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# Enterprise Project Portfolio Management: A Must for Project-Based Success

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## Executive Overview

To achieve operational excellence while adapting to dynamic economic conditions, project based organizations must plan and execute the right projects to successful completion. But the reality of business is that most processes tend to be fragmented within these organizations. A lack of alignment between disciplines or departments results in poor execution, low predictability of performance, and inconsistent decision making. Instead of disparate systems for portfolio analysis, financial management and project execution, a single business management system is needed to manage the project lifecycle from idea to execution, drive project cost control, and provide transparency into business decisions. Just as important, this system must deliver absolute alignment between strategy, execution, and results. This white paper explains the need to bring together a set of disparate business applications as part of an Enterprise Project Portfolio Management process to drive business transparency, profitability and project success.

Small, seemingly insignificant projects don't unexpectedly delay related strategic work. Aberdeen found that combining standardized best practices with enterprise-wide PPM solutions, companies were 43% less likely to have poor performance on one project have a ripple effect on other projects."

Aberdeen 2010 Project Management Report, January 2010

## Introduction

Roughly 25% of the gross domestic product of developed nations is spent on or through projects. That's not hard to believe if you consider the software and systems used, the services purchased, the facilities that supply us, the infrastructure countries depend upon, and, one can make the case, the future of society and the economy, all of which depend on the successful completion of the right projects. Hence, businesses rely on projects to create value, whether it means doing work on behalf of a client, bringing new products to market, or finding ways to improve and automate internal processes. When an organization has projects with milestones and deadlines to be met, people and resources to coordinate, budgets that must be adhered to – especially when priorities on multiple projects seem to always be in conflict with each other – the organization relies on effective Project Portfolio Management (PPM) systems to bring order out of this chaos.

## What Every Enterprise Wants

At its core, every enterprise looks to hold true to fundamental principles including growth, competitiveness, risk mitigation, and the care and feeding of its resources. At a tactical and project execution level, organizations also want to:

- Respond quickly to changing project and market conditions
- Deal effectively with the increasing complexity of projects and technology environments
- Deliver ROI, without unnecessary rework or waste
- Course correct or cancel failing projects in a timely manner
- Replicate successful projects
- Work productively and collaboratively
- Fully automate cross-functional business processes
- Optimize project-related cash flows

These would seem basic and achievable on the surface, however, in practice a number of challenges to the successful completion of projects remain.

## The Challenges of Enterprises Today

There are a variety of drivers for a single business management system mentioned above. Each has its own inter-play between disparate functional areas and its role in ensuring project success. Some of the more common examples are provided below.

### Lack of Alignment

For most organizations, projects occur all over the company. They seem to be frequently more complex, involve people from different lines of business and functional groups, with resources spread throughout the globe. At some level, we have all witnessed symptoms of a lack of alignment within the many functions of an organization. We recognize it even in successful and profitable organizations, and marvel at how much more successful the effort could be if there is more alignment in the organization. Some examples of these symptoms are:

- Projects are approved or cancelled by one function of the organization, but the rationale is unclear to the rest of the organization.
- Projects are bid and won by one team, but the estimates and assumptions for winning the bids are considered unrealistic or unachievable, and therefore are not leveraged nor re-used by the team who has to subsequently carry out the work.
- The way the Financial Accounting office captures budgets, actual costs and committed costs, and how they project cash flows, have little resemblance with what is actually happening on the organization's projects.
- There is no visibility into all the projects that are consuming actual hours, costs and resources within an organization. Although there is an official list of approved projects for the organization, plenty of resources and hours are spent on other, unofficial projects within the various functions of the organizations.

### Lack of Predictability

Although lack of predictability may just seem like another symptom of lack of alignment, it is very common even when the functions within an organization are aligned. A lack of predictability is due to a combination of basic human optimism, limited information on project progress, and untimely analysis of the available project information. Some examples of this are:

- Human Resources department has no visibility into the types of skills that will be needed on the potential projects being contemplated by the organization. These projects are set up to be challenged, even before they start.
- The official or approved project baseline does not resemble the real project work, such that cost and schedule variances from baseline do not help predict trends and do not trigger the appropriate alarms for corrective action.

- Project risks are not acknowledged nor recorded early, so their occurrences are a complete surprise to the project team. Often what should have been a “known unknown” occurs like an “unknown unknown” to the project team.
- When a project is executed smoothly, there is no warning that it will not achieve the promised ROI.

### Reactionary Mode of Operation

With the frequent lack of alignment and lack of predictability, it is easy to understand how many organizations operate in a reactionary mode on a constant basis. Because project risks are not identified early and because assumptions are not shared between functions, there are no mitigation plans in place.

Project teams often have to scramble in reaction to risk events, which may have been prevented if better documentation and hand-offs existed between functions. If risks were acknowledged up front and mitigation plans developed, organizations could spend more of their energy being proactive as opposed to reactive.

### Lack of PPM Governance

The Butler Group defines IT governance as “the creation of a management framework by which an organization maximizes the value that it derives from IT in support of its strategic objective.” To an employee, governance appears in the form of defined processes and required management approval chains. One of the most important processes in PPM governance is the selection and approval of projects to align with the company’s strategic objectives. Just as important are the processes to ensure that approved projects get the funding and skilled resources required to achieve their promised ROI.

It is not only the business processes which are fragmented within organizations. The same holds true for the applications in support of these processes. This results in:

- Funding and resources for non-strategic projects, despite the fact that the projects will not deliver expected returns
- Project budget overruns as insufficiently skilled staff take longer to complete their assigned work
- Skilled resources burn out as they are stretched too thinly across multiple projects
- Leading to...a lack of realization of the above because projects are tracked only in disconnected systems

Of course, executives rarely have a way of knowing how many unapproved projects are taking place, how much the projects have spent, how much money it will take to complete the projects, and when the initiative will finally be complete.

When information resides in a variety of disconnected systems in an organization, the Procurement department, for example, will not know that a project was just delayed, and therefore a key purchase can be delayed for several months to help the organization’s cash flow. Or, the accounting clerk processing a progress payment against a contract will not know that the contractor’s performance to

date does not justify the payment. Aggregating these common occurrences across the number of projects a company is involved in, results in a greater appreciation of the magnitude of the negative impact.

## Overcoming the Challenges

Enterprises need to make business and project decisions based on the financial, human capital, and supply chain considerations. With the right processes and systems in place, organizations can improve alignment between their many functional groups to produce accurate and timely answers to these questions:

- Which projects should we fund, and which ones should we cancel?
- Which of our projects are the most risky, and how may we mitigate those risks?
- Which projects are under-performing and need more management intervention?
- How do we improve monitoring and management of risk and compliance?
- How do we attract, retain and motivate the best employees?
- How do we manage product costs to improve profit margins?
- Which are our most critical projects for the upcoming year?
- How do we shift spending toward investments that will drive competitive differentiation?
- What are the project risks that may have a material impact on business operations?

The answers to these questions can be difficult, if not impossible, to answer given the discontinuity of information and data that exists across organizations.

To begin to answer the questions from a projects perspective, the project portfolio management system must be tightly coupled to other business systems in the enterprise, including financial and accounting systems, human capital management systems, and supply chain management systems, among others.

All projects in the enterprise contain and require critical information such as budgeted cost, planned schedule, resource assignments, progress and performance data; all of which must be made transparent to the right people throughout the enterprise.

Although this information may traditionally reside in disparate and disconnected systems, the success of organizations requires an embracing of an Enterprise Project Portfolio Management (EPPM) philosophy and framework. This will provide the vital information that ultimately drives the absolute alignment between strategy, execution and results needed for organizational profitability.

## A Single Integrated Business Management Solution

An Enterprise PPM framework is a business management system bringing together project portfolio management with project financial management to deliver absolute alignment between strategy, execution, and results for project-driven organizations. It also:

- Allows for the management of the project lifecycle from idea to execution
- Provides end-to-end visibility and control for improved decision making, coordination, and collaboration delivering transparency, visibility and control into business decisions
- Provides a consolidated view of the enterprise project portfolio for an accurate, up-to-date view of project, people and financial performance

To be clear, applications should not just be wired to exchange data periodically; instead they must be wired to react to events in other systems to facilitate effective workflow in the organization. Enterprise Project Portfolio Management allows for the fine-tuning of business processes that weave together all critical project information throughout the organizations in a logical and collaborative way, to ensure governance and, ultimately, business success.

As an example, a change request for additional materials from the project team triggers an alert in the supply chain system to compare the estimated costs of the material as well as the installation services from multiple approved suppliers, and the estimates in turn triggers the project management system to calculate the potential schedule impact to the project's critical path. All of these estimates do not alter the official project costs and schedules, but instead create a sandbox project for the multiple affected functions to collaboratively evaluate and make an informed decision to approve or reject the request.

A similar scenario may involve a request for a resource with a particular skill, and the automated process may weave in the human resources system instead of the supplier management system.

Although the above scenarios can be practiced manually without an integrated EPPM system, the latter is more efficient and effective for "management by exception". An EPPM system can utilize shared information between the relevant systems and only elevate the issues that require the attention and collaboration of the right people, whether they are the project managers, resource managers, suppliers, accountants, subject matter experts, legal advisors, and/or executives.

## Alignment with Strategy

An Enterprise Project Portfolio Management system allows the organization to clearly identify its strategic objectives, and evaluate how well each investment supports the objective. EPPM also supports the comparison of multiple portfolio scenarios, in consideration of funding available and resource capacities from the accounting, human resources, and supplier management systems. A corollary process also identifies the "waterline" (based on metrics such as funding limits or headcount available) and evaluates the many alternate scenarios against the waterline. Generally housed as part of a portfolio management tool or function, this allows for analysis of all the organization's constraints and key performance indicators (KPI) to propose multiple viable scenarios for consideration, and can

provide metrics and KPI-driven means of comparing, contrasting and deciding which projects to approve, which ones to postpone, and which ones to drop.

### Balancing Risk and Rewards

An Enterprise Project Portfolio Management system allows the organization to clearly document projects risks and anticipated rewards. Risks and rewards provide the basis for calculating many of the KPI's organizations depend upon to make the right decisions. The basis of estimates must be captured as well, allowing project execution teams to utilize this information in mitigation plan creation, and more accurate estimates in cases where the risk events are triggered.

### Monitoring Execution and Compliance

An Enterprise Project Portfolio Management system allows the organization to monitor project status and progress, as well as ensure governance. Based on the business systems which are integrated to share information, the EPPM system ensures processes are followed as designed.

As an example, when a pending change request is above the maximum managerial approval authority, the system can route the request to the right level of management with a higher level approval authority. Similarly, when a project has exceeded the acceptable thresholds for cost variance or schedule variance, an email alert is triggered to notify the project and resource managers to take corrective action and/or create the required exception reports for their senior managers. Or, perhaps a contractor has exceeded the overtime limit which creates an out-of-compliance issue, the contract and the project manager are both notified.

These processes are not designed to threaten the success of the project or their manager; they are designed to help organizations manage by exception and spend the right level of energy to proactively resolve issues, before they escalate out of control.

### Actionable Business Intelligence

Enterprise Project Portfolio Management ensures role appropriate dashboards that provide insight into relevant information. For example, a project manager's dashboard will contain all his projects' summary information, KPIs such as cost variance, schedule variance, cost to complete, days to complete, etc. A resource manager's dashboard will see different KPIs, such as average number of billable hours per week for each resource. The accountant's dashboard may also show projects, but the KPIs may be amounts receivable or payable, days payments are outstanding, and how many invoices have been submitted by supplier.

The system must facilitate a way to act on the KPIs presented, to retrieve more information when needed, provided that the user has the security access rights for the information being requested. Key capability requirements in this area include:

- Project forecasts comparing planned project deployment metrics to actual performance
- Earned value reporting, inclusive of cost and schedule performance

- Visibility to contractor progress during execution
- Portfolio, program and project level analysis delivered within enterprise project performance reporting repository

These dashboards deliver the critical benefits of deeper insights and superior intelligence from integrated analytics, improved project portfolio performance via actionable recommendations, and full visibility into project revenue, billing and profitability.

### Ensuring Trace-ability

The Enterprise Project Portfolio Management system preserves the relative connections between the previously disconnected business systems, and records changes in the information for trace-ability. This means not only tracking “who”, “what” and “when” the project/resource/contract data was changed, but also which processes and systems facilitated the changes. Tracking this information ensures that the various roles do not waste unnecessary time searching for contacts and researching the reasons behind changes.

### Capturing Lessons Learned

And finally, the Enterprise Project Portfolio Management allows for the capture of, as well as reuse of, lessons learned. The lessons can encompass different levels of detail, whether it is a lesson about a particular supplier’s expertise, how a project risk or contract type was handled, or a video of instructions to repair a part. A searchable lessons-learned repository, made accessible for each lesson to be leveraged in the right context for future portfolios, projects or contracts, becomes a reality.

## Conclusion

A single, integrated management system for Enterprise Project Portfolio Management brings significant business benefits. The organization that successfully implements EPPM will be aligned around strategic corporate objectives, and will be effectively cascading communication to their people, whether the communication is about shifts in strategy, project performance, or resource capacity.

With EPPM, management has the ability to understand exactly what their organization has planned to do, how well they are doing against plan, what they have spent to date, how much progress they have made, what is running behind schedule, what needs to be reworked or rethought, what they ought to pay for the work that has been completed, when to order critical materials for just-in-time time delivery, and experience-based forecast of what it will take to finish each project and the ripple effects of being late.

With the right enterprise-wide processes in place and enforced, every project team member can get an accurate, up to the minute picture of what they could do and what they should do, allowing for informed decisions to assure successful on-time, under budget, high quality results.

With the actionable business intelligence inherent in an integrated system, senior managers can look across all the projects within the enterprise, and literally see the future of that organization and its ability to compete and to succeed.

Managers can collaborate intelligently in a fully informed way with any and all of the participants, clients, sponsors, contractors, consultants and others who can make a difference to the organization's future.

The same project-based processes that used to be fragmented across disparate systems, now flows smoothly, enabling people to do their jobs that ultimately have an impact on project delivery.



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