

PM WORLD TODAY - FEATURED PAPER - JANUARY 2008

The Project/Program Management Office (PMO)

By TD Jainendrukumar

The Project/Program Management Office (PMO) is the fastest growing concept in project management today and is key to effective implementation of project management across the organization. To keep pace with customer expectations, competition, and economic conditions in the fast-paced global economy, organizations must do more using fewer resources. Advanced Project Portfolio Management and the PMO shows you how to turn your PMO into a value machine.

PMO Functions

Probably the best known, and the most widely used, description of the functions of a PMO would include only those functions that are intended to assist individual projects. However, if these functions are complemented by organization-oriented functions, then the resulting PMO will be an exceptionally effective unit in achieving organizational project management maturity, and more importantly, in facilitating higher profits and in maintaining the competitive advantage of the organization. Project-focused functions include staff augmentation, consulting, and mentoring. Enterprise-oriented functions include training, clear housing, project historical data, issuing best practices, and promoting the project management profession. The main areas under this are: 1. Practice Management; 2. Infrastructure Management; 3. Resource Integration Management; 4. Technical Support Management; and 5. Business Alignment.

1. Practice Management

The important functions in this are Project Management Methodology, Project Management Tools, Project Management Standards & Methods and Project Management Knowledge. Organization-Oriented Functions Ideally, the PMO should be the focal point for project management improvement and enhancement. This mission is met by establishing best practices and by providing training in all project management knowledge areas. It becomes the responsibility of the PMO to focus on areas such as development of lessons learned and standardized methodologies. The PMO serves as a facilitator, an enabler, and an advocate for improved performance across all projects in the organization. The PMO will continually define quantitative objectives for improving project management processes.

The extent to which the PMO participates in project performance and the functions to be performed are based on the goals and objectives of the PMO and using the Project Management Methodology, Project Management Tools, Project Management



Standards and methods and Project management Knowledge. One of the more visible functions of a project management office is developing, recording, compiling, and disseminating the best practices in project management. This repository of information will be continuously evolving. The PMO will maintain project archives containing data on project life-cycle performance and project scope, cost, and schedule. On these facets of the project, data will highlight the original value, modifications, and the final value. Additionally, lists of issues and problems of previous projects will be available to all new projects. Thus, successive projects are able to build upon the lessons learned of previous projects.

Project data on scope, cost, schedule, quality, and risks must be collected, refined, and archived. Other data that must be distilled from the project progress information are the productivity of various specialties in crafting, developing, and assembling project modules. It is not sufficient to collect project data and then to file it away without guidelines as to how to best use it in future projects. A standard repository is required, which must be supported by each existing project. In order to make data retrieval user-friendly, the repository must be cross-referenced.

The PMO is the organizational entity with exposure to multiple projects, and therefore, is in the best position to facilitate knowledge sharing through lessons learned. The PMO focuses on integrating positive project practices, promoting the use of recommended tools and templates, and providing guidance and support. Finally, these organizational experiences will form the basis of excellence for the parent organization, and as such, will be passed along to the project managers on a continual basis as part of the ongoing training programs, since they will be integrated into the enterprise project management policies and procedures.

2. Infrastructure Management

The main functions in this area are Project Governance, Project Assessment, Organizational Instructions and providing Infrastructure facilities and equipments.

Project Governance and Project Assessment focus on how organizational priorities and expectations interact with the project:

- How is the Project organized to efficient resource utilization?
- How is value decisions (functionality/budget/schedule) made?
- What is the accountability for information reported to oversight?
- Who are the stakeholders and what is their level of involvement?
- What information should be reported from the project to enable decision making?

In Organizational Instructions, Project management requires a cultural change; therefore, top management's support for the PMO is essential. In this case study a government agency that was not accustomed to use of project management tools and



techniques, and also in working in a matrix management structure, the Administrator established a PMO to help introduce this cultural change in this large organization. The initial function of the PMO was to serve as the Administrator's staff in conducting reviews of the major projects that were underway. It soon became evident to the project managers and team members that the PMO staff could not be trusted as they were viewed as the "eyes and ears" of the Administrator. The PMO was viewed as a datagathering arm, which only was one of its intended functions.

The Administrator then realized that his intent for this PMO was not recognized throughout the organization. He issued a charter for the PMO's operations and in meetings with executives in the agency, and in each of the reviews of the large projects, personally indicated that the intent of the PMO was to foster improvements in project management and it was not an auditing staff with a mission to only identify deficiencies. This cultural change to work in a project environment took considerable time that would not have been possible without top management support and commitment.

The goals of the PMO are enterprise-oriented and to mobilize resources (money machine and facilities) optimally across projects. The PMO can then institutionalize best practices that it identifies within the organization as it builds a process for project management governance. In this case, the PMO goals become the organizational values of maturity rating, average rating of all the projects, and financial losses that are due to project failure.

3. Resource Integration

The major functions in these areas are Resource Management, Training and Education, Career Development and Team Development. In organizations, success depends on how effectively resources are used. If an organization does not have a formal resource allocation process, project managers are left on their own to solicit and obtain resources from functional managers. This situation only leads to conflicts and difficulties that will hamper the project team's efforts in completing the project successfully. Therefore, the PMO should provide resource management capabilities across the organization.

The PMO can serve as a resource pool (human resource) for project professionals. It is only then that resource requirements can be balanced across projects. Building on the knowledge, skills, and competency profiles, the PMO can assign project managers to specific projects in their areas of expertise. It can make decisions on the best use of an organization's resources to meet its goals.

Staff augmentation is the process by which the PMO serves in a fashion somewhat similar to a temporary agency in that it provides personnel of various skills to the project in order to fill any shortfalls that might exist in the project staff. If the full complement of a PMO exists in the organization, then these temporary project staff



members will also serve as a conduit for best practices and company policies into the project. Otherwise, they simply serve as additional resource hours for the project manager.

4. Technical Support Management

In this area main functions are Project Mentoring, Project Planning, Project Auditing and Project Recovery. Mentoring occurs when the project has the right number of staff members, but the team members do not possess the appropriate competency in order to carry out their respective project duties. In such a circumstance, the PMO assigns a seasoned professional to assist and work with those project team members that have shortfalls in their competencies. The mentor will work side by side with the team member for as long and as often as necessary until such time that the team member and/or the project manager feel comfortable that the team member can perform his or her functions without direct intervention by the PMO staff member. A graceful way of phasing out of a mentoring arrangement is to convert it to a consulting arrangement, where the contact meeting is on an as needed basis.

PMO has to focus on the planning activities that ensure optimal execution and use of organizational resources:

- Project Budget allocated to tasks
- Project Schedule with dependencies and effort-based estimates
- Organizational structure with clear accountability
- Metric-based reporting to facilitate effective control (Earned-Value)

And also focus on the Purchasing, Outsourcing, and 3rdparty (subcontractors, consultant, etc) activities such as Contractual relationships (Partnerships, Service Providers and Consultants) and Supplier relationships (Products, labor etc,)

Project auditing is the process of assessing high-risk projects to ensure that they are doing the right thing and doing it well so that the project has a high probability of completing on time, within budget, and providing the expected value to the business without unknowingly increasing material control risk to the organization.

Specific functions to be performed must be known to everyone who is involved with the affected project or in the organization. In a case study a PMO for a large project, was established to manage project-related functions. This PMO was to perform functions such as preparing a WBS for the project, a schedule, a detailed plan, and a cost estimate; establishing baselines to measure performance; forecasting cash flow requirements; providing project management training; preparing status reports; holding project reviews; identifying minor issue items; and tracking minor issues as well as major conflicts. Its major function was to establish and maintain a project management information system for this complex project.



The PMO was successful because everyone on the project knew the specific functions it was to perform. It had a plan for its own operations that was distributed to the entire project team and to other stakeholders. Roles and responsibilities were delineated, and performance of the PMO staff was evaluated by others outside of the PMO.

An organization with a progressive standard to foster project management improvement should establish a metrics program and also should regularly conduct project management maturity assessments under the purview of the PMO. A PMO for a non-application development group in a major establishment was established. This PMO decided to establish a metrics program. It identified the key project and process management issues, selected and defined the corresponding metrics, and integrated the metrics into existing processes. It trained staff in data collection procedures and worked to collect data that would become a basis for action. Further, the PMO set up processes to capture and store the metrics for subsequent analysis.

In order to have people recognize that the metrics were being collected as part of an initiative in project management improvement, the PMO held meetings with stakeholders to discuss the purpose of the metrics, obtain their concurrence on them, and to show how the metrics were to be used. Factual data, that is clearly understood, can facilitate analysis, which in turn can help ensure there is agreement as to what is happening, as well as to what should be happening. While the metrics program was an ongoing initiative, every six months, it was supplemented by a project management maturity assessment to identify strengths and weaknesses and areas of improvement in the organization's project management practices.

5. Business Alignment

The main functions in these areas are Project portfolio Management, Customer Relation ship Management, Vendor Relation ship management and Business performance Management.

The next natural step is to integrate and disseminate these best practices into the enterprise project management policies. Then, each project is considered as an opportunity for learning how to improve project processes and organizational approaches. The PMO can provide easy to use and accurate models and procedures for estimates and for schedules. It can provide and support enterprise-level project management tools for scheduling, resource management, time reporting, estimating, configuration management, requirements management, risk management, and a central repository for lessons learned. Since the PMO is the focal point for project management enhancement, best results will be obtained if the PMO personnel set objectives for such improvements and continually check the progress against the plans.



In other words, the PMO must practice all of the monitoring and improvement philosophies that it prescribes for the projects. By publicizing such positive results on attaining its own goals, and hopefully the goals of all organizational projects (with a holistic view), the PMO will continue to maintain a support base with the senior executives. Further, the upper management must be routinely briefed on project management principles and new developments in the profession, in order to integrate project management into the broader business context. Work to obtain support from stakeholders at all levels for the PMO's functions. A key function of the PMO is to serve as a clearinghouse of project management best practices, tools, and techniques. This was the mission of a PMO in a government agency. It did so through a core staff that worked to establish a project management methodology for use throughout the organization.

As part of the implementation of the methodology, the PMO staff conducted interviews with stakeholders throughout the agency and with project managers and team members. It then developed its methodology but rather than impose it from the top through the Agency Director's office, the PMO staff held an off-site retreat to discuss the methodology with project managers in the agency, to obtain their ideas, and more importantly, their buy in to the process to be used. Then, it finalized the methodology and presented it to executive management for concurrence and enhancements.

This approach led to support for the approach to be used and facilitated its acceptance throughout the agency. When implementing a PMO, attention must be focused on the portions of the strategic direction of the organization that deal with the project management function. One would hope that organizational long-range plans would include such items as reduction of project overruns, improving resource allocation procedures, improving project selection and prioritization, increasing the delivery speed, and enhancing the overall quality of projects.

The sophistication of the PMO structure and its funding will vary widely depending on whether the overall goals are to improve project-by-project performance, divisional project performance, or organizational project management maturity, which is the most enlightened of these goals. If the PMO goals are project specific, the goals can be tied either to performance ratings or to overruns of cost and schedule. If the goals are division-specific, the goals would highlight the current maturity rating of the division together with the desired rating. Alternately, the objectives can be stated in terms of average evaluation ratings of projects or in terms of a threshold for financial losses that are due to project failure.

Need for Establishing a PMO

Implementing a Project Management Office will facilitate improvements in the success of projects in the areas of scope, quality, cost, schedule, and customer satisfaction. A PMO will be commissioned to maintain the focus of the enterprise on the



qualitative facets, and on the quantitative facets, of project management. Having consistent tools, procedures, and competent personnel that execute these integrated procedures, the organization will enjoy a higher rate of success in projects, which in turn will result in lower overall project costs, leading to increased corporate profits. From an organizational standpoint and looking from the vantage point of a client, the primary attributes that define the success or failure of a project are those of cost, schedule, scope, and client satisfaction.

Projects must meet customer needs and respond to market conditions. They also must meet the business objectives that are established. A PMO will optimize the values of these success factors through development of consistent procedures and tools that are based on company-specific historical information, industry-wide best practices, and company-specific best practices. Mentoring, consulting, augmenting, archiving, promoting, clearing-housing, and training activities are functions that will ensure the dissemination and application of these skills and knowledge sets throughout the organization. The first three functions should become less intense as the PMO develops the project infrastructure for the organization.

The efforts to quantify organizational goals can be focused toward setting organizational standards of performance for each of the project management facets such as cost, schedule, performance, etc. For example, the objectives might state that more than 95% of projects must come in on time, or more than 90% of projects must come in under budget, or that there must be a 97% customer satisfaction rate as a result of project delivery. Therefore, it is necessary to ascertain a realistic picture of the current organizational status. With that information in hand, the design of the PMO can address these specific needs more deliberately.

An alternate method of setting project performance outcomes is to establish quantified standards for a successful project. Then, for each facet, one must specify the performance level that will be considered acceptable. For example, it might be specified that the cost performance be rated as perfect if there is a more-than 10% under-run. The cost performance is rated as unacceptable if there is a more-than 250% overrun. To extend this concept further, one would determine how many of the current projects map unto this range of acceptability, and how many should map unto this range once the PMO is installed. Finally, the improvement objectives could be such that the performance in all areas should be improved by one maturity level, or alternately it could be such that they should all reach a certain level, say, level four.

The business case for establishing the PMO must clearly define the benefits that are to be derived from the deliverable of the project. The business case further extends the data to show that the cost of the PMO is justified by the revenues that it would bring to the enterprise. The benefits of the PMO are to attain formalized and consistent project management throughout the organization and to realize improvements in project performance in the areas of cost, schedule, scope, and people. Additional benefits are



recognition of the project management discipline and improvement in organizational profitability. It can enable the organization to realize a competitive advantage through reduced project costs.

These benefits of having a PMO can be weighed against the costs of establishing a PMO. These costs include the cost of a permanent staff for enterprise planning, project governance, and customized record keeping; the cost of an appropriate infrastructure for this new organizational entity; and the cost of project management training activities for the organization. Additional costs of establishing a PMO are the costs involved in mentoring, consulting, and augmenting. It is an important point that the intensity and cost of the latter group of activities should diminish as the organization becomes more mature in project management. In fact, the trend in expenditures of time and effort spent in such short-term crisis activities should be a measure of how much the organization has moved toward excellence in project management.

As part of planning for the PMO, one would need to determine, in realistic terms, the status of the organizational environment. To characterize the organizational attitude toward change, one would need to determine if the culture is project oriented or specialty driven. This can be done by assessing the status of the project management practice in the organization. It is necessary to determine how projects are being selected and managed, and the specific methodologies that are being used. To that end, a detailed review of the corporate vision, strategies, and goals must be conducted. Top management must be interviewed in order to highlight the current corporate and business functions of the divisions and personnel within those divisions.

Finally, current corporate needs must be detailed in order to determine to what extent there is tolerance for inaccurate project data and for project overruns. With this information, the PMO functions that best serve these purposes should be identified. Beyond that, knowledge areas that are most important should be identified. The premise is that operation of the project management office should match the company's strategic project management needs, and that the roles of the project management office in an organization should be methodically defined. It is important not to attempt an overly ambitious implementation in short period of time.

Implementation of PMO must be treated just like any other project, but more so just to highlight effective planning and execution. It is important to identify the success criteria for the PMO and for project management in the organization. Metrics must be established in order to measure the improvements as a result of the implementation of the PMO. In tangible terms, possible impacts of the PMO on the following must be identified: individual projects, project portfolio, project cost impact, morale improvement, and operational benefits. A top-down implementation is recommended so that the PMO is not viewed as another layer of bureaucracy and instead is viewed as an organizational unit that is adding value to the enterprise.



First, the PMO must be set up and established as an entity in the organization. As such, it must be properly staffed, and ample office space must be available. A charter for PMO implementation is needed, similar to a charter for a specific project. Here, the charter will specify the purpose of the PMO in the organization. The charter will provide the PMO with the authority and responsibility to apply organizational resources to the activities that are within the PMO's purview. The sponsor of the PMO should prepare the charter and sign off on it. He or she also should obtain concurrence and sign-offs by appropriate executive managers throughout the organization. This charter will highlight executive support for PMO implementation, and it serves as the springboard for the PMO's subsequent activities. A PMO organization chart, including roles and responsibilities, must be prepared and disseminated to the organization.

Next, the PMO must prepare a detailed plan for its operations. The plan should contain specific objectives of the organization as they support the vision for project management activities. To that end, the plan must specify milestones, such as first visible impact, intermediate milestones, and completion target. The PMO requires a scope statement, a WBS, metrics to measure its performance, and a communications management plan. And, like any other project, the plan for the PMO implementation must be distributed to the stakeholders for information, review, comment, and approval. The PMO implementation plan must be comprehensive and include a statement of objectives, network diagram, bar chart, tabular information, total cost estimate, roles and responsibilities, and necessary cash flow. Communication management approaches must be described. Then during regular reporting cycles, appropriate progress reports must be issued indicating the variances and plan modifications.

At this point, the PMO staff would be cognizant of the scope of their responsibilities and the manner in which they are to interact with others in the organization. The implementation of the PMO represents a major cultural change for the organization. Therefore, time must be set aside for meetings with stakeholders to discuss the added value that the PMO staff brings to the organization. A number of briefings and even workshops may be required so that people throughout the organization recognize the purpose of the PMO. The PMO must be viewed as a complementary, and supportive unit, and not as a rigid administrative structure that does not allow the necessary creativity and flexibility that project managers require.

References:

- The PM Podcast broadcasted interview with Mr.Gerard Hill,
- other internet sources
- Personal PMO experiences



TD Jainendrakumar Author



TD Jainendrakumar, PMP, is a Technocrat with over 20 years' of extensive experience in the areas of IT Project management/Head IT PMO in e-governance at Ernakulam District Collectorate, District Courts of Kerala, Central Administrative Tribunal Ernakulam, Rajeev

Gandhi National Drinking Water Mission New Delhi and Principal Systems Analyst in National Informatics Centre, Madhya Pradesh State Centre especially in the following areas of specialization: 1. IT practice management (Project Management Methodologies, Tools and techniques, Standards & Knowledge); 2. IT Infrastructure Management (Project Governance, Assessment, Organisational Instructions & Facilities and Equipments); 3. IT-Resource Integration Management (Resource Management, Training & Education, Career Development & Team Development); 4. IT-Technical Support (Project Mentoring, Project Planning, Project Auditing and Project Recovery); and 5. Business Alignment Management (Project Port folio management, Customer Relationship Management, Vendor Management & Business performance management). He completed a Master of Computer Applications (MCA), a 3 year post graduate course deals with software Engineering and Project Management. He scored 4.11 out of 5 in the project management (2005) examination conducted by brainbench.com, secured a Masters Certificate in Project Management, and is one among the top scorers (First in India in the experienced category). He is also working towards the PMP certification from PMI. Additional information about TD Jainendrakumar can be found at

http://www.brainbench.com/xml/bb/transcript/public/viewtranscript.xml?pid=6557177. He lives in India and can be contacted at jainendrakumartd@yahoo.co.in