November 2008

From Project Management to Project Portfolio Management:
Why the new process needs more than Excel

by Harvey A. Levine

From Project Management to Project Portfolio Management:

Why the new process needs more than Excel

by Harvey A. Levine

Mr. Harvey A. Levine, PMI Fellow, is a well-known project management (PM) author, consultant, and authority on the subjects of Project Portfolio Management (PPM), PM software, technology, earned value, and general PM practices. Harvey is Founder/ Principal with The Project Knowledge Group, a PM consultancy that specializes in building PM competencies and providing guidance, training and services related to PPM and PM software selection, evaluation & implementation. Mr. Levine is the author of three books: *Project Portfolio Management: A Practical Guide to Selecting Projects, Managing Portfolios, and Maximizing Benefits*; *Practical Project Management: Tips, Tactics, and Tools*; and *Project Management using Microcomputers*. Harvey can be contacted at halevine@earthlink.net.

EXECUTIVE SUMMARY

There is a paradigm shift in the management of projects as many firms, especially in the Information Systems and New Product Development disciplines, move from just managing projects to creating and managing portfolios of projects. This shift is bringing constructive change to the way that projects are selected, how they are managed, and how the firms are organized to bring direction, structure, and oversight to the processes.

Project Portfolio Management (PPM) has helped these firms to build portfolios of the most beneficial projects, increasing value, reducing resource demand, and assuring alignment with strategies. The new processes are enhanced by the availability of specialized computer-based systems that have been designed and optimized to address the issues of project selection and portfolio maintenance, and to communicate effectively with the Project Management Office (PMO), corporate executives, and other stakeholders, leading to vastly improved governance.

As corporations move to the new PPM governance model, there are some holdouts that are attempting to adopt the new methods while retaining old support systems. This paper provides an overview of PPM and an argument as to why spreadsheets and traditional project management tools cannot help to deliver the benefits of PPM and why specialized PPM systems offer vast advantages over the other methods.

It is no longer necessary to build a case for Project Portfolio Management. After a half-dozen years in the shadows and another half-dozen in the limelight, PPM has fully arrived as a valuable management methodology. Now, if we can only get people to let go of their inefficient and weakly-linked spreadsheets, and to take advantage of the many newer and effective systems that have been specifically designed to facilitate and enhance PPM.

Case histories abound, telling of successes in every conceivable industry and application, but especially in Information Technology (IT) and New Product Development (NPD). Books, webinars, and whitepapers are everywhere, and there are no longer any holdouts among the system developers, who have hurried to embrace this now popular environment. So what issue keeps surfacing - what is it that concerns us so, as to make this paper necessary?

It's an age-old situation. ***Too many organizations are attempting to adopt new technologies while retaining older ways of doing things.*** In the case of PPM, we see organizations attempting to expand their project lifecycle to embrace the "idea-to-benefit" manta of PPM. They are adopting structured methods to remove politics from project selection and to build portfolios that contain projects that are fully aligned with strategies, maximize benefits and ROI, consider and contain risk, and make the most efficient use of limited resources. They are improving methods, efficiencies and communications regarding the execution of projects within the portfolios.

What some of them are not doing is to look at their entire world, of people, processes, tools and culture, with an eye toward integration and modernization. You can put away your checkbooks. I'm not talking about major change or a great outlay of cash. But if you insist in hanging on to old conventions and old systems, you will lose out on much of what PPM has to offer.

In the next few pages, we briefly review some of the key elements and benefits of PPM, followed by guidance on processes and software that will help you join the PPM revolution.

WHAT DOES PPM BRING TO THE ENTERPRISE?

Primarily, PPM vastly expands the universe of project management. And it does this in multiple dimensions.

It expands the project lifecycle, covering the entire life span, from the identification of an idea, need or opportunity, through the development and execution of the project and through to the realization of benefits.

It expands the project community, to create a governance partnership between the Project Management Office (PMO) and the executive/operations side of the business.

It vastly reduces the potential for project failure, by placing greater discipline on project selection. Politics is removed from the process and is replaced by reason and order, involving this partnership of the PMO and a Governance (or Investment) Board.

PM is integrated with strategic initiatives, return on investment goals, and resource/capacity planning.

The performance of active projects is tracked and communicated to all stakeholders in ways that clearly display status and identify critical performance areas.

Here, briefly, are five important areas where PPM addresses traditional weaknesses and brings us closer to improving project performance and benefits.

The Expanded Lifecycle

The success of a project is influenced strongly by what comes before the project is executed. That influence goes back well before even the project planning phase, well before the approval stage, back as far as the original identification of an idea, a need, or an opportunity. How we deal with the collection of potential projects (ideas/needs/opportunities) is the key to achieving project success and the key to assuring that projects contribute to the health of the enterprise.

PPM provides the structure for this expanded lifecycle. PPM adds an entire pre-project set of processes, taking these proposed projects through a rational workflow by promoting improved and consistent business cases, by evaluating alignment with strategies, and by quantifying benefits to the business.
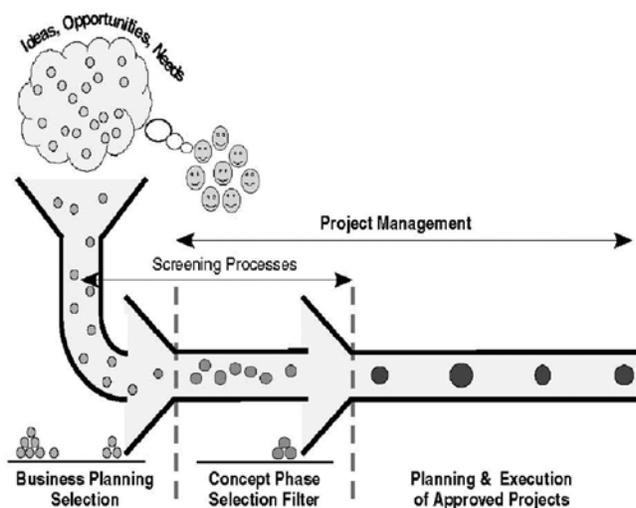
The Three Facets of PPM

For all project-oriented operations, there are at least two distinct phases: the Proposed Projects phase, and the Approved Projects phase. For many businesses, especially in the Information Technology area, there is a third phase: the Applications/Service Portfolio.
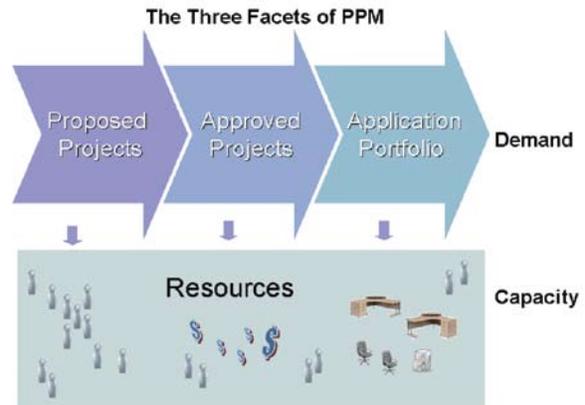
It is extremely important that these three facets be integrated into a single system. First, there is continuity between the three phases – a normal sequence from proposal, through project execution and on to applications and services.

The Three Facets of PPM

More importantly, each of these facets draws upon a common set of resources, which can include people, funding, and facilities. Through integration, management can make intelligent decisions regarding the allocation of limited resources among the three demand groups.

## The New PPM Triple Constraint

For the past five decades – the period recognized as Modern Project Management, the focus for project success has been on the triple constraint of money, time, and content. Success was described as bringing a project in on time, within budget, and with delivery of full scope.

Unfortunately, executives have struggled with the realization that even when projects met these criteria, they often failed to adequately contribute to the success of the business. While the Project Management Office (PMO) was doing a meritorious job in executing the projects, senior management could not adequately answer questions about why these projects were chosen and how they benefitted the enterprise.

It was time to change the focus and to recognize a revised and expanded triple constraint.

Looking at the PPM triple constraint, you can see that there are now multiple levels of planning and measurement. For the portfolio level, there is a shift in focus, a change in the types of data, measurement and decision criteria, and there are new players involved in governance.

The Shifting Focus in Project Portfolio Management
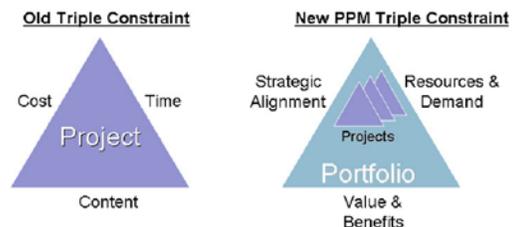
Managing the Portfolio

A common complaint, especially among IT executives, is the lack of effective oversight of current projects. Contributing to this deficiency are lack of consistency in project measurements and reporting, lack of standards for reporting poor performance, and weaknesses in the communication methods used. An important element of PPM includes processes and reporting practices to address these deficiencies. Early adapters of PPM have reported outstanding improvements in project performance and increased efficiencies in resource allocations. Poor performing projects are discovered earlier, while there is time to take corrective action, or to terminate such projects earlier in the investment cycle, releasing scarce resources for more beneficial assignments. The increased efficiencies are easily justifying the investment in PPM and executives are pleased with the vast improvement of information needed to make important and timely decisions about project investments.

Portfolio Governance

When the focus is entirely on projects, and the old triple constraint, the responsibility for projects lies within the Project Management Office (PMO). The PMO will maintain a robust automated system to process data relative to schedule, resources and costs, reporting periodically to the project stakeholders. These systems and reports are entirely lacking in the very important information relative to strategic alignment and project benefits. Furthermore, they rarely consider the impacts of proposed projects. An even greater shortcoming is the inability of these systems and reports to talk to executives on the operations side of the business. There is a disconnect between projects and operations. PPM bridges this gap, bringing executives into the process, via a governance or investment board. Improved software for portfolio management addresses the issues of alignment, value, ROI, prioritization of proposed projects, and allocation of scarce resources. Furthermore, specialized PPM systems provide vastly improved communication for executives as well as the PMO.

PPM as a Bridge

Operations	Projects
Strategies	Schedule/Time
Objectives/Goals	Project Cost
Business Performance	Project Performance
Stockholder Satisfaction	Stakeholder Satisfaction
Project Selection & Mix	Scope/Change Control
Resource Availability	Resource Utilization
Cash Flow/income	Cash Usage

PROCESS FOR PORTFOLIO MANAGEMENT

Expanding from PM to PPM involves the implementation of several new processes (or creating an integrated structure for previously conjured-up processes). Here are some of the new things that you will be doing:

- Top-down planning. The ability to build high-level plans and resource demand pictures

- Alignment with strategic plans and enterprise architecture

- Prioritization and ranking of candidate projects

- Computation of benefits, risks, and ROI

- Ability to address income (or cost savings) as well as costs

- What-if analysis (effect of adding/removing projects on resources)

- Executive-level display of data used to support the selection of projects

- Executive-level display of project health data and "by-exception" reporting of poorly performing projects.

These are all processes that are usually ignored within the normal Project Management operation. Traditional PM software does not support these functions. If you are still using spreadsheets for project management, you will need to develop new spreadsheet models. But this is not really necessary. There are other, more practical, options. If you are currently combining traditional PM software for project work, with spreadsheets for the application/services portfolio, resource management and financial management, you will have to add functionality and assure that the integration is smooth and seamless. Again, there are better ways.

TAKING THE LEAP

If you're reading this you are either thinking about joining the PPM revolution, or have already taken the first steps. You would like to plot a smooth course toward the goal of an enterprise-wide application of PPM, supported by informed people, practical and effective processes, and efficient tools. Here are a few suggestions, based on feedback from the pioneers who have paved the way.

First and foremost, change must have champions. And at least some of this leadership must come from the top. Executive buy-in is essential. Senior executives must clearly state that PPM is a way of life in the firm and that supporting PPM is a condition of employment.

How do you get this executive buy-in? You do it by building a business case for the benefits from PPM. The business case should be comprehensive and truthful. It should look at the awesome potential from implementing PPM, recognizing that there are necessary adjustments to culture & organization, to processes and to support systems. This should not be a difficult task because the benefits from bringing structure and intelligence to the selection of projects and the maintenance of the portfolio are clear and supportable by industry evidence.

That does not mean that the implementation must occur all at once across the enterprise. On the contrary, it is best to start small, perhaps with a pilot implementation, directed by some of the less change-resistant managers. The success of the pilot will help the sale to the rest of the organization and the leaders of that success will serve as the champions and mentors as the methodology spreads.

Obviously, there are several areas of change as we move from basic project management to the wider scope and enlarged involvement of the stakeholder community. We have new processes, on top of modified practices. There are changes in roles and responsibilities. And there must be changes in the management culture as these roles change.

As we migrate from traditional modern Project Management (PM) to Project Portfolio Management (PPM) we will implement these changes, in management culture, organization and roles, and management processes, taking small but structured steps that lead to a growing level of maturity in project portfolio management. Many of the changes will lead to potential improvement in communication – especially in the communication of information that will assist management decision-making, as it applies to projects. Whether this potential is realized will depend, to a large degree, on how the organization uses its project management systems.

Early in this change process, the prudent PPM organization will investigate and acquire the best systems to support their PPM initiative. It is a grave mistake to think that, because the migration from PM to PPM is so natural and easy, the new processes can be adequately supported by old tools.

Another common mistake is to delay the move to PPM-specific software until the firm has reached some specified level of PPM Maturity. Maturing in PPM can be significantly aided by the implementation of a well-integrated, robust, PPM-specific tool set. I can say this because a well-designed system will incorporate the best practices in the industry. These will be presented to the user, within a role based environment pre-defined to serve their needs, as a set of user-configurable templates.

UNLEASH THE POWER OF SPECIALIZED SYSTEMS

The purpose of this paper is to promote the successful implementation of project portfolio management. And software is an essential part of the process. Frankly, I'm disappointed to learn of the reluctance of some firms to upgrade their tool set to optimize the PPM experience. To fall back on an old expression, this is penny wise and pound foolish. I can't see how working with spreadsheets or even basic project management software will meet the needs of a practical, PPM solution, supporting the expanded lifecycle and the wider span of communication.

Spreadsheets are subject to significant flaws as the "user" designs the data structure and flow and computational regimens. Mistakes are the rule. There is no audit trail or guarantee of consistency between worksheets. I've personally seen too many examples where the work schedule changed and the resource and cost plans remained the same. Much time is lost juggling the data by hand to get it synchronized. And reputations are damaged explaining the disconnects. There needs to be a consistent story across all reporting documents.

In moving to PPM, we have much to gain from the improved processes and governance. Much of this may be lost if the project, portfolio, and resource information is scattered and inconsistent. All of this information must be tightly integrated and seamless. Changes to any part of the data must feed to all associated measurement and reporting areas through pre-defined and inviolate links. Formatting of reports is also important. PPM benefits from highly graphical presentations of project, portfolio, and resource information, featuring alarms and highlighting that directs the stakeholders to out-of-tolerance conditions.

Using spreadsheets for PPM is inappropriate and considerably less effective than specialized PPM software. It gets in the way of integration and standardization. Developing internal spreadsheets is not free. Much better solutions are available and at lower implementation costs.

Traditional project management software is a step up, but tends not to support the full lifecycle with full integration. These systems are optimized for current projects and are not designed for dealing with a hopper of proposed projects. They generally lack the ability to consider ROI and benefits. They can handle costs, but not cost savings or income.

Traditional PM software is optimized to support the old "project" triple constraint. It primarily addresses time, cost, and scope. If you want to support the enlarged PPM triple constraint as well, you will need systems that promote validation of alignment with strategies, evaluation of benefits and risk, optimization of limited resources on proposed as well as approved projects, and prioritization of pending and active work. Do your current systems do this, or can you efficiently add such capabilities to what you have now?

Another shortcoming of traditional PM software is that it is aimed at the people directly involved in projects. Senior managers and people on the operations side of the business often complain that they do not benefit from the product of such systems. What I have especially liked about PPM, and systems designed to support PPM, is that the practices and systems help to bridge the gap between the projects side and the operations side of the enterprise. They help the operations people to reach the decisions that they regularly make by providing information about pending and current projects in terms that they understand and can use.

Specialized project portfolio software adds all of the functions that have been described here, as part of the expanded lifecycle. It provides support for structured selection of projects for the portfolio and allocation to resources based on knowledge and prioritization rather than politics. Structure and integration are earmarks of a robust PPM system, wherein the PPM process serves as a hub for all of the project-oriented business activities.

If you scroll back to earlier parts of this paper, you'll see a diagram and discussion about the Three Facets of PPM. Here we note the importance of recognizing and managing demand from three phases of work: Proposed Projects, Approved Projects, and the Application/Service Portfolio. In addition, there will be demands on the resource pool outside of projects and applications. For this reason, it is essential that you employ processes and systems that are specialized for Demand Management.

Knowledgeable decisions regarding acceptance and prioritization of project-based and independent work items calls for robust, interactive systems that contain an up-to-date inventory of work requests, active work, available resources and unutilized resource time. The demand/capacity data must be integrated with any other resource, project and service request modules, so that the information is seamless, timely, and consistent.

Scrolling back one more paragraph, you'll see the diagram and discussion relative to the Expanded Lifecycle. This reflects the Idea-to-Launch concept that is the core of NPD applications and the basis for a structured process for selecting projects for all applications. A popular component of this process is the Stage-Gate® technique, developed by Dr. Robert Cooper. Again, robust PPM solutions, that incorporate support for stages and gates, get you up and running, using industry best practices, negating the necessity to create your own software solutions.

Here are some other characteristics to look for:

- **The ability to build various PPM screens and reports** to suit your particular needs and style without having to resort to programming. Consider a solution where configuration and tailoring is menu-driven, allowing non-technical users to create forms, pages, dashboards and workflows that map your processes.

- **Context-sensitive end-user help tools** that provide direction on how to accomplish specific tasks in the system. End users are critical to the success of any PPM deployment, so make sure the approach to training them is integrated into the software.

- **Support for PPM-specific functions**, such as project selection and prioritization. The software should allow you to quantify and qualify project aspects in respect to alignment with strategies, cost/benefits, risks, and impact on resources. It should help with the evaluation of balance between such attributes and aid in the pragmatic ranking of candidate projects. It should provide dashboard-style displays depicting project health and highlighting areas needing attention.

- **Out-of-the-box content** in the form of best-practices methodologies to help you get up and running more quickly. Look for pre-configured templates, dashboards and reports mapped to standards such as PMBOK, PRINCE2, Stage-Gate and more.

I can understand the reluctance to move away from your current computer applications. You have to justify a new purchase when you've already paid for what you have. You have to learn new processes and screens. But what if the new systems made the processes so much simpler and more efficient that the costs (generally small) are easily justified? Certainly, it will not be "free" even if you try to stay with your current scheduling systems and spreadsheets. You'll have to make additions and changes and integrate several new functions.

What if the new software was so intuitive so as to streamline the learning curve? Moving to a PPM environment will require new roles, new processes, and new software support. You will need to develop support for the new processes. Specialized PPM software will make this migration much easier. By incorporating all of the needed capabilities, in a seamless package, and by incorporating established best practices into the various modules, the proper tool set will help to guide you to a mature PPM capability. Sunk costs are just that – they are in the past. You can't justify staying with obsolete systems just because they are paid for.

If you truly believe (as I do) that building a PPM capability will have a big pay-off for your business, then investing in software that will help you to build that capability is easy to justify. Updating your system of tools, with a robust PPM engine at the core of a full-featured, integrated system, in support of enhanced PPM practices, enthusiastically embraced and promoted by an enlightened executive, is the ticket to success.

PPM as a Hub
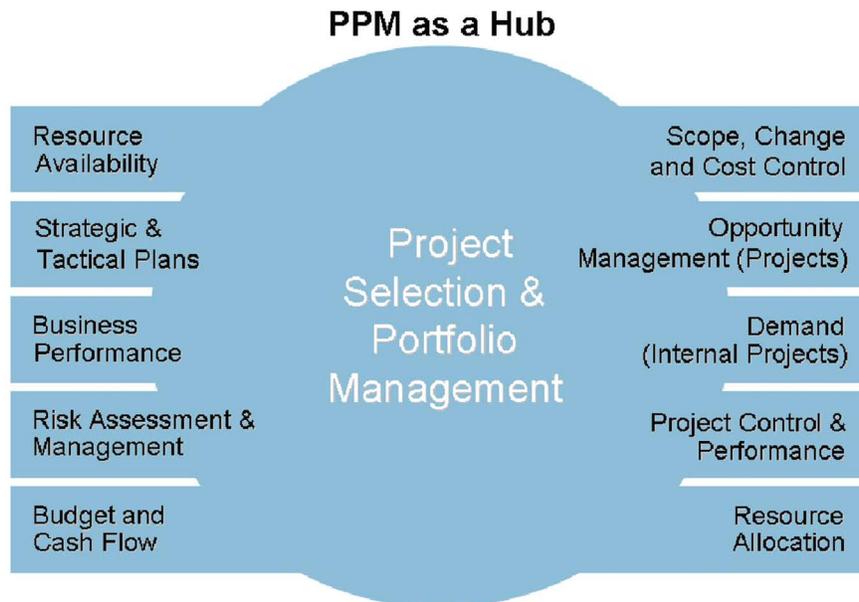
"Portfolio management is a process to ensure that your organization or department spends its scarce resources on the work that is of the most value." http://www.portfoliostep.com/300 Project Portfolio Management is crucial in identifying potential setbacks the may occur in individual projects and determining a comparative value for each project. The surveys from the Project Management Institute and KPMG depicts the importance of successful projects to strategic commercial goals, highlighting the role of Project Portfolio Management (PPM) in delivering those projects. This article digs a little deeper into PPM and putting together project management and project portfolio management that would ultimately mean doing the right projects right.