Chapter 6

Thinking Local, Going Social

Project Teams Can Thrive Using Microsoft Project Server 2010

In This Chapter

We review the implications and trends that can help predict a successful implementation and the opportunity to maximize the effectiveness of a project portfolio management (PPM) implementation.

Organizations that wrestle with project, program, and portfolio management can realize significant gains through leveraging Microsoft’s 2010 PPM product and integrating it with the flow of their business and corporate culture for managing projects.

What You Will Learn

* The importance and impact of PPM technology on project, program and portfolio management
* The impact of collaboration on maximizing project speed, metrics and momentum
* How to leverage the PPM lifecycle to maximize the value of project, program and portfolio management leadership
* The key factors to avoid the kiss of death in PPM implementations
* How to integrate the business lifecycle with the PPM lifecycle for best results

Project Management Looking Ahead

Today,as the workforce expands globally, the natural evolution of project management (PM) is advancing and leveraging updated technologies. The changes and capabilities brought on by the enterprise environment have enabled PPM stakeholders access to services and applications that quickly allow individual users and groups to take full advantage of the same workflows of managing, tracking, and reporting projects but now in an enterprise and consolidated work management environment.

Microsoft Project 2010 is an example of one type of technology that includes integration of project-specific data along with the evolving enterprise workforce to include and embed applications such as project blogs, project wikis, issues, risks, and document libraries with their project schedules, collaborating with the project manager, project teams, and executives. Companies are embracing the leveraging of critical resources around the world. These virtual project teams now can work together much more efficiently and often are grouped by skill set, location, or other project-required attributes. With Microsoft Project Server 2010 residing within the SharePoint platform, Microsoft Enterprise Project/Program Management (EPM) 2010 is changing the traditional practices of PM processes. Leveraging the advanced features of Microsoft EPM 2010 parallels the recent dramatic shift toward collaborative PM practices. The transformation appears in the role of the project manager and in the interaction with stakeholder classes.

Traditionally, the project manager controlled the project lifecycle as if he or she was the center of all work defined and completed. The project progress was contingent on the project manager’s actions of collecting, updating, changing, and reporting the project status. Therefore, enterprise stakeholder groups were at the mercy of the project manager’s time, effort, and competencies to gain insight into the health and progress of the project. Organizations are now utilizing PMOs to address this potential source of problems in their PM processes.

Organizations are looking to the PMO as a more critical business component that derives project-specific data as part of the organization’s progress ability. With the technology changes like those found in Microsoft EPM 2010, companies are rapidly adopting a PM culture that encourages collaborative spaces; everyone involved in the project is able to contribute work in the communal space. A project is led and developed by the whole team, and each team member has complete access to all information on the project. Project progress is visible to everyone on the team. In this environment, the project manager is transformed from a taskmaster to a project visionary, choosing the right direction for the project development. Project stakeholder groups now have better insight and can leverage collaboration to drive a project. People and business processes are more efficient. They can build and complete work around a PM system rather than having a PM system built around the work. The Microsoft EPM 2010 technologies use social, collaborative, and team-centric project data to produce collective project intelligence.

PPM as a Critical Part of the Business

The PPM as a critical part of the business has created an unprecedented interest in PPM methods. Historically companies find that after they have determined the strategic plans and defined types of projects that need to be initiated, they have more projects than resources available to implement them. PPM can help to address this issue. However, PPM can place a huge burden on an organization as PPM is a lifecycle process that is embedded in the functions and practices of an organization as part of doing business. Moreover, as companies embrace collaborative approaches to delivering more return on investment (ROI) and are acutely tuned to projects that contribute to the company’s bottom line, there are newly discovered components that project and non-PMO stakeholders should take into consideration.

Collaborative Project Management: Avoid Negative Project Momentum

Companies strive to create a buzz, or excitement about the projects, and influence the workforce culture to drive strategic results. Leveraging EPM technologies and building cultural acceptance to work on projects together offers a powerful means for project managers to create momentum. A risk of this management technique is that it allows momentum that creates negative forces, activities, or direction. Historically stakeholders gathered to evaluate a variety of project details that ultimately lead to seas of spreadsheets and many hours of analysis. The result was many wasted hours gathering information or tracking details that never really helped drive the project and, more often than not, never got used for anything. Here are some ways to avoid negative project momentum using Microsoft EPM 2010 and newer PPM cultural practices:

* **Collect only relevant project data.** The Microsoft EPM 2010 system is a role-based PPM technology that allows a PMO to slice project metadata residing across the entire enterprise and deliver information to stakeholders that is relevant to their functional roles.
* **Solid project analysis.** Spreadsheets and other desktop business data tools have been used to model, analyze, and determine scenarios almost to the point of analysis paralysis. The Microsoft EPM 2010 technology provides custom configurations for user and stakeholder groups. Users can control what they need to analyze when they need it—all from real-time project data.
* **The right amount of automated project processes.** PMOs continue to take advantage of workflows, communication options, and centralized project data that may contain updates from around the world and around the clock. Some project stakeholders only want specific updates at a specific time, while others require near real time streaming of updates. As the PMO demands the right amount of project data, it also needs to be able to define the level of automation, from simple steps that are user driven, to complex channels of data linking together multiple stakeholders at various points of the PPM process.

PPM Lifecycle

Creating Business Value through Project Management Processes

PM exists because practitioners agree to and follow steps that are interrelated. The concept is simple and able to adapt to a variety of business environments and corporate cultures worldwide. PPM lifecycles are complementary to practices such as software development, agile methodologies, and business processes and standards, such as Sarbanes-Oxley. Although business lifecycles can be detailed and complex, the concept of a PPM lifecycle is straightforward and designed to create an orderly flow of information and activities. Ideas to consider when adjusting your business processes and PPM processes into a more cohesive ecosystem are listed next.

* **Adopt PPM processes that follow steps or phases.** Create a system that defines lifecycle states, such as create, selection, planning, managing, and closure. Other attributes may include various statuses within each state of the lifecycle, such as budget request, work remaining for a critical project, compliances, and the like.
* **Project relevance to business requirements.** Show how each project is aligned to objectives at the strategic level, and define elements that justify considering the project delivery as successful.
* **Separate high-performing projects from failing initiatives.** Ensure visibility into projects that are progressing efficiently, and change or kill projects that are trending toward ineffective delivery or low business value.
* **Perform project and program analysis using key performance indicators.** Determine and implement scoring of projects for the affected business stakeholders.
* **Capacity forecasting and management.** Resources are one of the critical constraints in a PPM lifecycle. Ensure that resources are taken into account during project updating and evaluation by leveraging a central, single repository of resource capacity that all project work draws from.
* **Predicting the project path to completion.** A project is truly successful if it delivers to the objectives defined in the project charter and maintains a narrow path of change over the course of execution. Projects that have required massive changes over the course of the project’s life may indicate weak project initiation practices or lack of scope control.
* **Project completion delivers business success.** Projects should be evaluated as if they are part of the business lifecycle. They should be measured against fiscal efficiencies, investments into strategic objectives. These projects should be rated or ranked, just like any other corporate asset, on how they enable the company to compete as a viable entity.[AU: As meant? Had a bit of a problem with your meaning here; how to “measure against” “enabling”]

Successful Project Management Leads to Portfolio Leadership

Throughout the history of PM as a defined practice, the importance of the project manager role, and its relevancy to the company, has been questioned. In days past, project managers had control over project resources, budgets, and progress. Currently, project managers find that they are embroiled in a web of corporate hierarchies, where various resource managers, self-managed groups, and other business stakeholders all have some level of ownership over the project. As all project activity rolls up to the portfolio level, there are some important points for project managers to consider while leveraging technology like Microsoft EPM 2010:

* **Focus on adding project value at the portfolio.** Project managers need to consider acting like portfolio leaders, focusing on adding value through project execution instead of just executing projects. They must start to act like business owners, constantly striving to make improvements.
* **Portfolio strength though communications.** Portfolio leaders don’t wait for systems, people, and processes to tell them the answers. They leverage tools and initiate processes while encouraging behaviors that facilitate discussion. They also openly encourage communications (of many types).
* **It is about the relationships.** Portfolio leaders are using PPM collaboration systems to reach across the enterprise to connect with key stakeholder groups and influential departments within the company.

Keeping these in mind will go a long way to maximizing the value you bring to the organization as well as to helping you understand what it is you are working on.

The business environment and decision makers across most companies and in most industries are committing to a PPM approach to planning their business. Technology will still play a critical factor, and for the foreseeable future, people will continue to leverage the inefficient and weakly linked spreadsheets while working toward implementing and taking advantage of the many newer and effective systems that have been specifically designed to facilitate and enhance PPM. As organizational maturity of companies begins to increase and they start leveraging newer technologies, they must keep a link between simple and more complex environments for organizational adoption and assimilation of these newer technologies to work. Project Server was designed to help bridge the gap between the simplicity of Excel-based functionality and Web interface with the more robust enterprise portfolio and program relational database environments.

Information about the pros and cons and successes and failures of PPM has spread rapidly thanks to social media and global forums. People continue to be voracious in their consumption of information from many directions and in many different formats. Social media and mobile applications are prime examples of the different mediums in which consumers require information in more diverse ways. More and more information is added to the field of PPM daily, yet business problems continue to plague companies and decision makers still struggle to facilitate change. The question that comes up iswhat is preventing companies from realizing results from metrics, reporting and information that is being captured around projects, at the same rate of acceptance and adoption as seen with social media and the new technologies and hardware that are emerging supporting social media?[AU: This is unclear. Not sure what is meant by “information sharing about technology” in this context, or how it compares to social media] In most cases, it is the lack of standard metrics, collected and presented in an environment where the key project data are tied not only to the actual project itself but also to the portfolio planning and expected results of that project. This is compounded with the rate at which companies update project management technologies and fold the newer tools and reporting technologies back to senior management.

As the global business climate continues to change, problems of the past continue to plague companies today. Briefly, 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 mantra 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 and maximize benefits and ROI. This review of projects, both pre- and postselection, needs to include the risks, issues, schedule information, and project costs (actuals and estimated) and demonstrate the impact of limited resources. As companies are improving methods, efficiencies, and communications for the execution of projects within the portfolios, they fail to consider or connect the metrics to the global market, people, processes, tools and culture. Essentially, companies are implementing PPM practices without looking at their organizations in their entirety. As a result, they aren’t seeing the improvements they expected.

What do Microsoft EPM 2010 and PPM practices bring to the enterprise? Primarily, PPM vastly expands the universe of PM. Microsoft EPM 2010 provides an extensible technical platform that ties the human connection, such as social media, blogs, instant messaging, and wikis, with the processes and business data streams. The following list cites capabilities and benefits provided by PPM and Microsoft to address traditional PM weaknesses:

* **Naturally supports project lifecycles,** covering the entire project life span, from the identification of an idea, need, or opportunity, through the development and execution of the project, to the realization of benefits.
* **Leverage PMO socialization and connectivity to the community** to create a governance partnership between the PMO and the executive/operations side of the business.
* **Mitigates risks of project failure** by placing greater discipline on project selection. Politics are removed from the process and are replaced by reason and order, involving the partnership of the PMO and a governance (or investment) board.
* **PM is integrated** with strategic initiatives, ROI goals, and resource/capacity planning.
* **Performance of active projects is tracked and communicated** to all stakeholders in ways that clearly display status and identify critical performance areas.

Expanded PPM Lifecycle

The success of a project is influenced strongly by the initiation phase or pre-initiation and planning phases [AU: Correct word, or is a word missing? “Initiation” is a passive verb; it can’t really “influence” anything]as it prepares for execution or the delivery of the project. That influence goes back well before the project planning phase, well before the approval stage, and as far back as the original identification of the idea, the need, or the opportunity. Technologies like Microsoft EPM 2010 allow for ideation, ad hoc task captures, and agile planning while remaining fluid in capturing critical elements for project success. PPM provides the structure for this expanded lifecycle. It adds entire sets 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.

Effective PPM operations that allow scalability to manage complex business environments function best within a PPM lifecycle that allows for multiple phases and stages within each. Additionally, each of these facets draws on a common set of resources, which can include people, funding, and facilities.

Common complaints among executives are the lack of effective oversight of prospective projects, impact against constraints, and in-flight projects. Contributing to these deficiencies is a lack of consistency in project measurements, standards, governance and reporting. An important element of PPM includes processes and reporting practices to address these deficiencies. Early adopters of PPM have reported outstanding improvements in project performance and increased efficiencies in resource allocations. Poorly performing projects are discovered earlier, while there is time to take corrective action or to terminate them sooner in the investment cycle, thus releasing scarce resources for more beneficial assignments. The increased efficiencies easily justify the investment in PPM, and executives are pleased with the vast improvement of both qualitative and quantitative information needed to make important and timely decisions about project investments.

Why is “portfolio” so important in PPM? If a high-functioning organization leveraging PM is primarily focused on projects, the responsibility for projects lies within the PMO. The PMO will maintain a robust automated system to process data relative to schedule, resources, and costs. These systems and reports are entirely lacking in the very important information related to strategic alignment and project benefits. Furthermore, PMOs rarely consider the impacts of proposed projects to an organization or, at the end of the project’s lifecycle, evaluate whether the ROI was realized. An even greater shortcoming is the inability of executives to leverage the systems that are in place to get key metrics for insight across the organization. Essentially, there is a disconnect between the projects and their goals and measured results and the strategy as it ties to the business drivers and metrics associated with the organizational choice to do the projects to begin with.

It may seem intuitive enough to assume that simply implementing PPM bridges the gap, bringing executives into the process, via a governance or investment board. But in reality, the critical elements of technology implementation will be maximized by business organizations defining and tying the key success definitions and leveraging the visibility of these success factors in regular reporting. Doing this will create not only organizational adoption but also commitment to use the systems and processes, thus reinforcing the integrity of the data being tracked and reported. Microsoft EPM 2010 for PM 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.

Expanding from PM to PPM requires the implementation, and business user adoption, of several new processes as well as a culture of change. Some insights into options for expanding from PM to PPM are listed next.

* **Top-down planning.** The ability to build high-level plans and resource demand pictures
* **Alignment of strategic plans** with enterprise technology and process 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 on resources of adding or removing projects)
* Executive-level **display of data** used to support the selection of new projects
* Executive-level **display of project health data** and by-exception reporting of poorly performing projects that are in progress

All these processes usually are ignored within the normal PM operation. Traditional PM software does not support these functions. If you are still using spreadsheets for PM, you will need to develop new spreadsheet models.

Change accompanies PPM for real results; cultural change and PPM adoption must have executive champions. Executive buy-in is essential. Senior executives must clearly state that PPM is a way of life in the firm and build a business case for the benefits from PPM.

The business case should be comprehensive, accurate, and relevant, and it should state expected ROI.

Implementation of cultural change and PPM systems cannot occur all at once across the enterprise. Start small, perhaps with a pilot implementation, directed by some managers who are less change resistant. The success of the pilot will help sell PPM to the rest of the organization. The leaders of that success will serve as additional champions and mentors as the methodology spreads.

Obviously, there are several areas of change as we move from basic PM 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 an organization moves from a nonexistent or traditional PM company to a PPM company, small but structured steps will lead to a growing level of maturity in PPM. Many of the changes lead to improvements 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 PM systems. There is an opportunity to leverage the ROI gained from early steps to fund and secure support for the future actions, as those future actions may be larger in scope, cost more, and demand more from the company’s resources.

Early in this change process, organizations must to investigate and acquire the best systems to support their PPM initiative. A 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. A well-designed system incorporates the best practices in the industry.

A good PPM tool set should be presented to the respective business user groups within a role-based environment that is predefined to serve their needs and assist with their existing or future workflow around project, program, or portfolio management. Once validated to maximize the ease of use and adoption by the organizational resources using the system, the tool set should be optimized to a set of user-configurable templates that stakeholders can quickly select and utilize within different work roles in the PPM environment.

PPM Kiss of Death: Making Decisions with a Lack of Interrelated Data

Spreadsheetsare subject to significant flaws because the user designs the data structure, flow, and computational regimens. There is no audit trail or guarantee of consistency between worksheets. Much time is wasted when not working in a centralized data system that has synchronization across all initiatives. There needs to be a consistent story across all reporting documents. Using spreadsheets for PPM is inappropriate and considerably less effective than using specialized PPM software. Spreadsheets get in the way of integration and standardization. In other words, developing internal spreadsheets is not free.

In moving to PPM, we have much to gain from the improved processes and governance. PPM benefits from highly graphical presentations of project, portfolio, and resource information, featuring alarms and highlighting, that directs stakeholder attention to out-of-tolerance conditions.

Why not stick with what is working? Basic PM software (such as desktop PM software) tends not to support the full lifecycle with full integration. These systems are optimized for current projects and are not designed to deal with proposed projects. They generally lack the ability to consider ROI and benefits, and they can handle costs but not cost savings or income.

Typical desktop PM tools are optimized to support the classic project approach triple constraint (which primarily addresses time, cost, and scope). To support the scalable PPM demands, organizations 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.

Another shortcoming of the traditional PM approach using desktop scheduling PM software is that it is suited primarily for users who are directly involved in projects. Senior managers and relevant business stakeholders have limited access to viewing or seeing the metrics coming from projects both in static or real-time reporting. This minimizes them from [AU: Are you saying these people don’t have access to the software?] realizing [AU: How can you have “access to realizing” something?]the value of interfacing with dynamic online reporting versus what the rigid static reporting software of the past.[AU: If it’s “rigid” is there really a “value”? In general this sentence is a bit confusing….] Scalable PPM software, such as Microsoft’s EPM 2010, helps business users work with project data to reach decisions in a manner they find comfortable and easy to use, with a common and simple interface or collaboration portal.

Microsoft EPM 2010 is specialized project portfolio software that adds all of the functions for diverse business stakeholder groups and classes to expand the project and inevitable business lifecycles. 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.

Knowledgeable decisions regarding acceptance and prioritization of project-based and independent work items is possible only with a robust, interactive system that contains an up-to-date inventory of work requests, active work, available resources, and unutilized resource time. The demand and capacity data must be integrated with any other resource and with project and service request modules, so that the information is seamless, timely, and consistent. Microsoft’s inclusion of the PPM Lifecycle in Project Server enables taking an idea-to-launch approach. This is central to new product development applications, and is the basis for a establishing a structured process for ranking, rating, selecting, and monitoring projects through their lifecycle. A good example and popular component of this process is the Stage-Gate® technique, developed by Dr. Robert Cooper, which reinforces reviews at key checkpoints of a project or proposal lifecycle.

This Stage-Gate® enables a strong and reinforced process and checklist for evaluating a project as it goes from idea to launch. Microsoft EPM 2010 product Project Server has incorporated this capability for supporting a more robust PPM solution and enables end users to incorporate support, automation, and custom fields for stages and gates reinforcing industry best practices.

Initiating change, including the move to a more comprehensive PPM technology and process adoption, is a huge commitment. But what if the change was so intuitive that it streamlined the learning curve? 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: in the past. You can’t justify staying with obsolete systems just because they are paid for.

Building a PPM capability on top of the appropriate technology will have a big payoff for your business. 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. The figure below showcases the new features of Project 2010 to help prioritize and select projects based on a rating and ranking system.[AU: insert text ref. to figure]

Figure 6.1 Project Prioritization Selection and PPM Management to Deliver ROI [06-01-projectPrioritizationSelectionAndPPMManagementToDeliverROI.vsd]

In leveraging Project Server as a PPM tool, it is important to get insight into the characteristics of the processes in an organization or department’s project workflows and the value they provide as well as their impact and use throughout the project’s lifecycle.

How do companies get visibility to project information pathways? Process maps are created to meet a variety of needs covering stakeholder class orientation, navigation, user situation analysis, and the like. A process map’s utility is derived primarily from the relationships between business requirements and user capabilities. A good process map will accurately depict and predict the behaviors of information and how people use and make decisions based on that workflow. These process maps can be integrated into the PPM system for reinforcing and evaluation criteria through a project or program’s lifecycle.

What relevance does process mapping have to PPM and in particular to creating project budgets?

Typically business stakeholders cannot detail up front how much something is this going to with regard to project initiation. Often project sponsors are looking for prompt answers to the question “How are you going to do this?” But what is really being asked is “How much exactly is this going to cost me?”

When creating the business case to select which project approach to take to meet the demands of a specific business problem, or when choosing between competing projects to allocate a finite pool of funding, the formulas that are most commonly used to measure the expected financial return of a given project are time-adjusted rate of return (TARR) and net present value (NPV). These formulas explicitly acknowledge the effects of duration and timing on when costs are incurred or income is booked by the project. Similarly, earned value management techniques such as cost variance, which measures the difference between the estimated value of the budgeted work accomplished and the actual cost of the work accomplished, help project managers determine whether the project is on budget.

TARR and NPV (as examples) are constraints that can be used for portfolio analysis. But while such metrics are indispensable to managing the project throughout its lifecycle, we as stakeholders or business managers sometimes overlook the fact that the project budget also has a lifecycle of its own. What characterizes that lifecycle is the corresponding refinement in the magnitude to which cost and cash flow estimates can be made as we accumulate more detail about project scope. Thus, at whatever stage you are in of your project’s lifecycle, always be explicit about the order of magnitude (bigger than a bread box, smaller than a building) you have used to derive your budget estimate. Detail the basis for the magnitude of the budget—that is, the factors that have influenced the size of the numbers presented.

Order of magnitude estimates should also include a complete list of project assumptions, risks identified to date (including an assessment of probable impacts should any risk event occur), the scope of the project as represented by the degree of specificity in the current work breakdown structure, and any other gaps or unknowns in project information that remain to be filled in. During this phase, often in the initiation or commonly referred to as the create phase[AU: clarify; is this initiation or create phase?], provide some detailed context about how the estimate was derived. Also identify what is required to improve the precision of the estimate.

The goal at this point of project iteration is to establish the synchronicity between the PMO and the business groups, where the PMO will have the opportunity to discuss options for improving cost burn rates while delivering high-performing projects. This is the time when the PMO and the business groups will be fully engaged and ready to determine if refinements to the budget or project requirements are needed.

Using the orders of magnitude that are referred to in the budget process is an effective way of managing stakeholder expectations about what may potentially drive variance in project costs at later stages in the project lifecycle.

The control parameters for a project are believed to be budget and work or debt limits and resource limits. Product functionality determined by PPM requirements and time are control parameters, but money is a constraint. Also assume that productivity (resource work invested) and quality are the two control parameters that represent the costs aspect. These four parameters lead to what we like to call the PPM efficiency quadrant, where constraints are balanced by requirements, allowing results or outcomes to be measured and ranked.

Whenever a budget is determined, it will be applied to allocate resources to the project. A high-functioning PPM environment will enable the project manager and other stakeholders to determine resource allocation, including skill set, location, availability, and others. This collaboration leads to more effective establishment and control of the budget depreciation against work completed across the enterprise. The choices made also have an influence on project progress and an impact on quality. With the same amount of money, different choices can be made that will lead to a different type of project governance. [AU: OK, or clarify]

The requirements and the duration or elapsed time of a proposed project (or in some cases changes to in-flight projects) determine the amount of budget required. The productivity and the quality determine the way the budget will be used. The four parameters are dependent on each other. Whenever one parameter needs to be changed, the others need to be retuned.

Changes based on scope change or constraints present issues that impact the project. Examples include but are not limited to:

* New requirements identified that lead to scope review or update
* Portfolio analysis exposed opportunity at either a time or cost level
* Crash the project to meet market changes
* Quality or deliverables updated
* Resource changes

The changes always can be interpreted individually or collectively. The changes either enforce or weaken each other.

Figure 6.2 depicts the interdependencies between the four parameters.

Figure 6.2 PPM Efficiency Quadrant [06-02-ppmEfficiencyQuadrant.vsd]

The square is balancing at one corner, symbolizing the delicate balance required among the four parameters. An effective PPM environment will enable project managers and other key stakeholders to find the right balance and translate the analysis to PPM planning and the governance structure. Using the model shows that there are parameters to accommodate the change—for example, quality.

Productivity (aka resource utilization) is another way to control project requirements and changes without raising the budget. There are two ways to raise productivity:

1. **Add resources of less skill.** Increasing the team size will increase costs. In other words, the cost per resource needs to go down. This can be obtained by using less skilled resources. There are two disadvantages to increasing the team size:

a. More members in the team will increase communication and reporting efforts. These hours are a reduction in productivity, and therefore there will still be a rise in costs.

b. Less-skilled resources will be less productive and make more mistakes. These mistakes are then discovered in a later stage of the project (e.g., during one of the test cycles) and need to be fixed at a higher cost.

2. **Reduce resources or swap with higher skill sets.** Thismethodachieves the opposite effects. Overhead will be reduced, and thus productivity will increase. The team members have to be more senior; the productivity will rise since the amount of mistakes will most likely drop.

Using resource allocation and forecasting methods, time can be leveraged to accommodate PPM changes within the preset budget. However, simply increasing a project’s duration will not deliver a reduction in overallocation. The project will take longer, and with no additional measurements or use of fixed work tasks, the project and resource costs will increase.

There are several ways to address overallocation, including creating a more detailed or resource-leveled[AU: “resource-leveled”?] project or proposal, changing the start time for that project or proposal. It is important to note that in the early phases of evaluating a new work proposal or project, often proposals get denied or excluded. The intent with Microsoft’s PPM system is to allow end users to spend less time in the early phases and scale the level of detail, tasks, and resources as a project is moved through to its approval and selection.

Extending time on a project can follow the same pattern. Providing more time for the project allows project managers to reduce the project’s team utilization percentage, thus increasing productivity for other projects that have been proposed or in the existing work portfolio. Whenever a change in a project’s scope or functional deliverables can be mitigated by increasing project duration, that increase can offer the opportunity to reduce team size by adding resources of a higher quality. This mitigation is especially helpful at early stages of the project (create phase) and will provide the opportunity to gain momentum against costs or resource constraints. An example may be using a team that is smaller than planned yet more highly skilled to produce more for the same costs.

In a PPM environment, the quality of resources and work delivered can be diminished by project managers who give way [AU: What do you mean by “give way” in this context? It usually means to cede or break down]first to meeting the end date or to delivering all functionality. When this happens, the quality of exercising and supporting the PPM process and approach is also compromised, especially in the create phase or manage phase, when timing and budget pressures increase. The result is an architecture that is less resilient or less robust. As they say, garbage in, garbage out.

Often the changes and results prove to work against the PMO and alter the forecasting and planning at a portfolio level. The easiest option for handling the demand for increased quality is to reduce the project scope and requirements. Another option is to scope the project into milestones or add stages in each phase of the project. You can add program phases to create program dependencies across the portfolio.

Increasing quality with no change in duration requires increasing resources if changing scope and business requirements is not an option. There are two options:

1. Reduce the team and increase the timeline and duration of the project.

2. Reduce the team and increase the skill set of the team, allowing for more senior resources.

If the PM chooses to compromise quality, project success needs to be achieved with a minimum of risk. A way of achieving this [AU: Not sure what “this” refers to--may be clearer after “it” referent is provided, above…?]is by leveraging indicators, dashboards, and collaboration across the enterprise in relation to business stakeholders’ needs. Another option is to prioritize projects and programs at the portfolio level, where business requirements and strategic objectives will be categorized, organized, analyzed, and prioritized. These metrics need to be agreed on by representatives of the business stakeholder class.

If the timelines for the project are constrained and delivery at a certain date is mandatory, one option is to agree to delay noncritical projects. Another way of meeting the deadline is to prioritize the projects based on critical strategic requirements and time to market. Overall, this process will help to remove the pressure on a limited or constrained budget. In order to do this, projects will need additional prioritization measurements so that the rating, ranking, and reprioritization of projects in a portfolio can be done quickly and efficiently. Either quality reduction needs to be achieved—in most cases, this is not desirable—or an increase in resource allocation (number or skill level) is required.

A strategy to address this issue and to meet the deadline, increase productivity, and remain within budget is to reduce the size of the overall team and ensure that higher-quality resources are allocated to the project. Studies have shown that the number of defects increases with the square of the team size. Essentially, more hands do not mean more accuracy or faster performance. On the contrary, in many cases it results in teams doing duplicate work or rework. This is a good reason to keep teams lean and mean.

In the pursuit of increasing productivity, you might ask how to increase the productivity of an existing team. There are many motivational theories, but project or portfolio managers have at their fingertips the ability to measure and track key metrics related to the project or the project schedule.

An option for increasing productivity is to leverage collaboration and create competition by measuring productivity through the schedule or related project metrics. It is exciting and tactically stimulating to resources to see the results of their efforts reflected in the regular progress reports associated with the project team’s work activities.

This feedback leverages current business practices and technology to their fullest and gives visible and constant progress reporting on metrics that ultimately provide project success. Introducing results of measurements and logic improvements will boost productivity; it also reinforces the importance of the metrics an organization needs to succeed. As Peter Drucker stated, “That which gets measured gets done.”

A great way to see this success and a good long-term organizational strategy for ensuring it is to introduce some healthy stress by defining milestones in the near future. Goals that are within reach increase productivity. William James of Harvard found that motivated employees work at 80 to 90 percent of their ability while unmotivated employees work at about 20 to 30 percent of their ability.. A nearby milestone that is just achievable will increase the level of productivity up to 110 (or even 120) percent. The reason for this phenomenon is that people tend to relax until it is almost too late to achieve the objective. A kick is required to make things happen. Of course, we are not advocating increasing stress levels, as the negative effects of stress have effects on productivity, creativeness, and health. Rather we are encouraging the establishment of processes and technology to ensure accountability. These processes and technology help keep attention focused on critical activities and will improve performance and results that are clearly traceable and measurable.

By planning your milestones so that the cycle of stress and relaxation reaches its optimum (between four to six weeks), your productivity will increase. People tend to focus on deliverables and the near future.

Finally, offshoring to a low-wage country will increase the productivity while keeping you on budget. When offshoring is considered, you also need to calculate for additional overhead and management and a more rigid governance structure due to distributed delivery. As a rule of thumb, you need to add between 15 to 20 percent of the hours spent in the offshore location due to a loss in productivity. This number depends on the experience the project team has with offshoring.

Adopting the PPM Lifecycle as a Component of the Business Lifecycle

All projects follow more or less the same pattern. In the beginning of the project, during requirements gathering and the design phases, there is a focus on the needs of business user groups, strategic alignment, high-level costs, timing, and quality. During these phases[AU: you used singular for “phase” above; clarify if this is 1 or 2 phases], the milestones and specific resources are less of a concern. The project manager is often a facilitator, gathering all functional and nonfunctional requirements. During the create phase, the scope becomes clear, and an end date is agreed on. The focus changes to time and resources, which are the axis for analysis and movement of the project through stages and phases.

Important Concepts Covered in This Chapter

This chapter’s emphasis was focused on learning how to leverage the different lifecycles surrounding project, program, and portfolio management blended with PPM and the business lifecycle. Some key concepts were:

* Blending the right amount of automation and centralization can radically improve the business and processes surrounding PPM implementation
* By following a PM methodology and folding that into the native features of PPM, you can establish a reinforced and supported workflow that yields the best results for metrics, reporting, and visibility and communication
* PM can be supercharged through a PPM implementation, establishing metrics for pre–work portfolio management, existing work portfolio management, and postproject completion analysis of a project against stated goals and objectives.
* There are key gotchas to avoid in a PPM implementation. We call these the kiss of death. Being aware of them is critical in ensuring a successful deployment.