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The Integrated Enterprise: Connecting the Dots between Business, IT and Project Success with Enterprise Project Portfolio Management

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Introduction

At about the same time the Dow Jones Industrial Average posted a 12 percent gain between April 2010 and April 2011, IT research and analysis firm Gartner Inc. nudged up its estimates for spending on enterprise hardware, software, services, and telecom in 2011 from a 5.1 percent growth rate (projected in early January) to a 5.6 percent rate. This may seem like a tiny bump, but in the huge commercial IT sector, it means an extra $192 billion spent on corporate IT.

Today in almost every enterprise, business growth and IT investment are inextricably linked. As companies venture into new lines of business, grow existing vertical markets or expand though acquisitions – IT investments follow in lock step -- as do new projects to implement these IT solutions.

Projects and IT have a lot in common. Both are widely considered as the foundation for delivering enterprise value, yet they are also viewed as difficult to manage and complicated to measure in terms of value. Still, we can't live without them. Consider that roughly 25% of the gross domestic product of developed nations is spent on or through projects. While there are many contributors that underpin these projects, IT is one of the largest. In many cases, IT represents the "majority shareholder" in project success.

That's why it is no surprise that most businesses rely on IT projects to create value, whether that's doing work on behalf of a client, bringing new products to market, or finding ways to improve and automate internal processes. Organizations depend upon IT to ensure that projects with milestones and deadlines are met, people and resources are coordinated, and budgets are adhered to – especially when priorities on multiple projects are in conflict with one another.

Such high-level organization relies on effective Enterprise Project Portfolio Management (EPPM) systems to bring order out of this chaos.

Project Pain Points

Business need to remain agile in order to respond to changing project and market conditions, as well as deal with the increasing complexity of their projects and IT environments. However, communication between business, IT and project management has been a challenge because many corporations are fragmented entities much like a puzzle. There is often a lack of alignment and communication between the various disciplines, which result in poor execution, low predictability of performance and inconsistent decision-making.

Lack of Connectedness

For most organizations, projects are taking place all over the company. They are becoming more complex and involve people from different lines of business and functional groups that are often spread out around the world. This can often lead to a lack of alignment within the many functions of an organization.

Some symptoms of growing misalignment include projects that are approved or cancelled by one function of the organization, but the rationale is unclear to IT and the rest of the organization and often not communicated until much time and effort has been wasted. Another telltale sign of misalignment -- financial accounting reports showing budgets, actual costs, committed costs and project cash flow bear little resemblance to what is actually happening on the organization's projects. Most commonly, 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 not only in IT but within many other functions of the organization.

Lack of Predictability

Even if IT and the business appear to be aligned, the organization can still suffer a lack of predictability. This is due to a combination of basic human optimism, limited information on project progress and untimely analysis of the available project information.

If the human resources department, for instance, has no visibility into the types of IT skills that will be needed on the potential projects being contemplated by the organization, these projects are headed for trouble even before they start. Some other examples:

- The official or approved project plan does not resemble the real project work, such that cost and schedule variances from the plan 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 predictability, it is easy to understand how many organizations constantly operate in reactionary mode. Project risks are not identified early, and because assumptions are not shared between functions there are no mitigation plans in place. IT 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 IT 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 employees, governance in their company appears in the form of defined processes and required management approval chains. Project Portfolio Management (PPM) governance, one of the most important processes in IT, involves the selection and approval of projects to align with the company's strategic objectives. Processes must be in place to ensure that approved projects get the funding and skilled IT resources required to achieve their promised ROI.

Despite the tighter scrutiny of public executives' accountability surrounding financial statements, and relatively new requirements for public companies (such as Sarbanes-Oxley compliance in the United States,) organizations are still slow to adopt IT governance and project & portfolio management solutions. Not only are the business processes fragmented in most companies, so are the applications in support of those processes. The result is that non-strategic projects are receiving funding and resources, even though they won't produce the expected returns. Project budgets are overrunning because people with insufficient IT skills are taking longer to complete their assigned work. And worse yet, the most skilled IT resources are burning out because they have been stretched too thinly across

multiple projects – and no one realizes it because those projects are tracked only in disconnected systems, instead of a central enterprise system.

The Bottom Line

When information resides in a variety of disconnected systems in the organization, the Procurement department doesn't know when a project is delayed, for instance, and therefore a key purchase can be delayed for several months to help the organization's cash flow. The accounting clerk who is processing a progress payment against a contract doesn't know that the IT contractor's performance to date does not justify that payment. When these common occurrences are multiplied by the vast number of projects at each company, it's easy to see the magnitude of their negative impact. Companies can make much better decisions and improve their cash flow position if they are more aligned internally and have access to critical, timely information from their variety of systems.

Overcoming the Challenges

Enterprises need to make business and project decisions based on financial, human capital and supply chain considerations, and IT is the driver that unites these entities, wrings out system efficiencies and enables enterprise productivity. With the right processes and systems in place, IT can also help organizations improve alignment of 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 projects are the most important, and when should we do them?
- 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 ensure that we have the right resources assigned to the right efforts?
- How do we attract, retain and motivate the best employees?
- How do we manage product costs to improve profit margins?

An Enterprise Project Portfolio Management system – when tightly connected to the other business systems in the enterprise, such as at a minimum the accounting system and human capital management system and quite possibly the, supply chain management system, and customer relationship

management system – can provide vital information that drives the perfect alignment of strategy, execution and results.

All of the projects in the enterprise contain critical information, such as budgeted costs, planned schedules, resource assignments, and progress and performance data -- all of which must be made transparent to the right people throughout the enterprise. An EPPM system unites disparate systems and enables this transparency.

A single integrated business management solution

A single Enterprise Project Portfolio Management system should allow enterprises to fine-tune its many business and IT processes. It should gather all the critical project information found in disparate business units and organize it in a logical and collaborative way to ensure governance and, ultimately, business success. The applications found in the EPPM system should first and foremost include project portfolio management, financial accounting and human capital management. The applications should not just be wired to exchange data periodically. Rather, they must be wired to react to events in the other systems to facilitate effective workflow in the organization. In addition, the EPPM system must be well supported by proven collaboration, middleware and database technologies to form the backbone of the corporations.

For example, a project manager requests additional staff with a particular IT skill for her team. This triggers an alert in the HR management system to compare the request to staff availability, as well as to other projects near completion that might be using people with those skills. Those findings, in turn, trigger the project management system to calculate the potential impact to the project's schedule and its 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.

Although the above scenario can be practiced manually without an integrated EPPM system, the latter is more efficient and effective. The 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 or executives.

Aligning with strategy

A single Enterprise Project Portfolio Management system must allow the organization to clearly identify its strategic objectives and evaluate how well each investment supports those objectives. The system must support the comparison of multiple portfolio scenarios, as well as consider funding available and resource capacities from the accounting and human resources management systems. There must be a process for identifying the "waterline" (based on metrics such as funding limits or headcount available) and evaluating the many alternate scenarios against the waterline. The system may even analyze all the organization's constraints and key performance indicators (KPI) to propose multiple viable scenarios for consideration. The system should also provide a metric 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

A single Enterprise Project Portfolio Management system must allow the organization to clearly document their projects' risks and anticipated rewards. Risks and rewards provide the basis for calculating many of the KPIs that organizations depend on to make the right decisions. The basis of estimates must also be captured so that project execution teams can later make use of this information to create mitigation plans and create more accurate estimates in cases where the risk events are triggered.

Monitoring execution and compliance

A single Enterprise Project Portfolio Management system must allow the organization to monitor projects' status and progress, as well as ensure governance. Based on the business systems that are integrated to share information, the EPPM system ensures processes are followed as designed. Some examples, when a pending change request is above the maximum approval authority of a manager, the EPPM system routes the request to the appropriate level of management with higher approval authority. 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. When a contractor has exceeded the overtime limit, which creates an out-of-compliance issue, the contract and the project managers are both notified. These processes are not designed to threaten the success of the projects or managers; they are designed to help organizations manage by exception and spend the right level of energy to proactively resolve issues before the issues escalate out of control.

Creating actionable business intelligence

A single Enterprise Project Portfolio Management system must have role-appropriate dashboards that provide insight into relevant information for each role it serves. For example, a project manager's dashboard will contain all of 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. These dashboards will give project insight to the various functions in the organization, presented in a way that is relevant to their roles, so that they can use their subject matter expertise to effectively manage the business for profitability and success.

Ensuring traceability

A single Enterprise Project Portfolio Management system must preserve the relative connections between the business systems and record changes in the information for traceability. This means not only tracking the "who", "what" and "when" of project, resource and contract data changes, but also which processes and systems facilitated the changes. Tracking this information will ensure that the business, IT and project managers do not waste unnecessary time searching for contacts and researching the reasons behind changes.

Capturing lessons learned

A single Enterprise Project Portfolio Management system must include the relevant technology to capture, as well as reuse, lessons learned. The lessons can encompass different levels of detail, whether it is information about a particular supplier's expertise, how a project risk or contract type was handled, or a video of instructions to repair a part. The lessons learned repository must be searchable and accessible so that the information can be leveraged in the right context for future portfolios, projects or contracts.

Evaluating cost performance

A single Enterprise Project Portfolio Management system must enable the cost information captured by the accounting department to help the project manager evaluate the cost performance of his project. As a result, the various relationships he requires in the course of his efforts are well maintained because

of the proactive nature of his work, and his estimated remaining project costs will help the financial office generate an accurate cash flow projection for the organization. The system creates synergy that adds tremendous value for organizations of any size.

Enhancing business strategy

A single Enterprise Project Portfolio Management system certainly has some tactical benefits, such as eliminating redundant data entry across systems, which otherwise might introduce errors – and certainly would delay having access to the most up-to-date information. But a single, integrated management system for EPPM brings even greater business benefits. With the actionable business intelligence of EPPM, senior managers can look across all the projects in the enterprise, and literally see the future of that organization and its ability to compete and to succeed. Project data is integrated with global resource details, individual resource assignments, budgets and forecasted costs, tasks/activities, progress information, and forecasts to complete from internal and external resources. The 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 flow smoothly, enabling people to do their jobs that ultimately have an impact on project delivery. Everyone has the information they need to move the project forward – even if they don't realize that their everyday decisions impact projects because they don't work directly on projects.

Conclusion

When the Enterprise Project Portfolio Management system connects all the different people and processes in a way that delivers value, the organization gains business transparency, profitability and project success. The organization that successfully implements EPPM will be aligned around corporate strategic objectives, and will effectively cascade communication to its people, whether the communication is about shifts in strategy, project performance or resource capacity. Staff will work in a proactive mode, managing everything that directly impacts the performance and probability of success of the projects under way.

With EPPM, management gets 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 and should do, so that each of them can make informed decisions to do their part to assure successful on-time, under budget, high quality results.

With Enterprise Project Portfolio Management, an organization will be more agile because they can be sure that clear goals are communicated from the top down, and are then reflected in the project priorities. The impact of an integrated EPPM solution is the connecting of the dots between the business, IT and the ability to get more projects successfully completed per investment dollar and within the time allotted.

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