indicators for the processes under its responsibility, continually demonstrating its performance to its customers. In addition, the PMO shares goals with its customers and structures

itself to promote continuous improvement and increases in its maturity, assessing the need for removal, maintenance, or creation of new services.

C.1.4) How does the PMO manage the benefits of the project/program?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO monitors the achievement of expected benefits for the project/program only during its execution, evaluating the results comparing them with the original strategic goals of the project/program.

Level 2 - The PMO monitors the achievement of expected benefits for the project/program during its execution and after closure evaluating the results and comparing them with the original strategic goals of the project/program.

C.1.5) How does the PMO map the relationships and the environment of projects and programs in and out of the project/program?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO identifies the stakeholders of the project/program and takes actions to develop a strategy for stakeholder management.

Level 2 - The PMO identifies the stakeholders of the project/program, analyzes their expectations, establishes a strategy to manage relationships and proactively works to implement it. Besides, the PMO looks for benchmarking in project management with other organizations.

C.2) TACTICAL ASSESSMENT

C.2.1) How does the PMO develop and implement the project management methodology?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO has developed a basic methodology for the project/program, but it is not used consistently.

Level 2 - The PMO has developed a standard methodology for the project/program, and it is used in most of the time.

Level 3 - The PMO has developed a standard methodology for the project/program, and it is mandatory unless a specific waiver is requested and approved.

Level 4 - The PMO has developed and improved the standard methodology for the project focusing on best practices and continuous improvement.

C.2.2) How does the PMO develop skills in project management for the project/program?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO responds reactively to the project management training needs.

Level 2 - The PMO proposes project management training for the project/program.

Level 3 - The PMO establishes a plan for developing skills in project management throughout the project/program.

C.2.3) How does the PMO implement and manage the project information system?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides a project management information system for use throughout the project/program, focusing on monitoring and control, which is used by the project/program management and stakeholders in most of the time, but this system does not use an integrated database.

Level 2 - The PMO provides a project management information system for use throughout the project/program, focusing on monitoring and control, which is used by the project/program manager and stakeholders in most of the time with an integrated database

Level 3 - The PMO provides a project management information system for use throughout the project/program, focusing on monitoring and control, which is effectively used by project/program managers and stakeholders all the time with an integrated database.

C.2.4) How does the PMO manage interfaces with project's/program's customers?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO eventually monitors the customer satisfaction but is not involved formally with customer relationship management.

Level 2 - The PMO evaluates customer satisfaction, but does not directly interface with the customers of the project/program.

Level 3 - The PMO is responsible for customer relationship management of the project/program.

C.2.5) How does the PMO provide a set of tools for project management?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides tools for use in the project/program but they are not standardized and integrated.

Level 2 - The PMO provides tools, available for the project/program, that are standardized and integrated to existing processes and methodologies, but the tools are not used in their fullest extent

Level 3 - The PMO provides tools, available for the project/program, that are standardized and integrated to existing processes and methodologies, and the tools are fully used on the project/program.

C.2.6) How does the PMO allocate and share resources in the project/program?

Level 0 - The PMO does not perform this function.

Level 1 - PMO operates in a reactive form in allocating resources in the project/program.

Level 2 - The PMO recognizes the importance of a resource pool, but lacks authority to allocate resources project/program.

Level 3 - The PMO has established a resource pool and has the authority to allocate resources in the project/program.

C.2.7) How does the PMO implement and manage the lessons learned database?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO stores the lessons learned from the project/program but does so in an unstructured way.

Level 2 - The PMO consolidates the lessons learned from the project/program and has set up a database for them.

Level 3 - In addition, the PMO implements and disseminates a system with a single point of entry to retrieve lessons learned from the project/program.

C.2.8) How does the PMO implement and manage the risk database?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO has set up a risk database.

Level 2 - The PMO uses a risk breakdown structure and consolidates the risks managed in the project/program using a risk database.

Level 3 - In addition, the PMO is able to use the lessons learned database to access risks from the project/program.

C.3) OPERATIONAL ASSESSMENT

C.3.1) How does the PMO provide specialized services for the project/program manager?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides the project/program manager with basic project management support such as: preparing documentation, preparing of schedules, and facilitating meetings.

Level 2 - The PMO provides project/program manager advanced services and support such as: risk analysis, development and management of contracts, and project recovery.

C.3.2) How does the PMO provide information to senior management of the status of project/program that are under way?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO collects status information, prepares reports and distributes them to senior management / sponsors but is not responsible for analysis nor does it take corrective action based on data in the reports.

Level 2 - The PMO receives status information, analyzes it and provides reports to senior management/sponsors and informs them if there are specific problems in which their assistance is needed.

Level 3 - The PMO receives status information, analyzes it, and provides reports to senior management / sponsors, informs them if there are problems and assists them in resolving problems as requested.

C.3.3) How does the PMO monitor and control project / program performance?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO monitors and controls the project/program performance considering time, cost, quality, and customer satisfaction, and provides follow-up reports without analysis upon request.

Level 2 - The PMO monitors and controls the project/program performance considering time, cost, quality, and customer satisfaction and analyzes the available data.

Level 3 - The PMO monitors and controls the project/program performance considering time, cost, quality and customer satisfaction, analyzes data, and takes preventive and corrective actions working proactively with the project / program manager and senior management.

C.3.4) How does the PMO provide mentoring for the project/program manager?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO provides mentoring when requested. The mentoring involves supporting project planning and control and transferring technical knowledge to the project manager or to his or her team.

Level 2 - The PMO identifies needs and proactively provides mentoring. The mentoring involves supporting project planning and control, to transfer technical knowledge to the project manager or to his or her team.

Level 3 - The PMO identifies needs and proactively provides mentoring. The mentoring involves supporting project planning and control, transferring technical knowledge to the project manager or his or her team, and assisting them with the development or enhancement of interpersonal skills.

C.3.5) How does the PMO manage and collect project/program files and documentation?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO captures and stores documents for the project/program, without specific analysis and information retrieval; few people use available data.

Level 2 - The PMO captures and stores documents for the project/program, without specific analysis and information retrieval but provides guidance to individuals who wish to use these documents.

Level 3 - The PMO has a structured process with the goal of capturing and storing documents for the project/program, analyzing the quality of documentation and providing mechanisms for users to locate needed information.

C.3.6) How does the PMO manage the program/project?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO assists the project/program manager on occasion but does not have a methodology in place or tools to use.

Level 2 - The PMO provides assistance to project/program manager whenever requested but does not have a methodology in place or tools to use.

Level 3 - The PMO provides assistance to project/program manager with a standard methodology and tools for their use.

C.3.7) How does the PMO conduct project/program audits?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO performs audits upon request or if there is a major problem identified by senior managers who requests feedback.

Level 2 - The PMO acts proactively, following established audit procedures for projects. In addition, the audit results are used to provide feedback. The PMO realizes there is significant resistance when an audit is under way.

Level 3 - The PMO acts proactively, following established audit procedures for projects. In addition, the audit results are used to provide feedback. The PMO realizes that there is some resistance, but most people recognize the value of the audit work.

C.3.8) How does the PMO conduct post-reviews of project management (lessons learned)?

Level 0 - The PMO does not perform this function.

Level 1 - The PMO facilitates the process of capturing lessons learned, as it is directly involved in project/program meetings and events.

Level 2 - The PMO facilitates the process, analyzes, consolidates, and submits proposals for continuous improvement on the project/program.

Level 3 - In addition, the PMO provides a process to reuse the lessons learned in future projects/programs.