

Project Portfolio Management and the PMO

By Gerald I. Kendall, PMP

Introduction

Portfolio Management must be at the heart of any effort to improve project management results. A Project Management Office (PMO) *without* an excellent portfolio management process is like a body with a diseased heart. Sooner rather than later, the body demands more resources than the heart can give and the body succumbs.

Why do I advise executives in this way? There are two reasons. First, many organizations (around 100% of the ones that I consult with), have activated far too many projects. The result is that many projects do not complete when the executives badly need the results. Secondly, even when some projects do finish on time, they fail to meet the organization's goals.

From my experience, the survival of the PMO, long term, depends upon the level of perceived help in achieving organization goals. In the year 2000 alone, 40 CEOs of the Fortune 200 were fired! In most cases, projects did not deliver results quickly enough to satisfy the board of directors. In this article, I explain the beginning steps of a Portfolio Management process to solve these huge problems.

Step 1 – Determine the Organization's Project Capacity

Why are there so many project management conflicts over resources and priorities? Projects typically originate either from functional areas, from I.T. or from corporate functions such as finance or senior management. Simply put, there is no single originating source and prioritization system. But this, by itself, does not explain why the huge conflicts exist.

Most organizations have not determined, explicitly, what their capacity is for active projects. As a result, everyone with authority in any functional area or at corporate or I.T. activates new projects, *irrespective* of the capacity of the organization to do the work. No wonder project managers are frequently fighting for resources!

One essential step that must be part of any Portfolio Management process is to establish and educate the executives on the finite project capacity of their organization. Once set, the capacity must be adhered to through a governance process that will only activate new projects according to this capacity.

To set capacity, the organization must identify their *strategic* resource – the one resource pool which, more than any other, determines how many projects the organization can complete in a year. In actual companies, I have found that this step is not difficult at all to implement, since most people in organizations already have a lot of intuition about which resource this is. This is where projects get stuck most frequently, for the longest periods of time.

For example, consider TESSCO Technologies Inc, a \$300 million distributor in the wireless industry, based in Hunt Valley, Maryland. With logistics centers in Maryland and

Nevada operating 24/7 and offerings of over 34,000 items, the demand on the I.T. resources is constant. Therefore, the senior executives and CEO agreed almost immediately that the strategic resource was the Technology Services Group. This group is involved in many of the internal improvement projects, the web site, all of the transaction processing systems (new and legacy) as well as many customer and supplier interfaces.

How many projects can TESSCO handle at one time? Prior to answering this question, the company had over 200 projects initiated. When the Technology Services Group was formally acknowledged as the strategic resource, the capacity was set differently. CEO Robert B. Barnhill, Jr. states, “current performance has been greatly aided by the process. Today, we are focused on only 15 top priority projects, with complete cross-functional input and requirements definition.”

To help answer the capacity question, you must determine at what capacity level the resource starts to engage in “bad multitasking”. Bad multitasking occurs when, by taking on an additional project, the resource extends the duration of both projects. Capacity is set correctly when bad multitasking approaches zero.

Within some organizations, the strategic resource is multitasked on so many projects, there are often disagreements as to which project they should work on. For example, consider Elbit Systems, a large manufacturer of defense systems with 4,400 employees, based in Haifa, Israel. Some projects last for years. Engineers who do design work at the beginning of a project are often called on many months later, during integration testing, to resolve complex problems. The very busy engineers would sometimes point the finger at other groups, claiming that the problem belonged elsewhere, not in their components. The integration testing could go on for weeks, as arguments would not be settled over which engineering group owned an integration testing failure. The busiest engineers would say “Prove to me that it is my problem”.

To resolve this problem, project management capacity was established by setting the policy that only one or two projects would be allowed to move through integration at one time. The engineers could no longer make the choice of which projects they worked on. They had to put priority on the one active project until integration testing was complete.

Step 2 Develop the Portfolio, Linked to Goals and the Strategic Resource

With the strategic resource identified, the next logical step is to determine:

- what projects exist
- if current projects are overloading the strategic resource
- the likelihood of meeting the organization’s goals with the existing portfolio

The simplest way to perform this step is using a spreadsheet or table, listing the active projects across an organization, the utilization of the strategic resource per week, the project status and the contribution of that project to the organization goal(s). See figure 1 below.

January 2, 2003		Initial Project Portfolio					
Project	Project Manager	Status (Green, Yellow, Red)	Net Present Value (millions)	Strategic Resource Utilization (wks/mth)	NPV per Strategic Resource week	Primary Strategic Objective	Comments / Action Taken
Project 1							
Project 2							
Project 3							
Project 4							
Project 5							

Figure 1 – Developing the Project Portfolio

In a recent workshop with a division of British American Tobacco (BAT), the operations group had an excellent start on this process (better than most companies). Most organizations that I work with cannot produce a single list of all projects. However, BAT had comprehensive information about their functional area's projects, names of sponsors and the status of all projects. The problem that I've seen in most such lists is that the information does not quantify the utilization of the strategic resource, since this resource had never been explicitly identified before. This is new information that the project managers can easily provide, once they are told who the strategic resource is. For example, at TESSCO, knowing that the strategic resource was the Technology Services Group, they could state, for every project, how many weeks this group was expected to be utilized. At BAT, the strategic resource was the one project manager responsible for the 30 active projects. The conclusion of the group was that there were too many active projects. However, their project portfolio was missing some of the vital information described above to help them make decisions. As of the time of writing this article, the team was actively gathering the missing information so that they could move on to step 2.

Three major challenges to overcome in executing this step are:

1. **Lack of quantified information, relative to organization goals.** For example, projects are often authorized with vague accountability, such as "improving customer service" or "enhancing an existing system". But if the project sponsor has no idea, or is unwilling to indicate what the bottom line effect of the project will be, how can anyone say with a straight face that the project will have *any* tangible benefit? At TESSCO, for example, everyone who submits a new project for approval by the governance board is expected to have rigorous enough requirements definition to identify the impact of the project on Throughput, Operating Expense and Investment.
2. **Lack of meaningful project status.** From an executive's point of view, status means green, yellow or red. There are many different detailed definitions of these conditions. One organization, Arlington County, Virginia, uses such a system to monitor progress on the projects selected by their Technology Leadership Committee. This county has a vision they are implementing for eGovernment, to enable residents and visitors to engage in county business and activities over the web. Out of the more than 65 I.T. projects proposed for this vision, 11 projects

were ultimately funded. Therefore, it is very important to county leadership to monitor and understand the status of these projects. Arlington County defines project status for their leadership as follows:

- “Red” projects have one or more of the following characteristics: high-severity risks that are currently being realized, substantial overspending, or substantial schedule delay that results in either unrealized benefits or cost overruns, or are otherwise failing to fulfill their stated objectives.
 - “Yellow” projects have one or more of the following characteristics: insufficiently detailed project task plan, insufficiently detailed spending plan, insufficiently detailed risk management plan, significant areas of potential risk, realization of moderate-level risks, unclear statement of objectives, scope, and/or outcomes, or inadequate resources to achieve objectives.
 - “Green” projects have clearly defined objectives and scope, adequate controls in place to monitor progress against the task plan and the spending plan. The risks to the success of the project have been identified and are pro-actively being mitigated. The project is substantially on track to deliver the expected results.
3. **Lack of knowledge of some existing projects.** Often, some functional areas have active projects that they are devoting resources to, which are not on the PMO’s radar screen. As a result, project managers trying to deliver on cross-functional projects run into resistance getting resources assigned to them. Comprehensive knowledge of *all* projects is essential to set priorities across functional boundaries.

Here, the PMO can help significantly, by finding and maintaining this information, and keeping senior management informed and involved. Senior management uses this information to determine to what extent the strategic resource is overloaded, and therefore how many projects need to be deactivated. Therefore, this step becomes the raw material for decision-making in Step 3.

Step 3 Deactivate / Kill Many Projects

It is a vital truth that, when you load the organization beyond its project capacity, the longer will be the duration of each project and the fewer will be the # of projects completed. This step was recognized as so vital, that at an Alcan Aluminum division in Quebec that I worked with, the VP, Yvon D’Anjou, initially deactivated 50% of the projects. Many of the projects were improvement initiatives, such as Six Sigma, Theory of Constraints, Lean, Total Productive Maintenance, ISO, Quality, etc. Many of the projects also involved new or expanded I.T. programs.

I had worked with the managers and executives to facilitate a strategic plan to meet their very aggressive divisional goals. During this facilitation, we took some time to understand the impact of having too many active projects, and how this endangered meeting their goals. The strategic plan identified new projects, but also allowed all existing projects to be evaluated against the strategic goals. It became obvious that some projects were just not going to contribute

at all to making more money for the company. Other projects, while having some merit, had less leverage based on how much resource was required in relation to the benefits.

The VP gathered the list of all projects from all the managers, and worked with the management team to evaluate and decide on which projects to cut or deactivate. When I asked this VP how the idea worked, he indicated it was an excellent idea, but they did not deactivate enough. At TESSCO, over 70% of projects were deactivated. This gives you some idea of the magnitude of the problem. *In my experience, the practice of allowing too many active projects has degraded the rate of project flow by at least 50%!*

The question that this step raises is which projects to deactivate, and which to kill entirely. This question must be answered by the governance board – typically the senior executives – based on the ability of these projects to contribute to the organization’s goals. One technique that I use in helping executives make these decisions is to identify where the organization’s biggest constraint lies. For example, see figure 2.

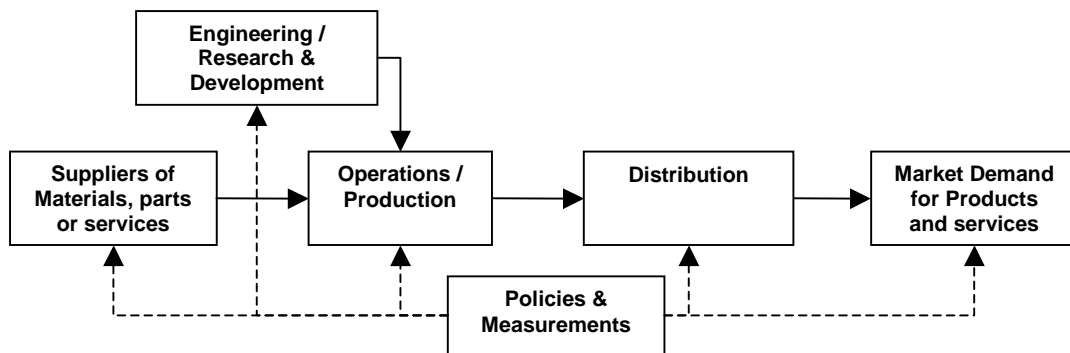


Figure 2 – The Organization’s Constraint & Primary Project Focus

If a company has excess production capacity and needs more market demand in order to improve, where should many of the active projects focus? Most people would agree that project efforts should be prioritized to help the company gain more market demand and more sales. But where do we see most of the projects focused, in reality? The answer is often on internal improvements that will have a zero impact on sales.

Assuming that you may pick only one box above as your organization’s constraint, you can now relate the project portfolio, which you identified in Step 2 above, to the constraint. Suddenly, it becomes much easier to pick projects to deactivate.

Step 4 Implement a Governance Process to Drive Wise Project Decisions

Since every organization has limited resources, and executives are challenged to improve quickly enough to keep their jobs, executives must identify and agree on which projects will provide the biggest leverage to help them.

This means, if we extend the above example, that if the organization has wasted production capacity, every department in every functional area in that organization should be doing everything they can to support the decision to improve sales. In production, for example, this might mean adding manufacturing flexibility and foregoing efficiency, or adding quality before the product gets out the door. In finance, it might mean easing up on credit approvals. In

engineering, it might mean taking actions to get some new products more quickly into and through production. There are NO predetermined answers.

The implication of this example is that anyone who wants to implement a powerful and wise Portfolio Management process must do so with a connection to the organization's strategy and to its current situation, not in I.T. or in Engineering or Manufacturing, but across the entire supply chain. They must know where the supply chain's and hence the organization's biggest leverage point is. Finally, they must have some idea of what kinds of projects will help the organization and what projects will be utterly useless.

Project Portfolio Managers and Project Managers must learn how to make recommendations that make sense to executives. To do so, they must learn a lot more about strategy and about how to deliver criticism without getting the reaction of "shooting the messenger". A "wise" Governance process encourages executives to send poorly defined or vague projects back to the drawing board.

At TESSCO, for example, where earnings per share last quarter jumped to 25 cents from 6 cents in the same quarter a year ago, the CEO put all 40 of the organization's leaders through a 4 day learning process, designed to create a deeper understanding of the organization's processes and their interactions. The sessions utilized a combination of facilitation and a video series, covering operations, finance and measurements, engineering and project management, distribution, marketing, sales, managing people and strategy. While one attendee described the experience as comparable to "drinking from a fire hose for 4 days", the net effect was twofold - the foundation for holistic thinking was laid and as a result, the number of projects was reduced.

Subsequent to these sessions, the CEO facilitated a 2-day meeting with the leaders on how to better utilize the organization's strategic resource to meet the goals of TESSCO. During this meeting, the poor requirements definition was highlighted as a major waste of the strategic resource. The discussion that ensued helped to educate all leaders on what kinds of initiatives would likely deliver on TESSCO's longer term goals. In the wireless industry, this deeper understanding, in combination with the revised, more rigorous governance process, is having another positive impact. TESSCO's revenue also grew by 15% over the same quarter last year, and 12% over last quarter. Governing wisely works!

Conclusion

This year, some Project Management Offices (PMOs) will earn their organization's top honor. Through establishing a powerful portfolio management process, the executives will recognize their PMO for actually contributing, tangibly, to corporate goals and profits. What impact will a PMO have, if it improves project management processes on the *wrong* projects? A PMO that does not take action on the clogged arteries of an overworked project management body will find its message falling on deaf ears. In organizations where portfolio management is implemented properly, the PMO becomes the real partner of the senior management team. Such a PMO deserves to be rewarded because they are not only smart relative to PM methodology, but wise relative to helping achieve the goals of the organization.

Gerald I. Kendall, PMP, Vice President TOC International, is the author of three books - *Advanced Project Portfolio Management and the PMO*, *Viable Vision* (to be published in late Spring 2004) and *Securing the Future*. He is the author of the chapter on Critical Chain in Dr. Harold Kerzner's text *Project Management, A System's Approach*, 8th edition. For further information on Theory of Constraints, see www.tocinternational.com. You may contact Mr. Kendall at Gerryikendall@cs.com.