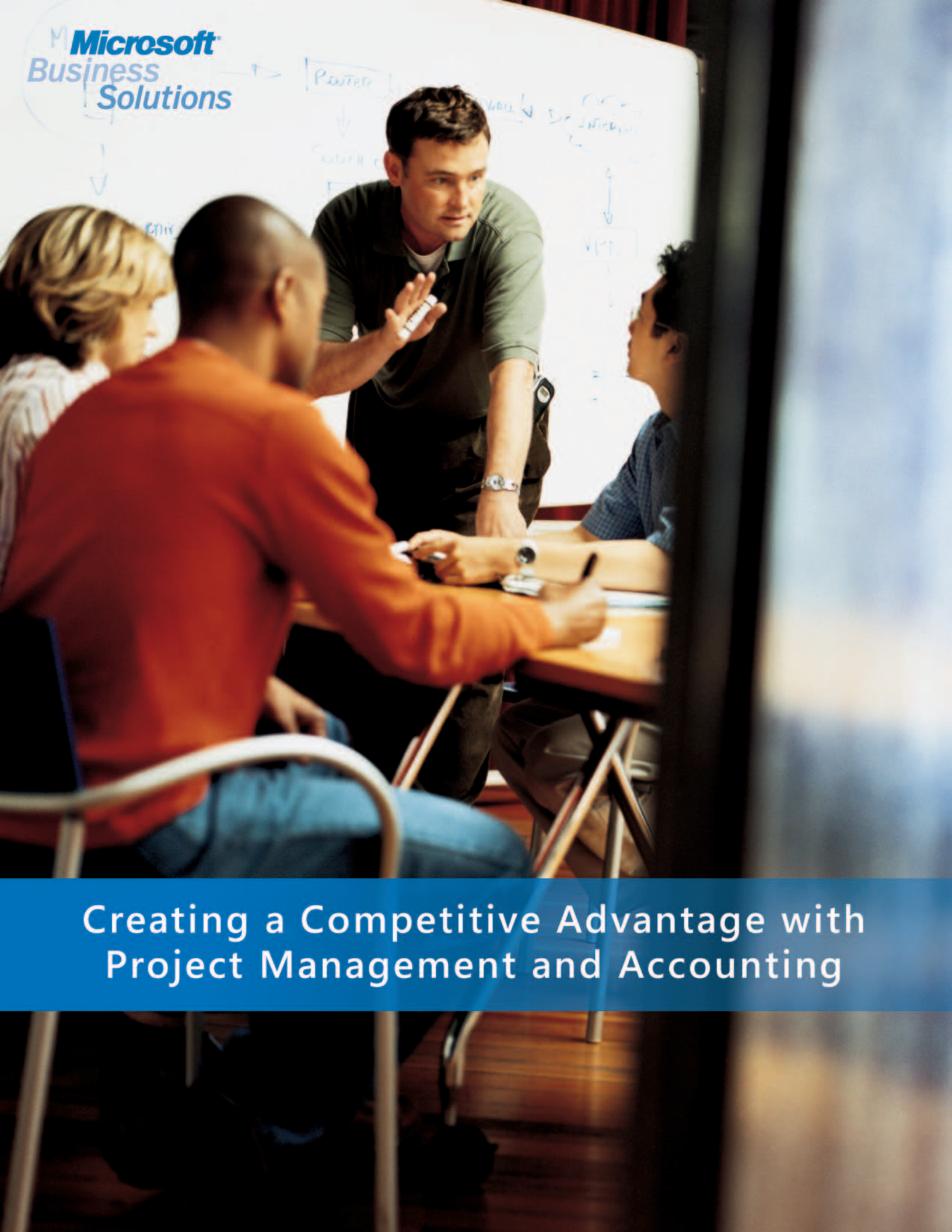

Creating a Competitive Advantage with Project Management and Accounting

Contents

Introduction

Catalyst for Business Transformation

Integrated Project Management and Accounting (PMA) technologies can be a catalyst for business transformation while delivering a powerful return on investment (ROI). Rather than describing the discrete elements of a PMA solution, the emphasis herein will be on the interaction between PMA advocates and management decision makers—and how they ultimately joined forces to accelerate project and resource optimization.

The discovery process took place in a typical Professional Services Organization (PSO), and the story is drawn from the real-life experiences of Pcubed, one of the world's largest providers of project and portfolio management services.

You will see how PMA helped to transform a well intentioned, but under-performing services company into one that dramatically improved bottom-line performance of profitability, productivity, and customer satisfaction. This transformation is told from the vantage point of four major breakthroughs:

- Measuring project success
- Optimizing project resources
- 'Projectizing' the organization
- Responsiveness to change

Overview of PMA

While there is no single definition for project management and accounting, the following information should provide some insight:

- PMA is the foundation for project-driven organizations with integrated financial, project and resource data to optimize delivery of valued and profitable services.
- PMA puts the right people and their skills on the right projects at the right time … to improve overall project success and service agility.
- Expanded to its full potential, PMA reaches beyond organizational boundaries to improve collaboration with customers, partners and suppliers. For a visualization of PMA, please see Figure 1 on the next page, entitled High-Level PMA Relationship Map.

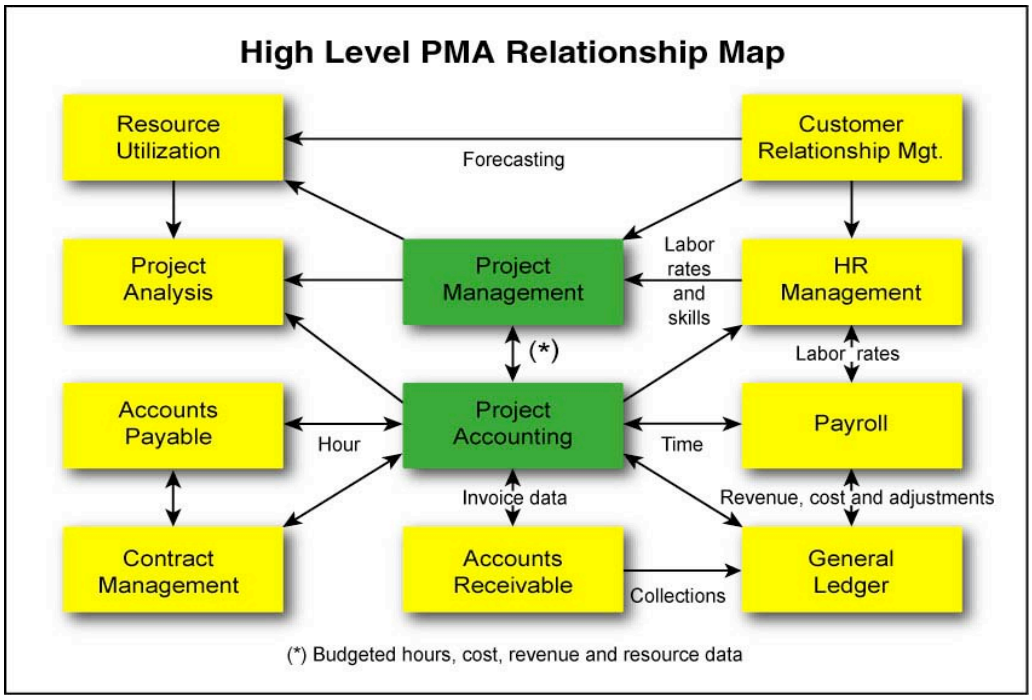

Figure 1. **Key PMA components to which you can add modules to meet client requirements for an integrated, end-to-end solution**

It is worth noting that annual revenues associated with PMA deployments are already closing in on the $1 billion mark, and may surpass $10 billion within the next five years. This type of accelerated growth is attributed to the strong ROI that PMA investments bring.

Response to Unprecedented Change

The backdrop is a typical services organization that rose to the challenges of a tough economy, and the transformation made possible through a well-conceived PMA solution. You are now invited to a front row seat as the storyline unfolds…

Having gone through a period of rapid growth during the mid 1990s, this services-based company had its eye on becoming an industry leader in its field. From the outset, the CEO's vision was to hire the best available talent, and give them the personal freedom to make on-the-spot decisions that would not only satisfy, but truly engage the customer.

The employees were highly motivated, and put in long, hard hours to reap the rewards of market leadership. Everything seemed on track until a series of unprecedented changes rocked the economy. In rapid succession came the collapse of the dot-com boom, the 9/11 tragedy, and scandals surrounding some of the country's most prestigious firms.

With the subsequent economic down-turn, sales began to drop, but internal expenses remained high, because of a deep-seated bias against process and bureaucracy that went up to the CEO level. Caught off guard, the organization had little choice but to initiate several rounds of painful cost-cutting. Before long, internal budgets were slashed, partners and suppliers were forced to make major concessions, and a hiring freeze meant no replacements for staff attrition. Finally, the budget was balanced, but there was little or no margin for error.

Regaining Forward Momentum

As the market began to stabilize, the company was holding its own, but profits remained thin, and the infrastructure was trimmed to the point of becoming anemic. Having weathered the worst of the storm, the CEO felt it was time to begin retaking the offensive. The challenge he proposed to the organization was: What can we do to make ourselves more efficient and profitable, while preserving our corporate culture, all the while staying at least one step ahead of the competition?

Not surprisingly, the response came in all shapes and sizes. Taking this input quite seriously, the CEO formed a cross-functional task force to sort through the feedback and summarize the results. He was presented with the following prioritized list:

- We love our freedom and creativity, but things seem to be out of control … we need *some* kind of structure to accomplish what we're capable of doing.
- Our customers love us as individuals, but don't feel the same way toward our company or the services we deliver. We see customer loyalty slipping away.
- We've had some serious setbacks with key projects (no one is willing to call them failures), but we never seem to learn from our mistakes. It's frustrating, and requires a huge amount of our time to keep reinventing a broken wheel.
- We understand the need for management reports, but no one has any confidence in the project data. Does anyone really know what's going on?

This final item surprised the CEO, because staff and managers came to the same conclusion, but from different perspectives.

Status Quo Is No Longer Acceptable

After a few restless nights, the CEO called his management team together and announced that it was time for a change: Eventually, the economy would recover, but the winners will be those that could hit the ground running.

"We cannot afford to wait for things to get better to regain our momentum and keep a competitive edge", declared the CEO.

He then outlined the criteria for moving the company forward, expecting everyone to give 100% to make it happen. He still didn't have the final answer, but whatever strategy was chosen would have the following mandates:

- Whatever we invest in, it must have a strong ROI and a near-term payback. Given our current financial situation, we cannot wait three years or more to recoup our investment.
- Individual effort alone cannot take us into the future. There has to be something that truly leverages the collective talent of this organization … and *we need to measure that contribution*. We cannot fly blind when setting priorities on project funding; our best people should work on the best projects.
- While we strive to make our people more productive we cannot bury them under a mountain of process. The quality of services we deliver means nothing if it isn't backed by energy and motivation. This is not negotiable.
- Finally, no piecemeal solution. We are not going to invest in third-party solutions and products because they scored highest on a technical checklist. If we're going to buy something, it needs to be mainstream, easy to use, and that integrates as well as scales to our company needs… *at least until we're out of the woods.*

Pursuing Available Options

The CEO was the first to admit that their homegrown financial system had been stretched to its limit, and could not support future growth. Purchasing a new financial system would address a number of the CEO's mandates, but it perhaps would not have an impact on people, performance or service delivery—other than more accurate financial data tracking. It was part of the complete answer.

A customer relationship management (CRM) application would improve how people work together to deliver better, more profitable client services, but it still addressed only part of the bigger picture.

At this point, Susan entered the picture—a mid-level manager. Over several years, Susan had earned the reputation as the go-to person. She routinely managed the most critical service delivery teams. On occasion, she had also been tasked with overseeing strategic internal initiatives often sponsored by the IT department.

Coming to Grips with Corporate Culture

Susan knew that her key to success as a services delivery manager was a natural instinct for perceiving when things were about to go bad. Many of her client engagements could have failed, if it weren't for the last-minute heroics of Susan and trusted team members. Less experienced team leaders often suffered under similar circumstances.

At that time, Susan was one of the few managers to use project management (PM) scheduling software. Her peers were more comfortable using Microsoft® Word documents or Excel spreadsheets to track people, cost and progress. Although she hadn't made it widely known, Susan had joined the Project Management Institute (PMI) and earned her Project Management Professional (PMP) certification without any fanfare.

Wanting to explore all possible options, the CEO asked Susan to make a brief presentation at an executive staff meeting on her experiences and lessons learned. She did so, but while explaining the benefits of an effective PM strategy, Susan could tell that the executives were losing interest. Managing projects makes a lot of sense at the operational level, but was not associated with running the business at the executive level. Sensing a likely defeat, Susan made one final observation. Although she did not know all the details, she had been researching PMA, and its potential for delivering a strong ROI through resource and project optimization.

After a deep breath, she posed the following question,

"What if our organization was able to standardize the delivery of its services using a proven, mainstream approach, and then tracked the effectiveness of resource usage, time and cost across all projects?" She then added, "And what if we could track not only billable and non-billable hours, but also project and resource alignment with business objectives … all based on integrated financial, project and resource data?"

Having given it her best shot, Susan turned to leave the room. The CEO stopped her mid-stride with a simple reply,

"Given the circumstances, we can't afford to overlook anything that improves the competitiveness and profitability of our company. I want to explore this option further."

This would soon trigger a sequence of events that no one could have envisioned, including Susan.

Breakthrough: Measuring Project Success

Things began to happen quickly. The CEO requested more information about PMA solutions, especially regarding the measurement of project resource and financial performance. He asked the CFO to look into project accounting software that could track resource usage, cost, revenue and even profitability across projects. Susan was tasked with familiarizing herself with project management tools, integration, and the adoption of core PM processes. All of the original CEO mandates were to be kept intact, and a follow-up meeting was scheduled.

Building a Business Case for PMA Return on Investment

> ***Note:*** *Most PMA deployments fall into one of two categories: (1) company-wide solutions, or (2) supporting a services-based group or department*

While a business case was being built for project and resource optimization, the CFO's immediate concern was documenting the potential for PMA ROI. Without compelling evidence for near-term payback, the CEO would be hard pressed to justify the purchase of a PMA solution (or one from a third party) until revenue and profits improved. It didn't take long for the CFO to summarize his findings:

- For PMA deployments, case studies have shown that annualized ROI often approaches or exceeds 90%, which is impressive by any standard.
- Even more encouraging was the potential for near-term payback, which for many PSA-like deployments has occurred within six months. However, true business transformation can take two or three years—mainly to overcome internal cultural issues and to adopt standardized processes. With strong executive sponsorship, the CFO was convinced that accelerated payback was within reach.
- Case studies also showed that PMA deployment can increase resource usage by an average of 2% to 5% with consulting-type services, often approaching 10%. Some PMA adopters believe that they could have recouped their original investment with even a 1% improvement in resource efficiency.

Deciding How to Measure Project Success

When the CEO was comfortable with the PMA business case, he wanted Susan's input about how the company would measure the success (or failure) of projects. In the past, most of the attention was given to on-time and on-budget performance, but that had little to do with delivering business value. In fact, the original intent of many projects was often lost when key deliverables were severely cut back to stay on time and on budget. Customers became unhappy with the final results, and a lot of non-billable effort went into restoring lost functionality.

Susan had experienced this cycle first-hand, so she was careful to point out that there were two distinct audiences that needed to be addressed when defining project success criteria. First, there are senior project managers (experienced program and project managers, project sponsors, senior project managers, etc.), who have a vested interest in the success of specific projects. Second are senior decision makers, who see projects either as big-ticket expense items to be managed or what can enhance business strategy and objectives.

After a number of false starts, a cross-functional team, headed by Susan, settled on seven primary measures of project success with the biggest consideration going to the needs of decision makers. The senior PMs were willing to accept these metrics, but with a different set of priorities. The final list and rankings appear below. The number one indicates highest priority.

> ***Note:*** *Other organizations might come up with a different list and priorities; this table provides a framework for discussion.*

Table 1. Top Measurements of Project Success

Measure	Executive Ranking	Senior PM Ranking
Alignment to business strategy	1	3
Bottom-line economics (profit, ROI…)	1	1
Time-to-market	1	3
Customer satisfaction	2	2
Meeting delivery dates and budget	2	1
Product and service quality	3	2
Resource productivity	3	1

Translating Theory into Operational Reality

As might be expected, a sizable amount of time and energy went into deciding how these project success metrics would be applied to day-to-day operations. Some of the reasoning behind these metrics is highlighted below:

- Susan and the CEO struggled with a practical way of aligning projects with business strategy. They finally decided on clear, one-word descriptions that would capture the essence of the top-four corporate objectives driving executive decision making. In order of priority, they were:
    - **Speed** □ Time-to-market
    - **Service** □ Improved customer service and loyalty
    - **Growth** □ Revenue and profit
    - **Cost** □ Cost reduction
- To accommodate business changes, they came up with criteria that could be adopted, and used to re-evaluate current and proposed projects (such as agility, innovation, leadership, and quality). For this to work, nearly everyone would need to be familiar with the latest business objectives and their intent. The CEO knew that this added insight would help everyone to understand the company's direction.
- PMA would be expected to support the bottom line, including cost, revenue, profit, ROI and pay-back. By integrating PMA with financial and HR databases, the foundation was being laid for in-depth analysis of project performance that had never been possible.
- While investigating PM best practices, Susan also learned that in large, 'projectized' organizations, time-to-market can be reduced by as much as 60%, while reducing development costs, and improving quality. From this point onward, management's attention would shift from arbitrary project deadlines to completion dates that were sensitive to internal, competitive and market pressures. Trade-offs, based on solid information, could then be made when resolving potential conflict between on-time, on-budget and within-scope performance.

Over the past decade, market research has shown that at least half of all projects are seriously challenged with budget and schedule overruns, poor feature retention, and failure to meet stakeholder expectations. On a more positive note, the likelihood of outright project failure has declined from an alarming 30% to approximately half that level. Nonetheless, tens of billions of dollars are lost each year due to poor project management, a message not lost on the CEO.

One of the CEO's biggest attractions to PMA was the accountability for project success that had proven highly elusive in the past. However, accountability can be a double-edged sword. As another challenge, the CEO decided to focus on rewarding positive behavior (through bonuses and personal recognition) … and to stress the need to *identify and correct project problems as early as possible*. In fact, the only people targeted for reprimand would be those who intentionally hid bad news or shifted

blame. This bold gesture helped to rekindle project team motivation throughout the company, but it also sent a message to functional managers, who in the past were rewarded for their vertical silo mentality and hoarding of project resources.

Table 2. Managing and Measuring PMA Effectiveness

	Plan Wisely	Execute Effectively	Measure Accurately
Decision Making			
▪ Executives ▪ PMO director ▪ Program and project sponsors	▪ Identify, prioritize and select projects based on business alignment, accurate financial forecasts and skilled resource availability	▪ Optimize portfolio mix of projects and resources ▪ Better 'save/cancel' project and program decisions ▪ Responsiveness to business change	▪ Analyze project ROI and time-to-market ▪ Track high-margin, high-value projects ▪ Compliance with formal industry standards
Project Management			
▪ Program Mgrs /PMs ▪ Business unit and resource managers ▪ Project teams	▪ Better time and cost estimates at start-up ▪ Resource availability and capacity planning ▪ Historical data for business manager proposals	▪ Improve resource/ skills use and out-sourcing ▪ Collaboration with virtual, cross-functional teams ▪ Increase customer satisfaction and retention	▪ Minimize duplicate time and expense entry and errors ▪ Analyze billable and non-billable work ▪ Planned vs. actual cost and schedule variances
Project Accounting			
▪ CFO ▪ Controllers ▪ Accounts payable and receivable	▪ Tie projects to profits, revenue and cash flow ▪ Better forecasting of time, cost and resources ▪ Productivity and cost-reduction initiatives	▪ Timely capture of all project-related costs ▪ Control budget overruns ▪ Ease burden of disparate PM and accounting systems ▪ Better contract management	▪ Synchronize project, resource and financial data ▪ Reduce billing and payment delays ▪ Streamline invoices and revenue recognition

With financial, project and resource data integration, an effective PMA solution can improve performance across all levels of the organization. The previous table summarizes many of these capabilities from planning, execution and measurement perspectives.

Having tackled one of the tougher issues faced by project-driven organizations, the CEO turned his attention to a second breakthrough discovery: *Optimizing Project Resources*.

Breakthrough: Optimizing Project Resources

The CEO knew from past experience that getting the most out of project-driven resources, at the enterprise level, would be a challenge. On one hand, the CFO was attracted to the financial side of the PMA equation. Accurately tracking the time and expense of all people across all projects, including billable and non-billable hours was a powerful incentive. This would not only lead to greater resource efficiency, but also allow more accurate forecasting of cost, revenue, and even profit potential down to the project level.

On the other hand, this approach would require that all project team members regularly fill out time sheets, with no exceptions. That cut deeply into the cultural bias against anything that restricted individual freedom and creativity. After thinking it over, the CEO was certain that he could win the support of staff and managers, if they understood that time sheets were vital for managing the growth and profitability of the company: With better financial performance comes the prospect of larger bonuses and salary increases. In the long run, the employees only needed to know *why* the time sheets were necessary. After that was understood, overall resistance was minimal.

Beyond Traditional Resource Management

Project management has been associated with delivering projects on time and within budget. Since people-related costs usually account for 75%, or more, of total project expenses, the benefit of tracking resource usage makes good business sense. Unfortunately, many organizations are not very good at estimating project time and cost. The result is a constantly moving target after the project starts, especially when there is no accurate record of time spent on specific tasks.

One of the benefits of PMA is the focus on skills-based resource management that can be tracked across multiple projects. This added dimension takes the emphasis off of pure headcount, and encourages a look at the bigger picture. You not only want to know what resources are supporting any given project, but also what kind of skills are being used across all projects. You can then identify what skills are still available for new or proposed projects.

Allocation of Best-Skilled Resources

Susan knew the pain of not having the right people on projects at the right time. With success, you almost always find two key players:

- The project manager who keeps everything on track by anticipating problems
- The all-important subject matter expert (SME). This person can make or break a project and is almost always in high demand. Crafty managers tend to hoard these people as if they were worth their weight in gold.

Unfortunately, SMEs often find themselves seriously over-booked because everyone wants some of their time. Unchecked, this can lead to one of three outcomes:

- The SME doesn't stay in one place long enough to perform the expected magic
- Strategic projects that lack the clout to snare a SME may spiral out of control
- The SME eventually burns out, and accepts an offer from another company that will pay handsomely for that unique talent

A good PMA solution not only tracks needed people, but can also create what-if scenarios of the resource mix across multiple projects.

Project Collaboration Takes on New Meanings

Optimizing individuals can take an organization only so far, regardless of skill levels. Effective collaboration tools can improve knowledge sharing in and across projects. What was once limited to email and chat rooms, collaboration tools have now moved into the mainstream of corporate Web-based strategies. When building her business case for resource optimization, Susan noted the following advantages of a PMA solution:

- **Project Team Assignments and Task Reporting.** Not every team member needs (or should have) access to the total project work plan. Today, with Web-based technologies, team members see only the work they need to accomplish, and report on progress to the project manager. This not only limits information overload, but can also reduce the overall cost of PM software, IT support, user training, and redundant data entry.
- **Automatic Email Alerts and Notifications.** If you can agree to acceptable performance levels across multiple projects, you can use a good PMA solution to program an automatic email notification to any stakeholder. For example, Susan placed a 15% threshold on cost and budget performance on all projects. Whenever that limit is exceeded, the PMA system sends an early-warning email to the project manager and sponsor so that necessary action can be taken.
- **Web-Based Repositories for Project Documents.** In the past, Susan often had 100 or more project documents in her computer's hard drive. This was useful to her, but essentially useless to anyone else. By using PMA, Web sites can be created for individual projects that encompass all documents worth sharing: charters, project plans, status reports, issues, risks, reference documents, etc. Any authorized person, including clients, sponsors, executives or partners can access these documents through a standard Internet connection using keyword searches.

Customer Satisfaction and Expectations

There are many other examples of how Web-based and document management technologies can revolutionize project collaboration, but the previous narrative should be of help when exploring the possibilities. A final point worth noting is use of standardized customer satisfaction surveys. The trick is to keep them straightforward (no more than five to ten questions), and you can update surveys at pre-determined points in the project life cycle. Keeping tabs on customer expectations can eliminate a lot of tension and re-work as the project moves toward completion. All survey results should be documented and included in lessons-learned prior to project completion.

After establishing the boundaries for ROI and resource optimization, the focus for Susan shifted to the strategic role that project management (and PMA) would have in the company.

Breakthrough: Projectizing the Organization

Project management support is often strongest at the grassroots level, yet the full potential of PMA generally cannot be realized at that level. For this reason, Susan became the evangelist, and her message to peers and executives was the need to elevate project management to that of a core competency across the organization.

Even the CEO, who very much believed in PMA, struggled with the concept of projectizing the whole company. This had more to do with corporate culture and resistance to change than learning the essence of project management. To make the commitment, the CEO required something tangible … a component so compelling that it could not be ignored. For Susan, this was about to become a defining moment in her career.

PM Maturity

Susan recalled reading about PM maturity and the key role it plays in an organization's overall capability. She found a qualified PM solutions provider that agreed to conduct a PM maturity assessment. What convinced the CEO was the use of established standards that would give him the credibility he was seeking:

- **Adherence to a De Facto CMM Model.** The capability maturity model (CMM) has been around since the early 1990's; recently it was adapted to the field of project management. The five levels of PM maturity (from lowest to highest) are:
  - Ad hoc/Initial
  - Planned/Repeatable
  - Defined/Organized
  - Integrated/Managed
  - Optimized/Sustained
- **Alignment with PMI's Nine Knowledge Areas.** PMI's Project Management Body of Knowledge Guide is a globally recognized standard for PM professionals and has been approved by the American National Standards Institute (ANSI). The nine knowledge areas are a framework for understanding the depth and breadth of project management. They are:
  - Integration
  - Scope
  - Time
  - Cost
  - Quality
  - Human Resources
  - Communication
  - Risk
  - Procurement
- **PMI's Project Management Life Cycle.** The project management life cycle has five primary phases:
  - Initiate
  - Plan
  - Execute
  - Control
  - Close

Conducting a PM Maturity Assessment

A series of interviews were planned to survey four levels of the organization: senior management, program/sponsors, project managers, and project team members. Based on the standards previously mentioned, all results were summarized and presented in a graphical format. The consulting firm then presented these findings to the CEO and his direct-reports, while Susan facilitated the meeting. The outcome of that assessment played a key role in creating support for PMA:

- **The Organization Is Firmly Entrenched at CMM Level 1.** CMM Level 1 is the lowest level of PM maturity, which was initially distressing to hear. The wake-up call came when they realized that the vast majority of all organizations (estimated at 75% or higher) are at Level 1.

  Note: *Some organizations believe they have already achieved Level 2 or 3 … and are making flawed business decisions based on that assumption.*

- On a positive note, the CEO and his team gained valuable insights into the impact that higher PM maturity levels can have on the enterprise. As a final deliverable, the consultant suggested specific actions that would help the organization move from Level 1 to Level 2.

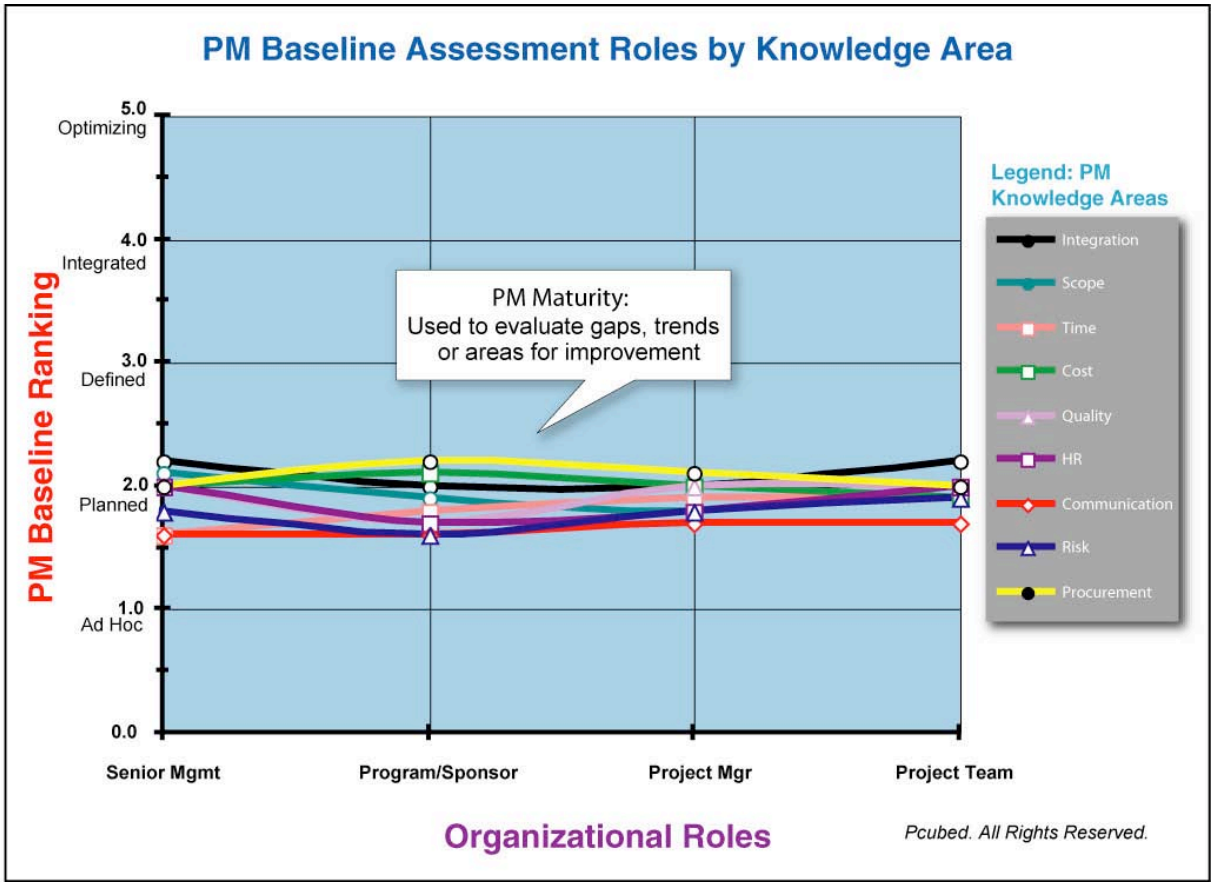

Figure 2. **Distribution of survey results, at different levels, based on a CMM model and PMI nine knowledge areas.**

- **Perception vs. Reality.** Another surprise was the perception gaps between different levels of management. Senior managers tended to be over-optimistic (or too pessimistic) about specific PM skills, but at the project-team level there was little room for unwarranted optimism. The biggest lesson learned was that executives were making key business decisions based on less-than-accurate perceptions about project performance. Closing that gap in critical areas such as people, communication, and risk management became a high priority for the CEO.

- **An Unbreakable Rule.** Improving PM maturity comes with its own golden rule: No matter how much money, time and training is invested, you cannot leap-frog CMM levels. A Level 1 organization cannot immediately pursue Level 3 without its culture, people and processes adapting to Level 2.

A Holistic Approach to PM Process

The hallmark of PM Level 2 maturity is planned and repeatable project performance. Individual heroics and working harder only take you so far. This clearer vision convinced the CEO that there was a need for more uniform processes, but he was adamant about one condition,

"I will mandate processes for the good of our company and clients, but *only* if it helps to empower our people, and not to stifle them."

After a number of brainstorming sessions, Susan came up with a bold plan that broke away from conventional wisdom about PM processes. At first, the advocates felt her plan did not go far enough, while the process-adverse felt that it went too far. Drawing courage from the CEO's support, Susan unveiled a big-picture plan for continuous process improvement. The key components of her plan were:

- **The 80/20 Rule of PM Process Adoption.** Because PM scheduling tools and processes were not consistently used in the past, a handful of core PM processes would have the greatest near-term impact without overloading the project teams. As bandwidth and maturity improved, more detailed process could be introduced. The core processes were identified as:
  - Standard project status reports targeted specifically at the executive and project level
  - Issues tracking with a formal escalation process for serious, unresolved problems
  - Risk tracking with contingency-plan review for high probability/severity project risks
  - Change control that would target project schedule and budget baselines

  Note: *The fourth process had significant implications. First, project managers would have to be trained to create thorough budget and schedule baselines early in the PM life cycle. This would become the basis for tracking variances and early-warning alerts. If this process failed, there was a direct impact on PMA benefits, documenting ROI or payback.*

- **Management of the PM Life Cycle.** This strategy took a little more imagination, because it was aimed at the collective role of project managers, sponsors and senior management. Rather than micro-managing processes at the project and task level, the emphasis would shift to planned reviews and approvals at the end of each PM phase. Core processes would be a part of this holistic model. Project sponsors would then be held accountable for approving each milestone before project managers could move to the next phase.

  Note: *Projects can have an iterative process with some overlapping phases.*

- Rather than forcing project teams to adhere to step-by-step process manuals, the emphasis would shift to a big-picture life cycle model (see Figure 3). While this appeared simplified, there are many business implications involved:
- This process model can be a standard template for all project schedules. Each stage's approval becomes a major project milestone that can be tracked and analyzed at any level of the organization (such as how many projects are more than 20% behind schedule, or how many projects were proactively cancelled early vs. late)
- While all projects use the same PM life cycle for consistency and measurement, deliverables often require and deserve a unique product life cycle. Common examples include a different life cycle for systems development (Six sigma or other formal quality initiatives, etc.) Even these life cycles can be standardized and then used in the execution phase of the over-arching PM life cycle.

In Susan's case, this strategy silenced the critics who claimed that no single life cycle could ever be implemented across all projects. The CEO immediately saw the simple elegance of this plan, and created a cross-functional group to recommend a list of standard product life-cycle models to be evaluated against models in the public domain.

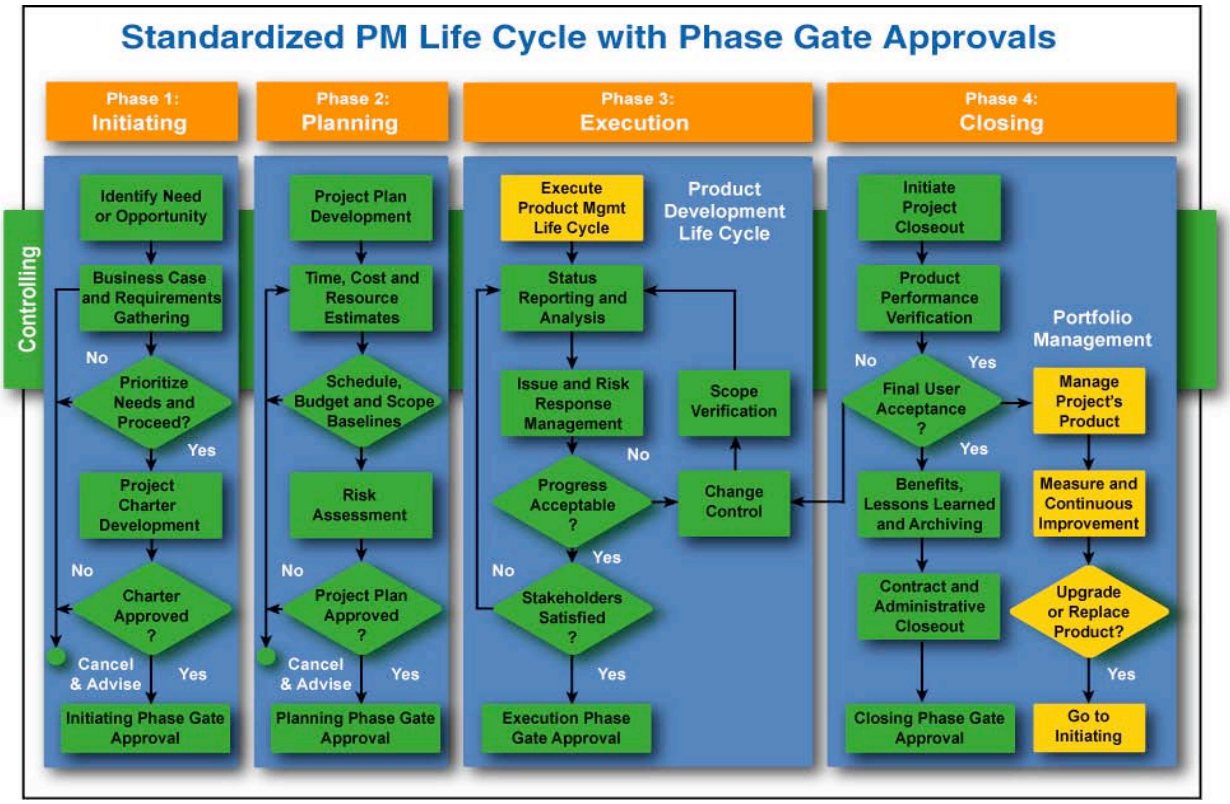

Figure 3. **A cycle model aligned with PM best-practices with the flexibility to support virtually any type of services-intensive project**

The driving force behind these life-cycle strategies was not to impose process controls (although this was clearly important), but to create consistent performance metrics that senior management could rely on to make sound business decisions. The CEO held himself accountable for getting this message to everyone, including external partners, suppliers and key customers.

A Projectized Organizational Model

After the key components fell into place, the last major point was to decide what kind of organizational structure would help to sustain this model and ROI expectations. As discussed earlier, one of the principle goals of PMA is resource optimization across projects. What the CEO and Susan were contemplating was the future model by which to deliver performance results without adding a new layer of unwanted bureaucracy.

Figure 4. **A project mindset integrated into the corporate culture, including strong executive sponsorship**

After reviewing and discarding a number of options, they settled on a design aimed at the needs of executives rather than the day-to-day management of projects. Once again, the business implications were fairly profound. At the heart of the model was a program management office (PMO). Some of the guidelines used to determine PMO roles and responsibilities are briefly outlined in the following paragraphs:

The Program Management Office The primary mandate of the PMO team (no more than four to six people) would be to facilitate and help executives make timely, accurate decisions, while ensuring the consistency of overall project delivery. This included doing much of the research needed by executives to be able to identify, prioritize and select projects based on alignment with corporate business objectives. The PMO's role is primarily proactive with the goal of staying one step ahead of project trends, problems, and opportunities that influence executive decision-making. PMO responsibilities include:

- Project standards, including performance thresholds linked to project schedules, budgets, scope control, and resource allocation. After these thresholds are established and approved, attention shifts to early-warning signs triggered by acceptable performance.
- Timeliness, accuracy and integrity of executive-level reports that summarize project performance metrics. Should a trend pose a threat to objectives, the PMO would prepare a short list of available options so that executives could quickly zero in on a preferred course of action.
- Resource optimization across the organization. This includes resource bottlenecks, a shortage of critical skill sets, and the over-allocation of SMEs. PMA tools can create what-if scenarios when reallocating resources based on business priorities. They can also evaluate training needs to meet forecasted project demands.
- Management of issue escalation. On a regular basis, such issues would be prioritized and presented to executives for timely response. More important, the PMO would suggest options with enough detail so that executives could focus on a definitive response, rather than an open-ended discussion of what should be considered.

- Serious project risks (based on probability and severity) addressed at the executive level, including the review and timely approval of proposed contingency plans. Options should be clear, then executives can focus on implications, should the threat actually occur.

A Proven Training Ground

- More progressive organizations have already been looking at PMOs as grooming for future management. Understanding the inner workings of projects and service delivery can add a dimension of professionalism often lost when bright young people are promoted solely on tactical performance and personal initiative. A savvy CEO might mandate a 6- to 12-month tour of duty on the PMO as a condition for reaching the most senior management positions. This could have a profound impact on projectizing the corporate culture over time.
- Create a new Chief Program Officer (CPO) position. Such a move would elevate the visibility of a PMO, especially at the executive level. The CPO would chair the executive steering committee, and guarantee a strong chain of command from the PMO down to programs and individual projects. This structure can be a corner stone for improved project portfolio management.

After Susan worked through much of the planning details for resource and project optimization, the final breakthrough was ready to be addressed. This involved critical executive sponsorship to achieve the desired ROI and business benefits of a PMA solution.

Breakthrough: Responsiveness to Change

In today's high-tech, global economy, dramatic fluctuations have become a way of life, and the winners are usually those who adapt quickly to sudden and dramatic change. In this white paper the CEO represents much more than an executive sponsor for PMA (although that role is crucial). He also possessed the willpower and authority to aggressively pursue change. Susan had many of the right answers from the very start, but it was the CEO who broke away from the status quo to overcome resistance to change within the organization. Any senior manager at the director, vice-presidential or higher level could have served as the change agent, but clearly the CEO held the trump card when it came to immediate, decisive action.

For the CEO, Susan and the company, PMA output was geared to support responsiveness to change at three different levels: project-related, internal business and external market.

Project-Related Change

Proactive Metrics

One of Susan's personal goals was to leverage PMA metrics to proactively head off project problems. As stated earlier, an acceptable performance threshold for schedule and budget variances were set at 15% (most thresholds range from 10% to 20%). PMA helps by improving the estimation process when staffing, scheduling and pricing new projects. In the past, these estimates were little more than best guesses, and as a result, the variances were too unreliable for decision-making. As the old saying goes, "Garbage in, garbage out."

Change Control

With more reliable time, cost and resource baselines, a formal change control process could be initiated for trends across all projects. This disciplined approach minimized time and cost overruns that in the past had frequently exceeded 50% to over 100%, due to a lack of meaningful controls. The same philosophy was used to manage changes in key project deliverables. As a more public gesture, all project managers agreed to promote the goal of 'No Big Surprises', which aimed at collaboration with senior management, project sponsors, customers, and partners.

Internal Business Change

Managing Waste and Project Viability

Market research indicates that waste associated with poorly managed project portfolios is somewhere in the range of 20% to 40% (as a conservative estimate). While much of the waste is linked to poor time, cost and resource management, another contributing factor is the failure to cancel existing projects that are no longer relevant to business objectives. Because of this long-term drain, virtually overnight, companies may need to shift from a market expansion strategy to a cost reduction or even survival mode. While the approval of new projects may be postponed or dropped, many active projects keep rolling toward completion, because no one is prepared or willing to make a save/cancel decision. For the CEO, those kind of decisions demanded accurate, up-to-date data… mainly to assess shut-down impact and the re-allocation of any unused budget and resources.

Prioritizing Allocation

As the PMA strategy took shape, the CEO came up with another creative twist. Until now, no one knew what percentage of project funds were being used for the following categories:

- Market expansion
- Market defense
- Non-discretionary internal support
- Discretionary internal improvement

From this point onward, the CEO tasked the executive steering committee with deciding what percent of project funding and resources should be allocated to each category. In effect, they began to manage the portfolio mix based on current business needs, rather than focusing on individual projects. This significantly changed the way new projects were initially selected and prioritized.

External Market Change

When the CEO felt more comfortable about managing change at the project and portfolio level, he also wanted the organization to be more responsive to sudden market changes that were often beyond anyone's control. In the past, projects were often planned and funded according to static, annual business plans, but today's marketplace was proving too volatile for that kind of long-range thinking.

Review Cycles

The executive steering committee decided that they would conduct a quarterly review of the overall project portfolio (managing it in the same way they would a stock investment portfolio). They would also perform a monthly review of the top-15 strategic projects to determine whether issues, risks and performance thresholds needed special attention. Meanwhile, they would continue to receive routine project status reports as part of their regular agenda.

Any recommended change in project status would be assigned to one of seven categories:

- Maintain
- Postpone
- Down-Scale
- Accelerate
- Recover
- Consolidate
- Cancel

High level criteria for each category was documented and communicated to all project stakeholders.

The CEO believed that the listed actions would improve the company's responsiveness to change. It would also help shift the executive team from a predominantly fire-fighting mode to becoming a more proactive decision-making body. The executive team was now as accountable for project success as the project managers and sponsors.

Perhaps the biggest challenge for the executives was the formal review and approval of contingency plans for serious project risks. At first the steering committee had a difficult time committing to action plans for problems that had not yet even occurred, when there were so many immediate problems to address. However, over time the workload from existing problems lightened, as preventive measures became more effective. During this transition period, the PMO played a critical role in evaluating both issues and risks, and coming up with two or three primary recommendations for each action. The steering committee could then spend its time deciding which option to choose, rather than debating alternatives.

Improving People Projects and Profitability

Project Management and Accounting (PMA) can improve project success and overall service agility. In almost every organization there are those capable of assuming the roles played by the CEO and Susan. The real story was the CEO's conviction and authority to change the corporate culture as part of the PMA game plan. Once put in motion, the benefits of PMA can take on a life of their own, because PMA touches on the very lifeblood of service and project-driven organizations—improving the effectiveness of its people, projects and profitability. A summary of these benefits is listed in the next section.

Primary PMA Benefits

Cost Reduction

Lowered cost often is not listed by clients as a primary reason for implementing PMA. However, many find that the efficiency and productivity gains of a PMA solution result in significant budgetary successes. Reduction comes from automating core business processes, improved invoicing, reduced administrative costs, and better resource time and expense tracking. Minimizing unnecessary costs during difficult economic times is not just an ROI issue, but potentially one of market survival.

Increased Revenue and Profitability

This routinely shows up as one of the top reasons for investing in PMA and is the result of improved resource utilization. This creates the best alignment of people and skills with service delivery. Ultimately, it leads to improved customer satisfaction and repeat business. Some organizations have already reported annualized ROI of 90% or more on PMA deployments. Payback on the original PMA investment sometimes can occur within six months, depending on the size and complexity of the solution.

Greater Visibility into the Organization

More timely and accurate access to resource and project data can enhance executive decision-making when it comes to prioritization of strategic services, projects, resources, and funding. Better visibility also helps project and operational managers to optimize resources, while improving on-time and on-budget delivery. Many clients find this to be even more rewarding than originally anticipated.

Improved Resource Utilization

Having an effective time and expense record of resource usage can help deliver significant benefits. Migration from best-available to best-fit project resources is where PMA solutions can deliver real business value. Better alignment of people and skills to billable (and non-billable) projects can result in resource usage gains averaging at least 2% to 5%, with consulting services achieving upward of 10%.

Process Improvement across the Service Life Cycle

In highly projectized organizations, research has shown that time-to-market can be reduced by as much as 50% or more, while reducing development costs and improving quality. This comes from tighter integration of project planning, scheduling and invoicing.

Greater Customer Satisfaction and Loyalty

Improved efficiency and productivity have little meaning if the customer is unhappy with the final results. Maintaining service quality and effective client collaboration throughout the service life cycle can significantly improve customer loyalty and repeat business—the hallmark of a highly successful service organization. Ongoing measurement of client satisfaction should be built into any PMA strategy.

Reduced Billing Cycle Time

Service organizations can lower financing costs with reduced billing cycle times. A well-conceived PMA solution can calculate resource time and expense, and allocate them to real-time project schedules and client invoicing. Streamlining this process contributes directly to bottom-line ROI results.

Minimize Revenue Leakage

Funds can be lost through ‘revenue leakage’, when manual entry or separate systems are required to invoice clients for services (resulting in errors, incomplete or lost paperwork). This includes accurate accounting of all billable time, charge-back, or equipment and material usage on service-related projects.

Performance Data Integration

PMA solutions that support both internal and externally focused services can benefit greatly from an integrated IT architecture. This includes systems that share project, resource and financial data for in-depth analysis throughout the service life cycle. Purchasing PMA modules that are not designed for seamless data integration can lead to increased IT support, maintenance, and product upgrade costs.

Improved Service Agility

By combining resource and project optimization with improved executive decision-making, service organizations can adapt quickly to sudden change. Service agility may not be measured as easily in terms of ROI, but it plays a critical role when responding to changes in business priorities, competitive pressures, new technology, and economic downturns.

Taking the Next Step

If you are interested in exploring how your own organization might go through this discovery process, there are several near-term actions that can be taken. Each of the investigative projects cited below can help you define the current environment and the journey that lies ahead:

- **Investigate standardizing on one mainstream project management tool.** PMA provides greater visibility into the organization. You can only act accordingly if there is timely, accurate performance data being generated by the right suite of integrated tools.
- **Conduct a PM maturity assessment** to gain a better perspective of your organization's overall PM competency. You will probably want outside assistance from a reliable PM service provider for several reasons: neutrality with sensitive feedback; proven PM expertise; analyses of survey results, and viable next-step options. Since the majority of companies are currently at a PM maturity Level 1, you should be prepared for some strong feedback, especially at the project-team level. This is often the first step when becoming a more projectized organization.
- **Consider an evaluation of your current project portfolio**. For many companies, deciding on what belongs in a project portfolio is its own challenge. You can consider a standard set of criteria for evaluating each project, and a plan for interpreting the results. This can be an eye-opening experience for anyone that has never looked at your portfolio from a project-based perspective.
- **Examine what is needed to support an integrated PMA solution**. Leverage your existing IT investment wherever possible, and place a premium on ease of integration, ease of use, user training, and ongoing IT support. Any solution that provides manageable financial, project and resource data is a step in the right direction. How you use that information determines the ultimate payoff.

PMI Consultants and Research Titles

Certified Project Management Professionals (PMP) can come to your organization with more than 20 years experience in PM consulting, systems integration, marketing and operational strategy. Many have served as a Senior Solutions Consultants that advise client sponsors on enterprise project and portfolio management implementations. You can learn more about this and other kinds of support at http://www.microsoft.com/BusinessSolutions/PSorgs.

Some titles of helpful publications include:

"Where It All Comes Together: The Business Value of Enterprise Project Management"
A. Chapel (January 2003), and

"Four Breakthrough Methods to Accelerate ROI"
A. Chapel (June 2003).