The Project Office: Finding Pearls and Avoiding Perils

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Introduction to the Project Office

I am an alumnus of that group that is adding members each and every year: managers and directors of Project Management Offices (PMOs). And, I was there at the beginning when a new project office was being formed to manage a portfolio of projects all tied together by a common goal. Being there at the beginning is a special opportunity. Organizational politics, getting staffed, and the need to really perform are all on the front burner. But, it was all worth it. I can testify to both the perils of making it through the first couple of years and the pearls of handling a portfolio of projects with a tool called a Project Office.

Begin at the Beginning

What is the Role of a Project Management Office?

There is no single answer to the question: "What is the role of a Project Management Office?" Project offices come in several flavors. Because they can do many things for projects, there are a lot of good reasons for having a project office in your organization.

Three Traditional Tasks

Usually, a project office has one or more of the following tasks assigned to it, as shown in Exhibit 1.

• Develop and promote the project management body of knowledge (BOK) for the business. This often means assembling a small team of project management professionals to put the BOK into place. It also means selecting tools and methodology, and conveying that knowledge by training and facilitation to project teams and project leaders wherever they are in the enterprise.

• Provide a corps of professionals to lead and manage specific projects for organizations or departments. Frequently, this means "joining" the department for the period of performance of the project and providing the project management expertise that is not a core capability of the department. In effect, "have PM skills, will travel."

• Provide a venue, staffing, tools and methodology, and the means to manage a portfolio of projects. Portfolio, used in this context, means multiple projects that share some common attributes or are correlated by the interdependency of one or more components. Interdependent components may mean that the projects all share a common resource pool, use a common tool set such as a test laboratory, or have interdependent schedules for tasks and milestones.

Perils and Pearls

Although there are many good reasons for creating a PMO, there are, as you would imagine, many problems that come with them. It's a classic case of evaluating benefit and cost, and avoiding risks to critical success factors. These three elements, BENEFIT, COST, and RISK have to be in balance to have a successful PMO. There are pearls in the benefits and perils in the risks.

Benefits Are Pearls

Consider a balance sheet for the project office as illustrated in Exhibit 2. On the benefit side, we find:

• Professionalism, organizational competence, and capability maturity for doing projects in the business. This means better performance on assigned tasks.

• Reuse of institutional knowledge and investment in future projects. This means lower costs going forward.

• Mitigation of risks and avoidance of mistakes made earlier when costs are less.

• Improved resource allocation across projects and within portfolios.

• Strategic planning deployed to project planning, inferring greater value of projects to the business.

• Department access to expertise greater than would be otherwise available.

Exhibit 1. The Project Management Office

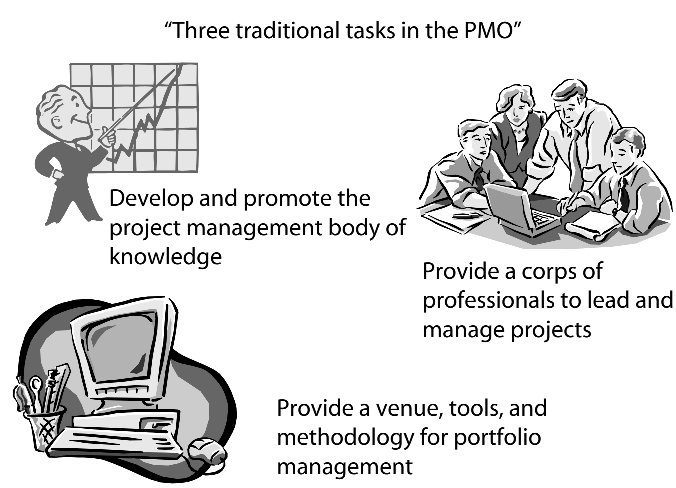


Exhibit 2. Project Balance Sheet

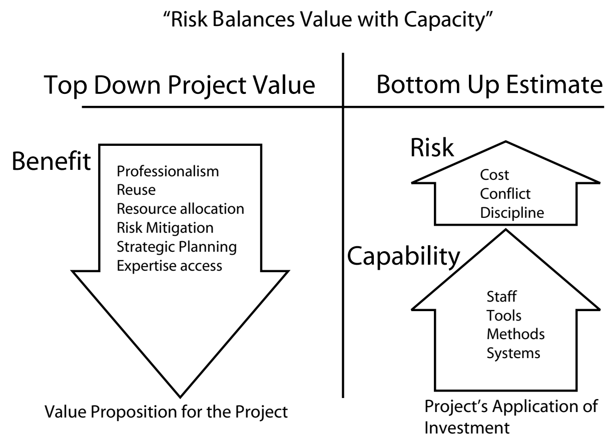
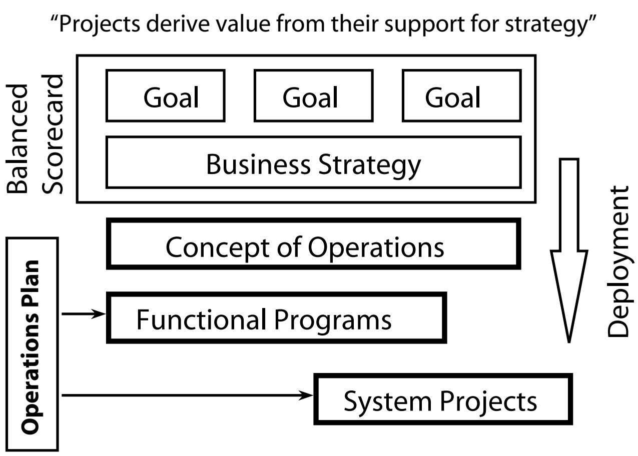


Exhibit 3. Value Chain for Projects



Costs and Risks Are Perils

Balancing the benefits are the capabilities, which require investment, and the risks, which may be perilous. On the right side of the balance sheet under capabilities we find:

- Staff, training, tools, facilities, and management for a professional corps of project managers
- Methods and process for doing projects successfully; in effect, the body of knowledge on how-to
- Systems to support planning, designing, developing, and delivering outcomes

Also on the right side of the PMO balance sheet are the risks, the perils to success.

- Costs may outweigh benefits. In short, does the project office pay its way?
- Organizational conflict. Matrix management introduces "purposeful conflict." Can the business successfully handle this conflict?
- Lack of discipline. Project methodology is a discipline and requires discipline. Will the business impose discipline and will it be sustained in the face of deadlines and operational pressures?
- Career impacts. Careers for PMO participants are not "core" to the business. How well does the business employ PMO professionals going forward?

In our PMO, we found a mixed bag of both our pearls and perils. Explaining what there were and how we managed them is the subject of the balance of this paper.

Making the PMO Pay-Off

Value Chain for Projects

Project Management Offices are valuable because projects are valuable. Projects derive value from their support to business goals. This principle is shown in Exhibit 3. There we see the general deployment of goals into projects.

- Goals are "destinations," and the arrival at a destination is measurable, as is progress along the way. Goals are expressed in dollars and goals are expressed functionally. A well-run business has a "balanced scorecard" of goals falling into the general categories of financial performance, customer relationships, organizational learning and innovation, and internal excellence. Routinely in many businesses there are a set of financial goals like revenue, profit, return on capital, cash management, and the others. But a scorecard of goals is more balanced and representative of all the success factors when functional goals are included and given weight comparable to the financial goals. Functional goals include customer satisfaction, market share, employee development and satisfaction, new product development, and customer delivery and service.
- Goals are achieved with strategy. Strategy is the pathway to goals and is made of the strategic actions and activities necessary to get to the destination. Strategy requires process, resources, tools and systems to support process, staff to carry out the activities, and a means to measure progress. For instance, a goal may be to be a market leader in a particular product line. The strategy may be to introduce new products to the market every year, yet not cannibalize products still in a profitable phase of their life cycle. This strategy requires a sophisticated program in new product development.
- Programs, as the word is used in this paper, are ongoing operational activities necessary to sustain the business. Collectively, programs implement strategy; the business is the integrated sum of its programs. Programs have five attributes: the roles or functions of its participants; the information they need to do their job; the process they follow in the program; the systems needed to provide the information or enable the process; and the measures of success for the program.
- Projects implement programs. Projects are one-time non-recurring inter-dependent tasks that are planned and executed as an entity to deliver some outcome. For our purposes, projects deliver

programs, or they deliver the products of programs, such as a new product development, or a new facility, or a new information system. As such, project value is directly traceable to business goals. Thus, the value of a project is directly proportional to the importance of the goal and the degree to which goal achievement depends on the project.

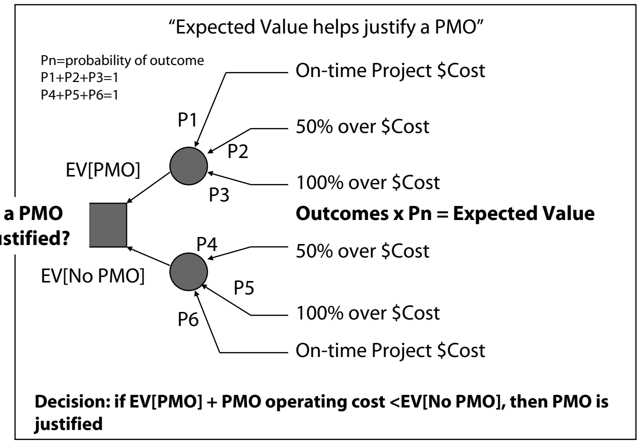
PMO Expected Value

With projects tied directly to goals, how hard can it be to justify a PMO? Sometimes it's harder than you might think. One approach is to evaluate the Expected Monetary Value (EMV) of having a project office. EMV is the dollar value of an outcome weighted by the probability that the outcome will occur. Decision trees are convenient for displaying and organizing the choices and evaluating the outcomes. They are good analytical tools for decision-making when the decision elements are discreet and relatively few. Exhibit 4 provides a simple tree example for the EMV of a project office decision. There we see a decision block, shown as a square, which is fed by two expected values: one for the PMO and one without a PMO. The circle is point of calculation. The sum of all probabilities feeding a circle must sum to one, representing the fact that all possibilities are accounted for. The outcomes on each branch, weighted by the probability assigned to that branch, is the expected value of that branch. To construct a tree in this way and calculate the EMV a few parameters need to be known. If they are not known then estimating them is the first task of the analysis. Using a tree like that in Exhibit 4 requires that the decision question be thought of in terms of discreet outcomes that might happen, what the value of those outcomes might be, and what the chances are that such an event will happen. In the case of the project office, the decision logic begins by having one or not. Although a set of example outcomes are shown in Exhibit 4, in point of fact there are many outcomes that could impact the need for a project office. The tree could be made much more complex to take these other factors into consideration. In the final decision, the incremental costs of the project office are compared with the difference between the EMV of the branches on the tree. To make a decision, a decision policy is needed; usually the policy is to pick the outcome of least cost or least schedule, but other factors may be included. If the *decision policy* of your organization is to minimize cost, and the incremental cost of facilities, permanent staff, administration, and outside services of the PMO is less than the difference in the EMVs, then your decision is made and the PMO is justified.

Pearls From Success

Now, apart from avoiding the perils of incremental costs, what are the pearls in having a PMO? One that was important to us was solving this dilemma: our cost managers and our benefit managers are not the same person. Is this important? It turned out to be very important. In fact, we soon realized that unless a rigorous effort were made to ensure that deliverables were applied operationally as intended, there really was no way to account for cost recovery in the benefit stream. In other words,

Exhibit 4. PMO Expected Value



ambiguities happen and business evolves. Is it always possible to measure the benefits that come from having done the project? The answer is: it depends. In fact it depends greatly on having a PMO. After all, during the course of the project there will be changes in markets, customers, and other business factors. Our PMO is the common venue of benefit managers and cost managers. In this setting, the project manager and executive sponsor "integrate" or "coordinate" cost and benefit. Meeting together in a structured PMO environment facilitates development of practical plans to role the deliverable into the business operationally, such that if used as intended there will be benefits to the business and recovery of the investment.

Matrix Management

An Organizational Dilemma

Matrix management is every project office's organizational dilemma. After all, projects are temporary. They begin and they end. As such, their management and organizational structures are temporary. Projects draw resources from the "permanent" and perpetual organization. If the project is not a vertically integrated unit, then the project staff also retains membership in a permanent organization. This arrangement is called a matrix. In most cases, this means having two bosses, and having two sets of goals: the project goals and the organizational goals. In fact, matrices introduce "purposeful conflict." "Purposeful conflict" is a check-and-balance system between the business and project. Clearly, if conflict resolution mechanisms are not in place and mature, matrix issues can be a significant peril. Matrix issues are by and large human resource issues. As such, the factors are not entirely objective.

Finding a Matrix Pearl

Two broad strategies are available for project management office organizational structure. One is to have a small permanent staff

Exhibit 5. Summary and Conclusion

"There are pearls and perils in a PMO"

- Pearls
  - Complex portfolio planning
  - Risk evaluation at strategy level
  - Cost & benefit alignment
  - Opportunity for organizational development
- Perils
  - Incremental PMO costs threaten benefits
  - Conflict introduced
  - Careers impacted for assignees

and "matrix in" variable staff for project tasks, leaving the variable staff administratively assigned to their permanent office. A second strategy is to reassign project members from their home departments to the project office, moving their administrative supervision, such as salary reviews and career planning, to the project office. This latter approach creates the "vertically integrated" project office. Both approaches can work, but both can fail. Here are the problems that go with either strategy, though the degree of influence and importance may vary:

• Functional managers are not adequately trained in conflict resolution. As such, "purposeful conflict" cannot achieve the check-and-balance it is designed to do.

• Individual contributors are not trained to handle multiple bosses and competing organizational goals. This results in frustration and lost productivity.

• Both managers and individuals, and perhaps the business as a whole, do not credit work in the project office toward development and promotion in the permanent organization. Again, morale impacts productivity.

We set out to make a pearl from these perils. We made sure that the project experience was recognized in HR and in the ranks of functional management as a personal adder to the resume of our team members. We set these objectives in place for staff for which the project office was not their main career:

• Do not inadvertently separate the project staff member from the very function that made that person valuable. Make room in the plan for continuing development.

• Do not let the functional manager believe that this person is lost to their organization. Make substantive opportunities for managers to participate in the project.

• Train managers in conflict management so that "purposeful conflict" is understood to be a positive tool in business management.

• Add the project experience to the developmental activities "approved in HR."

• Align compensation with the project contribution; avoid compensation losers when commissioned or variable pay staff join the project team.

Portfolio Planning

Getting the Flow From the Strategic Plan

Goals, strategies, programs, and projects: that is the flow that brings real value to projects. The ability to manage a portfolio of projects valuable to the business is one the drivers behind the move into project offices. But the peril is often resource constraints and conflicts, conflicting critical paths, and potentially conflicting risks. Thinking through this problem led us to the Project Balance Sheet. The Project Balance Sheet is a real pearl. I have used it in this paper to identify the balance needed to justify the project office. The concept is straightforward: the left side of the balance sheet is where the business leaders and executive sponsor establish the business needs and requirements. These needs often exceed project capability and resources. To meet the need, in spite of project estimates, a degree of risk must be and accepted. Risk balances the equation between business needs and imperatives on the one-side and project capabilities and resources on the other side.

Balancing the Portfolio

Of course, the balance sheet can be applied to a portfolio as well as an individual project. As a portfolio management tool, the balance sheet integrates the projects of strategic importance on the left side and provides a way to judge the risks in meeting the entire portfolio. Presented this way, the risk tolerance of the organization can be worked concurrently with its decision policy to make choices. Often in a portfolio, the number of outcomes and their probabilities could overwhelm decision tree analysis. Thus, the Monte Carlo technique is used instead. The advantage of the Monte Carlo tool is that it works with continuous probability distributions. As such, it can handle a more complex risk space.

The PMO provides a good platform for balance sheet analysis. The tools required for quantitative analysis can be concentrated in a few analysts who can be allocated to many projects individually was well as the portfolio of projects. Developing this skill not only strengthens the project office, but also strengthens strategic planning.

Summary and Conclusion

Exhibit 5 summarizes our conclusions. Though there are perils to be avoided, there are many pearls to be harvested from a successful project office. Project offices make possible complex portfolio planning and execution, risk evaluation at the strategic level, alignment of benefit and cost, and opportunity for employee and manager development. Organizational maturity in conflict management and resource allocation is promoted. Though there is an incremental cost, more often than not, the incremental cost is more than paid back by the improved performance of projects. What may be more problematic is the "purposeful conflict" introduced on account of matrix assignments into the PMO. The impact to the career of those assigned, to say nothing of impact to compensation, is not to be taken lightly.

Nevertheless, my experience was very rewarding and positive. The project office was essential to the successful implementation of our portfolio. In spite of perils, we found the pearls and we made it work for us.