

Doing IT Right

8 Steps to Project Portfolio Management

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Introduction

Because of an ever growing dependency on information and technology by businesses and a lagging economy struggling to rebound, the last few years has the Information Technology (IT) arena seeing an increasingly heightened focus on Project Portfolio Management (PPfM). A common description of PPfM is a method of managing a company's IT-related projects in a manner similar to the way that a financial planner manages the equities, bonds and cash of a financial portfolio. Before a new item is added to the portfolio it is evaluated for risk, investment pricing and of course potential for return.

PPfM is about aligning projects, technology investment funds and the associated IT resources with organizational priorities. It's about eliminating redundant projects and work that adds no business value and regaining the wasted resources. It's about managing IT resources as single pool and applying those resources against the projects that add the highest business value and have an acceptable business risk. When broken down into it's operational processes, PPfM is about estimating the value of a project, estimating the project's associated risk, performing project selection and prioritization, and ultimately, securing project funding and resources.

PPfM allows companies to deploy IT more selectively and makes it possible for executives to focus their IT spending on projects and technology that supports the company's current business strategies. When executed properly the PPfM process yields a steady flow of new projects that continually add value to the business in terms of both top-line and bottom-line growth. Ralph Menzano, author of *How to Manage an Application Portfolio Plan* states, "By controlling how your business spends its capital and people resources, and identifying the projects in which to invest, PPfM is the method by which you operationalize your business's strategy."

With over a dozen vendors successfully pushing PPfM software and hundreds of companies touting the benefits of deploying a PPfM discipline in their organizations there are not many people still arguing against the values of PPfM. The purpose of this white paper is to provide a pragmatic approach to PPfM that can be initially implemented in organizations without the aid of supporting software. By establishing, implementing and refining a PPfM process an organization can not only gain practical knowledge and experience in the PPfM discipline, but also establish exact business and functional requirements for software solutions.

The 8-step Pattern to Portfolio Management

PPfM is a continuous process comprised of collecting project data, evaluating each project, optimizing the portfolio & company resources, and executing the portfolio directives. Figure 1, below, illustrates a 8-step pattern for establishing a PPfM process within an organization and for identifying the key practices that are required to increase the maturity of these processes.

Doing IT Right

8 Steps to Project Portfolio Management

The 8 steps to a successful project portfolio management process include:

1. Building a centralized view of IT projects
2. Eliminating unhealthy, low value, and duplicate projects
3. Dividing the projects into three groups; operational, incremental, and strategic
4. Determining each strategic project's return on investment (ROI)
5. Publish a portfolio performance snapshot
6. Establish executive business leader governance for prioritization
7. Investment Evaluation
8. Automating the PPFM process.

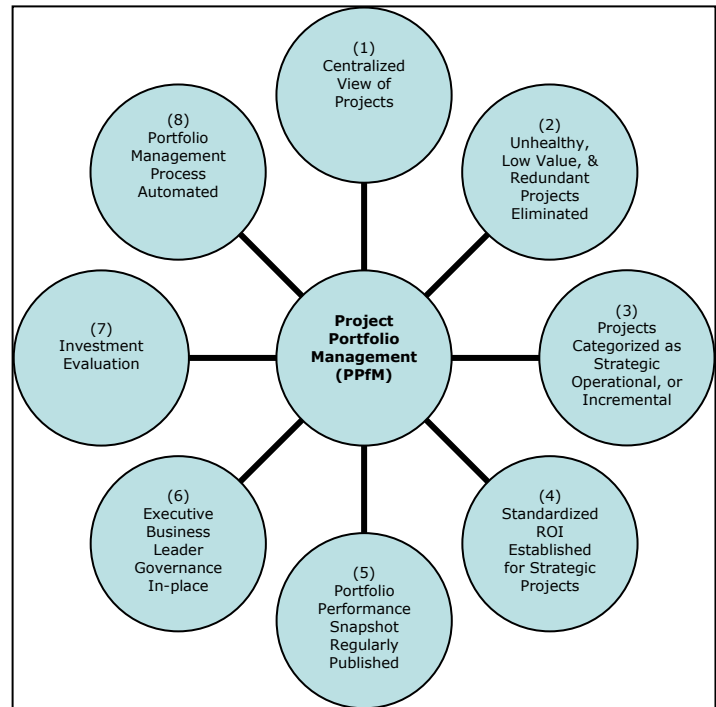


Figure 1: 8-Step Pattern to Project Portfolio Management

STEP 1 Building a Centralized View of IT Projects

PPfM begins with IT building a single collection of projects along with their vital informational facts. All projects, active and requested, should be placed into a single database. To ensure a comprehensive inventory baseline ensure that IT submits all IT-specific projects as well, such as network upgrades, PC refresh programs, server consolidation efforts, etc. (These types of IT-specific projects should be the result of proactively managing the existing IT assets – the other large component of the overall IT portfolio.)

The critical descriptive elements for a project include name, sponsor, scope, estimated costs, estimated time frames and assigned IT resources. If the project is currently active include a summary of the project's health, such as actual costs to estimated costs and estimated completion date. Keep in mind that a company's first attempt at collecting all the data will be a chore, so keeping the collection exercise and the initial database structure simple is critical. A popular format is to amass the projects in a spreadsheet.

It is critical that the project repository not only provide a view of the current projects being developed, but also provides a view of potential projects. At a minimum, a rolling two-year road map for key IT-related business projects and infrastructure platforms should be maintained. The portfolio and roadmap should be updated on a regular basis, throughout the year, rather than creating a last-minute portfolio for the budget forecast.

STEP **2**

Eliminating Unhealthy, Low-value, and Duplicate Projects

Attempting to apply an estimated budget to and scheduling every requested project is an indicator of a miss-managed project pipeline. Ultimately, the resulting pipeline of IT projects should be smaller than the original list of requested projects. Vilfredo Pareto, the Italian economist stated in his 80:20 rule, "A minority of input produces the majority of results." This "Pareto Principle" applies to the project portfolio repository as well. The top 20 percent of the projects will return 80 percent of the business benefits, but determining the top 20 percent of the projects doesn't need to be difficult.

The repository of projects should be evaluated on project health, business value and duplicate criteria. The purpose of this activity is to eliminate the non-essential project efforts, identify the group of projects for resource and funding reductions, and projects that should be considered for initial funding.

One approach to accomplishing this exercise is to ask business unit executives and their staff to review, eliminate and rank the projects being requested from their specific areas. Based on estimates provided by industry research firms, a company can expect between 30 percent and 40 percent of the initially listed projects to either be removed from the list or consolidated with other similar and duplicate projects. This exercise in itself has the potential to save an organization millions of dollars that would have been inappropriately spent on low-value and no-value projects.

STEP **3**

Dividing the Projects into Three Groups; Operational, Incremental and Strategic

At the most basic level of organization the portfolio of projects and their associated budgets need to be segregated between operational and discretionary categories. Operational projects are the efforts required to "keep the lights on". The discretionary projects are the efforts that provide the business some form of incremental upgrade or new strategic capability.

A typical discovery for a company performing this exercise for the first time is to learn that a majority of the IT budget is being spent on operational, non-discretionary activities. The Meta Group estimates that an IT budget, not being managed as a single investment portfolio, is comprised of 50% - 80% non-discretionary projects. This discovery is usually somewhat of a surprise

Doing IT Right

8 Steps to Project Portfolio Management

for organizations. For the first time, company executives and the CIO begin to realize that far too much of the IT budget is being allocated to the operational function, while too little is given to enhancing the business and strategic investments.

A large benefit of PPFM is to enable the operational cost of IT to be fully understood and measured. This financial model should be used to communicate how much money is being spent to provide a given set of business capabilities to business executives and management. On a regular basis, the CIO should report what percentage of the total IT spending is applied to new business processing capability and what percentage is spent servicing existing customers. Measurement can take the form of a percentage of revenue, the cost per employee or any other metric relevant to an organization. Once measured, the operations budget can be managed for efficiency and effectiveness gains because every dollar that can be reclaimed from operational functions can be applied toward more strategic initiatives. The end benefit of managing the operational function of IT more efficiently is getting more for the same amount of money.

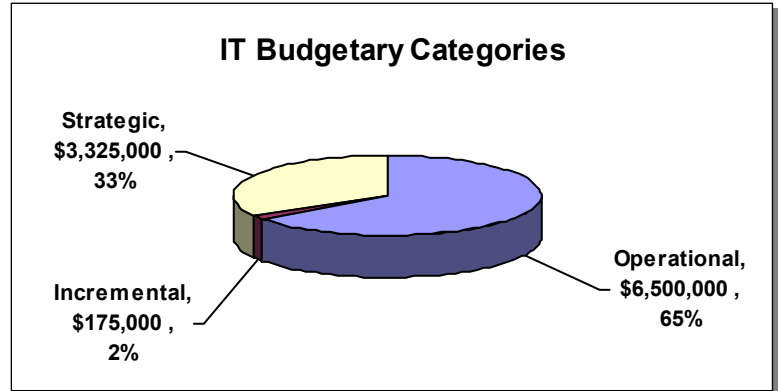


Figure 2: Sample allocation of funds for a \$10M IT budget.

The remaining discretionary budget dollars need to be split into two groups: one for strategic initiatives and one for performing small, incremental upgrades. By far, the lion's share of discretionary dollars should be targeted for strategic projects - those initiatives that will provide the greatest value and return to the company. Because of their size and complexity the number of strategic projects being executed at any one time will pale in comparison to the number of small projects being worked on. It is not unrealistic for an organization to see a 3:1 ratio of currently active small projects to large, strategic projects. Because of the large number of small projects that IT must perform it is critical that this component of the portfolio be well understood and effectively managed.

A safe and consistent manner to understanding and managing the funds for incremental upgrades is to allocate and reserve a portion of the overall discretionary budget. If the organization has a history of tracking such projects this history should be evaluated to determine a standard annual amount for an incremental projects budget. If the organization has no record or measure of such projects a good initial budget should be between 3 to 6 percent of the overall discretionary budget.

STEP 4

Determining Each Strategic Project's Return on Investment (ROI)

A strong business case will be required to secure funding for new IT projects identified as a large, strategic investment. Approval of a major systems project should require the development of a complete business case analysis (BCA) that identifies a project's return on investment and acceptable risk. Business cases are tools to support decisions of whether to build or buy a system or product and when to implement it. The focus of business cases is the financial aspect of determining the project's initial and ongoing costs, as well as the return on investment (ROI) if the technology is deployed in the business.

While the financial indicators (e.g., payback period, net present value, internal rate of return, etc.) give quantifiable values for direct comparison, they fail to consider the non-quantifiable factors related to risk. Additionally, there is a wide variety of financial analyses that produce different indicators, each having strengths and weaknesses. There are many ways to apply ROI scrutiny to a company's IT investment. Following is a summary of industry best practices:

1. Apply ROI Analysis to "Large" Projects

ROI analyses should only be done for the large, strategic IT projects – those over a certain dollar amount, certain number of required resource hours, or requiring capital expenditures. In general, the top 10% - 20% of all IT projects will represent 80% - 90% of the entire discretionary IT budget.

2. The Business Owns the Benefits

While the project management documentation for capturing all the aspects of an IT project is the responsibility of IT, calculating the ROI for technology projects isn't an IT-only endeavor. The business users should gather the data and work on defining the benefits associated to the project being measured.

3. Use Multiple Metrics

It is more pragmatic and appropriate to use a simpler ROI measure, such as Payback Period on IT projects under a certain dollar amount (e.g. \$50,000) and a more rigorous measure, such as Net Present Value in addition to Payback Period on the large IT projects (e.g. over \$50,000). This approach to applying ROI scrutiny will help keep the IT project pipeline full and avoid an elongated "benefits analysis" phase on projects that can be implemented quickly (e.g. less than 12 man-months).

4. Partner with Finance

If the financial measurements attached to an IT project are to be accepted throughout the company, then an authoritative representative from the Finance department needs to support the method, as well as the ROI calculation. The IT and business staffers responsible for calculating the ROI metrics need to work closely with the financial organization to achieve the needed support from Finance.

5. Pragmatic Measurement

If it takes more than a few of weeks to evaluate a project, then the method is too complex. If an investment of 20 hours from IT and 20 hours from the business community can not produce a viable ROI analysis then the process needs to be simplified.

STEP 5

Publish a Portfolio Performance Snapshot

The executive reporting materials supporting the PPfM process must allow executives to dig into critical project details and answer important business questions, such as: "What's the bottom line value of this project?", "Are the company resources allocated to the right projects?", "Are the selected projects aligned with the company's strategic direction?", and "Is this project actually achieving the desired benefits?".

The ability to capture, aggregate and present the project portfolio contents, of ROI, risk, resources, alignment to business goals, and project health status drives the investment decision-making process.

Benefits Reporting

A benefits report must allow an executive to gain an understanding of costs, benefits and ROI at the portfolio, program or individual project level. Moreover, during the execution stage of a project the reporting of "actuals" or the vital comparison of proposed costs and benefits versus actual costs and achieved benefits allows decision makers to continually evaluate the investment level being applied to the specified initiative. In many cases the investment level is never changed from the initial decision, but often a project may need to be cancelled or deferred if major issues arise or business priorities change.

Risk Report

The Risk Report allows for the quick recognition of issues when they occur, the contingency plan initiated to resolve the issue and the progress being made against the issue. This report also provides executives with insight to the impacts on ROI, schedule budget and milestones caused by the high-lighted issue.

Investment Alignment Report

The Investment Alignment report groups projects within a portfolio by their business theme and shows where money and resources are being invested. This report provides the information that ensures resources are being applied to high-value work that is supporting and advancing defined business objectives.

Resource Planning Report

The Resource Planning report charts company's pool of resources against proposed projects. It takes into account constrained skills within the organization and answers the essential question of, "When can the organization deliver on the work that is important to the company?" The net result of this report illustrates the impact on overall resource capacity of the company and allows executives to plan for portfolio impacts, such as delaying a project in the portfolio because of a constraint on capacity or pursuing other sourcing strategies based on project dollars and value.

Portfolio Monitor

The Portfolio Monitor report is a comprehensive summary report bringing together all of the critical elements of portfolio monitoring and provides a high-level "health checks" for project budget, risk, schedule and benefits metrics. At the individual project level, a green-yellow-red stoplight report summarizes the current health of the project and its critical components allowing for quick identification of a project going astray.

STEP 6

Establish Executive Business Leader Governance for Prioritization

With an unending series of IT requests, but IT funding budgets limited, project prioritization is critical to the overall success of PPfM. The CIO is faced with business unit executives fighting for their own list of projects that they believe will solve their business problems, IT resources stretched thin attempting to keep too many active projects on track for delivery, as well as the explosion of new technologies from which to choose. The CIO sits in the middle of this chaos, attempting to balance IT's supply with the business demand.

A fresh perspective on this problem is required. To understand the true economic and qualitative value that a project offers a company and the real risks associated to it, business unit leaders must drive the prioritization of IT projects in the portfolio. Establishing business leaders as portfolio managers ensures business-IT alignment and positions the CIO as a voting facilitator of the committee, not the sole decision maker. Instead of the CIO determining when and where to spend budgeted IT funds it is more practical to let the business leaders figure it out.

A portfolio management such creates a shared responsibility between the CIO and business unit executives for setting project priorities, determining resource options, and allocating IT funds. It is a common event for an organization to make a decision to decline a project request, as well as delay

Doing IT Right

8 Steps to Project Portfolio Management

or cancel a project to meet changing project priority needs or to accommodate budgetary requirements. The amount of due diligence needed to make IT portfolio management work should not be underestimated. Building an effective technology project portfolio requires a clear business direction for the future, an understandable picture of the present and considers the dynamic business environment.

A proven method for establishing and maintaining the portfolio mix is for the CIO to assemble business executives into a steering committee or IT governance council and have it meet regularly, typically monthly, to review current project progress and new project requests. Several benefits result when the appropriate IT project information is placed in the hands of key business executives.

- The CIO can successfully facilitate such decision-making discussions in a logical, fact-based manner, thus eliminating a majority of the emotional influences around a project. The PPfM process gives business leaders the responsibility for making investment decisions on IT projects. The CIO is no longer in a position where he has to sell projects to the business. The business people propose the projects and take share the responsibility for benefits definition, risk profiling, ongoing operational costs and timeliness of delivery. For example, if a \$7 million CRM project is being recommended, it's the VP of Sales who has to sell the project to the rest of the business team.
- Communication between IT and business leaders is improved. The process of portfolio management in this forum 'demystifies' the complexity of the IT function by giving business leaders the valuable ability to understand how IT initiatives impact their company.
- Business executives begin to think as a team when evaluating the best projects for investment. PPfM replaces the practice of the 'squeaky wheel gets the grease' and replaces it with a process where investment decisions are made based on the best interests of the company.
- The flow of dollars and reasoning behind it becomes very transparent to the organization. This is music to the ears of CEOs and CFOs because they are under increasing pressure to deliver business and technology investments that add value and support strategic objectives.

An IT steering committee prioritization session should be comprised of healthy discussion regarding the key aspects of projects, such as their relative economic value, current execution health, technical feasibility and ultimately their priority against projects in the portfolio. With the appropriate reporting and communication materials, as described above, a PPfM capability enables ongoing project selection, prioritization and cost/benefit evaluation so that the optimal mix of initiatives can be maintained.

As facilitator and chair of the IT steering committee, the CIO is responsible for the development and management of the portfolio, as well as the portfolio

performance reporting materials. This responsibility is usually delegated to an IT planning function. If the organization is lacking a formal IT planning function, an organizational change most likely will be needed.

STEP **7** **Investment Evaluation**

The investment evaluation phase of the PPfM practice could be considered the most difficult and probably the least implemented by organizations. It is the practice of measuring the business value that was actually realized from an implemented IT project, and it answers questions like "Was this the right investment to make?", "Is this still the right investment to make?"

The Investment Evaluation process determines the degree of progress that was made towards the quantifiable business benefits and stated performance goals of IT projects. Critical elements of this process include consistent realized value examinations, project scorecards, as well as the monitoring and measurement of realized IT value over time.

STEP **8** **Automating the PPfM Process**

This entire paper has taken the perspective that if you don't have good project portfolio management practices in place, then a software tool is not going to help you. Evolving project portfolio management tools are useful, but they can't substitute for a good process. Because of this viewpoint it is important that this process get established and used by the organization before automation is pursued. Once the PPfM procedures are in place they can be made more effective and efficient with the aid of a PPfM tool.

Currently, the marketplace is cluttered with PPfM software entrants with most of them relatively immature, but evolving quickly. The tools do not yet provide complete oversight of all aspects of PPfM, such as on-going project governance, benefit measurement, and comprehensive budget and resource planning. At a minimum, a good portfolio tool should manage and report on the complete projects inventory and its economic value, the alignment of projects to strategic objectives, active project health, as well as portfolio changes.

If your organization is unfamiliar with the principles of project portfolio management an essential motivation to choosing a PPfM tool may be ease of use. Business unit clients and IT staffers responsible for providing and maintaining the portfolio information will spend enough time getting comfortable with the concept of PPfM that you don't want the burden of learning a complex software package to add more frustrations.

Doing IT Right

8 Steps to Project Portfolio Management

In fact, buyers of PPfM software should worry just as much about training their staff members as they do about the functionality of the tool. The tool should provide modifiable templates and scripting wizards that assist in getting projects defined. In addition, the PPfM tool should be able to support a variety of PPfM methodologies. This will ensure a smooth integration between a company's internal PPfM process and the application, as well as maximize the rapid acceptance and consistent usage of the tool by users.

The biggest benefit to be gained by automating the PPfM process is the discipline it imposes on all projects - even the small ones. A PPfM tool enforces the tasks and controls throughout the organization in a consistent, regulated manner. With automation, you can assure executives that there will be few aspects of a project that get left out or forgotten during the critical investment decision process.

Conclusion

Developing and optimizing a project portfolio management practice within a company does not come without its challenges. Large amounts of project-related data must be collected across the organization and integrated into a single repository. The disciplines of financial and business case analysis need to be honed in the IT organization, as well as the business units. Additional time constraints will be placed on already busy executives.

However, the challenges of implementing portfolio management pale in comparison to the bottom line economic value and organizational benefits that it brings to an enterprise and its IT function. It builds the competency in IT to allow it to talk about investments from a business perspective. This in itself can revolutionize a company's process of getting technology deployed that adds true economic value to the bottom line and differentiates the company from its competition.

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