

## A Conceptual Framework to Improve the Delivery Capability of an Organisation

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### SYNOPSIS

**Purpose:** The article focuses on organisations' capability to deliver their vision and strategies through the use of project management and, in particular, the project delivery capability of organisations themselves.

**Problem investigated:** Although quantitative evidence does exist that organisations do receive value from project management, the track record of failed projects shows the opposite. This can be attributed to the fact that there is no holistic approach in the implementation of project management, which means that organisations do not receive the value they are supposed to get from project management.

**Design and/or methodology:** The problem of a holistic approach is addressed through a theoretical framework that shows the various building blocks of project delivery capability as well as the relationship between the various components within the building blocks. The benefits of such a holistic framework are the improvement of project delivery capability and an understanding of what is required by organisations to ensure that the value is realised.

**Findings:** The article lists three levels of management as well as two dimensions, i.e. proficiency and organisational requirements, that form the Project Management Capability Delivery Framework. The PMCDF provides a holistic framework that can be utilised to increase project success within organisations.

**Originality/value:** The value of this article is that the holistic view provides organisations and the project management office ultimately with a way to manage projects, programmes and portfolios within the organisation, taking into account the synergy that is required. Components can no longer be managed in isolation.

**Conclusion:** The conclusion can be drawn that although there are various aspects and components within the PM discipline, these affect other components and are interrelated. Without this holistic view, efforts to improve delivery capability could prove to be fruitless.

### KEYWORDS

Project capability, project management, proficiency, organisational requirements.

### INTRODUCTION

There is a significant interest in the ability to deliver projects. Project management (PM) has been recognised as a strategic delivery capability that can assist organisations in achieving their strategic objectives (Crawford, 2004; Besner & Hobbs, 2006; Crawford, Hobbs & Turner, 2006; Blichfeldt & Eskerod, 2008). With the advent of corporate governance (Turner, 2006; Thiry & Deguire, 2007), a global economy that is going through a recession and a severe skills shortage worldwide (Morello, 2008), developing better strategic delivery capability and getting value out of all investments have become imperative. Most organisations are faced with increased competition, shortened product development life cycles and an increasing emphasis on time to market (Hobbs, Aubry & Thuillier, 2008). This has resulted in organisations developing new and more flexible organisational forms, with the ability to manage projects becoming more strategically important (Marnewick & Labuschagne, 2008). In order to develop and improve such ability, it is necessary to understand the organisational context of what is required.

Until recently, the value of PM has often been questioned (Besner & Hobbs, 2006; Morris, Crawford, Hodgson, Shepherd & Thomas, 2006). Several organisations have implemented formal PM infrastructures, methodologies, tools and techniques without realising any tangible or quantifiable benefits, while many others have been able to capitalise on their investment.

Project management maturity models (Bower & Walker, 2007; Thomas & Mullaly, 2007) have long sought to provide an explanation for these failures as well as solutions on how to improve capability for success. Despite the existence of these models for several years, project management maturity has not improved that significantly (O'Leary & Williams, 2008; Söderlund, Vaagaasar & Andersen, 2008).

This article is based on the following assumptions:

- Most organisations consist of three horizontal levels of management, namely strategic, tactical and operational (Brooks, 2002).
- Most organisations consist of two vertical levels of activity, namely operational initiatives (current business) and strategic initiatives (future business).
- Most organisations have strategic plans aimed at a future state that are deconstructed into strategic objectives.
- Most organisations require new initiatives to achieve their strategic objectives.

This article proposes a framework that can assist organisations in contextualising project management in order to improve their strategic delivery capability.

The article starts off by explaining the research method that was used, followed by a literature review to identify the factors that influence an organisation's strategic delivery capability. The next section covers the management levels, the proficiencies that managers must have and finally the organisational requirements. This all culminates in the Project Delivery Capability Framework, followed by a conclusion.

## RESEARCH METHOD

The research method followed started with an extensive literature review to determine the factors as well as the components that influence an organisation's strategic delivery capability. These results were used to determine how successful organisations have been in implementing and establishing project management as a strategic delivery capability. The purpose of the literature review was to acquire an understanding of the topic at hand as well as any key issues (Olivier, 2009:8; Bell, 2007:99). The results of the literature review were analysed to provide the foundation for a framework that can be used to illustrate the relationship between the various components identified in the literature review.

Based on the results of the literature review, a theoretical framework was developed. This is an explanatory device "which explains graphically the main things to be studied and the presumed relationship among them" (Miles & Huberman, 1994:18). A theoretical framework also provides simplicity as well as clarity of the problem at hand (Olivier, 2009:49). The purpose of this theoretical framework is to provide clarification and not to differentiate or generalise. This implies that the theoretical framework illustrates the relationship between the various components in such a way that organisations can clearly visualise this relationship. The theoretical framework is constructed based on formalisation where theory and logic are used to derive the theoretical framework (Olivier, 2009:48).

## LITERATURE REVIEW

The literature review investigated first of all the factors that influence the delivery capability of organisations. The perceived value organisations get from using project management as a vehicle for implementing strategic initiatives is investigated next.

### Strategic Delivery Capability Factors

In recent years, several researchers have more closely investigated the idea that a delivery capability can act as a strategic differentiator. These findings clearly suggest that delivery has emerged as a potential strategic weapon, creating a need to understand (i) the impact of delivery on organisational performance as well as (ii) the factors that enhance an organisation's delivery capability (Fawcett, Calantone & Smith, 1997). According to Crawford et al. (2006), organisations do realise and recognise the fact that the organisational strategy is delivered through projects. Therefore project management capability is important to their ability to deliver their strategic intent.

Milosevic and Ozbay (2001) identify seven factors that form part of project delivery capability (PDC). These factors are:

- Process: this is defined as the sequence of activities that create added value to the customers and users of the project's product.
- Organisation: this factor focuses on the integration of all the projects within the organisation and the intention is to have better integration and strategic alignment.
- Information technology: IT assists with the integration and dissemination of the outputs of all the projects.
- Tools: include procedures and techniques to complete specific activities within a project.
- Metrics: assist the organisation to understand how well the project delivery works with regard to customer satisfaction and financial performance.
- Culture: the intention is that project team members have a sense of identity with the organisation as well as the project.
- Leadership: the leadership style is defined in terms of specific competencies.

These factors of Milosevic and Ozbay address what is needed by an organisation to understand the impact of delivery on organisational performance. For organisations to embark on this quest of PDC, the value of project management must be understood.

Cooke-Davies and Arzymanow (2003) followed the same train of thought as Milosevic and Ozbay and list the following factors:

- Extent of project culture.
- Extent of business (versus technical) culture.
- Organisational understanding of multidiscipline project management.
- Strength of project versus line management.
- Degree of authorisation held by a project.
- Extent of project management infrastructure, method and systems.
- Centralisation of project information for each project.
- Competency of project management staff.
- Ability to match project team to the needs of the development (stage and type).

Based on these various PDC factors, the three main dimensions or groups of factors are the organisational structure or management levels, the proficiency and the requirements of the organisation itself.

### **Value of Project Management**

The discipline of PM has been evolving and maturing constantly over the last few decades. Despite this growth, the true value of PM has always been questioned due to a lack of empirical evidence (Thomas & Mullaly, 2007; Williams & Parr, 2008). Several organisations have invested in people, tools, methodologies, standards and structures with an expectation to see a quick return on these investments. Literature is fraught with evidence of unsuccessful projects (Thomas & Fernández, 2008; Labuschagne, Marnewick & Jakovljevic, 2008), project offices (Hobbs & Aubry, 2007) and no business benefits to the organisation (Bennington & Baccarini, 2004; Christenson & Walker, 2008).

Only recently has quantitative evidence emerged of the organisational value of PM (Thomas & Mullaly, 2007, 2008). According to Thomas and Mullaly, organisations do, in fact, get value out of PM and can therefore be considered to have a strategic delivery capability. Sixty-one per cent of the organisations that participated in this research expressed satisfaction with the way projects are managed and 68% confirmed that projects are aligned with the organisational vision.

Organisations must ensure that they have the project delivery capability to deliver any chosen projects, programmes and portfolios (Crawford et al., 2006). The next section focuses on the various components that constitute the PDCF.

### **THE PROJECT DELIVERY CAPABILITY FRAMEWORK (PDCF)**

From the literature review, three dimensions of project delivery capability have been identified. These are:

1. Management levels
2. Project management proficiency
3. Organisational requirements

Below is a discussion of each of these dimensions.

### Management Levels

The management of organisational projects can be divided into three categories, namely a project, a programme and a portfolio (De Reyck, Grushka-Cockayne, Lockett, Calderini, Moura & Sloper, 2005; Project Management Institute, 2005b; Reiss, Anthony, Chapman, Leigh, Pyne & Rayner, 2006:18). This is illustrated in figure 1.

**Figure 1.** Three categories of organisational initiative



The purpose of a project is to deliver a predefined product or service, while the purpose of a programme is to deliver organisational benefits. It consists of related projects (Reiss et al., 2006; Wellman, 2007). A portfolio, on the other hand, is the grouping together of programmes to meet strategic objectives (Project Management Institute, 2005b; Apfel, Gomolski, Handler, Hotle, Light & Steinberg, 2006; Maylor, Brady, Cooke-Davies & Hodgson, 2006).

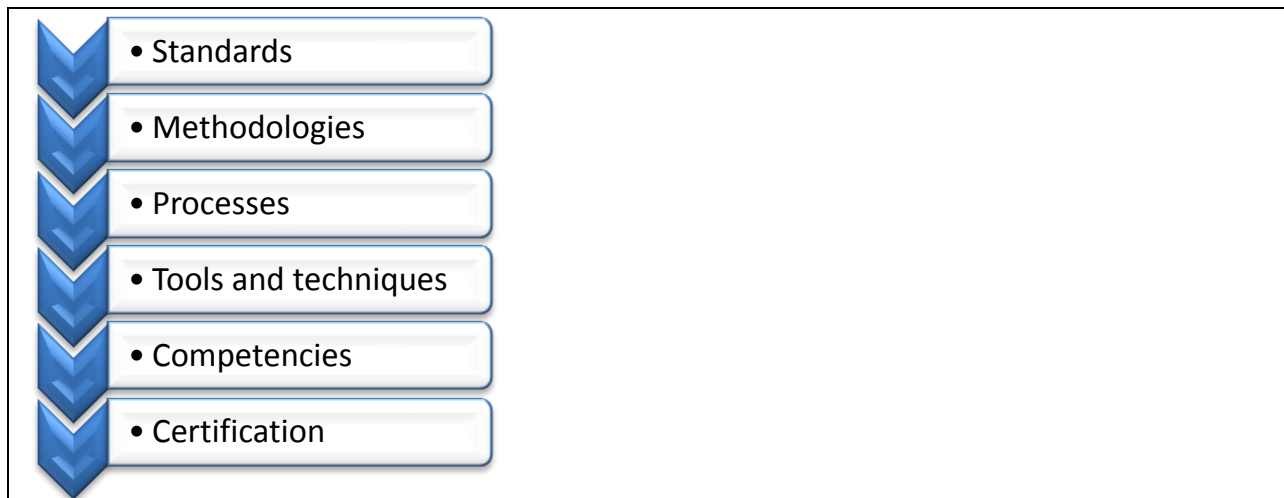
This division of projects, programmes and portfolios forms the basis of the PDCF and all other concepts are related back to it based on an extensive literature review (Turner, 1996; May, 1999; Jugdev & Thomas, 2002; Crawford, 2005; Dvir, Sadeh & Malach-Pines, 2006; Maqsood, Finegan & Walker, 2006; Morris et al., 2006; Mullaly, 2006; Andersson & Müller, 2007; Reich, 2007). For the purpose of this article, the three management levels (project, programme and portfolio) will be referred to as the 3P's. The common denominator for this dimension is everything that influences the ability of 3P managers to perform their tasks.

In the following section the proficiencies in relation to a project, programme or portfolio manager are discussed. It must be noted that some of these proficiencies are well researched and debated in the case of project management but not in the case of programme and portfolio management.

### 3P Manager Proficiency

Proficiency is skilfulness in the command of fundamentals deriving from practice and familiarity. This section describes the various components that constitute the proficiencies of 3P managers as illustrated in figure 2.

Figure 2. Components of proficiency



Bredillet (2003) states that PM standards are becoming crucial to implement organisational strategies. In addition, Crawford (2005) points out that PM standards were developed to ensure that project managers are competent in the field of project management. Standards for programme and portfolio management were also developed by the PMI (Project Management Institute, 2008b, 2008c). These standards can be used to determine if a programme or portfolio manager is competent.

### Standards

A standard can be defined as “a published document which sets out specifications and procedures designed to ensure that a material, product, method or service is fit for its purpose and consistently performs in the way it was intended” (Standards Australia, n.d.). The International Standards Organisation defines a standard as “a published specification that establishes a common language, and contains a technical specification or other precise criteria and is designed to be used consistently, as a rule, a guideline, or a definition” (International Standards Organisation, n.d.).

There are various international project management standards, for example (i) the PMI’s “A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – 4th Edition” (Project Management Institute, 2009a), (ii) the APM’s “APM Body of Knowledge – 5th Edition” (Association for Project Management, n.d.), (iii) the PMAJ’s “A Guidebook of Project & Program Management for Enterprise Innovation – Volume 2” (Ohara, 2005) and (iv) the Global Alliance for Project Performance Standards (GAPPS) (2007). GAPPS focuses on the development of agreed frameworks that serve as a basis for the review, development and recognition of local standards that will facilitate the mutual recognition and transferability of project management qualifications (Global Alliance for Project Performance Standards, 2007). Standards for programme and portfolio management were also published in 2008 by the Project Management Institute (2008b, 2008c).

Based on these definitions it can be agreed that a standard provides the rules and specifications that must be followed to ensure a high quality product or service. If this is applied to project management, then any 3PM standard provides the 3PM community with a set of rules and common understanding of what must be done to ensure that a project, programme or portfolio is successful.

### Methodologies

Lewis (2000) defines a methodology as “the procedures that must be followed in carrying out the overall process”. These procedures include what forms must be completed, the meetings that must be held and the approval of changes. Bal and Teo (2001) agree with Lewis and define a methodology as “a collection of procedures, techniques, tools, and documentation aids which will help” project managers to implement a project. Phillips, Bothell and Snead (2002) are of the opinion that a methodology is a process that is successful regardless of the scope and size of the projects, the tools that are used for the project and the people working on the projects. A methodology is a repeatable process with project-specific methods,

best practices, rules, guidelines, templates, checklists and other features for building quality systems that are manageable and deliver value to an organisation (Murch, 2005).

It is clear from these definitions that there are various views about and definitions of a methodology and that these are sometimes opposing or conflicting. Based on these definitions, the common denominator is that a methodology defines how things are supposed to be done or executed.

Schwalbe (2010) differentiates between a standard and a methodology by defining a standard as "what must be done" and a methodology as "how it is supposed to be done". Cockburn (2006) states that a standard is one of the components of a methodology. A methodology makes use of standards such as management and decision standards but also includes PM standards.

This means that a standard and a methodology are two sides of the same proverbial coin and that they are dependent on one another to ensure the success of a project. A PM standard provides the rules and guidelines of what must be done within a project, and a PM methodology provides the processes to ensure project success.

There are various PM methodologies: (i) the rational unified process, which is a software development methodology (Graham, Van Veenendaal, Evans & Black, 2007), (ii) PRINCE2, a framework developed and instituted in the United Kingdom under the Office of Government Commerce (OGC), a government agency (Hall & Fernández-Ramil, 2007), (iii) system development life cycle (SDLC), the classic "waterfall" approach (also a software development methodology) (Gremba & Myers, 1997; Wieder, Booth, Matolcsy & Ossimitz, 2006), (iv) solutions-based project methodology, a simplified approach for consultants to work with their clients (Charvat, 2003) and (v) TenStep (Crawford, 2004).

### Processes

The next component is the process component as illustrated in figure 2. The focus is on the different processes within the 3P's. A process transforms an input into a desirable output where the output is monitored and compared against a predefined standard (Lewis, 2000). The Project Management Institute (2008a) indicates that there are five process groups, namely initiating, planning, executing, monitoring and closing. The aim of these processes is to ensure that a project is delivered successfully within the constraints of the project (Schwalbe, 2010:80). Processes must also be in place for the programme and portfolio management levels. The PMI published processes for these two management levels (Project Management Institute, 2008b, 2008c). The Office of Government Commerce (2007) published a book (Managing successful programmes) which describes six processes to manage a programme. Standards indicate to a 3P manager what to do and serve as the foundation for processes. Processes are used in methodologies to define the management activities during the lifespan of the project (Office of Government Commerce, 2007). They are the connection between the methodologies and the standards, i.e. methodologies explain how a project must be executed, processes are the activities for how to execute the project and the standards are what must be done during the execution of the project.

### Tools and Techniques

The fourth component in which a project manager must be proficient is the tools and techniques that are used to convert inputs into outputs such as scheduling techniques, reporting tools, estimation techniques and collaboration tools (Retief, 2004). These tools and techniques can assist the project manager to be more productive if the tools are utilised optimally (Rigby, 2001). Complex PM methods such as earned value (Besner & Hobbs, 2006) and critical path methods (CPMs) (Murphy & Ledwith, 2007) can be automated using a tool such as Microsoft Office Project (Microsoft Corporation, 2007). The methods that are mentioned are part of the standard, methodology and process components, for instance during the planning process Microsoft Office Project can be used to develop a CPM to determine the best way to execute the project. 3P managers should have the knowledge (competency) to use the appropriate tools to ensure the optimum outcome of a specific activity.

### Competencies

Edum-Fotwe and McCaffer (2000) define PM competency as the combination of acquired knowledge, the skills that were developed through experience and then finally, the application of this acquired knowledge. Competency can include factors like motives, self-concepts, knowledge and skills (Light & Hotle, 2006; Robinson, Sparrow, Clegg & Birdi, 2007). This implies that task-oriented and worker-oriented competencies are taken into consideration in this definition. The Project Management Institute (2007)

defines PM competency as what project managers bring to a project through knowledge, how project managers perform or are able to do on a project. The International Project Management Association (IPMA) defines competency as knowledge plus experience plus personal attitude where knowledge and experience relate to function and attitude relates to behaviour (Gale & Brown, 2003). This implies that 3P managers must have knowledge of the available standards and of methodologies, the various processes and the tools and techniques that are available to them. Apart from this knowledge, the 3P managers must also be able to apply this knowledge in a working environment to ensure the successful delivery of a project, programme or portfolio. Programme competence is not just an extension of project competence. Partington, Pellegrinelli and Young (2005) have identified a framework of 17 key attributes each conceived at four levels in a hierarchy of competence. The PMI classify the competencies of a portfolio manager as business and management competencies. Part of these competencies is to have analytical skills to monitor the portfolio based on performance (Project Management Institute, 2008b). The 3P manager must be able to focus on the specific product of the project/programme/portfolio but must also be able to have a long-term view of the benefits of the product or services that must be delivered.

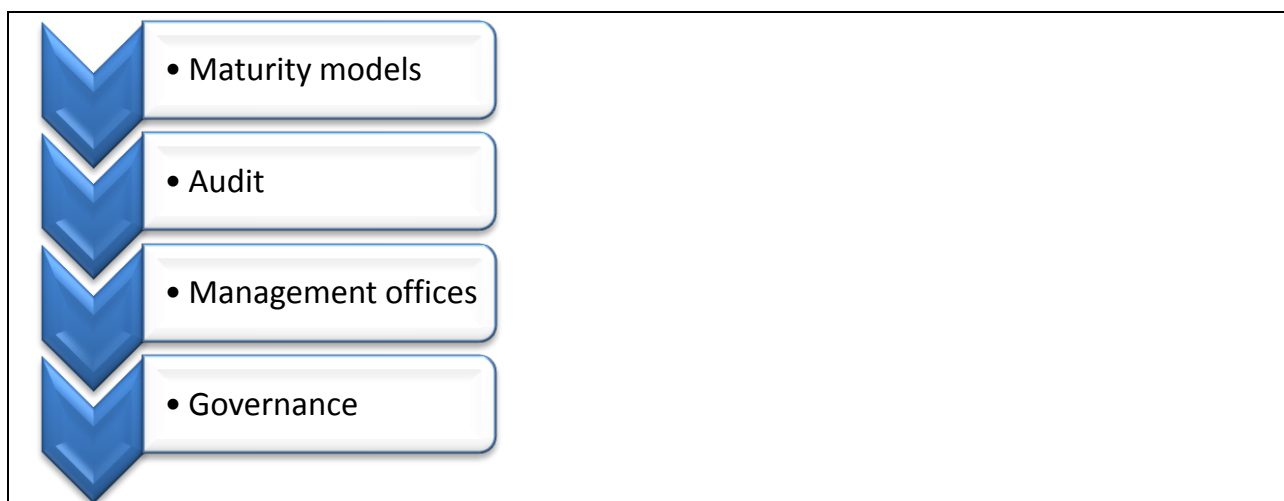
### Certifications

The last component is certification. Crawford and Pollack (2007) state that standards are used for certification and for accrediting a 3P manager. Morris et al. (2006) explain that “certification simply says that the person has done all that is required in terms of acquiring and demonstrating knowledge”. 3P managers can also be certified in a methodology such as PRINCE2 (PMProfessional Learning, n.d.). Certification also goes with the maturity level of the organisation (Caupin, Knoepfel, Koch, Pannenbäcker, Pérez-Polo & Seabury, 2006). The conclusion is that the higher the organisation’s maturity level, the higher the level of certification of the 3P managers.

### Organisational Requirements

The organisational requirements include concepts in terms of legislation such as Sarbanes-Oxley (Brown & Nasuti, 2005) and best practices such as CobiT (Hong, Chi, Chao & Tang, 2003; Abu-Musa, 2009). By adhering to the legislation and international best practices, organisations ensure that they conform to good corporate governance through the implementation of project, programme and portfolio management (3PM) (Association for Project Management, 2004). The common denominator for this dimension is those components that provide support and direction for 3P managers.

Figure 3. Components of organisational requirements



This dimension consists of four components which together ensure that the 3P’s are in support of corporate governance.

### **Governance**

The first component on this dimension that addresses these needs is 3P governance. The Association for Project Management (2004) defines project governance as all the activities of corporate governance that are related to the activities of a project. The Project Management Institute (2005b) defines governance as the process of creating and using a framework that aligns, organises and executes activities in a coherent manner to achieve the organisational goals at all levels of the organisation. According to Turner (2006), project governance can be described as “the structure through which the objectives of the project are set, and the means of attaining those objectives are determined, and the means of monitoring performance are determined”. The common elements of these definitions are that the project activities of any project must be in line with the organisational vision and strategies. It must be noted that there are no governance structures for programme and portfolio management. A general definition that can be applied to programme and portfolio management is that a structure must be in place that allows organisations to determine the objectives of the 3P’s, that ensures that the means of attaining these objectives are met and that means do exist within the organisation to monitor the strategic alignment of any of the 3P’s.

### **Management Offices**

The second component on the organisational requirements dimension is management offices. These offices represent the physical structures that enable project managers to fulfil their responsibilities. Physical structures are also required for programme and portfolio management. The project management office (PMO) has become a prominent feature in many organisations (Hobbs & Aubry, 2007). Seventy-six per cent of a PMO’s function is to develop and implement a PM methodology for an organisation (Hobbs & Aubrey, 2007). According to Thiry and Deguire (2007), “the PMO is a governance structure for organisational project management” and the role of the PMO should move from developing and implementing methodologies towards a governing structure. The Association for Project Management (2004) identifies portfolio management and project sponsorship as two key components of project governance. The PMO is therefore the structure through which governance is assured. Hobbs and Aubry (2007) investigated the role of the PMO and concluded that it can be grouped into the following:

- (i) monitoring and control of project performance,
- (ii) development of project management competencies and methodologies,
- (iii) management of multiple projects, i.e. programme management,
- (iv) strategic and portfolio management and
- (v) organisational learning.

In essence, a PMO is responsible for developing and maintaining the project delivery capability of the organisation.

### **Auditing**

Auditing is the third component and organisations are experiencing increasing pressure to develop the means to constantly audit themselves internally (Maurizio, Girolami & Jones, 2007). The conducting of project audits is done through PMOs against the relevant governance framework and standards to enhance organisational learning (Aiyer, Rajkumar & Havelka, 2005; Hobbs & Aubrey, 2007). The auditing of the 3P’s focuses on all three management levels. The aim is to ensure that organisations do have processes and tools in place so that projects, programmes and portfolios can be audited based on the 3P levels. The importance of auditing the 3P’s is that (McDonald, 2002):

- (i) it provides enhanced control over the organisational systems,
- (ii) organisations are in a better position to understand the environment they operate in and
- (iii) organisations understand why projects succeed or fail and this will have an impact on the overall organisational success.

The auditing process links back to the governance and standards components as the auditing component ensures that everything was done as per the governance requirements. This implies that 3P managers are accountable for their actions if these actions do not adhere to the definition of project governance (Wellman, 2007).



**Maturity Models**

Organisations assess their level of maturity and performance in project management through the use of project management maturity models (PMMMs). PMMMs consist of four to five levels and are designed around the organisation’s environment, structure and needs (Eve, 2007; Midler & Silberzahn, 2008; Walker, 2005). The more mature an organisation is in terms of PM, the higher the level, i.e. level 3 on the PMI’s OPM3 indicates that the majority of PM processes are in place and are used by the majority of the people in the organisation (Jugdev & Thomas, 2002; Walker, 2005). Organisations mature from one level to another level, i.e. an organisation cannot mature directly from level 1 to level 3, but will mature from level 1 to level 2 to level 3. Level 5 indicates that all the PM processes are in place as with level 3, but the processes are measured and continuously improved upon (Jugdev & Thomas, 2002). Organisations start at level 1 and the goal is to reach at least level 3 where the majority of the management processes are in place (Pennypacker & Grant, 2003).

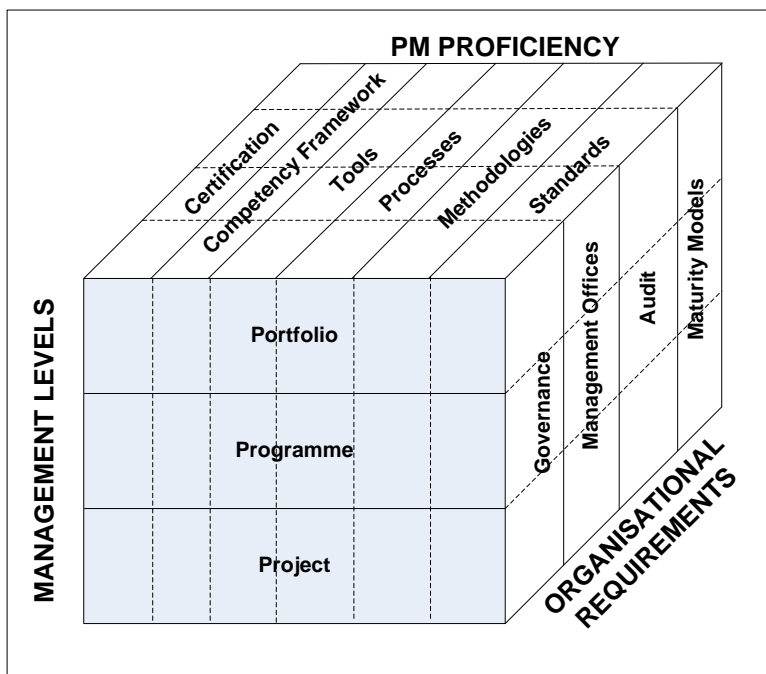
An important factor that must be taken into consideration is that maturity measures an organisation and not individual project managers or specific projects (Project Management Institute, 2009b). The vehicle to mature, according to the maturity model, is the PMO that assists organisations in this task (Hobbs & Aubrey, 2007; Pellegrinelli & Garagna, in press). The third component (audit) can also be used to ensure that the organisation complies with the requirements of each maturity level. If an organisation is currently on maturity level 3, then the audit may indicate that all the criteria for level 3 have been achieved and adhered to. It will also indicate if there are certain procedures that are not adhered to on level 3.

The next section explains how the three dimensions are integrated to form the PDCF.

**THE PROJECT DELIVERY CAPABILITY FRAMEWORK**

The division of projects, programmes and portfolios forms the basis of figure 4 and the concepts discussed above are related to projects, programmes and portfolios.

**Figure 4.** The Project Delivery Capability Framework



Organisations can use the PDCF in various ways, which should be based on the needs of the organisation itself.

The first use is to focus on each of the three dimensions and ensure that each component of a dimension is in place or addressed within the organisation. An organisation can, for example, determine that it only has project management processes and no programme or portfolio management processes in place. The organisation can then embark on implementing these processes. The same principle applies to PM proficiency and the organisational requirements dimensions.

The second use of the PDCF is to utilise it as a three-dimensional cube and focus on the different intersections. If, for example, an organisation determines that it lacks portfolio governance, it can then use the PDCF to analyse gaps. These gaps will be identified on the proficiency axis. This implies that the organisation can then determine which of these components need to be addressed with regard to portfolio governance. If the same organisation wants to focus on programme governance, the same analysis needs to take place as portfolio and programme governance are totally different.

An organisation can thus use the PDCF to determine gaps in either one of the three management levels or all three of the levels. This framework enables organisations that are only focusing on project management to assess gaps on the PM level. The same applies to organisations that have matured into programme management. The framework can then be applied on both the project and programme management levels.

### **VALUE OF THE PDCF**

The main purpose of the PDCF is to enable an organisation to satisfy the expectations of its stakeholders. The PDCF addresses these expectations in a holistic way and focuses on creating an environment that is conducive to project, programme and portfolio success and ultimately organisational success.

Another purpose of the PDCF is that it empowers organisations to focus on the areas where it lacks the necessary skills, processes or establishments. The PDCF provides the holistic view of what is needed to ensure the successful implementation of the organisational vision and strategies.

The PM maturity of an organisation can also increase through the implementation of the PDCF as it allows the organisation to focus on each component and therefore excel in PM and the organisation's delivery capability.

The conceptualising of the PM domain indicates that the PM discipline fits into a broader context and environment. Without this holistic view, increased investment in PM might not deliver the expected results.

### **CONCLUSION**

The article focused on providing a conceptual framework that can be used to improve the delivery capability of an organisation. The article provided three axes, i.e. the management levels, the competencies and the organisational requirements, that must be taken into consideration. Each axis was discussed in detail.

The conclusion can be drawn that although there are various aspects and components within the PM discipline, these affect other components and are interrelated. Without this holistic view, efforts to improve delivery capability could prove to be fruitless.

The value of this article is that the holistic view provides organisations and the PMO ultimately with a way to manage projects, programmes and portfolios within the organisation, taking into account the synergy that is required. Components can no longer be managed in isolation.

Future research will focus on how PMOs can utilise the framework to determine the role and responsibilities of the PMO itself as well as the processes that must be in place to determine the success of such a PMO.

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