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Title:	Perspectives on project management methods
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Abstract	<p>Projects are increasingly being carried out with the support of project management methods (PMMs). PMMs include standards such as the Project Management Body of Knowledge (PMBOK) and also process-based methods such as PRINCE2. PMMs are buttressed and promoted by professional bodies and reinforced by accreditation schemes which qualify practitioners in their use. The evidence on the roles played by PMMs is diverse. PMMs can be viewed from many perspectives including organisational routines, co-ordination mechanisms, structures of controls and rational choice. This paper discusses the perspectives that can be applied to PMMs to help understand how they can best be used. Two case studies are presented in which the organisations are assessed against the 10 perspectives to gain an initial view from the very limited sample of whether the list of 10 has validity.</p> <p><133 words></p>
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Introduction

A study by the Anderson Economic Group estimates that, by 2016, 32.6 million people in 11 countries will be participating in business projects, an increase of 8 million in the space of a decade (ISO 2012). People are being drawn to work on projects because projects are increasingly used to both maintain and transform business operations (OGC 2009). As the number, size, complexity and importance of projects within organisations grow, so does the requirement to ensure that projects achieve a high level of success. The future of organisations depends on their ability to execute projects well (Pitagorsky 2003). While the definitions and measures of success vary widely between organisations, industries and cultures, the need to achieve success is constant.

The barriers to project success have been well documented and are wide-ranging. For example, the UK Government's Cabinet Office identified the primary causes for project failure including communication, leadership, co-ordination, management, planning and benefits management (Dolan 2010).

Practitioners and project management bodies have been developing individual tools and techniques in attempts to address these shortcomings since the 1980s. These developments have been combined into approaches to managing projects collectively known as project management methods (PMMs). PMMs are a factor in successful projects because of the standardisation they bring to an organisation through a set of common practices, tools and techniques, a shared vocabulary and way of working (Chin and Spowage 2010). The adoption of repeatable processes is one method employed to raise the maturity of the project practices within an organisation (Pitagorsky 2003). The more mature an organisation's practices, the more successful it is (Ibbs and Kwak 2000).

Defining PMMs

Under the umbrella of PMMs are methods, standards and frameworks. These are defined in Table 1.

Concept	Definition
Method	<p>A method is the 'how' or a "set of guidelines or principles that can be tailored and applied to a specific situation. In a project environment, these guidelines might be a list of things to do ... a specific approach, templates, forms, and even checklists used over the project life cycle." (Charvat 2003 p17). The OGC define a method as "An approach to a process that is secure, consistent and well-proven." (OGC 2009 p4).</p> <p>For example: PRINCE2</p>
Standard	<p>More a 'what' than a 'how', a standard is a "document that provides requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose" (ISO 2013). "Document approved by a recognised body, that provides, for common and repeated use, rules, guidance, or characteristics for products, processes or services with which compliance are not mandatory." (PMI 2013 p418).</p>

For example: Project Management Body of Knowledge (PMBOK), the Association of Project Managers (APM) Body of Knowledge (APMBOK) and the ISO 21500:2012

Framework “a basic conceptional [sic] structure” (Mirriam Webster 2015).

For example: International Project Managers Association Competence Baseline (IPMA ICM)

Table 1: Types of PMM

Figure 1 provides a visual representation of PMMs, based on the author’s view, using the dimensions of ‘what’, ‘how’ and the scope (ie how much of project management is covered) of the PMM:

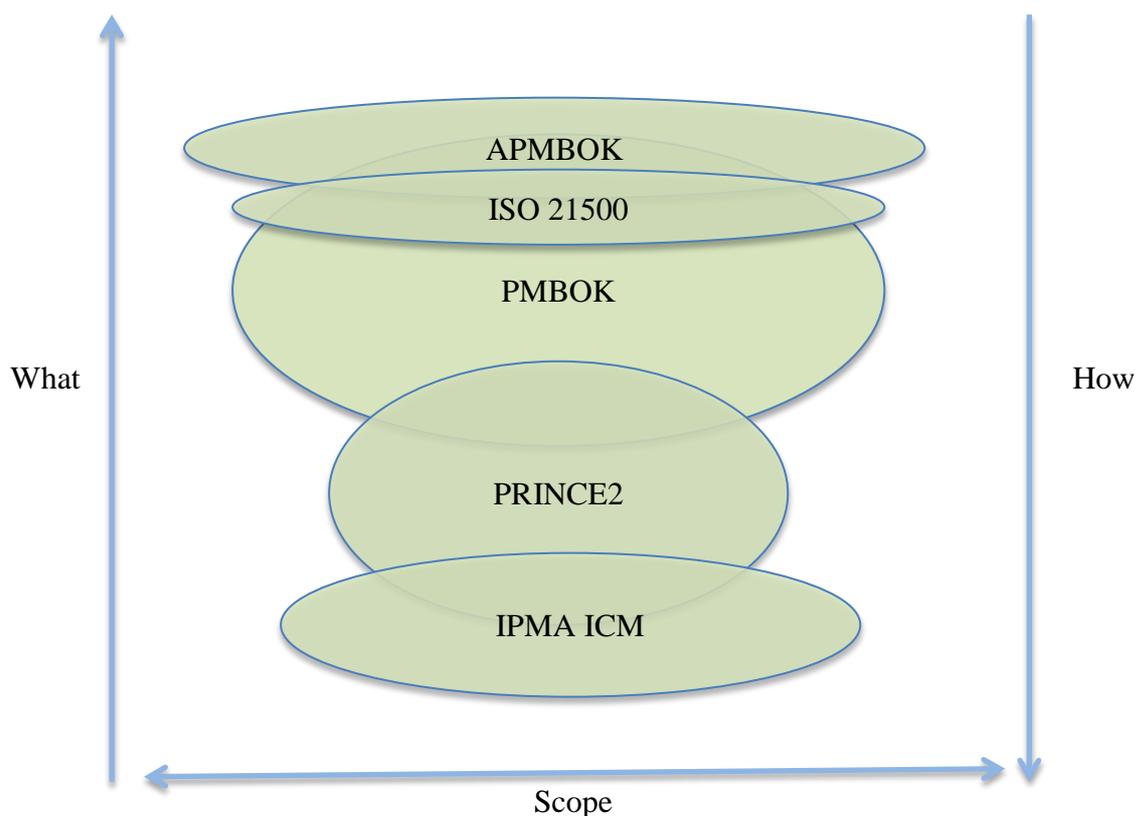


Figure 1: PMM dimension map

The diversity amongst those entities, collectively called PMMs, helps to explain how it is that there are multiple perspectives.

PRINCE2 and PMBOK are two of the most widely used PMMs. For example, PRINCE2 is the de facto standard for project management in the UK, Europe and Australia and is used in more than 150 countries (OGC 2009). Across all sectors, there is a widespread and growing popularity in the use of PMMs (PWC 2012). Coupled with this, an increasing number of managers are taking qualifications to certify their use of a method. The number of people who have passed certification examinations in PRINCE2 exceeded 1 million in 2012 (APM Group 2012) and the PMI has awarded over 500,000 certificates (PMI 2015a).

The importance of PMMs

The growing importance of certification is supported by evidence that 90% of large organisations that use a method also certify their managers in that method (PWC 2012). The combination of the wider use of PMMs and increasing availability of qualified practitioners should intuitively result in better-managed projects and therefore more successful projects but the evidence does not support this conclusion. Longitudinal studies report that between 2012 and 2015 over one third of projects, 37±1%, fail to meet their goals (PMI 2015b).

The adoption by an organisation of a PMM is a strategic business decision (Charvat 2003). The costs of implementation can be significant and full implementation requires considerable resources. It can be difficult to choose a method from the many available (Sheard 1997) and, once chosen, to encourage users to adopt the standard (Garcia 2005). The implementation complexity has meant that success has been difficult to achieve. For the last decade, project management approaches have been in the list of the top ten factors causing project failure (Wells 2012).

One tactic used by organisations to inhibit PMM complexity has typically been to customise how projects are managed using a combination, in varying degrees, of established PMMs eg PMBOK, experience of those involved and the characteristics of the projects undertaken. This approach has led many organisations to implement a customised PMM that is believed to maximise the benefits of a structured way of working while at the same time minimising the perceived disadvantages of the established methods. Figure 2 shows how the PMM used by an organisation can be plotted on a continuum that begins with a totally customised PMM and ends with a way of working that precisely follows a structured method such as PRINCE2.



Figure 2. The PMM continuum

The 2012 study by PWC is one of the few to have recently looked into this area. From their small sample of 1,524 respondents, PWC found that 41% of organisations used PMBOK, 3% used PRINCE2, 12% an in-house method or combination of methods and 9% used ‘other’ which, frustratingly, was not explained further but did not include software development methods. Figure 3 visualises how the PWC data could be plotted on the continuum.

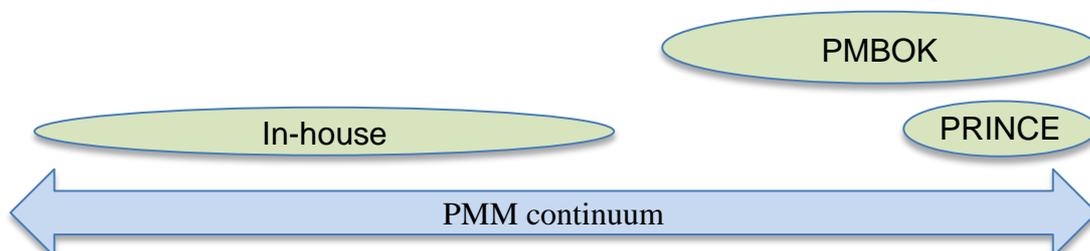


Figure 3. The PMM continuum with PWC data

More research along the lines of that undertaken by PWC is needed to establish how organisations are arrayed along this continuum but it has been the author's experience, based on PMMs used by UK organisations, that there is a large group of organisations to the left of centre, often identified by their use of descriptive terms for their PMM including 'PRINCE-like' and 'PMBOK-lite'.

Perspectives on PMMs

The existence of the PMM continuum suggests that there are many ways of working that fall within the remit of a PMM. At the left extreme of the continuum, project managers may not recognise the use of a PMM whereas at the other extreme a project manager may feel constrained and restricted by unquestioning adherence to a PMM.

An interpretivistic ontology would suggest that the people involved in PMMs will hold differing views on PMMs and it is to an enumeration of these perspectives that we now turn. The rationale for this investigation is that an understanding and appreciation of the perspectives on PMMs will help to explain and justify their use in organisations.

Ten different perspectives of PMMs have been derived from reviewing a wide range of project management and allied literature to identify the distinct views. In no particular order, these are:

1. **Rational choice.** PMMs are the organisation's way of managing change and PMMs are an evidence-based and rational choice to optimise how projects are managed to combat the many reasons why projects fail. Following a logical, problem-solving approach to the issue of improving project management success, a supported and justifiable option will be the use of a PMM. This view links with the list of project problem areas listed by Dolan at the beginning of this paper.
2. **Uncertainty avoidance.** It has long been recognised that different projects require different approaches (Shenhar et al 2002). PMMs represent a way of managing this uncertainty because the PMMs are widely applicable. If an organisation undertakes projects of a similar nature, one methodology may suffice but more methods may be required if the projects exhibit wide variation (MacMaster 2002). Following a risk reduction or uncertainty avoidance strategy to managing a narrow or diverse project portfolio, PMMs can help because of the standardisation and honed/best practice processes they offer.
3. **Proactive action.** This internal perspective recognises the importance of projects to the organisation (Charvat 2003) that projects are linked to benefits realisation (Bradley 2010; Jenner 2012) and that projects improve business value (Pitagorsky 2003).
4. **Competitive advantage.** This external perspective acknowledges that if an organisation can operate more effectively than its competitors, it can enjoy an economic advantage by winning more business or working more efficiently (Williamson 2005). PMMs represent one way to improve operational efficiency because of standardised processes and use of a common language (Pinto 2012).

5. **Maturity development.** PMMs represent a very useful tool to increase an organisation's level of maturity. The PMI's Organisational Project Management Maturity Model (PMI 2015c) and Axelos's Portfolio, Programme and Project Management Maturity Model (Axelos 2015) are two prominent examples of the many maturity models available. Organisations can use the maturity models to develop their maturity over time to reach a desired level. The more an organisation's PMM aligns with an established method, the more benefit they are likely to gain from maturity development because the models will be directly relevant to the processes and ways of working in the organisation. Logic suggests that the more customised an organisation's PMM, the less applicable the off-the-shelf maturity model will be. This is not to say that customised PMMs cannot be linked to maturity levels, more that the matching will require additional work and any comparisons with other organisations will be less reliable because differing models will be used as the basis for comparison. A positive correlation between strong project management performance and the level of maturity in the organisation has been found in multiple studies (Ibbs and Kwak 2000; PWC 2004; Swanson, 2012).
6. **Reactive response.** An organisation may opt for a PMM as a response to an external stimulus. For example from environmental factors such as the customer or supplier, or corporate standards (OGC 2009). The author has worked with some organisations who bid for project work and for whom the demonstrable use of a PMM is an entry condition for any bid.
7. **Staff development.** Certifying project managers in PMMs can be seen as developing the human resources and capabilities of the organisation. The 2014 portfolio and programme survey by PWC found 64% of CEOs reported that skills development in the workforce would be a priority in the next three years and 55% of PM professionals complained there is insufficient time for training and development.
8. **Staff retention.** In the face of skills shortages in project management (PMI 2014; NCS 2015), developing project staff and supporting them in their work can aid job satisfaction and thereby retention (Hertzberg 2003; Hölzle 2010).
9. **Organisational routines.** Viewing PMMs as organisational routines or recurrent patterns of activity (Feldman and Rafaeli 2002; Paoli and Prencipe 2003) opens up a rich vein for analysis. PMMs represent a form of routine in the organisation that regulates work but also that fluxes due to interaction with the environment and the role of the people who carry out the processes. Viewed in this way, PMMs might be seen as mindless routines that people slavishly follow (Simon 1947) or as mindful where the actors interact with the processes dynamically (Pentland 1995; Feldman 2000). The recurring nature of the routines can be seen a stores of solutions that the organisation used to solve past problems and which are continued as a form of perpetuating and evolving organisational memory (Nelson and Winter 1982).
10. **Politics/Control.** With its roots in critical social theory and postmodernism, an alternate perspective on organisational routines is that PMMs can be used to limit the freedom of action and creativity of project staff. The processes within PMMs can be used to control the work and the workers for political or other advantages that serve only the few (Calhoun 1995).

Case studies

As part of on-going research, two organisations have been involved in explanatory research of PMMs. Organisation 1 is a UK higher education institute. Organisation 2 is a UK government department.

In understanding why PMMs are chosen, qualitative data was collected through semi-structured interviews and analysed using the data assessment tool, Nvivo. The analysis used key word matching to identify links to the 10 perspectives. The results of the analysis are shown in Table 2. A tick in the body of the table shows where the phrase was mentioned by one or more participants from the organisation.

	Rational choice	Uncertainty avoidance	Proactive action	Competitive advantage	Maturity development	Reactive response	Staff development	Staff retention	Organisational routines	Politics/control
Organisation 1	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>					
Organisation 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Table 2: Analysis of responses

The current sample size is too small to draw any conclusions. However, the table does give credence to the view that there are many perspectives on PMMs within individual organisations.

Though limited, the data does bring to light some interesting points. For example, both organisations identified rational choice in their responses but for opposite reasons. Organisation 1 was responding to a strong PMM (to the far right of the continuum) and decided it was rational to loosen the method and was moving quickly to the left. Organisation 2 was using evidence of the merits of strong PMMs to further develop their method and move it to the right on the continuum. Thus both organisations believed they were making rational decisions but they had come to opposing conclusions. No numeric measure exists to plot organisations on the continuum so it is not possible to determine their relative positions on the continuum.

Where next?

With PMMs being increasingly used, it is important that decision-makers take account of the many different roles that PMMs can play in their organisation and the different perspectives from which they can be viewed. A greater understanding of the perspectives can help decision makers to select and use PMMs to the best effect in their organisations.

It is intended to conduct more research with organisations, both through semi-structured interviews and also via online questionnaires. The research will also consider the contextual factors such as the influence of culture (Doolen et al 2003; Cameron and Quinn 2011) and organisational structure on the perspectives of PMMs (Galbraith 1973) in order to further investigate and understand this aspect of PMMs.

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