Guide to Building a
Project Management Office

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This content was adapted from Internet.com's CIO Update Web site. Contributors George Hunte, Chris Craig-Jones, Haydn Thomas and Julie Tilke are courtesy of Computer Associates.

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Getting Your Project Management Office Off the Ground

By George Hunte

Today, organizations spend a large amount of their time delivering projects. While success rates have improved to approximately 34 percent, 15 percent of all projects still fail and 51 percent are somehow "challenged," according to research from the Standish Group.

There are many reasons why projects fail — many of which can be attributed to a lack of visibility into long-term project needs. Without proper visibility, organizations are unable to see what is needed six months, three months, or even two months down the road, resulting in poorly constructed project plans that do not capture critical dependencies, including assigning project resources and key milestones.

While developing a software process improvement program can be costly, studies have shown that the resulting benefits of improved time-to-market, productivity, and software quality far outweigh the initial investment costs. Establishing a project management office (PMO) is the first step towards improving:

• Project, program and portfolio management best practices;
• Time-to-market acceleration; and
• The quality of your initiatives in a cost-effective manner.

Getting Your PMO Started

The first step to establishing a PMO is to determine your organization's needs. Start by examining the key processes in the areas of project, portfolio, and program management as defined, for example, by the Project Management Institute's (PMI's) PPM/PMO framework.

This framework has three levels (project, program, and portfolio), each of which is broken down into 12 process groups (e.g., project initiation, project planning, etc.). The process groups consist of 92 processes in total, and these processes relate to the management of nine knowledge areas (e.g., scope, cost, time, and resources, etc.). Examples of PMI processes/components include a project charter, project plan, work breakdown schedules and cost estimate.

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You must also determine what type of management office best suits your needs —project, program, or portfolio. In some cases, all three might be necessary but in order to help decide what is right for your organization, each is defined below.

A project management office oversees a temporary effort with a definite starting and ending point. The project management office helps development teams finish projects on time and on budget through the use

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of established best practices, while ensuring the finished project or product meet stakeholder requirements.

A portfolio management office oversees a collection of projects aligned to meet specific business objectives. For example, a retailer needs to reach out to five million new customers via the Internet. In this case, a portfolio could consist of e-commerce initiatives that support the common strategic initiatives related to establishing a Web presence. Key objectives of a portfolio management office include aligning portfolios of projects and services to business goals and managing risk exposure to the business.

A program management office oversees a collection of projects or portfolios that, when managed together, often provide greater benefits than if they were managed separately (for example, a compliance initiative or cost reduction initiative). A program management office is typically tasked with providing an optimal mix of resources and achieving economies of scale.

To determine what management office best suits your needs, analyze the importance to your organization of each PMI process. For example, if your immediate issue is to improve project success rates, then consider starting with a project management office. If your immediate issue is the need to understand where your dollars are being spent, consider starting with a portfolio management office.

The results of your needs analysis will guide you in determining which of the three offices are most suitable for your organization. It is also important to note that while the project and program offices are typically established first, there is no real predefined order you need to follow.

Determine Your Organizational Maturity

The PMO needs to demonstrate clear and tangible value in a relatively short period of time. It is important, therefore, to set up a process that quickly measures the PMO value to the enterprise. To do this, a baseline must be established. Steps to establishing a baseline include assessing your organization's capabilities against industry-standard best practices, such as those defined by the PMI's PPM/PMO framework. Record your level of maturity in each of these process

areas using a capability scale from 1 to 4 (active, efficient, responsive, and business driven). Once your maturity level has been measured against the most important PMI processes, develop a "target" maturity level (again using the 1 to 4 scale for each process area) so your progress can be quantified.

If the organization is at a lower level of maturity, there may be little or no accurate data available from which to establish a baseline. In many cases, organizations simply do not know how much it costs to complete a project. If this is true in your situation, there are ways to overcome a possible lack of information. For instance, you can seek out historical data points, such as the length of projects and the number of developers who worked on these projects, to help extrapolate a cost estimate and a baseline from which to measure future successes.

Simply measuring total project cost may make it difficult to do an "apples-to-apples" comparison. However, there are ways of normalizing data so that such a comparison can be made. For example, the following metrics will provide a more accurate representation from which to compare costs between projects:

• Cost per use case
• Cost per function point
• Cost per thousand lines of code (KLOC)
• Resource utilization (percent of a developer's time utilized/optimized)
• Defect rates

Establish a Measurement Plan

As mentioned above, it is important to measure the positive impact the PMO is having on the organization. This will ensure that the PMO maintains the executive sponsorship it needs to effect organizational change. For this reason, the PMO should institute a measurement plan that defines key metrics for determining the organization's progress against the established baseline.

If you used a maturity analysis based upon the PMI framework to establish your baseline, use this same maturity model to measure your progress at periodic intervals. Some of the measurements cited above, such as "cost per use case" and "cost per function point," should also be measured to gauge progress and calculate ROI. ∎

Introducing a Project Management Office Into Your Organization

By George Hunte

Once you determine your organization's needs and level of maturity, a rollout plan must be developed for establishing the PMO. While there is no preset order for executing against this plan, here are some suggestions on how to best implement a PMO into your organization.

The First Three Steps

Step One: Implement the PMO staff and determine reporting structure.

The PMO is the CIO's "eyes and ears," it is the body that the CIO relies upon to make sure the organization is addressing the right needs and that budget is being applied towards initiatives that will sustain and grow the business. If project management is relegated to a lower level in the management hierarchy, the PMO won't have the authority to enforce best practices, gain the respect of practitioners, and ultimately, it won't achieve the potential impact of a well-positioned PMO.

The three offices within the PMO have specific roles. For instance, the project management office should include a process mentor to promote and foster best practices. This individual will provide mentoring and training, as well as review deliverables and manage the overall infrastructure. This person also plays a key governance role by spot-checking deliverables and ensuring guidelines are being followed. Project managers typically report directly to the PMO.

A key resource in the portfolio management office is the business relationship manager (BRM), whose responsibilities include brokering communications between IT and the organization. The portfolio management office typically reports to the CIO and CFO, but it is still important to maintain a relationship with the project management office because the constituent projects in each portfolio will be managed there.

The program manager is tasked with understanding the dependencies between key tactics and milestones within the various projects that comprise a program. This individual is therefore responsible for realizing the collective benefit of the program, which cannot be done if

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the projects are managed separately.

Step Two: Develop a simple repository or "library" of PMO materials.

The next step is to develop a simple repository or "library" of PMO materials (e.g., project plan templates, project charter templates and workflow diagrams). This library will eventually become the "process encyclopedia" for the organization.

Specific library items to consider for each type of office include:

• Project Management: Project templates, skills database, project performance dashboard/health monitor.
• Program Management: Program management plan template, work breakdown structure template, communications plan.
• Portfolio Management: Strategic initiatives (CIO or CFO-based), alignment category for project mapping, risk factors for each project's business case (i.e., where was it initiated) and value to the business/projected costs (ROI and payback).

Step Three: Select technology to automate and enforce your PMO processes.

Step three involves selecting the appropriate technology to automate and enforce your PMO processes from project request and resource planning through delivery. This technology should be equipped to support a variety of features, such as idea management and project initiation.

For instance, when someone has an idea for a new project, that individual will be prompted to enter the idea into a solution which can then automate a workflow to ensure that all the right steps occur before that project gets funded. This is an important process to any IT governance initiative. Other features to request in a PPM solution include portfolio management, planning and balancing, electronic timekeeping, project-level IT cost tracking, and project "health" dashboards and status reports.

Execute Rollout Plan

Once the rollout plan is in place and stakeholder agreement has been secured, it is time to execute. One key

What Should You Expect from Your Stakeholders?

By Jed Simms

A raft of project management literature has been written about managing expectations. And most of it almost entirely misses the point. Mismatched expectations come from mismatched measures of success.

To illustrate: a B2B project team had as its measures of success "on time, on budget delivery of a set of automated transactions." The Steering Committee had a slightly broader view of success, namely that the company met the associated regulatory requirements and was not embarrassed amongst its peers. The business stakeholders were looking for a smooth transition, reduced workload, and ongoing meaningful jobs: three completely different measures of success.

It is not that the business stakeholders' expectations were wrong, just different. However, too many project teams would consider these measures of success as "outside of their scope." Yet failure to think through all three sets of expectations and then manage them accordingly is a major cause of perceived project failure.

In the U.K. many years ago, a perfectly good new payroll system had to be abandoned because the workers expected the new system would remove the need for them to line up outside (often in the rain) to collect their pay packets. No one on the project team even thought of this. When this did not happen they went on strike until the old system was restored.

Getting out of alignment with expectations is easily done. For example, a sponsor when asked what his business stakeholders would expect from his project said, "That it fits our way of doing things," but he then promptly went into a steering committee meeting where he agreed to adopt the new system "vanilla" knowing it did not fit their way of doing things.

execution strategy is to show value within a relatively short period of time (usually about 90 days). This strategy will solidify the PMO's position as a "trusted advisor" to the CIO and executive management team. Early ROI will also ensure that the PMO gets the resources it needs to fully execute the rollout plan and it will attract early adopters who can be showcased as process leaders.

How do you show value early on in the execution process? One idea is to "start narrow and deep," i.e., focus on projects that are deemed to be most critical and processes that will provide value to all levels of IT management. As is the case with implementing any new process, there are a number of pitfalls that can have an adverse affect on a PMO rollout. Below are some key areas to think about before embarking on the roll out, as well as advice for mitigating risks.

> "
> Project managers need to understand the importance of raising issues early so that course corrections can be made before timelines, quality and/or cost are put at risk.
> "

Cultural Buy-In: This is especially crucial at the project and application manager levels. At the beginning of the PMO process, there is usually a small decrease in productivity followed by an increase in project completion time after the implementation is complete.

During the initial slow down it is important to have champions that understand this dynamic and who are willing to accept a temporary drop in productivity in exchange for faster implementations in the future. Buy-in at the executive level is also paramount. Make it a point to understand key stakeholder wants and needs, and address them early in the rollout. This could be as simple as building a portlet that displays a simple project inventory.

The value of transparency must be well understood. Project managers need to understand the importance

This created a mismatch of expectations that had to be addressed.

Just telling your business stakeholders, in effect, "We've decided to ignore your desires and expectations for an improved process that actually fits your requirements in order to reduce our technical design and development risk," is unlikely to win friends and influence people, as the saying goes.

But the issue cannot be ignored. If their reasonable (and unreasonable) expectations are not going to be met, then this needs to be communicated and explained. They might not like it, but they'll still get X, Y, and Z benefits.

It is the same as, say, building a house. You may desire marble bench tops but you cannot afford them, or they are unsuitable, or they clash with the rest of the house, or ... whatever. Life is full of disappointments and compromises and it's only as a stakeholder when you find what's important.

Also, people want to know early so they can either adjust their expectations or make other changes to ensure the project will deliver on their expectations. Managing expectations has to be coupled with managing support for the project. If your perceived ability (or failure) to meet expectations gets to the point where your stakeholders see little to no value in your project, then you have a real problem.

So, the challenge is to identify all three levels of expectations — project, governance team, and business stakeholders — then identify any misconceptions that need to be dispelled and sustain support for your projects.

To achieve this you need to know what they value, what's important to them and their definitions of success and failure, and then position your project in their terms. Most project communications strategies don't achieve this, hence so many problems with "stakeholder management. ■

of raising issues early so that course corrections can be made before timelines, quality and/or cost are put at risk. Project managers need to understand the benefits of a centralized PPM repository or "single system of record," which will alert project managers to potential problems while corrective action can still be taken.

A rewards system also helps to ensure organization buy-in. Performance and best practice consistency should ideally be tied to incentive-based compensation and individuals' career goals. Posting project status reports in a highly visible area also goes a long way towards changing behavior — peer pressure can be a powerful tool.

Training: It is a challenge rolling out new processes across dozens of business units and thousands of users. Establish training and mentoring programs to ensure best practices are consistently followed after training is completed.

Communication: Communicating success is as impor-tant to sustaining PMO momentum as the process that goes into creating one. Develop a comprehensive com-munications plan that ensures successes are being highlighted across all the stakeholder audiences.

PMO Benefits

Many companies have already recognized the benefits of establishing a process improvement effort. The rela-tionship between an organization's process maturity level and its productivity has been studied extensively. While developing a software process improvement pro-gram can be costly, studies have shown that the result-ing benefits of improved time-to-market, productivity, and software quality far outweigh the initial investment costs.

Establishing a PMO is the first step to improving your project, program and portfolio management best practices so you can accelerate time-to-market and increase the quality of your IT initiatives in a cost-effective manner. ■

Evolving the Maturity Level of Your Project Management Office

By Chris Craig-Jones

In the pursuit of improving IT project delivery, many companies overlook a crucial step: benchmarking effectiveness. This step is often overlooked due to the pressures of addressing immediate issues and pain points that results in a baseline that is not established to measure improvements at regular intervals. We're going to look at some tips and techniques for setting up effective, iterative benchmarking and project rollout.

Benchmarking Your Maturity

A project management office consists of project and portfolio management (PPM) processes undertaken in the delivery of projects, programs, and portfolios, and support processes carried out by individual management offices. For example, the process definitions and framework, along with PMO support, enable:

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• Project managers to deliver projects within scope, time and budget.
• Program managers to manage groups of projects and services, provide an optimal mix in the use of resources, and achieve economy of scale.
• Portfolio managers to align portfolios of projects and services with business goals and also, manage the organization's exposure to risk.

When measuring and improving the PMO, both the PPM delivery and individual office support processes and environment must be addressed. Benchmarking brings additional value towards implementing and internally advocating for improved project, program, and portfolio delivery. A good way to frame the idea of improving delivery is to think of it in terms of "maturity."

An industry standard PPM/PMO framework, as defined by the Project Management Institute (PMI), has three levels of work — project, program, and portfolio. These are broken down into 12 process groups, such as project initiation and project planning. The process groups consist of 92 processes, which relate to the management of nine knowledge areas, including scope, cost, time and resources. Individual project, program, and portfolio management processes and groups of processes can be measured in terms of maturity.

The levels of maturity range from "active" through "business-driven" and generally fall into these groups:

• Level 0: Chaotic -- No evidence of documented processes or best practices.
• Level 1: Active -- Documented processes carried out, but not formalized (ad hoc, with unpredictable results, and dependent on heroics).
• Level 2: Efficient -- Consistent discipline started (repeatable processes supported by materials and templates, but only in use in "pockets").
• Level 3: Responsive -- Ubiquitous and measured (processes are applied consistently in the majority of situations and managed proactively).
• Level 4: Business-Driven -- Provides data and information to drive business decisions (used as the standard throughout the organization, provides metrics for continuous improvement).

Many companies today are at Level 2, where some processes are formalized but their use is being rolled out only across pockets within the organization. However, it is typical for organizations involved in the delivery of business-critical or safety systems to be striving to reach Level 4 on the maturity scale. This type of organization can be found in the defense or aircraft manufacturing industry, for example, where safety is critical.

Organizations at Levels 3 and 4 typically have defined processes, supporting standards, templates, and software for the majority of the project, program, and portfolio management processes. This environment would include both PPM processes carried out by the project managers, program managers, and portfolio managers, as well as the processes carried out by their respective offices. The majority of staff uses the delivery and support processes at this level, and non-use is on an approved exception basis.

At Level 4, data obtained as a by-product of staff carrying out the processes are used as input into business-driven decision-making, such as determining which projects and services the organization should undertake in the future.

The implementation of PPM software is a key component in any organization's effort to improve their maturity level and ability to automatically collect data from their processes. By automating key processes, this software provides the necessary data for continuous improvement.

For example, in a Level 3 organization, the project manager would carry out a process to "monitor progress through completion of milestones." Using software for this monitoring enables measurements that can be used for comparative analysis, such as percentage of milestones achieved on time versus those that slipped. This information, if consistent across all projects, suggests that there may be an issue with project planning and could be used to identify improvements to the "create project plans" and "estimate the effort" processes.

In a Level 4 organization, a project manager produces a cost/benefit case to obtain a decision about whether or not to proceed. As a by-product of carrying out that process using PPM software, data is provided to executive management for a "What if?" analysis and for decision-making about future projects and services. The provision of data from the processes is more effective and efficient where PPM software is deployed to automate the process.

Approaches to Maturity Improvements

By examining the four levels of maturity, you can determine where your project, program and portfolio delivery and support processes are now, and identify gaps between where you are and where you want to be with your organization's most critical processes.

For example, you may want to examine the project management process of "creating a project charter." Perhaps you have a template for creating the program charter, but it is used infrequently, which causes inconsistency resulting in higher costs and therefore suggests Level 1 maturity. By automating the creation and tracking of the template, consistency can be enforced to reduce costs suggesting a maturity of about Level 3. We have now identified a gap between where we are now, and where we want to go. Next, we need to develop a recommendation on how to get there.

> " Organizations may vary in their approaches to making PPM and PMO maturity improvements. "

Where to Begin

Organizations may vary in their approaches to making PPM and PMO maturity improvements. Some may adopt a bottom-up approach, taking on the project management processes first. Others may take a top-down approach, starting with "What if?" scenarios of portfolio management using basic project and resource information at a high level rather than detailed project plans. They then expand into detailed project planning in the next release.

Still, others may want to improve the level of maturity of some of the processes at all three levels — project,

portfolio, and program management — in the first release and then, add more process improvements at all levels in subsequent releases.

Whatever approach is used, for each process or group of processes, the organization must analyze the current state, agree on the target state, identify the gap, and then create recommendations for improvement. These recommendations will include requirements for improvement in processes, staffing, and technology.

The implementation of technology will involve the configuration and deployment of a PPM system. This sys-

tem will support all the PPM and PMO processes, but the emphasis will be on processes and functions to be deployed first. How those functions will be configured will depend on the approach the company adopts: bottom-up versus top-down.

When measuring and improving the PMO, both the PPM delivery and individual office support processes and environment must be addressed. ■

Increasing PMO Maturity
Through Multiple Releases

By Chris Craig-Jones

A "release" is a project that addresses a group of recommendations for improving project, program, and portfolio management maturity. In short, a release is a grouping of recommendations that feed into a project. We're going to outline how to effectively utilize multiple releases and provide recommendations for a maturing PMO.

Growing Up

Releases involve people, processes, and technology and should be measured for effectiveness. Each release will provide incremental improvement over the previous releases. Every process improvement release should be executed in 60 to 90 days, with an agreed follow-on period for operation use before the effectiveness of that release is re-benchmarked. It is an iterative process of continuous release, use, and benchmark.

The balance here is to come back regularly with measurable value for the following key stakeholders:

• Operational project managers, who will need to be sold on changing culture to accommodate the new process;
• Tactical departmental managers, who will be held

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accountable for instituting the new process; and
• Strategic executives, who will want to see the return on investment (ROI) for the organization.

A common oversight in benchmarking and improving delivery processes is forgetting the critical role played by the support organizations (project, program, and portfolio). Each level of delivery — project, program, and portfolio — has its own processes, which are aligned to support organizations that have their own processes.

Therefore, to evolve your maturity levels, you need to improve delivery-type processes and support-type processes that go on at the same time. For example, say you want to improve a process related to procurement. On the delivery side, the project manager will undertake processes for supplier selection, while the support organization, in this case the project management office, undertakes processes for developing parameters for creating and maintaining supplier lists.

Both of these process improvements would involve changes to staffing or roles. This means that the support organization develops rules and guidelines so that

> **A "release" is a project that addresses a group of recommendations for improving project, program, and portfolio management maturity.**

project, program, and portfolio managers can carry out the delivery processes efficiently and effectively.

Often, when improving the level of maturity in PPM and the associated processes, organizations take a "bottom-up" approach. We often see the different profiles of functionality released as an organization moves up the maturity level from "Active" through "Business-Driven" on groups of processes.

A possible approach with a four-part release implementation could be:

Release 1: Implement basic project management including initiation, planning, (plus resource assignments), control, execution (plus time capture), and project closure.

Release 2: Add project risk management to the basic project management functionality; basic program management of projects and services (mainly grouping projects and services into programs for progress reporting); and portfolio management processes and capabilities for both projects and services.

Release 3: Add project cost management, project procurement management, and project quality management; program risk analysis; and program resource management.

Release 4: Add IT services portfolio planning; business relationship management; services finance management; program cost management; program procurements and program quality management.

For example, a large healthcare organization decided to take a bottom-up approach. Its first release involved improving its project, resource, and time management processes through the implementation of industry-standard processes for project management, supported by standards, templates, and software.

This first release raised its level of maturity in many project management level processes. Their second release involved improving the processes they needed to review resource usage and capacity across programs of projects, plus the management of costs and earned value at both the project and program level.

Their future releases most likely will concentrate on economies of scale through the improvement of program-level processes, plus aligning projects and services to corporate objectives through portfolio management "What if?" processes.

An example of a different approach is of a property development company that wanted to improve processes, organization, and technology at both the project management and portfolio management levels in the first release. They introduced standardization around project initiation, scope definition, high-level project planning and tracking, and resource allocations, plus grouping of projects into portfolio scenarios for "What if?" analysis.

The next release introduced cost management at both the project and portfolio planning levels. In this case, the focus is on both project and portfolio management, and program management is likely to be addressed in later releases.

Both of the above examples relate to the work of internal IT departments in the delivery of projects, programs, and portfolios. While services organizations carry out the same processes, they may differ in the lower-level detail as to how they carry out the processes and staffing, utilize PPM software, and also, in the priorities they place on certain processes or groups of processes.

These processes could include storing of supplier information and selection criteria; the automated application of selection criteria against a project selection request to identify a match or mismatch; collection and analysis on use of suppliers for projects and programs, and the rates that were negotiated; and analysis of trends in supplier rates.

Tips for a Maturing PMO

Once you have determined the processes you want to improve and grouped the recommendations into a release, the following steps are crucial to ensuring the success of the process improvement project:

Thought Leadership: Create a roadmap and vision for the implementation of processes, organizational change, and PPM software, an explanation of why we're doing this, who it will benefit, and the desired

ROI. Constantly communicate this roadmap, benefits, and progress at three levels of the organization — project, program, and portfolio.

Define: Clearly define the requirements and create an actionable scope manageable and achievable within 60 to 90 days. Scope-creep will derail your efforts as teams lose sight of the payoff. Frequent successes fuel positive PR for all internal audiences and maintain sponsorship.

Staffing: Set up three teams.

• Implementation Team: Defines and implements processes and puts supporting standards, material, and PPM software into place. This team will carry out each release, then hand off to the stabilization team and on-boarding teams and move to the next release.

• Stabilization Team: Takes over from the implementation team to ensure that any process, people, or technology issues in the release are addressed and have no impact on the implementation team undertaking the next release.

• On-boarding Team: Trains all end users in the new processes, standards, supporting material, and software being deployed within that release. Again, this is undertaken as a separate exercise so that it does not divert the implementation project resources away from the next release. Effective on-boarding will ensure that the process improvements and changes will be used throughout the organization (e.g., will raise the level of maturity in the deployed processes to Level 3 — the "Responsive" level of maturity). As one release builds on the next, this team helps to ensure that the maturity level is raised across the entire process.

Companies undertaking improvement initiatives often allocate their budget for a mixture of process, people, and technology-related improvements. So, why not invest an additional five to 10 percent into measurement to ensure these improvement projects are actually creating benefits for the organization? ■

Project Management Best Practices:
An Introduction to PMBOK & PRINCE 2

By Haydn Thomas and Julie Tilke

Project management best practices have been captured, explained, and evangelized for more than 20 years. The first formalized methodology came in 1987 through the Project Management Institute (PMI), with its Project Management Book of Knowledge (PMBOK). Today, PMBOK is still the broadest and deepest reference of generally accepted best practices, arranged around key processes that are leveraged across market segments and departments.

Adding to this "how to" process is U.K-born Projects in Controlled Environments (PRINCE2), which evolved from the first edition of PRINCE that addressed a standard for IT project management in the U.K. This is a generic project management method, which has an equally deep set of processes and standards focusing on end-to-end project delivery.

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The following is an overview of how to use these two instructional and impacting methodologies.

A Guide to the PMBOK

Currently in its third edition since 2004, the PMI's PMBOK is the broadest and most widely used standard reference of industry best practices for project management. It identifies generally accepted and fundamental practices and guidelines that are applicable to a wide range of markets — construction, software, engineering, automotive, etc. — and crossing multiple departments, from IT to operations to services.

In fact, many government and financial organizations in the U.S. and the U.K. require their managers be PMI-certified. The PMBOK can be used in any industry, and CA has observed that different industries will leverage different aspects of the reference guide to suit their specific needs. The PMI also issues the "The Standard for Program Management" and "The Standard for Portfolio Management," which are complementary to one another.

The PMBOK outlines five key process groups to aid in project delivery:

1. Initiating: Setting up the project for success by identifying the right team and scope, as well as determining the relationship between the project and its alignment with the organization's overall charter.

2. Planning: Developing the relevant resources, timelines, and milestones, and mapping project delivery to business priorities (i.e., risk management, communications, quality, cost/budgeting, duration and sequencing, external dependencies).

3. Executing: Assigning the project team and distributing information to ensure the proper activities are undertaken. This process also includes ensuring quality assurance methods are in place to address change management, organizational updates, possible changes to the plan, etc.

4. Controlling and Monitoring: Ensuring the result-

ing product maps back to the original plan, and risk from uncontrolled external actions is mitigated.

5. Closing: Making sure you have delivered everything expected of the project. Once you close, you need to review the project vis-à-vis the plan and likewise ensure contract closure.

The PMBOK arranges the 44 processes into nine supporting knowledge areas. Each process has identified inputs and outputs along with referenced tools and techniques.

The role of your project management organization (PMO) is to address all process groups and selective processes to address their unique requirements. It should act as the guardians (via education, collateral, templates, standards) to support rollout and increase expertise of their people.

Train to Minimize Culture Shock

If imposed without a broad understanding of benefits, implementing a structured, highly articulated approach to project delivery according to the PMBOK could be a culture shock resulting in unnecessary resistance. In order to gain broader end-user adoption you should provide relevant documentation detailing the processes and standards, along with the tools and techniques, required for implementation. Proper training is critical for achieving a successful business change.

For training and certification purposes, there is a PMI support accreditation in the PMBOK called the "Project Management Professional" (PMP). To obtain this, candidates are required to show an appropriate educational background and experience in the project management field. They will also be required to pass an exam to demonstrate their knowledge. To retain the credential, a continuous certification requirements (CCR) program is in place.

Beyond the initial PMI certification for staff members, you should designate a few key players in your PMO and key business stakeholders for procedure-level training. This advanced training should be mapped to some or all of the key PMBOK process groups and will be essential to ensure consistent delivery.

Ensure Roles for Enforcers and Supporters

After training, organizations employing PMBOK should create roles for both top-level "enforcers" of the identified approach, along with "support" staff for consistent delivery according to the identified standards and procedures.

It should be noted that continuous development should be contributed to or undertaken by the following roles:

Enforcers: The enforcers are the custodians of procedures and standards, and are responsible for their development under change management. While the enforcers' initial charter will be to effect business change, as the PMO becomes more mature and accepted the role will transition to one of ensuring the necessary procedures and standards are in place for continued maturation.

Supporter: The support or advisor roles champion and promote the adopted framework throughout the user community through education, mentoring, and issue and change management. Each resource will have a solid understanding of the end-to-end processes and standards but can also specialize in a particular area such as execution.

A Guide to PRINCE2

Initiated by the U.K. Office of Government Commerce (OGC) in 1989, the current version of this best-practice methodology, PRINCE2, has been in place since 1996 and is planned for an update in 2008-9. This process-based approach is a generic project management method, although widely applied by IT organizations, and has been used worldwide for its ability to be scaled and tailored to provide a standard and consistent approach for organizations.

Specifically, the PRINCE2 methodology is a framework of processes that assist the project manager by using a set of common components to reduce risk and avoid failure. To achieve this, three techniques are employed: Product Based Planning, Quality Review, and Change Control.

Following are the eight process groups outlined by

PRINCE2. It should be noted that the Planning and Directing processes remain ongoing throughout the project lifecycle.

1. Starting Up: This is done before the initiation of any project. An idea or request from the organization is raised in a project mandate. It is here that information is collected to determine the business case for the project, the plan for moving forward and the team that will be responsible for its delivery.

2. Initiating: In the initiation phase, the contract will be arranged between the project manager and project board, along with the development of a high-level plan and control approach.

3. Planning: The technique of product-based planning is used in the identification of project deliverables. In addition to the required resources, quality and testing are addressed. Monitoring and control of the progress is also undertaken.

4. Controlling a Stage: This is the day-to-day management of the stage by the project manager. Controlled production of the agreed products by monitoring key indicators allows the project manger to control the scope and achieve delivery to time, quality and budget.

5. Managing Product Delivery: This can be a highly administrative area, which defines how the project will be delivered to the project manager upon completion.

6. Managing Stage Boundaries: Managing the transition to the next stage in a controlled manner by applying a common structure. Certain items are mandated to ensure delivery of the project within scope.

7. Closing a Project: This process is a structured closure of the project, which must happen whether the deliverables have been achieved or the project is terminated early.

8. Directing: The project board proactively manages the project's response to the external environment. Within the project, the project board should "manage by exception," so demands on its time are kept to a minimum.

PRINCE2 is optimized for product-based planning. Here, the "product" is a result, i.e., the production of a document at the end of a task. The product falls into one of two categories:

• Management Products are items required to support project management, e.g., a business case, project scope, quality log, etc.

• Specialist Products are items contributing to an identified deliverable of the project, e.g., a piece of code, specification, etc.

Ultimately, PRINCE2 helps to provide control and an adaptable method for your business. This is a proven, tailored method for project management, especially in IT. Essentially, PRINCE2 helps PMOs control the chaos of project delivery.

Success with PRINCE2 comes from configuring it to meet your specific needs. PRINCE2 is more prescriptive than PMBOK and more detailed, therefore configurations in process or standards are common. For example, in some organizations, there might not be a need for the role of Senior Supplier as outlined in PRINCE2, so users might either rename or re-scope this role.

Don't Ignore Training

Training is vital. The PMO needs to be trained on methodology. Review of the method (PMBOK or PRINCE) is a lengthy process, but subsequent payoff in execution support is equally large.

PRINCE2 is widely supported by accredited organizations to assist in training and implementation. OGC's partner organization, APM Group Ltd (APMG), provides two-tier courses called "Foundation" and "Practitioner." The latter course must be taken to become a registered practitioner, and a re-registration exam every three to five years is required to maintain the designation.

The ability to provide template plans according to the organization's approach, governance by configured workflows, and control over stages, etc. enables the PMO to manage the effective rollout of PRINCE2. ■

Project Management Best Practices:
An Introduction to COBIT

Haydn Thomas and Julie Tilke

We're going to finish up this eBook with an overview of the control objectives for information and related technology (COBIT) methodology. Where both PMBOK and PRINCE2 are more project-intensive, COBIT takes a top-down approach for managers and auditors to ensure governance over key issues such as Sarbanes-Oxley compliance.

The newest of the key project-related methodologies, COBIT was created by the Information Systems Audit and Control Association (ISACA) and the ITGI IT Governance Institute (ITGI) in 1996 for IT governance and control. Four editions have been published since November 2005. The recent incremental release, 4.1, includes streamlined control objectives and application controls, improved process controls, and an enhanced explanation of performance management.

As a pivotal set of methodologies to ensure Sarbanes-Oxley Act compliance, managers and auditors have rapidly adopted COBIT across major organizations. While adoption of COBIT is global, the principle marketplaces have been the U.S. (especially from the Sarbanes-Oxley perspective) and Europe. The framework bridges the gap between risks, control needs, and technical implementation approaches. It provides a processes-oriented structure classified by domain, which identifies the resources to be leveraged, defines the control objectives to be considered, and incorpo-

rates major international standards.

COBIT outlines 34 high-level objectives that cover multiple sub-objectives across four domains:

Planning and Organization: Defining the strategic IT plan and information architecture; determining the technology direction; defining the processes organization and relationships; managing the investment; communicating the direction; managing the human resources; and managing risk issues and projects.

Acquisition and Implementation: Identifying and acquiring solutions, software and technology; enabling operation and use; procuring resources; managing changes and accrediting the solutions and changes to them.

Delivery and Support: Defining and managing service levels, third-party services, and performance and capacity; ensuring continuous service and security; identifying and allocating costs; managing the service desk and incidents; managing problems, data, configurations, and the physical environment and operations.

Monitoring and Evaluation: Monitoring and evaluating performance and internal control; ensuring regulatory compliance; and providing IT governance.

The framework focuses on what needs to be done, rather than providing prescriptive guidelines on how to

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achieve objectives. For example, as part of planning and organizing, COBIT recommends the implementation of project management frameworks and supports. Typically, this would lead to the set-up of a PMO and implementation of a project management methodology such as PMBOK or PRINCE2.

COBIT provides a framework that maps directly to the core IT governance focus areas of strategic alignment, value delivery, resource management, risk management, and performance measurement.

By following a business-driven implementation approach, effective IT governance becomes part of the organization's DNA.

Business Drivers and Value

While the need for good IT governance is generally acknowledged, the implementation of frameworks such as COBIT are frequently seen as "something we feel we ought to do," with no real perspective of the value that is delivered to the organization. The keys to successful implementations are focusing on the business drivers and results the organization is seeking, and recognizing that "zero to hero" may be a journey involving many small steps rather than a single leap of faith. Changes to processes will potentially drive organizational and cultural change thus the implementation needs to be managed holistically.

Assessment and Planning

A pragmatic approach for delivery involves two main groups of activity. The first is an assessment, and the second the actual implementation.

A good assessment approach involves the following:
- Establishment/review of business drivers
- Mapping of business drivers against process areas to identify relative importance to the business
- Capability assessment of the process areas to establish current position
- Comparison with relative importance to set priorities and establish gaps
- Formulation of a high-level solution (this will involve the definition of activity goals, control objectives and audit guidelines)
- Assessment of the impact on the business, which addresses the expected level of cultural change and resistance that is likely to be encountered

- Creation of the roadmap that balances priorities against the ROI (financial and other benefits) that would be expected to accrue (this is likely to be defined as a program involving multiple work streams)

Managing Holistically

Each delivery phase of the implementation will be a multi-threaded program touching many parts of the organization. While there is no "one size fits all solution," successful implementations of frameworks such as COBIT share some common characteristics, notably:

- A vocal and visible project sponsor capable of taking the "Why are we doing this?" message to all levels of the organization.

- A project team with subject matter experts who are truly representative of the business, and are empowered to make decisions.

- Excellent communications planning and execution.

- A focus on delivering framework components within the agreed timelines. This may mean establishing basic-level processes, controls and metrics around an area, rather than trying to implement every detailed requirement. There is always room for process improvement in later phases.

Make use of technology solutions to automate controls, processes, metrics, and audit tracking wherever possible, but be aware that the technology itself does not offer a silver bullet. In order to be successful, the organization must want to change. Rewarding the new behaviors must also reinforce this goal. Take the organizational and individuals' culture and motivation into account when performing the implementation.

COBIT is a framework for IT governance, and there are a number of solutions that can be leveraged to deliver a high-level COBIT "dashboard," and provide integrated support to the underlying processes and controls defined as part of that framework. Typically, an integrated dashboard would be implemented. This provides configurable support for controls and metrics, and at its most basic level can also capture information on desired maturity and current levels (and trends) for each of the process areas.

Benefits of Leveraging Best Practices

Best practices span solution implementation method-
ologies, guidelines on process alignment, reference
architectures, configuration recommendations, perform-
ance tuning advice, and end-user training (onboarding).
These best practices should be used in every imple-
mentation and in doing so, time to value is reduced
and user adoption increases. Both of these factors are
hugely critical to the success of PMBOK, PRINCE2 and
COBIT implementations across the organization. ■