

Building a Project Management Office

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About the Authors

George Hunte is a solutions manager in CA's IT governance practice with over 14 years' experience in software engineering. He specialises in service solutions for customer satisfaction, intellectual capital development and CA's PPM delivery capabilities.

Chris Craig-Jones is global solution manager for CA Clarity PPM™. He has spent more than 30 years in information technology and management working for, among others, Capgemini, Guardian Royal Exchange and Lloyds Bank International.

Haydn Thomas is a certified architect of CA Clarity PPM software and has spent over 15 years implementing enterprise-wide project management systems. He studied information technology at Brunel University, and holds SSADM and PMI certifications.

Julie Tilke manages CA's IT European delivery capability for IT governance and PPM and has a special interest in the emergent technologies that support new project management approaches.

Enrico Boverino is a senior architect for CA's Business Service Optimisation practice, and is a certified ITIL manager and author of many best-practice documents and solution architectures.

Starting Your Project Management Office

George Hunte

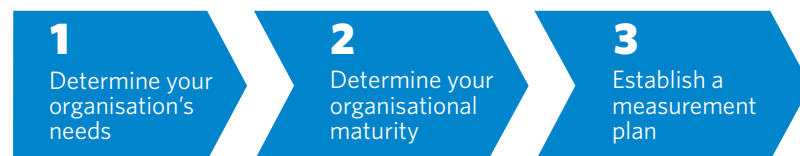
Today, organisations spend a large amount of their time delivering projects. While success rates have improved to approximately 34 percent, 15 percent of all projects still fail and 51 percent are somehow 'challenged', according to research from the Standish Group.

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, organisations 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 programme 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, programme and portfolio management best practices
- time-to-market acceleration
- quality of your initiatives in a cost-effective manner.

There are three steps to starting your PMO:



Step 1: Determine your organisation's needs

Start by examining the key processes in the areas of project, portfolio and programme management as defined, for example, by the Project Management Institute's (PMI) project and portfolio management (PPM)/PMO framework.

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

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

	Project Management Office	Programme Management Office	Portfolio Management Office
Project type	Single	Multiple or portfolio	Multiple
Objectives	To meet stakeholder requirements	To achieve greater benefits through economies of scale	To hit specific business targets while minimising risk
Features	On-time and on-budget delivery	Optimisation of resources across multiple related projects	Alignment with business goals
Typical examples	Specific task	Compliance or cost reduction initiatives	E-commerce initiatives to support an internet presence

Analyse the importance to your organisation of each PMI process. The results of your needs analysis will guide you in determining which of the three offices is most suitable for your organisation.

For example, if your immediate issue is to improve project success rates, then consider starting with a project management office. If it's the need to understand where your money is being spent, consider starting with a portfolio management office.

Note that, while the project and programme offices are typically established first, there is no real predefined order you need to follow.

Step 2: Determine your organisational 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, establish a baseline to assess your organisation's capabilities against industry-standard best practices, such as those defined by the PMI's PPM/PMO framework, for project initiation, planning, execution, control and closure.

Starting Your Project Management Office ...continued

Record your level of maturity in each of these process areas using a capability scale from 0 to 4:

Level 0: Chaotic	Level 1: Active	Level 2: Efficient	Level 3: Responsive	Level 4: Business-driven
No evidence of documented processes or best practices	Documented processes carried out, but not formalised (ad hoc, with unpredictable results)	Consistent discipline applied through repeatable processes supported by materials and templates	Ubiquitous and measured processes consistently applied and managed proactively	Data and information to drive business decisions provided, together with metrics for continuous improvement

Once the maturity level has been measured against the most important PMI processes, develop a target maturity level (again using the 0-4 scale for each process area) so your progress can be quantified.

If the organisation 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, organisations 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 normalising 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 utilisation (percentage of a developer's time utilised/optimised)
- defect rates.

Step 3: Establish a measurement plan

As mentioned above, it is important to measure the positive impact the PMO is having on the organisation.

This will ensure that the PMO maintains the executive sponsorship it needs to effect organisational change. For this reason, the PMO should institute a measurement plan that defines key metrics for determining the organisation's progress against the established baseline.

If you used a maturity analysis based on 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.

In this chapter you found out:



how to assess your organisation's management office needs, and which option is the most suitable



how to measure your organisation's current PMO maturity using a capability scale



how to extend the maturity model to measure ongoing progress.

Introducing a Project Management Office into Your Organisation

George Hunte

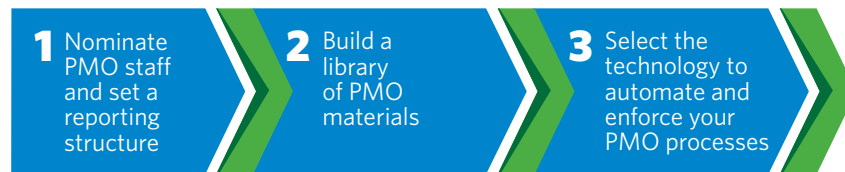
Many companies have already recognised the benefits of establishing a process improvement effort. The relationship between an organisation's process maturity level and its productivity has been studied extensively. While developing a software process improvement programme can be costly, studies have 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 to improving your project, programme 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.

If the project management office is to have the authority to enforce best practices, gain the respect of practitioners, and, importantly, be the 'eyes and ears' of the CIO, it needs to be positioned at a senior level within the management hierarchy.

Only then can it address the right needs of the organisation and ensure that budget is being applied towards initiatives that will sustain and grow the business.

Typically, three steps are necessary to successfully implement a PMO into your organisation.



Step 1: Nominate PMO staff and set a reporting structure

Every PMO should contain the three offices which are key to successful PMO management:

- a process mentor
- a business relationship manager
- a programme manager.

The process mentor should promote and foster best practices by providing mentoring and training, as well as reviewing deliverables and managing the overall infrastructure. This post carries with it a key governance role in spot-checking deliverables and ensuring guidelines are being followed. Project managers typically report directly to the PMO.

The business relationship manager is responsible for brokering communication between IT and the organisation. The portfolio management office typically reports to the chief information officer (CIO) and chief financial officer (CFO), but it is still important to maintain a relationship with the PMO because the constituent projects in each portfolio will be managed there.

The programme manager is tasked with understanding the dependencies between key tactics and milestones within the various projects that comprise a programme, and is responsible for realising the collective benefit of the programme, which cannot be done if the projects are managed separately.

Step 2: Build a library of PMO materials

The next step is to develop a simple repository or library of PMO materials, such as project plan templates, project charter templates and workflow diagrams, which will evolve into the 'process encyclopedia' for the organisation.

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

- project management: project templates, skills database, project performance dashboard/health monitor
- programme management: programme 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 (where it was initiated) and value to the business/projected costs (ROI and payback).

Step 3: Select the technology to automate and enforce your PMO processes

The choice of technology to automate and enforce your PMO processes from project request and resource planning through to delivery should be governed by its capacity to support a variety of features, such as idea management and project initiation.

For instance, when someone has an idea for a new project, they will be prompted to enter it into a system which will automate a workflow to ensure that all the right steps occur before project funding is approved. This is an important process in any IT governance initiative.

Other features to request in a project and portfolio management (PPM) solution include portfolio management, planning and balancing, electronic timekeeping, project-level IT cost tracking, and project health dashboards and status reports.

Introducing a Project Management Office into Your Organisation ...continued

Execute your rollout plan

Once the rollout plan is in place, and stakeholder agreement has been secured, it is time to put it into action.

One key execution strategy is to show value within a relatively short period of time (usually about 90 days). This will:

- solidify the PMO's position as a trusted advisor to the CIO and executive management team
- ensure that the PMO gets the resources it needs to fully execute the rollout plan
- attract early adopters who can be showcased as process leaders.

Show value early on by going for a quick ROI on those projects deemed to be most critical and on processes that will provide value to all levels of IT management. Get the user up and running very quickly by leveraging a preconfigured set of templates and reporting options. This quick start installation can be evolved over time as more specific requirements are developed.

Watch out for these pitfalls that can adversely affect a PMO rollout.

Cultural buy-in

It is important to have champions at the project and application manager and executive levels who understand that a temporary drop in productivity is likely at the beginning of the PMO process and may be followed by an increase in project completion time after the implementation is complete.

Make a point of understanding key stakeholder wants and needs, and address them early in the rollout. Project managers need to know to raise issues early so that course corrections can be made before timelines, quality and/or cost are put at risk. They also need to understand the benefits of a centralised PPM repository or 'single system of record', which will alert them to potential problems while corrective action is still possible.

This could be as simple as building a portlet which displays a simple project inventory.

A rewards system also helps to ensure organisation buy-in. Ideally, performance and best practice consistency should 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 behaviour – peer pressure can be a powerful tool.

Training

Establish training and mentoring programmes to ensure best practices are established and consistently followed when rolling out new processes across dozens of business units and thousands of users.

Communication plan

Communicating success is as important to sustaining PMO momentum as the process that goes into creating one. Develop a comprehensive communication plan that ensures successes are being highlighted across all the stakeholder audiences.

In this chapter you found out:



the three steps necessary to a successful implementation of a PMO in your organisation



how to go about executing your PMO rollout



the potential pitfalls of a PMO rollout and how to avoid them.

Benchmarking Effective Project Rollout

Chris Craig-Jones

In the drive to improve IT project delivery, many companies overlook the crucial step of benchmarking effectiveness in the wake of immediate pressure issues and pain points.

The result is a project management office (PMO) baseline that is not geared to measuring improvements at regular intervals.

Benchmarking your maturity

Benchmarking brings additional value to the implementation and internal promotion of improved project, programme and portfolio delivery.

To benchmark your PMO effectiveness, you need to use industry-standard best practices of project and portfolio management (PPM) processes as defined by the Project Management Institute (PMI). These should be applied both to the delivery of projects, programmes and portfolios, and to the support processes carried out by individual management offices.

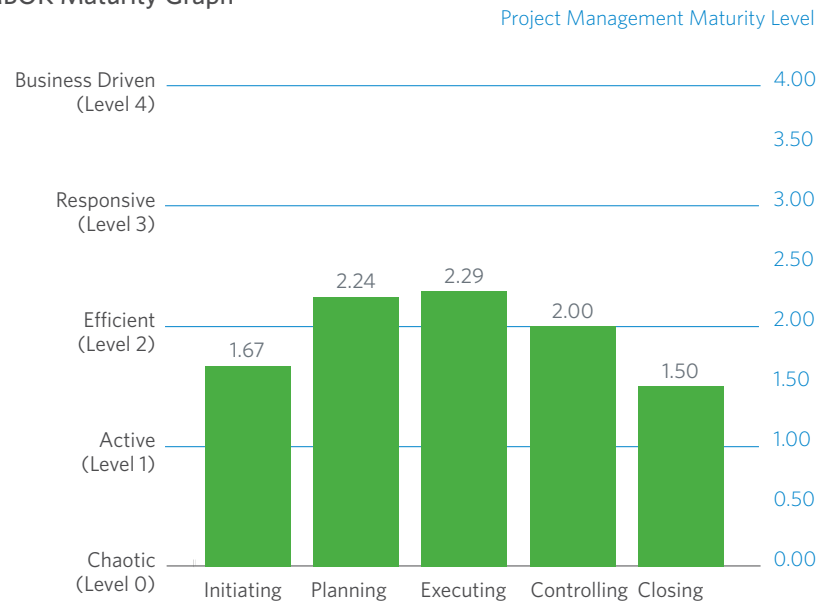
Using these process definitions and framework, along with PMO support, you can enable:

- project managers to deliver projects within scope, time and budget
- programme 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 organisation's exposure to risk.

The PMI PPM/PMO framework has three levels of work – project, programme and portfolio – 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.

You can measure the maturity of individual management processes and groups of processes. The example overleaf shows a maturity graph of the project management processes consolidated into the main process groups, as defined by the PMI Project Management Body of Knowledge (PMBOK).

PMBOK Maturity Graph



The levels of maturity generally fall into these groups:

Level 0: Chaotic	Level 1: Active	Level 2: Efficient	Level 3: Responsive	Level 4: Business-driven
No evidence of documented processes or best practices	Documented processes carried out, but not formalised (ad hoc, with unpredictable results)	Consistent discipline applied through repeatable processes supported by materials and templates	Ubiquitous and measured processes consistently applied and managed proactively	Data and information to drive business decisions provided, together with metrics for continuous improvement

Many companies today are at level 2, where some processes are formalised but their use is being rolled out only across pockets within the organisation. However, it is typical for organisations involved in the delivery of business-critical or safety systems – in defence or aircraft manufacturing, for example – to be striving to reach level 4 on the maturity scale.

Organisations at levels 3 and 4 typically have defined processes, supporting standards, templates and software for the majority of the project, programme and portfolio management processes.

Benchmarking Effective Project Rollout ...continued

This environment would include both PPM processes carried out by the project managers, programme managers and portfolio managers, as well as the processes carried out by their respective offices. The delivery and support processes at this level are used by the majority of staff, 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 organisation should undertake in the future.

Using PPM software

The implementation of PPM software, and the ability to automatically collect data from its processes, is a key component in any organisation's effort to improve their maturity level.

This software can aid continuous improvement through:

- the provision of online deliverable templates
- the use of project models and templates to create project plans
- automated time, status and cost capture
- automated requisition of project and programme resources
- delivery of project, programme and portfolio status, and planning information through portlets and reports
- automation of the processes through workflows that present templates to users and route completed deliverables for approvals.

For example, in a level 3 organisation, 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 in project plan creation and the effort estimating process.

In a level 4 organisation, 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.

Approaches to maturity improvements

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

Where to begin

Organisations 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, and expanding 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, programme and portfolio management – in the first release and then add more process improvements at all levels in subsequent releases.

Whichever approach is used for each process or group of processes, the organisation must analyse 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 system 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.

Benchmarking Effective Project Rollout ...continued

In this chapter, you found out about:

- ▶ how to set up effective, iterative benchmarking and project rollout
- ▶ the role of PPM software in collecting data from its processes
- ▶ achieving maturity improvements.

Applying Multiple Releases for Better PMO Maturity

Chris Craig-Jones

Here, we're going to explain how to effectively utilise multiple releases – those projects that address a group of recommendations for improving project, programme and portfolio management maturity – and provide recommendations for a maturing project management office (PMO).

'Releases' are groupings of recommendations involving people, processes and technology that feed into a project to provide incremental improvement over previous releases. Managing a release is an iterative process of continuous release/use/benchmark in which a 60-90 day execution time frame should be followed by a measurement of its effectiveness, and further re-benchmarking after an agreed follow-on period.

This measurable value needs to be demonstrated regularly to 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 accountable for instituting the new process
- strategic executives, who will want to see the ROI for the organisation.

Evolving your level of maturity

A common oversight in benchmarking and improving delivery processes is to forget the critical role played by the support organisations (project, programme and portfolio), each of which has its own processes. So it's essential to improve delivery-type processes and support-type processes hand-in-hand.

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 organisation – in this case, the project management office – develops parameters for creating and maintaining supplier lists.

Both of these process improvements would involve changes to staffing or roles, plus the implementation of PPM software to support the processes. This means that the support organisation develops rules and guidelines so that project, programme and portfolio managers can carry out the delivery processes efficiently and effectively.

Applying Multiple Releases for Better PMO Maturity ...continued

Organisations often take a bottom-up approach when improving the level of maturity in PPM and the associated processes, releasing different profiles of functionality as they move up the maturity level of the PMBOK scale from 'Active' to 'Business-driven'.

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

Release 1	Release 2	Release 3	Release 4
Implement: <ul style="list-style-type: none"> ▶ basic project management, including <ul style="list-style-type: none"> - initiation - planning (plus resource assignments) - control execution (plus time capture) - project closure. 	Add: <ul style="list-style-type: none"> ▶ project risk management ▶ basic programme management of projects and services (for progress reporting) ▶ portfolio management processes and capabilities for both projects and services. 	Add: <ul style="list-style-type: none"> ▶ project cost management ▶ project procurement management ▶ project quality management ▶ programme risk analysis ▶ programme resource management 	Add: <ul style="list-style-type: none"> ▶ IT services portfolio planning ▶ business relationship management ▶ services finance management ▶ programme cost management ▶ programme procurements ▶ programme quality management

Let's take the example of a large healthcare organisation that decides to take a bottom-up approach. Its first release involves 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 raises their level of maturity in many project management level processes. Their second release involves improving the processes they need to review resource usage and capacity across programmes of projects, plus the management of costs and earned value at both the project and programme level.

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

A different approach might be taken by a property development company that wants to improve processes, organisation and technology at both the project management and portfolio management levels in the first release. Here, the focus will be on both project and portfolio management, with programme management likely to be addressed in later releases.

To start, they introduce standardisation 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 introduces cost management at both the project and portfolio planning levels.

Both of the above examples relate to the work of internal IT departments in the delivery of projects, programmes and portfolios. While services organisations carry out the same processes, they may differ in the lower-level detail as to how they carry out the processes and staffing and utilise 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 programmes and the rates that were negotiated
- analysis of trends in supplier rates.

Ensuring success 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, organisational 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 the project, programme and portfolio levels of the organisation.

Clearly define the requirements and create an actionable scope

Scope should be both manageable and achievable within 60 to 90 days. Successfully maintaining this schedule will fuel positive PR for all internal audiences and maintain sponsorship, but any delay will derail your efforts as teams lose sight of the pay-off.

Applying Multiple Releases for Better PMO Maturity ...continued

Staffing

Set up three teams:

Team 1: Implementation	Team 2: Stabilisation	Team 3: On-boarding
<p>Role: to define and implement processes and put supporting standards, material and PPM software into place.</p> <p>This team will carry out each release, then hand off to the stabilisation team and on-boarding teams and move to the next release.</p>	<p>Role: to address any process, people or technology issues in the release.</p> <p>This team will ensure any outstanding issues have no impact on the implementation team undertaking the next release.</p>	<p>Role: to train all end users in the new processes, standards, supporting material and software being deployed within that release.</p> <p>This team will ensure the process improvements and changes are used throughout the organisation to raise the level of maturity in the deployed processes to level 3 ('Responsive'), and across the entire process as one release builds on the next.</p>

Companies undertaking improvement initiatives often allocate their budget for a mixture of process-, people-, and technology-related improvements. So, why not invest an additional 5 - 10 percent in measurement to ensure these improvement projects are actually creating benefits for the organisation?

In this chapter, you found out about:



the key factors in managing multiple releases for maximum effectiveness



approaches to improving the level of PPM maturity



ensuring the success of a process improvement project.

Project Management Best Practice: Introducing PMBOK and PRINCE2

Haydn Thomas and Julie Tilke

Project management best practices have been captured, explained and evangelised for more than 20 years.

The first formalised methodology came in 1987 with the Project Management Institute's (PMI) 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 the UK-born Projects in Controlled Environments (PRINCE2), a generic project management method focusing on end-to-end project delivery. This is evolved from an original edition that set a standard for IT project management in the UK.

A guide to PMBOK

Currently in its third edition since 2004, the *PMI's PMBOK Guide* 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 – for example, construction, software, engineering, and automotive – and across multiple departments, from IT to operations to services.

In fact, many government and financial organisations in the US and the UK require their managers to be PMI-certified. The *PMBOK Guide* can be used in any industry, with many choosing to leverage different aspects of it to suit their specific needs. The PMI also issues *The Standard for Program Management* and *The Standard for Portfolio Management*, which complement one another.

Project Management Best Practice: Introducing PMBOK and PRINCE2 ...continued

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

1: Initiating	2: Planning	3: Executing	4: Controlling and monitoring	5: Closing
<ul style="list-style-type: none"> ▶ Identify the right team and scope. ▶ Determine the relationship between the project and its alignment with the organisation's overall charter. 	<ul style="list-style-type: none"> ▶ Develop the relevant resources, timelines and milestones. ▶ Map project delivery to business priorities, including risk management, communications, quality, cost/budgeting, duration and sequencing, and external dependencies. 	<ul style="list-style-type: none"> ▶ Assign the project team and distribute information to ensure proper activities are undertaken. ▶ Put quality assurance methods in place to address change management, organisational updates and possible plan changes. 	<ul style="list-style-type: none"> ▶ Ensure end result maps back to the original plan. ▶ Mitigate risk from uncontrolled external actions. ▶ Set up secure infrastructure to: <ul style="list-style-type: none"> ● monitor quality, costs and schedule ● manage stakeholder relationships, risk and contract monitoring ● Identify discrepancies (or variations) within the project schedule ● provide the PMO with more control. 	<ul style="list-style-type: none"> ▶ Confirm delivery of everything that's expected of the project. ▶ Review project against the plan and likewise ensure contract closure.

The *PMBOK Guide* arranges the 92 processes into nine supporting knowledge areas. Each process has identified inputs and outputs along with referenced tools and techniques.

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

Training to minimise culture shock

Proper training is critical to achieving a successful business change.

If imposed without a broad understanding of benefits, implementing a structured, highly articulated approach to project delivery according to the *PMBOK Guide* can be a culture shock resulting in unnecessary resistance.

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.

For training and certification purposes, PMI support accreditation is available as a project management professional.

To qualify, candidates must:

- have an appropriate educational background
- be experienced in project management
- pass an exam to demonstrate their knowledge.

To retain the credential, a continuous certification requirement programme is in place.

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

Ensure roles for both PMBOK enforcers and supporters

After training, create roles for both top-level enforcers of the identified approach, and similarly for support staff, to ensure consistent delivery according to the identified standards and procedures.

The enforcers are the custodians of procedures and standards, and are responsible for their development under change management. While the enforcer's initial charter will be to effect business change, the role will transition into one that ensures the necessary procedures and standards are in place as the PMO becomes more mature and accepted.

Supporters, or advisors, should champion and promote the adopted framework throughout the user community via education, mentoring, and issue and change management. Each resource should have a solid understanding of the end-to-end processes and standards, and the flexibility to specialise in a particular area such as execution.

Projects in Controlled Environments (PRINCE2)

Essentially, PRINCE2 helps PMOs control the chaos of project delivery.

Initiated by the UK Office of Government Commerce in 1989, the current version of PRINCE2 has been in place since 1996 with an update planned for 2008-9. Its process-based approach is a generic project management method, although widely applied by IT organisations, and has been adopted worldwide thanks to its ability to be scaled and tailored to provide a standard and consistent approach.

Effective rollout is made possible through the capacity to provide template plans according to the organisation's approach, governance by configured workflows and control over stages.

Project Management Best Practice: Introducing PMBOK and PRINCE2 ...continued

The following are the eight process groups outlined by PRINCE2. It should be noted that the planning and directing processes remain ongoing throughout the project life cycle.

1: Starting up <ul style="list-style-type: none"> ▶ Raise project mandate. ▶ Determine the business case. ▶ Set plan for moving forward. ▶ Appoint team responsible for project delivery. 	2: Initiating <ul style="list-style-type: none"> ▶ Arrange contract between project manager and project board. ▶ Develop high-level plan and control approach. 	3: Planning <ul style="list-style-type: none"> ▶ Use product-based planning to identify project deliverables. ▶ Identify required resources, quality and testing. ▶ Establish monitoring and progress controls. 	4: Controlling a stage <ul style="list-style-type: none"> ▶ Control scope and achieve delivery to time, quality and budget by monitoring key indicators.
5: Managing product delivery <ul style="list-style-type: none"> ▶ Define how the project will be delivered to the project manager upon completion. 	6: Managing stage boundaries <ul style="list-style-type: none"> ▶ Apply a common structure to manage the transition to the next stage in a controlled manner. ▶ Mandate certain items to ensure delivery of the project within scope. 	7: Closing a project <ul style="list-style-type: none"> ▶ Structure closure of the project, whether the deliverables have been achieved or the project is terminated early. 	8: Directing <ul style="list-style-type: none"> ▶ Manage the project's response to the external environment 'by exception' (to minimise demands on the project board's time).

Specifically, the PRINCE2 methodology is a framework of processes that uses 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.

In product-based planning, a product is an identified outcome which falls into one of two categories:

- management products, or items to support project management, such as a business case, project scope or quality log.
- specialist products, or items contributing to an identified project deliverable, such as a piece of code or specification.

Configure PMBOK to meet your needs

Success with PRINCE2 comes from configuring it to meet your specific needs. It is more prescriptive than PMBOK, and more detailed, therefore configurations in process or standards are common.

For example, in some organisations, there might not be a need for the role of 'senior supplier', so users might either rename or re-scope this role.

Don't ignore training

Training is vital. Review of the method (PMBOK or PRINCE2) is a lengthy process, but subsequent pay off in execution support is equally large.

PRINCE2 is widely supported by accredited organisations to assist in training and implementation. OGC's partner organisation, APM Group Ltd (APMG), provides two-tier foundation and practitioner courses with the latter essential to becoming a registered practitioner. Subsequently, a re-registration exam is required every three to five years.

In this chapter, you found out about:



the contribution of PMBOK and PRINCE2 to project management best practice



their respective process groups



the importance of training in applying both methodologies.

Project Management Best Practice: Introducing COBIT

Haydn Thomas and Julie Tilke

The newest of the key project-related methodologies, Control Objectives for Information and Related Technology (COBIT), was created by ISACA (Information Systems Audit and Control Association) and the ITGI (IT Governance Institute) in 1996 for IT governance and control.

Where both PMBOK and PRINCE2 are more project intensive, COBIT takes a top-down approach for managers and auditors to ensure governance of key issues such as Sarbanes-Oxley compliance. 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.

COBIT 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 incorporates major international standards. It has been rapidly adopted by managers and auditors across major organisations, the principal marketplaces being the US (especially from the Sarbanes-Oxley perspective) and Europe.

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

Planning and organisation	Acquisition and implementation	Delivery and support	Monitoring and evaluation
<ul style="list-style-type: none"> ▶ Define the strategic IT plan and information architecture. ▶ Determine the technology direction. ▶ Define the processes organisation and relationships. ▶ Manage the investment. ▶ Communicate the direction. ▶ Manage the human resources. ▶ Manage risk issues and projects. 	<ul style="list-style-type: none"> ▶ Identify and acquire solutions, software and technology. ▶ Enable operation and use. ▶ Procure resources. ▶ Manage changes. ▶ Accredite solutions. 	<ul style="list-style-type: none"> ▶ Define and manage service levels, third-party services, and performance and capacity. ▶ Ensure continuous service and security. ▶ Identify and allocate costs ▶ Manage the service desk and incidents. ▶ Manage problems, data and configurations. ▶ Manage the physical environment and operations. 	<ul style="list-style-type: none"> ▶ Monitor and evaluate performance and internal control. ▶ Ensure regulatory compliance. ▶ Provide IT governance.

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. It focuses on what needs to be done, rather than providing prescriptive guidelines on how to achieve objectives.

For example, as part of planning and organising, COBIT recommends the implementation of project management frameworks and supports. Typically, this will lead to the set-up of a project management office (PMO) and implementation of a project management methodology such as PMBOK or PRINCE2.

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

Focus on business drivers and value

While the need for good IT governance is generally acknowledged, the implementation of frameworks such as COBIT is frequently undertaken without any real perspective on the value delivered to the organisation.

The key to successful implementation is to focus on the business drivers and the results the organisation is seeking, and to recognize that 'zero to hero' may be a journey involving many small steps rather than a single leap of faith. The implementation needs to be managed holistically with changes to processes potentially driving organisational and cultural change.

A pragmatic approach to delivery should be based on sound assessment and implementation.

In the assessment stage:

- establish/review the business drivers
- map the business drivers against process areas to identify relative importance to the business
- assess capability of the process areas to establish current position
- compare relative importance with set priorities and establish gaps
- formulate high-level solution (to define activity goals, control objectives and audit guidelines)
- assess impact on the business (the expected level of cultural change and resistance likely to be encountered)
- create a roadmap to balance priorities against the expected ROI (financial and other benefits). This is likely to be defined as a programme involving multiple work streams.

Project Management Best Practice: Introducing COBIT ...continued

Each delivery phase of a COBIT implementation will be a multi-threaded programme touching many parts of the organisation and will typically share some common characteristics:

- a vocal and visible project sponsor capable of taking the ‘why are we doing this?’ message to all levels of the organisation
- 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.

To be successful, the organisation must want to change. Reinforce this goal by rewarding the new behaviours and make use of technology solutions to automate controls, processes, metrics and audit tracking wherever possible. Always take the organisational 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 deliver a high-level COBIT dashboard while providing integrated support to the underlying processes and controls defined as part of that framework.

Typically, an integrated dashboard will provide configurable support for controls and metrics and, at its most basic level, 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 methodologies, guidelines on process alignment, reference architectures, configuration recommendations, performance tuning advice, and end-user training (on-boarding).

These best practices should be used in every implementation to reduce time-to-value and increase user adoption. Both of these are critical to the success of PMBOK, PRINCE2 and COBIT implementations across the organisation.

In this chapter, you found out about:



the COBIT top-down approach



the need to focus on business drivers and value



the key factors of assessment and implementation.

Project Management Best Practice: Using Reference Architectures and Technology

Enrico Boverino

Achieving success in project, programme and portfolio management requires a variety of technology solutions and services to overcome the challenges of driving down the cost of implementing project management office (PMO) best practices, while increasing the success rate and value to the organisation.

Such success generally comes down to three drivers:

1: Driving up the success rate	2: Driving up value	3: Driving down cost
<ul style="list-style-type: none">▶ Identify the right team and scope.▶ Determine the relationship between the project and its alignment with the organisation's overall charter.	<ul style="list-style-type: none">▶ Optimise your team by creating a skill development path mapped to your business needs.▶ Streamline execution by developing repeatable templates and processes to use across the organisation.▶ Understand programme risks – and their potential impact on the costs and success of the programme.▶ Ensure investments are aligned with business objectives to maximize ROI.	<ul style="list-style-type: none">▶ Deploy an IT portfolio system that prioritises investments and accountability for good financial management.

Here is a top-line review of how CA reference architectures can address the needs and technology requirements for each of the three key management offices – project, programme and portfolio – while speeding up implementation and reducing risk.

The PMO: map technology to your project plan

The PMO provides efficient, on-time and on-budget delivery of discrete projects by utilising appropriate resources and best practices. It is also responsible for defining a charter, setting goals, developing measurement matrices to monitor goal achievement and establishing a communication plan to enforce implementation throughout the organisation.

To achieve all this, it needs to define the project scope, work breakdown structure (WBS) and all activity definitions and sequencing (defining the process steps from start to finish).

By using CA Clarity PPM, your PMO can create simple project plans for the collaboration and tracking of key tasks and milestones, or detailed plans for capturing all the information in a complex project, including WBS hierarchies, estimates, dependencies and deliverables, and staff assignments.

The program management office: efficient, responsive delivery

The programme management office answers business demands and reduces time to market by understanding programme costs and utilising a pool of resources across multiple related projects simultaneously.

The programme management office can manage new levels of cost, risk and quality complexities brought on by a collection of interrelated projects by introducing work breakdown and project structures that are more in-depth and further aligned with executive management. CA Clarity PPM can add even more value by providing top-down budgeting and forecasting, as well as bottom-up risk, status, cost and schedule reporting for sub-projects, providing visibility across multiple linked projects to see the full impact that one change can make to an entire programme — from budget to project progress.

At the resource level, CA Clarity PPM provides the HR department with reports on skills and resources, as well as logging new skills gained with experience.

It can then help determine where additional skill sets not currently part of the team may be needed and also creates an efficient and orderly mechanism for communicating resource requirements to resource managers with or the HR organisation. In addition, it provides resource managers with the information they require to quickly find people who meet the needs of a project or programme.

The portfolio management office: move from IT tactics to business-driven maturity

Portfolio management offices map potential IT investment to business imperatives, creating visibility to prioritise use of resources, staff, budget and outsourcing options. To achieve these objectives, they need to keep improving programme quality through reports, and introduce programme budgets and program costs, link with management and track financial management.

Project Management Best Practice: Using Reference Architectures and Technology ...continued

Here are four steps that will enable the portfolio management office to move beyond project and programme delivery to true IT governance, helping the business to make crucial investment decisions concerning growth, R&D, risk and compliance management.



Step 1: Define criteria

The first phase of IT portfolio management is to define the investment evaluation criteria applicable to the organisation.

CA Clarity PPM provides key metrics, including true benefit and true cost capture, resource capacity and demand, alignment to goal rating, milestone schedules and risk profiling. With point-and-click configuration, it is straightforward to create, prioritise and evaluate investments against the organisation's own metrics, such as ROI and break-even analyses, cost avoidance or revenue enhancement goals, quality statistics and business value assessments.

Step 2: Define portfolio

The second phase is to evaluate the current and proposed investments that comprise an IT service portfolio – assets, applications, projects, ideas and products – against the selected criteria. Investments can be entered through the user interface, or easily imported in batch or real time from external systems using the CA Clarity PPM XML Open Gateway or CA Clarity Web Services.

Step 3: Empower decision-making

CA Clarity PPM provides a complete set of tools and reports to enable the budgeting, analysis and 'what if?' scenario planning that makes up the third phase of portfolio management.

It enables the specification of a set of constraints, including budget, risk, time, and resource role capacity, and evaluates all potential combinations to find the 'efficient frontier', an optimised set of portfolio choices that provides the highest return for the lowest cost.

Step 4: Communicate, execute and assess

This step consists of communicating decisions to department, resource, project and IT relationship managers so that detailed plans can be put in place.

CA Clarity PPM's seamless integration across all functional areas ensures decisions are well communicated, initiatives are well executed, and performance is well tracked. As a contributor to essential IT governance, it also offers a single system-of-record that:

- maps IT costs to services consumed
- dynamically analyses the impact of budget changes
- provides detailed invoices for IT services
- provides an audit mechanism for all IT cost changes.

Drive efficiency and value while reducing costs

CA products and services are targeted at providing rapid time-to-value for clients.

Whatever level PMO your organisation has, CA provides both the technology and reference architectures that best suit your needs and help drive optimal performance. These architectures and tools provide a clear path to efficiently and effectively growing an organisation's maturity – from 'Active' to 'Efficient' to 'Responsive' and, ultimately, to the most strategic and 'Business-driven' state as defined by the Project Management Institute's Project Management Body of Knowledge.

In this chapter you found out:



the three drivers of project, programme and portfolio management success



the key features of CA Clarity PPM



how CA Clarity PPM addresses the needs of IT's key management offices.

About CA Clarity PPM

- Enables the creation of project templates to establish repeatability and speed up project creation.
- Records time and resource usage for each project.
- Simplifies the scheduling of key tasks and milestones and manages project and resource calendars, all within a web-native environment. Out-of-the-box connection is available to both Microsoft Project and Open Workbench.
- Stores and shares documents, secures them by user, group, role or organisational breakdown structure (OBS) and provides version control.
- Tracks staff utilisation for each project, allowing searches for the right resource based on skills, availability and cost.
- Enables capacity management by geography, department and roles, and links this analysis to current and even future project demand.
- Creates the critical connection between the IT organisation's service and project functions by recording all project and requests, incidents and ideas for new projects.
- Allows capture, cataloguing, evaluation and approval of product or technology ideas, project requests and early-stage initiatives. Converts approved ideas into the appropriate project, application or product records, triggering immediate portfolio planning, resource allocation and time and cost tracking.

CA Clarity PPM, an industry-leading project and portfolio management solution, enables IT organisations to achieve world-class performance by improving the quality of their engagement with their customers and enhancing their ability to run at peak efficiency. The CA Clarity PPM system features integrated IT portfolio planning, demand management, project management, resource planning and time and cost management. More than 800,000 users at more than 800 companies depend on CA Clarity PPM to govern IT and, increasingly, to manage new product development (NPD).

For more information on CA Clarity PPM, please visit www.myclarity.com

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