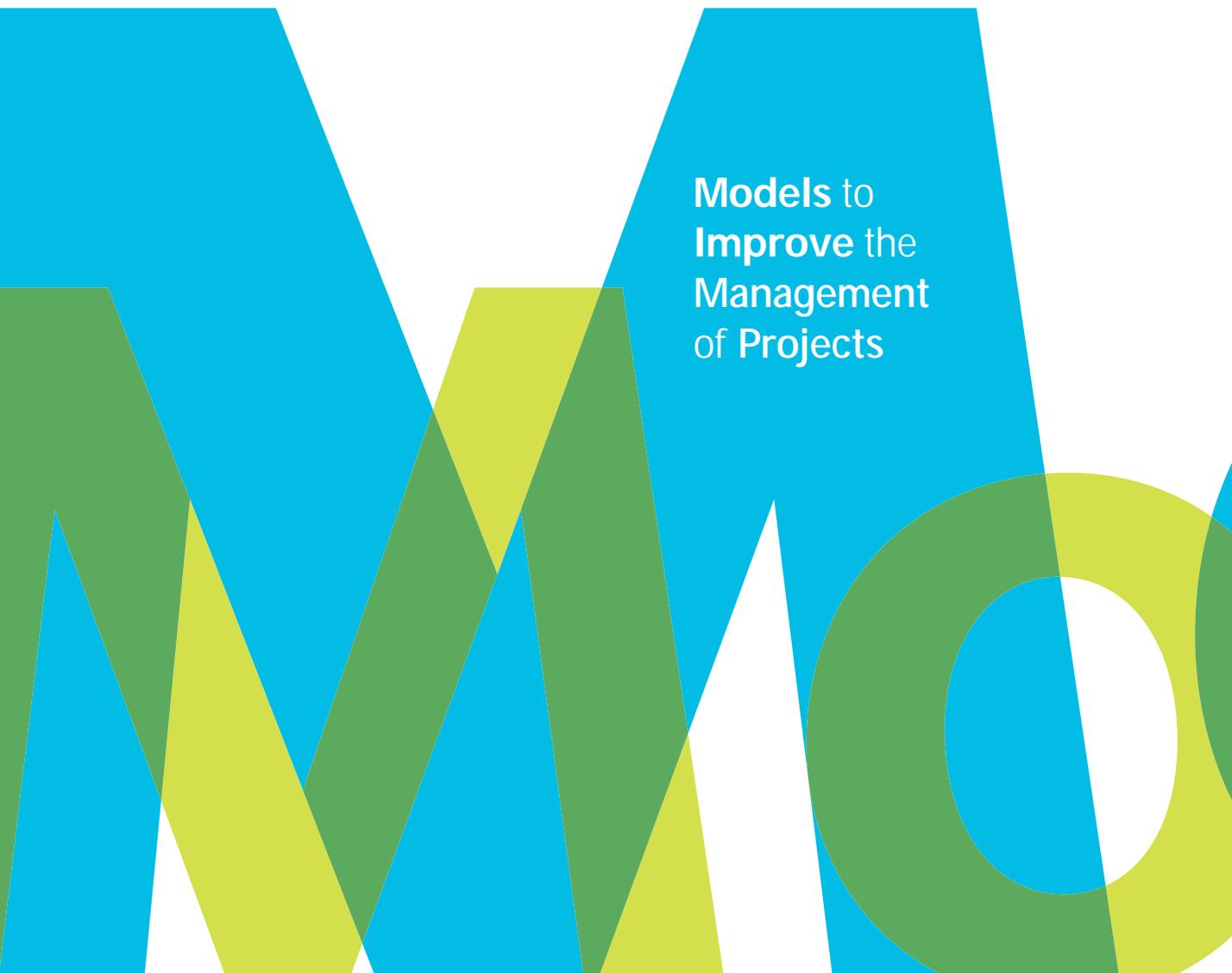


apmKNOWLEDGE



Models to
Improve the
Management
of Projects



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Introduction

The guide started in 2005 as an 'APM Discovery Project' commissioned to find out more about the models on the market that claim to enable improvement in the management of projects. As a result of this research APM identified the need for a guide to provide clarity about some of the main models for APM members and other interested parties. This guide was written using the combined professional judgement of a specially selected expert panel.

There are lots of models available on the market and some have sounder foundations than others. Where does one start to find the best model for a particular situation? APM saw that there was something of value to add to the literature that already exists.

As the UK's professional body for project management, it may have been tempting to invent another model and compete with the others. However, this was deliberately resisted, choosing instead to do the hard work of clarifying six core existing models and providing advice about their purpose and use in the management of projects.

The models chosen

The featured models are:

- 1 Capability Maturity Model Integration (CMMI®)
- 2 PRINCE2™ Maturity Model (P2MM®)
- 3 Programme Management Maturity Model (PMMM)
- 4 Portfolio, Programme and Project Management Maturity Model (P3M3®)
- 5 Organizational Project Management Maturity Model (OPM3®)
- 6 Project Excellence Model

Generically, a model is a logical construct that gives some insight into a problem or area of interest. The models we feature are all designed to assess the capability, maturity or excellence of the management of projects against a defined set of criteria. Each model is also designed to suggest a road map for improvement.

APM research conducted in 2006 suggested that these models are an essential part of overall organisational effectiveness. They allow an organisation to look critically at its processes, practices and outcomes and to make plans to improve those areas that would contribute to their strategy and objectives.

All the models are applicable to the management of projects but not to individual project managers' competency; some of the models are applicable to programmes and portfolios as well as projects. In addition all the models featured are applicable to any sector irrespective of whether their history and background has a particular sector influence. This will help readers choose what's right for them, regardless of where the work started.

How to use this guide

Comparing models can be very confusing. It is difficult to decide which model would be the best fit for a particular purpose. This isn't helped by the language and abbreviations used with words like maturity, excellence and capability being used interchangeably. Whatever words are used, all imply that their use can lead to practical improvement and therefore to increased organisational value.

It may seem self-evident that the purpose of all the models is improvement, however what may be less obvious is that all of the models need to be applied with rigour and in a systematic way if measurable improvement is to be achieved over time. Experience and research have shown that when a model is not applied with full commitment from the organisation, it is likely to fail.

Whilst all of the models have an assessment framework, many different processes are used to measure the current state. For some organisations the ability to gain a 'level' or some other sort of badge is enough of a return on their investment.

For others the main value is the ability to compare with other parts of their own organisation, or to benchmark their performance against that of other organisations. Others use models to aid procurement or to demonstrate their capability when bidding for work.

Following assessment, all of the models suggest what needs to happen next to reach the next level or to improve in some other measurable way. Whether that happens is up to the organisation. All the models provide the means to improve but actual improvement clearly takes more than models and assessment.

Regardless of the model chosen, effort will be required to achieve the goals, so it is worth spending time to choose the most appropriate model and implementation approach in the first place. Our first objective is to help you choose the optimal road to take, to identify the 'staging posts' along the way and to enable project managers to gain buy-in from internal stakeholders. The initial stage can be quite a significant task in itself and we aim to make it easier. We also aim to help you see that the decision need not be a one-time choice. As you improve you may choose a different model to enable a different level or focus of improvement. As organisational needs change; so might the choice of model.

Structure of the guide

The six sections within this guide are written to the same structure to allow comparison across the models. Each model is described by exploring its features, claims and benefits with the intention of providing clarity in a practitioner-led, knowledgeable and impartial way. Case studies are included to share the experience of current users offering positive aspects of the models and areas to consider when implementing.

Most of the content of each section represents the claims made by the model 'owner', but in addition an APM verdict is provided for each model that recommends suitability for a particular purpose. You will also learn the degree to which each model can be adapted to suit particular situations and about the ability of the model to be used at a whole-organisational level, as well as applied to different business units, departments or individual programmes or projects.

In summary, the ability to deliver change is a key factor in most organisations today. The ability to deliver projects with confidence and more effectively than the competition is a source of real strategic benefit. Models to improve the management of projects can provide the route to realising tangible additional value. APM aims to demystify the subject and to speed your journey along the road to improvement.

PRINCE2™ Maturity Model (P2MM®)

P2MM® is owned by the UK's Office of Government Commerce (OGC) and was developed in 2005-06. It is derived from OGC's Portfolio, Programme and Project Management Maturity Model (P3M3®) and Managing Successful Projects with PRINCE2™ (The PRINCE2™ Manual®). P2MM® does not itself contain detailed descriptions of the activities needed to support effective processes, as the necessary detail is contained within the PRINCE2™ Manual®.

What does it do?

P2MM® is a hierarchical model that describes the key elements of the PRINCE2™ method that need to be embedded within an organisation to achieve a certain level of maturity. The associated assessment scheme assists organisations to gauge their maturity in the use of the PRINCE2™ project management method.

The model can be used to:

- Understand the key practices that are part of an effective organisational process to manage projects;
- Identify key practices that need to be embedded within the organisation to achieve the next level of maturity;
- Understand the rationale behind the assessment questionnaire.

How is it used?

P2MM® can be used in one of two ways:

- As a stand-alone maturity model albeit with only three maturity levels, see figure 1;
- As a subset of OGC’s P3M3® which broadens the scope of key process areas for Levels 2 and 3 and provides key practices to be considered in achieving higher levels of project management maturity that are not specifically addressed within PRINCE2™.

Each level of P2MM® focuses on a set of key process areas, each process area being unique to a specific level of the model and underpinning achievement of higher levels of maturity. The P2MM® model can be freely downloaded from the OGC website.

Maturity is assessed by means of a facilitated questionnaire assessment, see figure 2, undertaken by a suitably registered consultant. The P2MM® questions are in two sets, one set relating to organisation and one set focusing on individual projects. In planning an assessment, the consultant would ascertain the number of projects currently being undertaken and the scope of the assessment in order to arrange the necessary interviews with project sponsors and project managers.

The scoring of the assessment questions leads to a capability maturity evaluation and the trained consultant is able to recognise the strengths and weaknesses of the current project management process and recommend areas for improvement. Hence an assessment provides a benchmark level of current maturity and facilitates improvement planning.

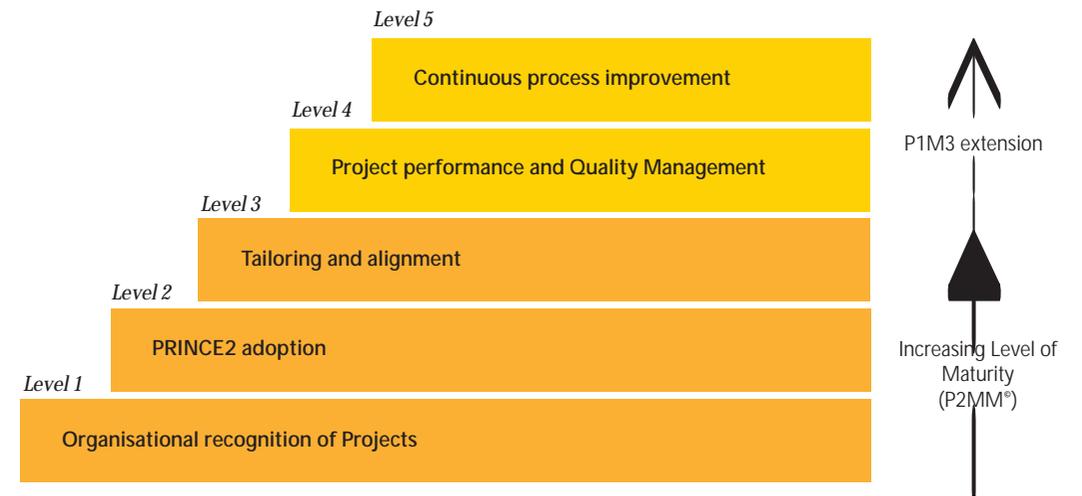


figure 1 P2MM® maturity model and possible extensions

To gain formal accreditation the assessment needs to be carried out by an external consultant and the findings and recommendations need to be verified by the APM Group Ltd. who will award the Maturity Level Accreditation.

	self-assessed	facilitator-led	externally accredited
P2MM®	No	Yes	Yes

Case study 2 Public sector

An international firm of management consultants had been retained by the project management office of a Mid-Eastern government department to develop and implement new programme and portfolio management practices and processes.

At the start of the activity, it was decided to undertake an *OPM3* assessment of the maturity of the current project, programme and portfolio practices both to provide a baseline against which to measure improvements, and to provide indications of which specific improvements would provide the greatest 'leverage'.

The key benefits of the assessment were:

- Recognition of improvements that can be made to existing project management processes by the development and implementation of systems to control them;
- Identification of a small number of key management areas, the improvement of which would result in a significant improvement in maturity overall;
- Confirmation of the need for the proposed new programme and portfolio practices.

The intention is to repeat the assessment after the implementation of the new practices in order to demonstrate the improvements that have been made.

Further information

For further information contact Project Management Institute Inc., Four Campus Boulevard, Newtown Square, PA 19073-3299 USA, or visit www.pmi.org

Verdict

APM recommends that *OPM3* is used when organizations are serious about making root and branch process improvements to link strategy to projects, especially if PMI's other standards are widely known within the organization. For further information contact the Project Management Institute.

OPM3® is registered trademark of the Project Management Institute, Inc.

Project Excellence Model

The Project Excellence Model is owned by the International Project Management Association (IPMA) and was developed in 1996 by the German Project Management Association from the European Foundation for Quality Management (EFQM) Excellence Model. The EFQM Excellence Model and the Project Excellence Model appear similar, but the former is concerned with assessing excellence of processes within a business, whereas the Project Excellence Model is concerned with assessing the excellence of delivery of a single project.

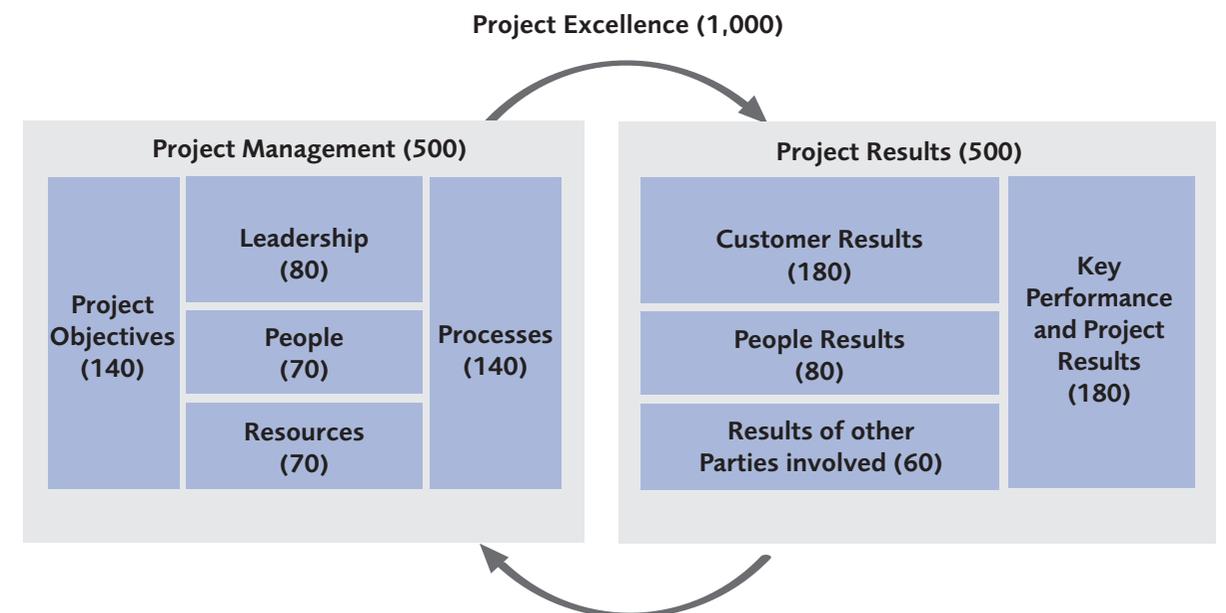


figure 1 The Project Excellence Model

The arrow at the top emphasises the cause and effect between management and results, and the arrow at the bottom the link to learning from experience and the constant improvement elements of the model.

What does it do?

The Project Excellence Model provides a framework for assessing how well a project team is delivering, or has delivered a project. The nine criteria shown on the model in figure 1 are sub-divided into 22 sub-criteria, and each of these is described in a way that allows actual activities and results to be assessed. The descriptions of the criteria enable an appropriate starting point for assessment to be chosen depending on the type of project. The model is used systematically by review of the project against each of the criteria, assessing whether or not the project has sound processes in place to achieve results.

The model is based on the assumption that projects are driven by their Objectives. The first criterion therefore examines the way in which the project has defined the objectives, identified stakeholders and managed the objectives throughout the project. To achieve the defined objectives, the project team carry out project management that enables project results. Leadership, People, Resources and Processes are enabling aspects of project management and the model looks for a strong cause and effect between the excellence of project management across all of these areas and actual project results. Project results, or the outcomes of project management include Customer Results, People Results and the Results of Other Parties Involved, as well as Key Performance and Project Results. The Key Performance and Project Results section is directly looking for alignment with the Objectives.

How is it used?

The model is applied to a single project or a group of projects making up a portfolio. Using the descriptors of each of the 22 sub-criteria and the scoring protocol, scores are awarded for each project being assessed. In addition to the scores; strengths and areas for improvement of the project are identified to underpin the scoring.

	self-assessed	facilitator-led	externally accredited
Project Excellence Model	Yes	Yes	No¹

¹ but is used as the model by IPMA for the annual International Project Excellence Awards.

The model is available for anyone to use but requires assessors who have been trained by IPMA to interpret the criteria and provide consistent scores.

Organisations that enter particular projects into the annual International Project Excellence Awards will be assessed by a team of external assessors. The first stage is for each individual assessor to review the project documentation and perform an evaluation. At the next stage of the assessment process, the team evaluating the project bring their scores together and are required to achieve consensus on the level of scoring of each of the sub-criteria. This is aggregated into an overall project score using the relative weighting assigned to each criterion. Award applicants, whose projects achieve a sufficiently high overall score, are visited by the assessment team to allow further clarification of the claims of the project in their application document.

The final output is a feedback report which provides an explanation of the basis for the scoring and identifies the strengths of the project and the areas for further development and the planned improvement actions.

The process used for awards can be adapted so that the model can be used as a tool for self-assessment or external assessment of a project. In any case, it is designed to be used as part of a comprehensive, systematic and regular review process, by which an organisation would be able to clearly identify strengths and highlight areas in which improvements to the management of projects can be made.

Why use it?

IPMA claim the following benefits for the Project Excellence Model:

- The model provides an evidence-based structured approach to the assessment of projects, which is both scalable and repeatable;
- The measurement of performance within their own projects can offer the organisation confidence that the processes, behaviours and systems they have introduced are working effectively as part of the project management framework;
- Feedback from the assessment identifies strengths and areas for improvement for individual projects and the organisation as a whole;
- Involvement in the assessment process gives those involved a critical insight into how their projects are managed and how they can be improved;
- The project excellence score establishes the organisation's position in its progress towards excellence in the field of project management.



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