

UNIVERSITY OF CAPE TOWN



**AN INVESTIGATION INTO THE EFFICIENCY &
EFFECTIVENESS OF PROJECT MANAGEMENT
OFFICES (PMOs)**

THESIS

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Master of Commerce

in

Information Systems

By

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For my unborn child who has become a part of this journey

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Abstract

PMOs are complex organisational-specific entities. Companies are increasingly establishing PMOs in search of more favourable outcomes for their projects. However, these PMO organisational structures are rarely found to survive and are often disbanded or transformed every few years.

The PMOs implemented in the public sector are faced with the task of justifying their value to business over time. These PMOs function in particularly stressful environments as they run complex projects that are driven by politics. The public sector provides a unique context in that organisational transformation is likely to occur every few years with the election of a new political cabinet.

The notion of a PMO is a relatively new phenomenon with limited research available at present. There are few practical and theoretical guidelines identified in the research literature. The public sector environment has received even lesser research despite offering a unique organisational structure that commonly undertakes large, complex, and political-focussed projects. The purpose of this study is to seek a better understanding of the contribution made to public sector PMO value in terms of efficiency and effectiveness. An understanding of the efficiency and effectiveness factors involved can aid managers in identifying where to focus their efforts to ensure value-add of new services and products are achieved in the public sector.

A mixed method research approach was employed to investigate the public sector PMO organisational environment case study, using interviews and a complementary survey. A model of the factors that contribute to the efficiency and effectiveness of a PMO was derived from the research literature. This was followed by an in-depth case study of a public sector PMO. The factors relevant to the case study were captured using interviews and then analysed using thematic analysis. The results were then compared to the model.

The study revealed that most of the public sectors PMOs (77%) was found to be structured as virtual PMO offices with varying levels of capacity and authority. The results of the survey found that most of the PMOs focus in terms of efficiency was on productivity (60%), planning (20%), and profit (20%). In terms of effectiveness, the foci were mainly on responsiveness (40%) and flexibility, adaption and innovation (60%). It was concluded that project management maturity could be significantly improved by focussing on the areas that were lacking for these PMOs, i.e. benchmarking, hiring external consultants with PM knowledge and linking with external consultants.

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Chapter 1 – Introduction

A prominent strategy that organisations have adopted to assist with the outcome of projects is to establish a Project Management Office (PMO) (Dai & Wells, 2004; Singh, 2009; Ward & Daniel, 2013). PMOs are embedded in the organisations in which they exist. However, it is found that PMO entities are not very successful as they undergo a transformation/evolution or finally shut down on average after two years (Aubry, Hobbs & Thullier, 2007). PMOs present declining value as time progresses and risk failure or ultimately shut down if they do not evolve to more strategic involvement (Kendall & Rollins, 2003).

It is said that PMOs fail because they are generally unable to provide measurable value to business (Kendal & Rollins, 2003; Singh, 2009). The successes and failures of PMOs must be better understood to enable improvements to be made for more efficient and effective PMOs. There is a need for a “golden standard” to measure PMO performance to allow improved efficiency and effectiveness efforts to succeed. The aim of this study is to explore factors that contribute to current PMO operations in order to gain an in depth understanding of what drives PMOs to be more efficient and effective.

1.1 Significance of the Study

The study is relevant to both practitioners and researchers as it seeks to understand factors that contribute to the performance of PMOs. This could encourage managers of PMOs to appreciate methods on how to improve the efficiency and effectiveness of their PMOs. This in turn may ensure executive visibility on PMO value contribution to business. Although the notion of a PMO originated in the IT sector, the focus of this study is on general PMOs. The public sector in particular is suitable for this study as it presents a unique organisational structure in which projects undertaken are generally large and political in nature. At the time of the research, this was the first study conducted in a South African, public sector PMO context. A mixed method approach was used in response to the research problem, which included the development of a conceptual model followed by interviews with PMO members and a survey.

1.2 Structure of the Thesis

Chapter 2 follows from the introduction in Chapter 1, and reviews the recent research literature on PMOs. The review investigates the factors that contribute to the value added by PMOs for the organisations in which they exist.

Chapter 3 describes the motivation for the research approach, followed by the development of the conceptual model.

Chapter 4 describes the data collection and analysis process. The conceptual model was used as a framework to conduct an in-depth case study of 13 departments of a public sector organisation. Details of the case study, the interviews with PMO members, and the additional survey are described in Chapter 5. The survey was included to triangulate the findings in the interviews. The conceptual model is then reviewed and further analysed in terms of the survey results and the interview findings.

In Chapter 6, the findings and conclusions are discussed. Recommendations for future research are then made.

Chapter 2 – Literature Review

2.1 Introduction

The number of PMO implementations have doubled from 2000 to 2012 (Crawford, 2012), despite having an average lifespan of two years (Aubry, Hobbs & Thullier., 2007). There is insufficient emphasis in the research literature to understand the issues surrounding the sustainability of PMOs. This chapter will review the recent literature that provides the theoretical foundation required to answer the research questions.

2.2 Review of the Research Literature

According to the Project Management Institute (PMI), a Project Management Office (PMO) is defined as, “an organisational body or entity assigned various responsibilities related to the centralised and coordinated management of those projects under its domain. The responsibilities of the PMO can range from providing project management support functions to actually being responsible for the direct management of a project” (PMI, 2008, p.11). Andersen, Henriksen & Aarseth (2007, p.98) provide another definition of a PMO as a “systematic coordination and unified handling of key-related tasks, as an enterprise wide responsibility.”

However, these definitions provide a broad view of a PMO. The “various” responsibilities and tasks referred to above have resulted in a wide variation of PMOs that exist globally. To date, there is no single agreed upon set of standard PMO features documented in theory, nor in practice (Dai & Wells, 2004).

2.3 The Role of IT for PMOs

Information Systems (IS) is defined as the means by which people and organisations utilise technology, gather, process, store, use, and disseminate information (Ward & Daniel, 2012). Information Technology (IT) is referred to as the technology on which IS runs (Ward & Daniel, 2012). IS/IT is thus those means that support and enable businesses to run efficiently and profitably (Holsapple & Wu, 2009; Isola, 2006; Ward & Daniel, 2012).

Melville et al. (2004) define the value of IT by the impact it has on organisational performance.

The role of IT for business has evolved significantly over the years. The demand for technology is increasingly evident as it is expected to transform all aspects of, as well as innovative ways of, doing business. Public sector organisations are also known to rely extensively on IT in order to deliver their services efficiently (Ward & Daniel, 2012).

PMOs originated in and are still mostly found within the IT department, (Kendall & Rollins, 2003). Chief Information Officers (CIOs) are tasked by the business to compute the value contribution made by their IT investments (Thorp, 2002). It is for this reason that CIOs are driven to request the implementation of a PMO to assist with gathering all required project information, to gain better control of projects as well as for overall improved project performance in their organisations (Isola, 2006; Kendall & Rollins, 2003). Kendall & Rollins (2003) suggest building a PMO in a way that delivers value to the business from the inception.

Senior managers often consider the success of IT projects by the value that they add to the organisation (Ward & Daniel, 2012). Businesses increasingly invest in IT projects as attempts are made to move toward technologically evolving environments, and more specifically for increased competitive advantage and return on investment (ROI) (Chiang & Nunez, 2009; Martin, Pearson & Furumo, 2007; Ward & Daniel, 2012). Corporate IT expenditure is increasingly high (Marnewick & Labuschagne, 2011). Business executives have reportedly been disappointed with the outcome of IT projects, which may imply a greater need for improving on IT project benefits management (Ward & Peppard, 1999; Baccarini & Bennington, 2004). A clear understanding is required on the strategic and business reasons for IT investments in order to identify and manage benefits (Ward & Daniel, 2012). Ward & Daniel (2012) recently found that some organisations are actually reluctant to carry out benefit reviews since benefits are often overstated at the start of the project in order to secure project approvals.

According to Andersen et al. (2007), the benefits of a PMO are said to be realised when the needs of the organisation are met. It is argued that executives will positively embrace their PMOs if they were to significantly meet the organisations business goals (Kendall and Rollins, 2003).

2.4 Historical View of the PMO

The use of PMOs is a relatively new phenomenon (Aubry et al., 2009; Santos do Valle, Silvia & Soares, 2008) whose origins can be traced back to the 1950's (Aubry et al., 2007). Project management practices can be dated back to the construction of the Pyramids of Egypt and the Great Wall of China (Solomon, 2006; Mpazanje, 2009). Modern day project management can be traced back to Henry Gantt in the early 1900s and this evolved to a management "discipline" from around 1950s (Solomon, 2006; Mpazanje, 2009). Knutson (2001, p. 3) postulates, "Project management is a discipline that requires discipline". Project management practices play a role in the management of all sectors and industries (Shenhar et al., 2003; Aubrey, Blomquist, Hobbs & Müller, 2010). According to Vries (2009), organisational project management is the ability of an organisation to effectively apply project management knowledge and practices. Economic pressures to reduce the time to market have led to an increase in the number of projects that organisations run (Aubry et al., 2007).

The need for PMOs arose due to organisations running an increasing number of projects that were becoming more complex to manage (Dai & Wells, 2004; Desouza & Evaristo, 2006; Chiang & Nunez, 2009). The role of the PMO has generally been to support and improve organisational project management practices (Stanleigh, 2006), while for some the emphasis lies primarily on auditing projects (Morris & Pinto, 2004).

PMOs are entities that are embedded in the organisations in which they exist. The PMO is said to evolve with the organisation and is therefore considered an organisational-specific structure (Aubry et al., 2009; Pellegrinelli et al., 2009; Artto et al., 2011). This attribute may be what largely contributes to the complexities of the entity.

The early literature on PMOs appeared in research literature after the 2000's (Dai & Wells, 2004), while the first published books appeared after 2003 (Santos do Valle et al., 2008). Despite practitioner journals repeatedly stressing the importance of PMOs (Kendall & Rollins, 2003; Perry, 2009), there is still very limited academic research available (Martin et al., 2007).

Many authors reported that organisations have increasingly taken to establishing PMOs over the years (Andersen et al., 2007; Chiang & Nunez, 2009; Dai & Wells, 2004; Crawford, 2012; Stanleigh, 2006). This increasing trend to implement PMOs has been to support complex projects (Desouza & Evaristo, 2006; Singh et al., 2009; Ward & Daniel, 2013) and for overall project management support and improving the project performance of the business (Dai & Wells 2004; Knutson, 2001; Stanleigh, 2006; Thiry, 2007). It is believed that the implementation of a PMO ultimately supports organisational performance (Stanleigh, 2006; Crawford, 2012).

The research findings of Dai & Wells (2004) support the growing trend of implementing PMOs. They found that, as shown in Figure 1, since the mid-1990s the number of PMO implementations has increased substantially. More recently, Crawford (2012) concluded that the number of PMO implementations had almost doubled from 48% in 2000 to 87% in 2012 (see Figure 2). From this it is clear that organisations are increasingly investing both time and budget to implement PMOs with the expected outcome to maximise the potential value of the projects they undertake (Sprouse, 2010; Stanleigh, 2006).

2.5 The PMO Structure

Vries (2009) claims that it is the organisational positioning of the PMO that is key to increasing the project management maturity level of the organisation, and he argues that a stakeholder analysis is strongly recommended to determine the business requirements before a PMO implementation is embarked on. Some authors opine that PMO structures are dependent on their agreed scope in terms of responsibilities, size of business, as well as the location of PMO (Andersen et al., 2007; Curlee, 2008; Desouza & Evaristo, 2006).

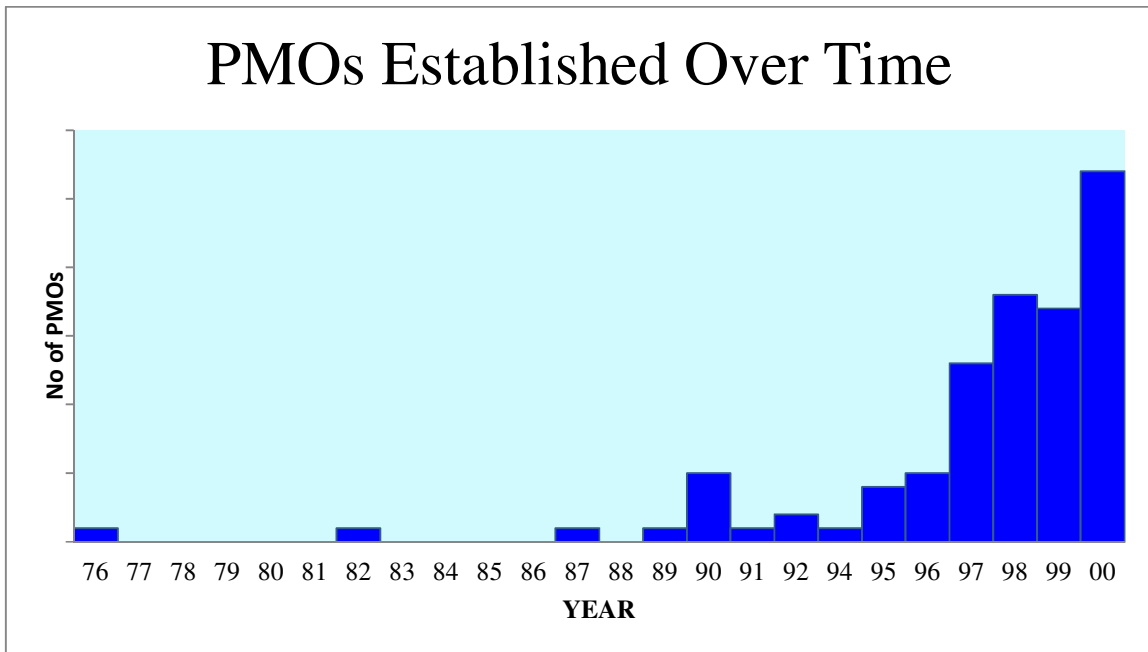


Figure 1: Growth in PMOs establishment over time (Source: Dai & Wells, 2004)

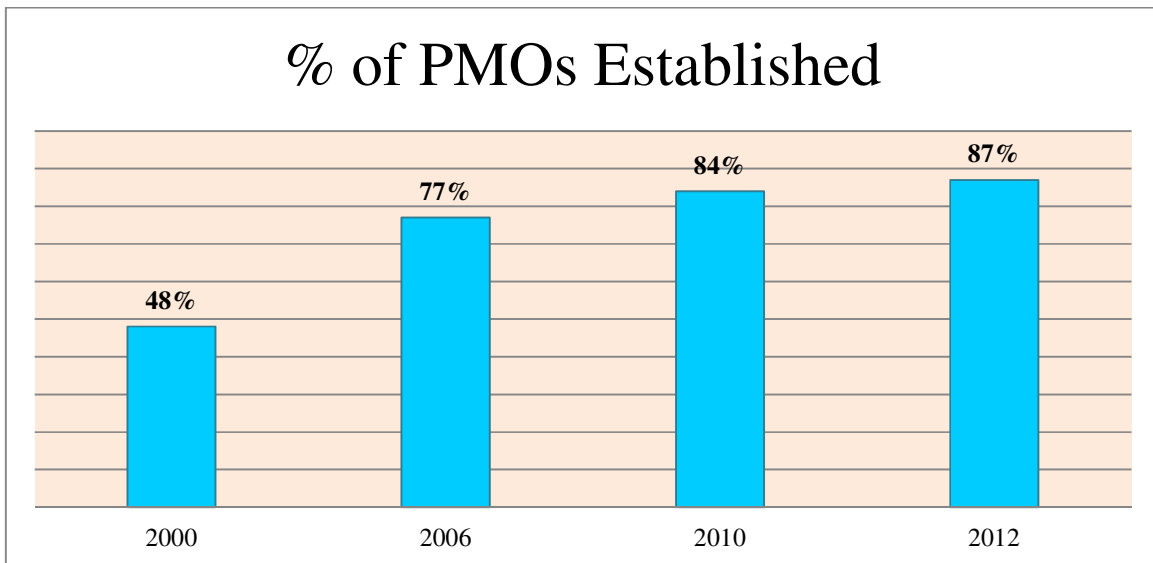


Figure 2: Growth in PMOs establishment since 2000 (Source: Crawford, 2012)

Artto, Kulvik, Poskela & Turkulainen (2011) note that existing PMO research literature focuses largely on project execution rather than the organisational structure and the role of the PMO. Interestingly, Ward & Daniel (2013) found that in organisations with existing PMOs the senior management were generally dissatisfied with their project results. The authors suggest that this could be the result of these PMOs being new implementations that

were established due to management already being dissatisfied with their current conditions, or it could be the result of PMOs that provide executives with more holistic information that primarily focus on their poor performing projects.

In a study completed in 2005 by Hobbs (2007) it was found that more than 50% of the PMOs were relatively new establishments of around one and two years. Since most PMOs appear to have been established during the mid-1990s, this suggests that while PMOs were being implemented at a very high rate, many PMOs may have shut down at the same time.

Aubry et al. (2007) in a study of 502 PMOs found that most PMOs were undergoing some form of transformation every two years. Table 1 shows several suggested processes of PMO evolution.

Table 1: Stages of the Evolution of PMOs. (adapted from: Desouza & Evaristo (2006) and Knutson (2001))

Authors	Suggested evolution of PMOs		
Desouza & Evaristo (2006)	Operational →	Tactical →	Strategic
Knutson (2001)	Consultative →	Information →	Managing role
Crawford (2001) as cited in Andersen et al. (2007)	Level 1: Project Office →	Level 2: Unit Project Office	Level 3: Strategic Project Management Office

Knutson (2001) describes a PMO continuum that evolves from a consultative role (i.e. provides advice and support to project teams), to a project office enterprise-wide information role (i.e. provides information to support corporate decision-making) and finally to a managing role (i.e. accountable for strategic project initiatives). Desouza & Evaristo (2006) suggest segmenting the roles of the PMO into strategic, tactical, and operational levels, with each level performing various roles and functions accordingly.

Crawford (2001) as cited in Andersen et al. (2007) defines levels of PMOs as follows: Level 1 handles large and complex projects with a focus on monitoring as well administrative aspects;

Level 2 manages individual projects of a portfolio for a unit e.g. IT project office; and Level 3 that enables senior management to participate in project prioritisation and support the goals of business.

Hill (2004) provides another view of 5 successive stages of PMO evolution as follows:

1. *The Project Office* applies effective practices for project performance and project oversight.
2. *The Basic PMO* introduces critical processes and practices of project management and process control.
3. *The Standard PMO* establishes and monitors use of project management methodology and provides process support.
4. *The Advanced PMO* enhances the content and monitors the use of comprehensive project management methodology and measures business maturity.
5. *The Centre of Excellence*, which analyses methodology.

In all these models, the lowest level (one) is generally associated with project administrative tasks. Hill (2004) opines a progression to level five at which the PMO provides strategic support to the business. Kendall & Rollins (2003) conclude that those PMOs whose main responsibility is to support a standard methodology will inevitably find their value questioned by executives. According to Chiang & Nunez (2009), the strategic PMO (level five) will focus on evaluating business benefits, risk and cost of proposed projects. The models and descriptions identified in the research literature specify a PMO structure that ultimately evolves to a strategic level. According to Knutson (2001, p. 448), PMOs that function at the strategic level are “highly professional, respected, and productive business units”.

Kendal & Rollins (2003) identified a declining value curve for those PMOs that function primarily at administrative levels as shown in Figure 3. At this level, the PMOs role mainly involves the provision of project information and standardising the project management methodology in the organisation. The purpose of these PMOs was often as a requirement of the CIO due to management dissatisfaction with current conditions (Stanleigh, 2006). Kendal & Rollins (2003) note these PMOs are in effect implemented as

a defence mechanism and result in increasing resistance from the organisation. There is very limited strategic involvement for these types of PMOs. Kendal & Rollins (2003) claim that when the organisational resistance exceeds the perceived value, the PMO eventually ceases to exist, as they are unable to show their value or worth. Kendal & Rollins (2003) go as far as claiming that “you have to be immortal to escape certain death in this PMO model” (Kendal & Rollins, 2003, pg. 35).

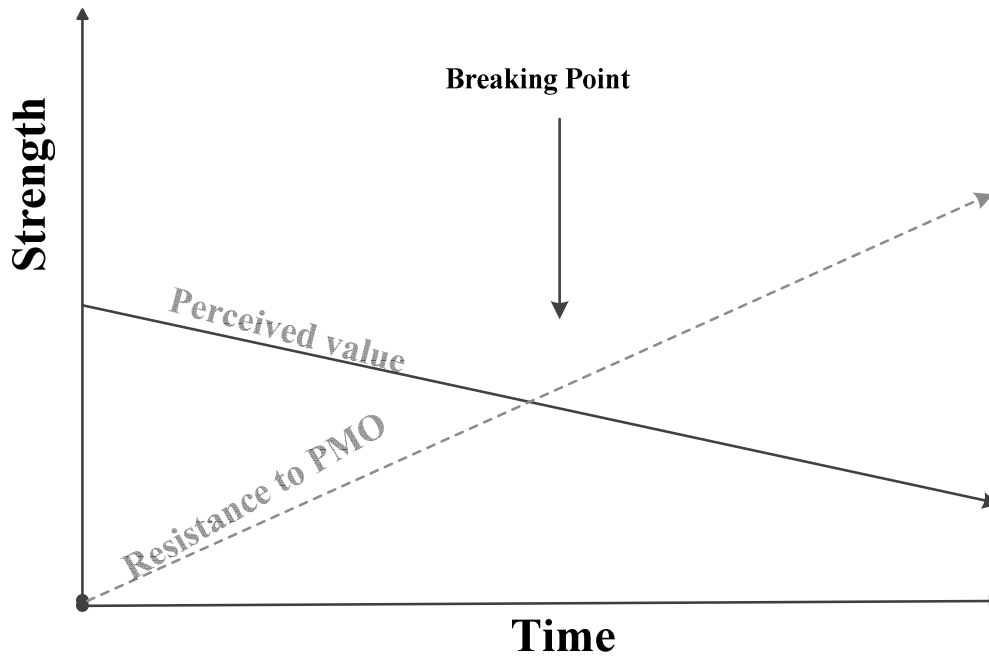


Figure 3: PMO Value Curve (Source: Kendall & Rollins, 2003)

The competencies within a PMO to be able to operate at strategic level is also a factor that has a significant impact on what the PMO is able to achieve. Aubry et al. (2007) found that the majority of PMO staff were from an IT background (see Figure 4). Interestingly, Mata et al. (1995) claim that technology and technical skills do not contribute to sustained competitive advantage as much as management skills does. Ward & Daniel (2012) opine that in the IT environment, PMOs are generally reported to be involved in identifying costs (85%) and technology planning (70%).

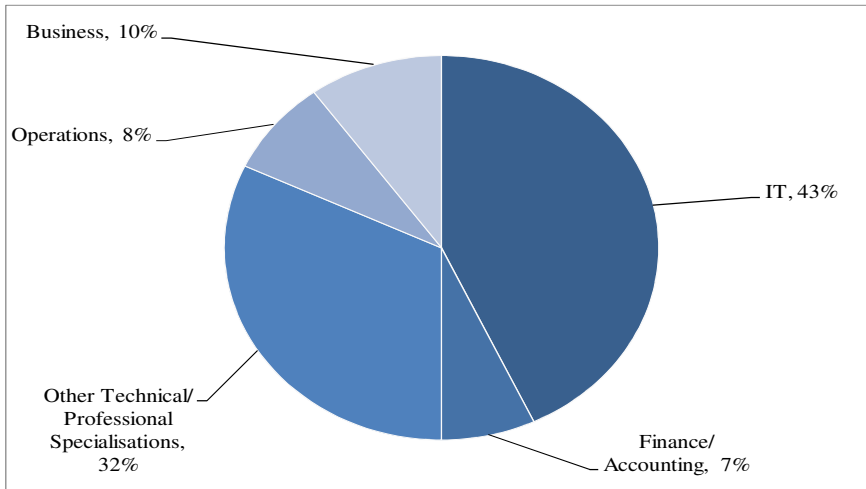


Figure 4: Professional background of staff in PMO (Source: Hobbs & Aubry, 2010)

Figure 5 shows the link between competent project management and the role that it plays in ensuring the successful outcomes and value-add of projects (Desouza & Evaristo, 2006; Singh et al., 2009). This is achieved by providing customer satisfaction, benefit to customers and return on investment, as these factors impact the value provided to business in some way (Shenhar, 2003; Morris & Pinto, 2004; Hobbs & Besner, 2006).

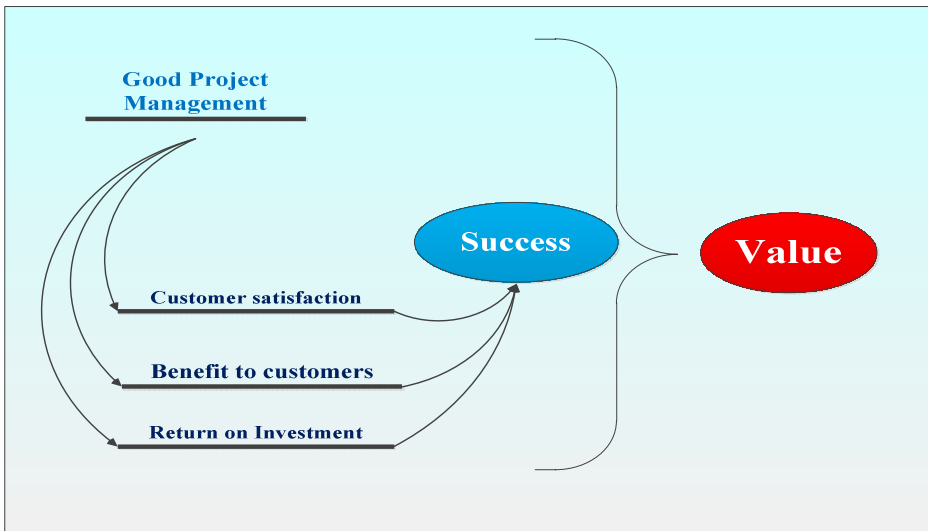


Figure 5: Research suggestions for the probable impact of competent project management on project success dimensions (Source: Adapted from Shenhar et al., 2003; Morris & Pinto, 2004; Hobbs & Besner, 2006)

2.6 The Role & Functions Performed by the PMO

Andersen et al. (2007) claim that while PMOs differ in design they are all similar in their responsibilities and tasks. Table 2 shows an analysis of the research literature of the PMO functions.

Table 2: *The variations in definitions of PMO functions. (Source: Dai & Wells, 2004; Andersen et al., 2007; Arto et al., 2011; Martin, Pearson, Furumo, 2007)*

No	FUNCTIONS	DESCRIPTION (Variations)	LITERATURE SOURCE
1	PROJECT MANAGEMENT STANDARDS & METHODOLOGY	Develop and maintain PM standards and methods Establish, develop and manage methodology Establishes Project Management Methods and Procedures	Dai & Wells, 2004 Andersen, Henriksen, Aarseth, 2007 Martin, Pearson & Furumo, 2007
2	QUALITY ASSURANCE	Provide quality assurance of projects Evaluating, analysing and selecting projects	Andersen, Henriksen, Aarseth, 2007 Arto Kulvik, Poskela, Turkulainen, 2011
3	GOVERNANCE	Contribute to the governance processes of projects Defines and implements project structure Monitoring and controlling projects	Andersen, Henriksen, Aarseth, 2007 Martin, Pearson & Furumo, 2007 Arto Kulvik, Poskela, Turkulainen, 2011
4	MAINTAIN RECORDS	Implements automated project management systems and tools Develop and maintain project historical archives	Martin, Pearson & Furumo, 2007 Dai & Wells, 2004
5	SUPPORT	Provide project administrative support	Dai & Wells, 2004; Andersen, Henriksen, Aarseth, 2007., (2007); Arto Kulvik, Poskela, Turkulainen, 2011
6	HUMAN RESOURCE SUPPORT	Provide human resource/staffing assistance	Dai & Wells, 2004
7	ADVISORY	Provide project management consulting and mentoring	Dai & Wells, 2004
8	TRAINING	Provide or arrange PM training Training on project management skills and competence development Institutes project management education and training Training and consulting	Dai & Wells, 2004 Andersen, Henriksen, Aarseth, 2007 Martin, Pearson & Furumo, 2007 Arto Kulvik, Poskela, Turkulainen, 2011

Some authors have stressed the importance of the PMO mandate, which includes the PMO charter, the PMO policies and the PMO methodology. It is argued that the PMO mandate must be clearly understood at the onset to ensure the success of the PMO (Desouza & Evaristo, 2006; Morris & Pinto, 2004). A lack of this understanding could eventually lead to the credibility of the PMO being questioned and the PMO ultimately failing.

There is a wide variety of PMOs in terms of their functions that have been documented (Julian, 2008). In a study of 500 PMOs it was found that no systematic pattern or explanation for these variations exist (Hobbs, 2007). However, the core tasks and functions generally include monitoring, reporting, standardising processes, standardising procedures and project management training. It is also noted that a total of 83% of PMOs consider reporting of project status to top management as their most important function (Aubry et al., 2007).

Many authors consider the role of the PMO as key to improving the project management maturity of organisations (Julian, 2008; Vries, 2009). Kendall & Rollins (2003) suggest that the role of the PMO is primarily diagnosing systemic problems in project management and then providing assistance to resolve them. Andersen & Vaagaasar (2009) claim that the core function of the PMO should be conducting project management training within the organisation. The reason provided for this is that internal project management training and thus learning is the most effective way of improving project management maturity, as well as to promote a common culture and a shared understanding of project management in the organisation (Andersen & Vaagaasar, 2009). Stanleigh (2006) also notes the importance of learning to make improved and more accurate assumptions for future projects.

Crawford (2012) supports the focus on training and claims that high performing PMOs offer more advanced project management skills development than the low performing PMOs. Andersen et al. (2007) define PMO success by the level of PMO respect achieved in the organisation, the attitude of the PMO and senior management support for the PMO.

Some PMOs merely represent a governance structure for operational project management (Thiry et al., 2007) or as Kendall & Rollins (2003) put it, they are “process cops”. Some PMOs experience resistance from those that view it as just another layer of bureaucracy not adding any real value to the business but acting as a control group that could potentially stifle innovation (Morris & Pinto, 2004).

2.7 The Meaning of “Value” for the PMO

Recent research findings mention the survival of the PMO as being dependent on its ability to provide value to the business (Aubry et al. 2007; Ward & Daniel; 2013). However, defining PMO value is highly controversial. According to Perry (1914), to define value, one must consider the context of subjectivity and judgement. Hobbs & Aubry (2010) suggest embedding performance as a means of determining PMO value-add to business. According to Hobbs & Aubry (2010), the origins of performance dates back to the 15th century and is considered an adequate measure to determine value in a practical sense. The performance of PMOs is a topic that has been of great interest in practitioner literature (Kendall & Rollins, 2003).

The complexity in determining what constitutes business value is highlighted by several authors (Bannister & Remenyi, 2000; Hobbs & Besner, 2006). Thorpe (2002) stressed that asking the following questions are critical for businesses to assess their value add initiatives: “are we doing the right things, are we doing things right, are we getting them done well and are we getting the benefits?”

According to Hobbs and Aubry (2010), some organisations value their PMO by the percentage of successful projects that are completed. However, the perception of success is another factor that is also controversial as the definition of success differs from one PMO to another (Shenhar et al., 2003; Wateridge, 1998; Agarwal & Rathod, 2006). Shipman (2009) suggests that the value of the PMO lies in the ability to report on project performance so that it provides useful, accurate and timely information to executives. Pellegrinelli & Garagna (2009) argue that PMOs are organisational constructs and they therefore suggest adequately defining and then redefining the roles and the purpose of the PMO to ensure that value is maintained.

Phillips describes a Value Framework with five levels for measuring organisational value as shown in Table 3 (Thomas & Mullaly, 2007). Satisfaction is the simplest measure of value and determines whether the stakeholders perceive project management initiatives to provide value to the organisation. Level two measures whether the desired processes were achieved through project management initiatives. Level three measures what process improvements were achieved through project management implementation. Level four measures the business outcomes and whether the results had been achieved. Level five measures the return on investment and is the ultimate level of evaluation.

According to Desouza & Evaristo (2006), among the main challenges found with PMO implementations was the failure to manage organisational resistance or change, lack of experienced project managers, lack of PMO leadership as well as the lack of an effective change management strategy. Morris & Pinto (2004) support Kendal & Rollins (2003) claim that PMOs have failed because of their value proposition not being clearly defined at the start of the PMO implementation. Furthermore, Desouza & Evaristo (2006) note that in a top down approach to PMO implementation the employees may be resistant to change, whereas in a bottom up approach, senior management involvement is critical to ensure PMO funding is available and maintained. Stanleigh (2006) claims that executive sponsorship is achieved through ensuring that all projects are aligned to the business strategy. Aubry et al. (2007) conclude that, in general, there is a clear lack of consensus on the value, structure and the functions of a PMO.

Knutson (2001) notes that to measure project management success, metrics must be put in place that will evaluate progress over time and set levels of commitment and accountability to reach agreed targets.

Dr Eli Goldratt shows the importance of performance evaluation and measurement in his quote, "Tell me how you will measure me, and I'll tell you how I will behave. If my measurements are unclear, no-one can predict how I will behave, not even me" (Kendall & Rollins, 2002, p.16). Thorpe (2002) claims that these measurements are a key requirement for effective management.

Table 3: Value Framework (Source: Adapted from Phillips in Thomas & Mullaly, 2007)

Level	Criteria	Description	Measured
1	Satisfaction	Do the stakeholders perceive that project management provided value?	Perceptions/self-report satisfaction levels as well as through the use of objective measures.
2	Aligned Use of Practices	Did PM implementation result in the desired processes? Do you do what you say you do? Do project people know what they supposed to?	Assessed through a comparison of policies, processes and procedures with what actually happens on projects.
3	Process Outcomes	What project process improvements have you reaped from your PM implementation? How effective is the PM process?	Changes over time in things like number of change requests, budget performance, learning from past projects, and reliability of delivery.
4	Business Outcomes	What business outcomes are related to these process improvements?	Improve customer satisfaction and the organisations ability to attract new customers through reputation effects, word of mouth, and potential advertising opportunities. Improved project delivery speed and reliability can improve an organisations time to market. Increased ability to achieve strategic goals (for IT).
5	Return on Investment	For every dollar invested in the PM initiative, what return in terms of cost saving, revenue etc. can be attributed to it?	Calculated based on quantification of direct business impacts identified in level 4 benefits analysis as compared with reported expenditures on PM.

Desouza & Evaristo (2006) postulate that organisations are to identify key areas of concern before being able to measure the impact of the PMO and this is only possible after a measurable period of time. Evaluation and measurement of the PMO is required to display

value-add to organisations and for project management improvement efforts. Interestingly, Ward & Daniel (2013) recently found that the presence of a PMO was not related to project success. Morris & Pinto (2004) recommend survey methods as an appropriate option to provide information on the perceived value added by the PMO.

2.8. Efficiency and Effectiveness of the PMO

Perry (1914, p.144) argues that it is not enough to just pronounce value simply because it cannot be defined, but rather “one must be prepared to point to a distinct quale (*quality*) which appears in that region which our value terms roughly indicate”. Roghanian, Rasli & Gheysari (2012) claim that value may be determined through measuring productivity based on efficiency and effectiveness.

The link between efficiency and effectiveness with productivity and performance is identified in research literature (Kling, 2006; Roghanian et al., 2012). It is also noted that in many cases increasing productivity alone, without affecting quality, may not necessary imply an increase in value. Hobbs & Aubry (2010) introduced a link between PMO performance to efficiency and effectiveness.

Knutson (2001) stresses the importance of efficiency in project management for organisations. “In a multi-project environment, there is simply no room for wasted time or misplaced energy” (Knutson, 2001, p.9). Drucker (1974) offers the simplest definition of efficiency as being “concerned with doing things right” and effectiveness as “doing the right things.’ Schmidt and Finnigan (1992), as cited by Kling (2006), further note that efficiency is the production of required output at a perceived minimum cost, measured by the ratio of quantity of resources, and effectiveness is a measure of how closely organisational outputs meet the business goals. According to Kling (2006), efficiency and effectiveness are factors that are both critical to business success.

Kling (2006) identified four concepts for efficiency as a tool to guide action toward greater efficiency. These concepts are goal-fulfilment and meeting expectations, pre-requisite to working, a property of the result of working and as a composite measure of good work.

The Critical Values Framework (CVF) initially developed by Quinn & Rohrbaugh (1983) identified indicators of organisational effectiveness. Quinn & Rohrbaugh (1983) found that there were two major dimensions underlying effectiveness conceptions. The first dimension relates to an internal emphasis on the development of people to an external emphasis on the development of the organisation itself. The second dimension relates to the contrast between stability, flexibility and change. These dimensions form four models; human relations model, open systems model, rational goals model and the internal process model.

Hobbs & Aubry (2010) interpreted the multi-dimensional CVF into criteria for measuring PMO performance. Table 4 shows the PMO concepts for rational goals and the open system as proposed by Hobbs & Aubry (2010). These are based on their validated empirical data: a set of 14 factors and 4 criteria relate to the efficiency of PMO performance; and a set of 14 factors and 5 criteria relate to the effectiveness of PMO performance.

Table 4: Indicators identified and linked to Efficiency and Effectiveness Criteria (Source: Hobbs & Aubry, 2010)

Rational Goals <i>Efficiency</i>	Profit	2 factors
	Productivity	6 factors
	Planning in goals to reach	4 factors
	Efficiency	2 factors
Open System <i>Effectiveness</i>	Growth of the organisation	3 factors
	Flexibility/Adaption/innovation in project management	7 factors
	Assessment by external entities	None
	Link with external environment	2 factors
	Responsiveness	2 factors

2.8.1 PMO Efficiency

Efficiency is defined as an output to input ratio (Roghianian et al., 2012; Kling, 2006). Favourable improvements are made when there is an increase in output or a decrease in input (Kling, 2006). The rational goals are said to integrate economic value to measure

profit, project management efficiency and return on investment (ROI). The aim of a PMO is ultimately to improve the performance of project initiatives and to increase benefits realised to the business (Chiang & Nunez, 2009; Morris & Pinto, 2004).

According to Shenhar et al., (2003), the most important dimension of project success by stakeholders is the benefit to customers. The Cambridge Dictionary (2012) defines benefits as the “result/reward of your own actions”. Organisations that consistently undertake benefits reviews at the end of projects and transfer lessons learnt to their future projects have been successful in delivering benefits (Stanleigh, 2006; Ward & Daniel, 2012). Thorp (2002) argues that measurement of benefits from IT projects should be in terms of business rather than standalone IT measures. According to Schell (2012), there are public sector organisations that use ROI evaluations to show outcomes, results and value.

Efficiency in the context of this study refers to the rational goals model of the multi-dimensional CVF. Table 6 shows the list of factors relating to effectiveness as identified by Hobbs & Aubry (2010).

2.8.1.1 Profit

Projects are initiatives that are undertaken to deliver some form of benefit, profit and ultimately some form of value to business (Baccarini & Bennington, 2004; Marnewick & Labuschagne, 2011). Table 5 shows indicators that are said to measure profit generated by the business and includes benefits planning. According to Knutson (2001), profit refers to the financial impact, as influenced by levels of productivity. Interestingly, Stanleigh (2006) found that many projects have a negative impact on the bottom line as money is spent on projects with cost over-runs and where user requirements are not being met.

According to Ward & Daniel (2013), PMOs involved with benefits planning and the evaluation of benefits at the end of projects were found to have an increase in project success and improved management satisfaction. In a study conducted by Ward & Daniel (2012) in 2008, it was found that 57% of organisations had delivered less than 50% of the expected benefits set out in their business cases.

ROI evaluates the earnings derived from projects with the investment expended (Knutson, 2001). Interestingly, Jeffrey & Leliveld (2004) found that even though 59% of the organisations they surveyed would calculate return on investment of IT projects prior to making investment decisions, only 25% would actually go on to measure the realised ROI after project completion. Stanleigh (2006) concluded that, despite the high cost of operating PMOs, they achieved no positive return on investment.

IT benefits are categorised into tangible, intangible, effective and/or efficient (Baccarini & Bennington, 2004; Ward & Daniel, 2006). Tangible IT benefits are objective, quantifiable, and often financial, whereas intangible IT benefits are considered subjective and qualitative (Ward & Daniel, 2006). Remenyi (1998) proposed an information decision-making model to facilitate benefits management by ensuring the right information, at the right time, to the right people to enable actions for effective and efficient results (Remenyi, 1998). Ward & Daniel (2012) more recently proposed that all benefits should be assigned a benefit owner who is accountable for the planning and realisation of benefits. Thorp (2002) argues for a project approach that focusses on the continuous management of the benefits realisation process to deliver value.

While organisations look for ways to improve their long-term viability, the particular interest of the public sector lies in seeking to maximise their effectiveness (Ward & Daniel, 2012). Thorp (2002) stresses the importance of benefits monitoring and management by claiming that the way that benefits are achieved (i.e. the how) is perhaps more important than what benefits are realised. Schell (2012) notes the increasing importance of monetary contributions of programs, and ROI, in the public sector. According to Schell (2012), ROI can still have an impact on the bottom line even in cases where profits are not generated. This can be achieved when productivity is improved, as quality is then enhanced and rework time is reduced (Schell, 2012). This process implies cost savings and this can directly contribute to the bottom line.

2.8.1.2 Productivity

According to Kling (2006, p. 754), productivity is the “the quality of being efficient” and is often synonymously used as efficiency. Roghanian et al. (2012) describe productivity as an

"attitude of mind" where the focus is on organisational improvisation. In some cases in the financial industry where there is a difficulty to quantify productivity, only efficiency is measured (Roghanian et al., 2012). The role of the PMO in ensuring project management productivity is a concept well recognised in practitioner literature (Kendall & Rollins, 2003; Taylor, 2009). Table 5 shows the factors 3 to 8 that measure project management productivity. Hobbs & Aubry (2010) also suggests that the PMO contribution to productivity could be substantial, particularly in terms of resource allocation.

Table 5: Efficiency Factors (Source: Hobbs & Aubry, 2010)

EFFICIENCY INDICATORS		
PROFIT	1	Profit from projects
	2	Benefits planning within project business case
PRODUCTIVITY	3	Order in productivity
	4	Best use of resources in project management (leave fewer people on the bench)
	5	Index of productivity
	6	Bureaucracy
	7	Internal competition (e.g., between units in different countries)
	8	Existence of an organisational structure to deliver projects
PLANNING IN GOALS TO REACH	9	Importance of the strategic dimension in the selection of the "good" projects
	10	Equilibrium in projects of a portfolio (risk, benefits on the short, medium, and long terms., value)
	11	Prediction of the delivery capabilities (resource allocation)
	12	Alignment of enterprise objectives with the employees ones
EFFICIENCY	13	Efficiency in the relations between PMO and functional or business units – negotiation on projects
	14	Project success (PMO impacts on projects)

Organisational project management is considered an extension of project management in which the strategic objectives through projects, programmes, and project portfolios are achieved (Aubry et al., 2007). The Organisational Project Management Maturity Model (OPM3) was launched by the PMI to define a universally accepted standard in response to the concept of organisational project management maturity. PMI defines OPM3 as a

“global best practice standard for enterprise improvement which can be enthusiastically endorsed by all stakeholders” (PMI, 2004). Aubry et al. (2007) posit that the goal of organisational project management maturity is to create value for business. However, Vries (2009) points out conflicting views that exist on the value of improving the project management maturity of organisations, and concludes that this may be why businesses are unable to see the impact and value of improving project management maturity.

Organisational project management is a widely adopted concept (Kendall & Rollins, 2003; Perry, 2009). Recent research by Winch et al. (2011) suggests a strong relationship between project processes and organisational change.

2.8.1.3 Planning

According to Kendall & Rollins (2003), strategic planning and project management should work hand in hand. This is consistent with Dai & Wells (2004) who further posit that the PMO should assist business with the implementation of the organisational strategic plans. A comprehensive strategic plan can ensure that the project initiatives to be undertaken are aligned with business (Isola, 2006). According to Kendall & Rollins (2003), PMOs should focus on aligning the interest and goals of the organisation. Many researchers suggest the value of the PMO could be relative to the strategic alignment of the organisation through the projects they run (Dai & Wells, 2004; Stanleigh, 2006; Thiry & Deguire, 2007; Santos do Valle et al., 2008). Stanleigh (2006) found that 68% of the organisations they analysed had no process for prioritising projects and this was important to ensure strategic alignment and executive support.

Table 5 shows factors 9 to 12 that are about planning for strategic and multi-project functions. The PMO contribution is recognised through portfolio and project management, and these indicators emphasise the role of the PMO in balancing the portfolio relative to risks, their benefits in the short and long term, and their value to the organisation.

According to Isola (2006), some organisations have issues with forecasting (specifically budgeting, resource planning, and information system compatibility) because of not having accurate and comprehensive lists of their projects available. This typically leads to the extension of deadlines and unexpected expenses (Isola, 2006). Stanleigh (2006) found that

the knowledge gained from the projects to allow PMOs to make accurate predictions on resource allocation, time and budget estimates was generally absent.

The public sector has been known to suffer from a disconnect between strategic intentions and strategic implementation (Ward & Daniel, 2012). This is because politicians often announce policy changes, which affect projects, without understanding the implications of these changes. In this way, challenges are presented when realising benefits, particularly when different political parties are involved (Ward & Daniel, 2012).

For some, the establishment of a PMO is the result of wanting to increase the strategic importance of projects (Aubry et al., 2009). According to Kendall & Rollins (2002), the process of strategic implementation involves the allocation of organisational strategic goals to their functional groups that are responsible for translating them into projects. Chiang & Nunez (2009) suggest that all project proposals be submitted to the PMO first for evaluation of their alignment to the business strategy, given executive input has also been provided. Unger, Kock, Gemünden & Daniel (2012) state that any project that is not linked to the business strategy should be terminated. This is supported by Stanleigh (2006), who suggests that the main reason for project failure is that project initiatives are not aligned to the core business strategy. Stanleigh (2006) found that 75% of PMOs in their sample failed within the first three years because they were unable to show any value. Ultimately, it is said that PMOs have failed because they are generally unable to provide measurable value to business (Desouza & Evaristo, 2006; Kendal & Rollins, 2003).

The business case is a tool that provides the motivation for making investment decisions. However, business cases traditionally focus on 90% financials and 10% benefits (Thorp, 2002). These benefits are often not very clearly set out, and these business cases are rarely ever revisited (Thorp, 2002). Ward & Daniel (2012) found that routinely conducting benefit reviews resulted in improved business cases. Thorp (2002) suggested replacing the business case with a tool called the value case to allow for continuous monitoring.

A portfolio is a structured grouping of business investment programs selected by management to achieve business results (Thorp, 2002). Project portfolios are the vehicles that drive strategy implementation (Unger et al., 2012). Ward & Daniel (2012) found that the prioritisation of projects occurred as follows: project objectives aligned to strategy (92%), avoidance of over commitment of limited resources (87%), and setting priorities across different types of investments (82%). Jeffrey & Leliveld (2004) described the complexity in identifying the links between projects and the business strategy. Hill (2004) noted that project portfolio management is only as good as the information generated at the project level. In a survey conducted by Jeffrey & Leliveld (2004) it was found that, 65% of CIOs in their sample agreed that following a project portfolio management approach produced significant business value. However, the ability to create real value through the interaction of portfolio management, program management and the PMO is a phenomenon that is not well understood (Thiry, 2007).

Unger et al. (2012) argued that only projects that are linked to the business strategy should be included in the project portfolio. In this way, resources would not be wasted in projects (Stanleigh, 2006). Thorp (2002) referred to this concept as “a process of picking the winners”. Kendall & Rollins (2003) noted the importance of PMOs to be actively involved in the selection and initiation phase of strategic projects so as not to lose executive support.

2.8.1.4 Project Management Efficiency

Table 5 shows the factor (13) that measures the relationship the PMO has with the rest of the organisation and includes negotiation on projects. Factor 14 refers to the role of the PMO in ensuring project success.

Organisations with successful benefits realisation are those organisations where PMOs were involved with benefits planning, as well as benefits realisation review processes at the end of projects (Ward & Daniel, 2012). Despite increasing efforts and investments in IT projects it was noted that companies are still finding the realisation of benefits challenging to manage (Ward & Daniel, 2012). Aubry et al. (2007) found that only 28% of PMOs in their sample considered Benefits Management as an important function.

Hill (2004) provided a definition of project management as being business performance management, since projects are the means by which products and services are delivered. Project management success (based on time, cost, and quality) is considered largely subordinate to product success (goals and objectives) and both elements are required to ensure project success (Baccarini & Collins, 2004). Martin et al. (2007) assert that the PMO may improve IS project budgeting, IS project scheduling and IS project quality.

According to Ward & Daniel (2006), benefits management is the process of organising and managing in a way that the planned IT benefits are realised. IT project benefits depend on changes to business processes and relationships and the ways in which groups or people go about their work in the organisation (Ward & Daniel, 2012).

The sponsorship and governance of projects also plays a role in determining the success or failure of projects, and this is evident in the IT industry (Crawford, Cooke-Davies, Hobbs, Remington & Chen, 2008). It is argued that PMOs are likely to fail if they do not have a structure of governance and supportive executive sponsorship (Singh, 2006; Stanleigh, 2006).

The perception of PMO success may be the ability to display value of both projects and project management to business (Hobbs & Besner, 2006). Hobbs & Besner (2006) argue that good project management together with efficient measurement tools will enable higher project success rates and thus create value. Ultimately, successful PMOs will have a positive impact on the organisational performance of business through efficient and effective project management performance (Crawford, 2012).

According to Bredillet & Midler (2010), a solid working collaboration between project manager and stakeholders are required for project success. Sprouse (2010), however, claims that PMO members are often too far removed from the project level to fully support a successful outcome of projects.

2.8.2 PMO Effectiveness

Effectiveness is seen as the relationship of inputs or outputs to the outcomes (Roghianian et al., 2012). Shenhar et al. (2003) claims the outcomes of successful projects have an impact on organisational effectiveness, client satisfaction and economic growth.

Effectiveness in the context of this study refers to the open systems model of the multi-dimensional CVF and measures growth, and takes into account innovation and effectiveness of projects, see Table 4. Table 6 shows the list of factors relating to effectiveness as identified by Hobbs & Aubry (2010).

2.8.2.1 Growth of the Organisation

Table 6 shows factors 1 to 3 that are concerned with growth of the organisation through the account sales, qualitative results and effectiveness. These elements are also related to project benefits.

2.8.2.2 Flexibility/Adaptability/Innovation in Project Management

Table 6 shows the indicators 4 to 10 that deal with flexibility, adaption and innovation in the project management environment. Kendall & Rollins (2003) claim that the PMO should assist the organisation in meeting or exceeding their project outcomes.

2.8.2.3 Link to external environment

Several professional project management bodies exist that provide project management support and guidance both globally and locally. The PMI is an internationally recognised organisation that provides business solutions and professional project management development (“Project Management Institute”, 2013). Table 6 shows factors 11 to 12 that are concerned with links to external environments.

According to Desouza & Evaristo (2006), benchmarking can provide a sense of PMO performance in comparison to other organisations or to industry leaders. The OPM3 is the latest model available to benchmark organisational project management maturity of organisations (Vries, 2009). However, there are no standard lists of factors available that influence organisational project management capabilities (Vries, 2009). In addition, there

is no widely accepted model for standard project management maturity benchmarking that is accepted in South Africa (Vries, 2009).

Table 6: *Effectiveness Indicators (Source: Hobbs & Aubry, 2010)*

Effectiveness Indicators	
GROWTH OF THE ORGANISATION	1 Sales results
	2 Qualitative element from business case (business positioning)
	3 Effectiveness
FLEXIBILITY/ ADAPTION/ INNOVATION IN PROJECT MANAGEMENT	4 Innovator, creator, and good at conflict or problem resolution
	5 Hiring of project management personnel having creation skills
	6 Existence of initiatives in project management methodology (sometimes being delinquent)
	7 PMO product a variety of reports
	8 Hiring of external consultants who know the best practices in project management
	9 Evolution in project management process and tools
	10 Participation of stakeholders in the development and evolution of project management processes.
	None
	11 Link with the local PMI chapter (sometimes too much!)
	12 Benchmarking
LINK TO EXTERNAL ENVIRONMENT	13 Being agile
	14 Responsiveness in appointment when urgent need
ASSESSMENT BY EXTERNAL	

2.8.2.4 Responsiveness

Table 6 shows factors 13 and 14 that relate to the responsiveness of the PMO to adapt to new environments to ensure project success. Taylor (2009) suggests that PMOs should be more agile in their operations to ensure effectiveness.

2.9 Gaps Identified in Research Literature

While PMOs remain prominent and their existence unquestionable, there is a lack of systematic research that describes measures to ensure value is added and sustained. There is also a lack of consensus on the operations, roles, functions, measures, indicators and ultimately on how value is to be provided and demonstrated to the business. At the time of study, there was no academic research found on the value added by a public sector PMO.

The literature review shows an increasing growth in PMO implementations and this implies the relevancy and business need of this structure. However, it appears that while organisations attempt to implement PMOs, many end up failing and not delivering what the executives had hoped for (Desouza & Evaristo, 2006; Singh, 2009). According to Aubry et al., (2007), PMOs either last an average of only two years or some form of transformation is initiated. The lack of guidelines for managing and establishing PMOs can potentially be the reason for poor PMO performance. The research literature suggests that PMOs are organisation-specific and this has led to the existence of various types of PMOs, which can change frequently (Desouza & Evaristo, 2006).

Even though substantial research suggests that the most efficient and sustained PMOs operate at a strategic level and enjoy executive satisfaction, there is a lack of evidence to support the role of the PMO evolving to this level. There is also a lack of research on the PMO contribution to the strategic implementation of the business plan and there is a lack of evidence for any homogenous setting of the PMO. Stanleigh (2006) claims that ensuring the strategic alignment of projects will ensure success of these projects and will lead to management satisfaction of the PMO.

While organisations across various industry sectors view the establishment of PMOs as vital to business, there is a lack of research on the structure, implementation, operations, expectations and evolution thereof (Aubry et al., 2010). Even though the benefits of PMOs have been repeatedly stressed there are limited research findings that have explored this (Martin et al., 2007). This limitation is surprising given the importance and relevance of PMOs as a growing trend.

2.10 Literature Review Findings

While the notion of PMOs originated in the IT sector, they transcend across industry and sector. It is said that PMOs have failed because they are generally unable to provide measurable value to business (Kendal & Rollins, 2003; Singh, 2009). PMOs struggle to justify their value to business over time. In the public sector, PMOs are faced with similar, yet unique problems that generally place them in a worse situation as they run very complex projects that are driven by politics.

In recent years, organisations have increasingly taken to establishing PMOs to assist with the maturity of project management and improving project success rates (Dai & Wells, 2004; Andersen et al., 2007; Aubry et al., 2007; Pellegrinelli & Garagna., 2009; Vries, 2009; Ward & Daniel, 2013). PMOs have an average lifespan of two years or they undergo some form of transformation (Aubry et al., 2007).

The research shows that most PMOs are largely concerned with reporting project progress and performance while there is evidence of a lack of benefits management, lack of knowledge management to enable effective learning and a lack of ensuring efficient alignment to strategy. These are the main factors responsible for ensuring management satisfaction of PMOs and ultimately the success of PMOs.

Knutson (2001) notes that to measure project management success, metrics must be put in place that will evaluate progress over time, set levels of commitment and accountability to reach targets. Hobbs & Aubry (2010) have provided the first and only available set of indicators that measure PMO performance to determine the value they add. Value is dependent on the context of subjectivity and judgement (Perry, 1914). According to Aubry & Hobbs (2010), the performance of the PMO can be measured in several ways that include global measures of its value, as well as measures of specific contributions to value. The link between efficiency and effectiveness to productivity and performance is noted in literature (Kling, 2006; Roghanian et al., 2012). Hobbs & Aubry (2010) introduced the link between PMO performance to efficiency and effectiveness models that determine their value.

2.10.1 Conceptual Model

A theory provides a simplification and explanation of complex real-world phenomena while a model is considered to be a map of a theory (Van de Ven, 2007). Hobbs & Aubry (2010) posit the most important thing for researchers is “not to find the sole model that integrates the others, but rather the model that best explains a given organisational situation in a given context”.

Leaders will start to question the need for the PMO if value drivers are not put in place (Kendall & Rollins, 2003). This will enable PMOs to become recognised as a “ROI engine” for the organisation in the private sector or equivalent to ROI in the public sector. PMO value must be measurable and visible to managers to ensure satisfaction and sustainability.

Figure 6 shows the conceptual framework that presents the variables that contribute to PMO value in terms of efficiency and effectiveness, derived from Hobbs & Aubry (2010).

2.10.2 PMO Efficiency variables

Figure 7 shows the importance of profit from projects, productivity, planning as well as project efficiency and the influence on PMO efficiency (Hobbs & Aubry, 2010). All this contributes to PMO value added to business.

Profit – The importance on PMO focus on profit is determined by their focus on profit generation from projects, as well as the importance of completing benefits planning in business cases (Hobbs & Aubry, 2010).

Productivity – The importance of PMO productivity is determined by exploring the importance of order in productivity, resource management, index of productivity i.e. metric to determine the ratio of productivity achieved over time, bureaucracy, internal competition and the existence of an organisational structure that supports project delivery (Hobbs & Aubry 2010).

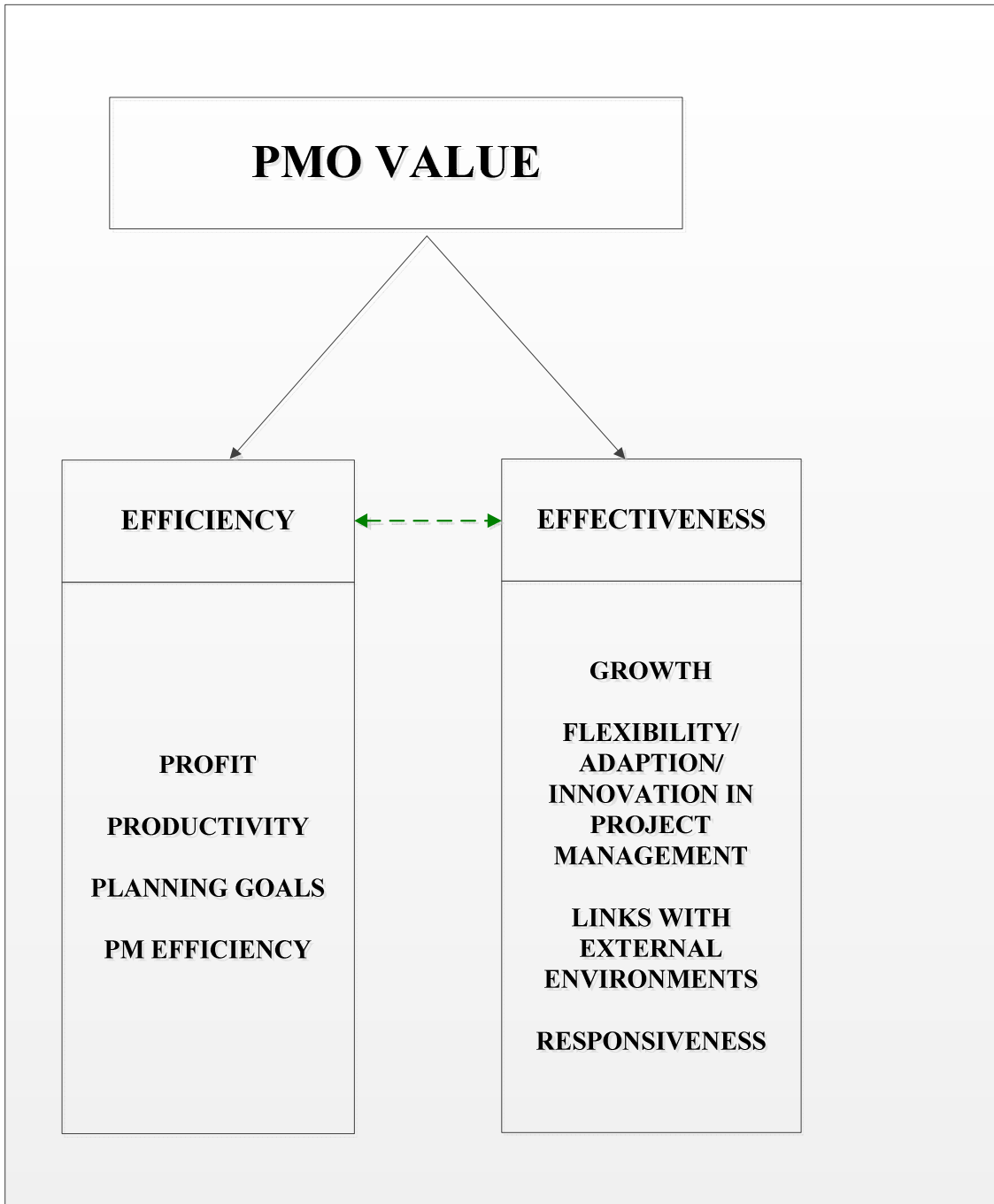


Figure 6: Proposed Conceptual Model for PMO value contributors

Planning goals – The importance of planning by the PMO to reach their goals is determined by exploring the PMO focus on their strategic alignment, project portfolio management, accurate resource allocation and business-employee alignment (Hobbs & Aubry, 2010).

Project management efficiency – The importance of project management efficiency to the PMO is determined by exploring the PMOs direct impact on project success and their (PMO) efficiency in relation to functional and business units (Hobbs & Aubry, 2010).

2.10.3 PMO Effectiveness variables

Figure 8 shows the importance of growth of the organisation, flexibility, adaption, innovation and creativity in project management by the PMO influences PMO effectiveness and this contributes to PMO value added to business (Hobbs & Aubry, 2010).

Growth of the organisation – The importance of the growth of the organisation is determined by exploring project results, qualitative element from the business case (business positioning) and project effectiveness (Hobbs & Aubry, 2010).

Flexibility, Adaption and Innovation in Project Management – The importance of innovation in project management to the PMO is determined by exploring problem and conflict resolution, hiring PM personnel with creativity skills, driving initiatives in project management methodologies, producing a variety of project reports, hiring external consultants who know best practices in project management, evolution in PM tools and processes as well as the extent of stakeholder participation (Hobbs & Aubry, 2010).

Link to the external environment – The importance of external links is determined by exploring the PMOs links to external project entities, as well as the PMO commitment to using benchmarking (Hobbs & Aubry, 2010).

Responsiveness – The PMO importance on being responsive is determined by exploring their ability to be agile, and their responsiveness to organisational needs when required (Hobbs & Aubry, 2010).

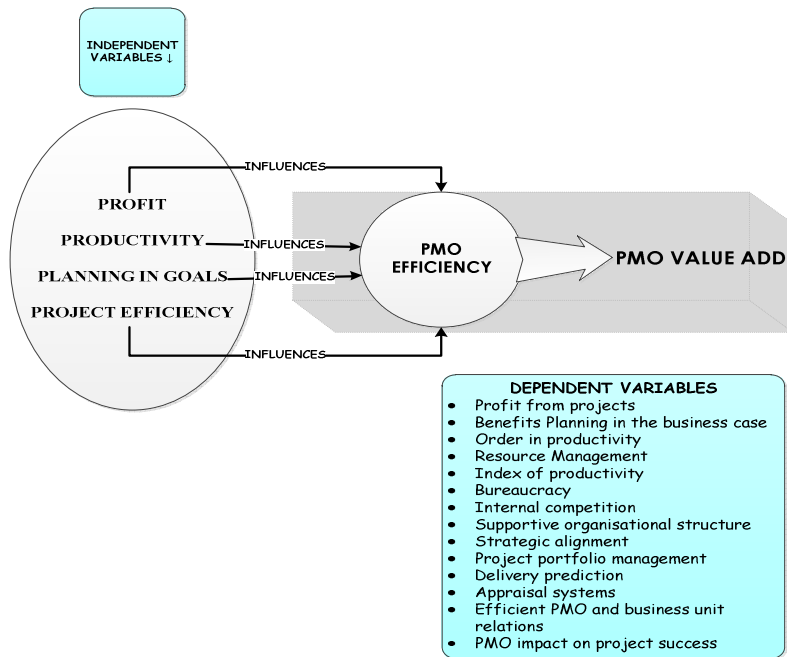


Figure 7: Efficiency variables linked to PMO value add

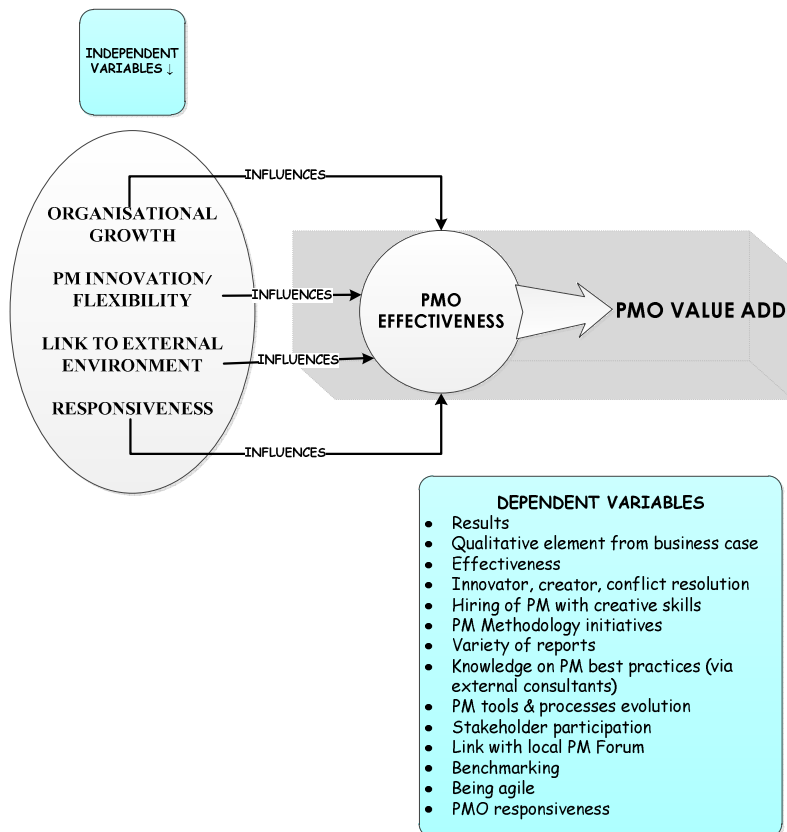


Figure 8: Effectiveness variables linked to PMO value add

The value of PMOs are determined by the efficient and effective running of these offices to ensure accepted performance, results and executive satisfaction. The outcome of the above literature review presented indicators that link to PMO efficiency and PMO effectiveness. Since PMOs present many variations, these factors provide the basis for prototyping PMOs.

A further investigation of the available indicators and its relevancy to PMOs and their contributions to efficiency and effectiveness is required. This chapter provided the foundation and purpose for the research study. The next chapter provides the basis for the research methodology employed to conduct this investigation.

Chapter 3 – Research Methodology

The literature review provided an overview on the historical view and current state of PMOs. The lessons learned from the literature are synthesised with current PMO practices as experienced in South Africa to produce a coherent study.

The fundamental core of any research is ultimately to seek a truth about reality. The methodological choices selected for research is informed by the characteristics of the phenomenon to be studied (Bennett & Elman, 2006). According to Whitman et al. (2003), good design strategy and correct data, analysis forms the foundation on which good research is built.

The purpose of this research is both exploratory and descriptive in nature. The study is exploratory in that it seeks to explore the factors that drive PMO value and performance for business. The study then seeks to describe these identified factors and their corresponding indicators. These indicators would provide a measure for the efficiency and effectiveness of PMO operations. Descriptive and prescriptive methods are both scientific research methods relevant for IS studies (Järvinen, 2008). Descriptive studies are considered knowledge-producing research and falls within the realms of natural science (Järvinen, 2008).

3.1 Research Problem

The notion of PMOs remain an increasing trend that businesses undertake to assist with their project outcomes. This, despite PMOs having a relatively short life span on average, and their legitimacy ultimately being questioned over time, particularly if there is no transformation taking place or the transition to a strategic level. PMOs are organisational-specific constructs are therefor there are many variations that exist. Due to this attribute of PMOs there are no measures in place to ensure the sustainability and growth of PMOs in business. The efficiency and effectiveness of PMOs are questioned by business over time, because these factors are unknown and therefore not being measured.

3.2 Objectives and Research Questions

The objectives for this study were to investigate the research questions derived from the literature review:

1. What are the factors that influence the value of PMOs in terms of ensuring efficient operations?
2. What are the factors that influence the value of PMOs in terms of ensuring effective operations?

The objective of this study was to identify and explore the factors that generate PMO value to organisations, thereby attempting to ensure improved longevity and usefulness of this entity.

3.3 Research Instrument

A mixed method approach combining elements of quantitative and qualitative methods was used as it best suits the idiosyncrasy of the inquiry. This approach attempted to add greater depth and breadth to the inquiry. According to Rocco et al. (2003), this approach can yield richer findings, more accurate information and improved inferences. This approach is said to expand the scope and improve on the analytical power of studies (Sandelowski, 2000; Rocco et al., 2003). Mixed methods advocate pragmatist and dialectical perspectives and their combination in a study contribute to delivering much stronger research (Rocco et al., 2003).

The key benefit of following a mixed method approach is that it allows for the empirical inductive process that may also be used for the confirmatory deductive testing of a hypothesis (Rocco et al., 2003). Mixed methods are often used to provide a more complete view by combining information from complementary sources (Denscombe, 2008).

In order to gain a better understanding of the contribution to value, in terms of efficiency and effectiveness of PMO operations, a total of 13 interviews were conducted for 13 different PMOs. The interviewees were specifically selected as they provided leading roles

in their PMOs. They consisted of the following in descending order of rank; 1 Chief Director, 2 Directors, 7 Deputy Directors, 1 Consultant, 1 Assistant Director and 1 Admin Officer.

The PMO members were interviewed to satisfy the following objectives:

- To determine current practices linked to PMO efficiency
- To determine current practices linked to PMO effectiveness
- To understand challenges that may hinder them from being more efficient and effective and that could hinder them from providing value
- To identify if there is any missing processes in their PMO organisation

Each interview consisted of 28 questions in which interviewees were asked to rate and explain the importance of variables found in their day-to-day PMO operations. This provided an overview of the variables that were evident in their organisations.

Participants were asked to rate the importance of these variables as they exist in their organisation, on a scale of one to five, from “no importance” to “very important”. The interviewer then requested supporting answers to justify their ratings. These comments were recorded by the researcher. The comments were used to refine the responses.

The justification for this mixed-method approach was that the survey itself was lengthy and time-consuming. In the pilot study it was discovered that conducting the research in 2 sessions would not work within the organisation, as participants were reluctant to have a follow up interview. The single interview approach provided the researcher with the qualitative data and substantiating evidence for their claims.

3.4 Research Paradigm

The philosophical paradigm, also referred to as world views, provides insights to an orientation of the world (Guba & Lincoln, 1994; Cresswell, 2010; Rocco et al, 2003). These world views are shaped by the discipline of the researcher, as well as their beliefs and past research experiences (Cresswell, 2010). There are certain philosophical assumptions that are inherent in the various worldviews; they influence the choice of research methods selected that in turn influence the data collection methods selected by the

researchers (Orlikowski & Baroudi, 1991). The three philosophical assumptions adopted by IS studies are primarily positivistic, interpretivistic and critical (Orlikowski & Baroudi, 1991, Klein & Myers, 1999).

Positivistic approaches assume an objective world and that social reality is independent of the researcher (Patton & Applebaum, 2003). Creswell (2009) advises that positivists reflect the need to identify and assess the causes that influence outcomes. In this light positivistic research is suitable for theory testing, given that a formal proposition has been made, with quantifiable variables to draw inferences. Orlikowski & Baroudi (1991) showed that positivist research was initially the dominant epistemology for IS research. The critical research approach assumes that social reality is historically replicated, and it is produced and reproduced by humans. Interpretive approaches assume that reality is socially constructed and associated with the subjective and inter-subjective meanings of interactions (Orlikowski & Baroudi, 1991; Klein & Myers, 1999).

Based on the nature of the study and its philosophical foundation, an interpretative approach and case study method was considered appropriate for this research. Case study methods in particular allow IS researchers to investigate contemporary phenomena in a natural context and real life settings to generate theories from practice (Benbasat et al., 1987; Yin, 1989; Klein & Myers, 1999). However, it is noted that adopting purely quantitative methods would possibly mean an oversimplification, whereas adopting purely qualitative methods may be too selective (Rocco et al., 2003).

3.5 Research Approach

Creswell (2009, p. 51) quotes Kerlinger in defining theory as a set of “interrelated variables, definitions, and propositions that present a systematic view of phenomena by specifying relations among variables...” On the other hand, strict research methods are being criticised, in practice, for increasing the gap between theory and business reality (Patton & Applebaum, 2003).

The approach selected for conducting this research was chosen as it was rigorous and relevant to the research questions (Whitman et al., 2003). PMOs are organisation-specific entities and organisations are complex (Desouza & Evaristo, 2006). A Competing Values Framework (CVF) framework approach was selected as the interpretive lens for this inductive study. The CVF theory is useful for organisations who are unclear about their criteria for measuring performance, or when changes over time are of interest. The CVF approach was selected as appropriate for this study as it evaluates organisational performance, but has also been the result of specific research to evaluate performance in the public sector. The conceptual model is derived from Hobbs & Aubry (2010) who used the CVF and was appropriate for this study as it seeks to understand PMO operations and the value that they add to business taking into account both their efficiency and effectiveness. The model contains a set of factors that relate directly to PMOs, their efficiency and effectiveness.

3.6 Research Strategy

Some researchers argue that qualitative studies more accurately presents closeness to the truth, or as Orlikowski & Baroudi (1991, p. 5) put it “allows one to understand the deeper structure of phenomenon”. This research method was selected as qualitative studies are particularly effective for studying real people in natural settings, and can provide rich insights into human behaviours (Guba & Lincoln, 1994; Marshall, 1996).

Quantitative research is concerned with generalisations and statistical analysis, and assumes relations by cause and effect principles (Patton & Applebaum, 2003). The qualitative research process is concerned with the exploration of a particular phenomenon. It seeks to gain an in-depth understanding of the experiences of groups and individuals. It involves data collection and data analysis generally through inductive reasoning which generate ideas.

The most common qualitative research methods are ethnography, grounded theory, case studies and action research. Qualitative research is of growing interest in the IS discipline since its data collection techniques have the advantage of flexibility (Benbasat et al., 1987; Kaplan & Maxwell, 2005). According to Orlikowski & Baroudi (1991), case studies are

the most commonly used approach to IS qualitative studies, and Klein & Myers (1999) confirm that case studies are valid approaches to IS research.

Case studies contribute to “organisational, social and political phenomena...” (Patton & Applebaum, 2003, p.63). Yin (1994) claims that case studies are applicable when explaining complex situations, describing real-life contexts, describing interventions and exploring situations in which interventions being evaluated have no clear outcomes. Yin (as cited by Patton & Applebaum (2003)) states that, “empirical research advances only when it is accomplished by logical thinking”.

Thus, a cross sectional, case study method was selected for this study. The study was conducted through conducting structured interviews and the completion of a complementary survey. The next chapter describes the case study used in this investigation.

Chapter 4 – Case Study

Case study methods are appropriate for contemporary research areas and are “well-suited to capturing the knowledge of practitioners and developing theories from it.” (Banbasit et al., 1987, p.370; Yin, 1994; Klein & Myers, 1999). This chapter describes details of the case study used in this investigation.

4.1 Overview of the Organisation

There have been many political changes in the Western Cape government since the dawn of democracy in 1994. According to Okecha (2011), the political conflicts and alliances that are formed have an impact on the outcome of service delivery. The Provincial Parliament elects a new Premier for the Western Cape every 5 years. The Premier appoints a Provincial Cabinet that consists of 10 members of parliament. According to the Western Cape Government (2012), these Cabinet Ministers are accountable for “implementing provincial legislation, implementing appropriate national legislation, coordinating the functions of the Provincial Government and its departments and preparing and initiating provincial legislation”. Each department has a Head of Department (HOD). When a change in political ruling occurs, there is the potential for serious impacts on policies that affect the outcome of service delivery.

In May 2009, Helen Zille took to Premiership of the Western Cape, as the first elected Premier from the South African political party, the Democratic Alliance (DA). The outcomes and visibility (including public visibility) of the provincial projects remain of particular interest to Premier Zille. The Vision of the Western Cape Government is “to be the best run regional government in the world”. Ultimately, all projects that are undertaken within the organisation should contribute to this vision.

4.2 The Provincial Projects Office (PPO)

The notion of the PMO was first established at the IT department in 2003. The PMO of the Western Cape Province is called the Provincial Project Office (PPO), and was established in mid-2009, after Helen Zille took to premiership. The core function for this implementation was to manage provincial project performance. Soon after 2009, virtual PMOs called Departmental Project Offices (DPO) was established which in some cases

constituted a single resource dedicated per department. Currently, there are 13 departments in the WCG, as shown in Figure 9.

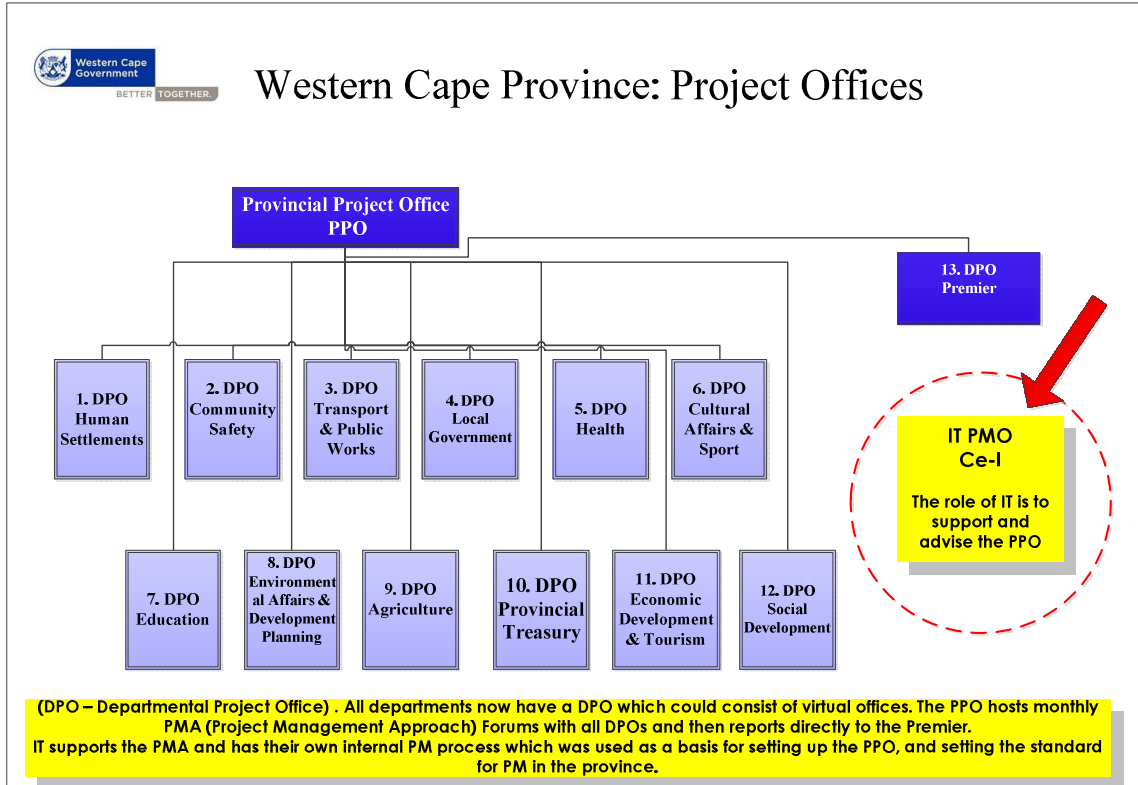


Figure 9: PMO structures in the WCG

In 2009, Premier Zille appointed the IT Department (Ce-I) to design a high-level system to show visibility of all strategic projects of all 13 provincial departments. Strategic projects are projects that are directly linked to the Annual Performance Plan (APP) of all departments. From this the Executive Projects Dashboard (EPD) system was developed. The EPD system was built from modules taken from the PMON system, so the look and feel of the two systems was very similar, as shown in Figure 10 and Figure 14.

Provincial public sector financial years run from April to March the following year. The EPD system went live for the financial year 2010/11 and Premier Zille announced to the Cabinet that the system would be available to the public from 1 April 2011. Ce-I was then tasked to ensure that only relevant fields were accessible to the public. EPD is available for public viewing at the following link:

http://www.westerncape.gov.za/eng/pubs/public_info/P/215612

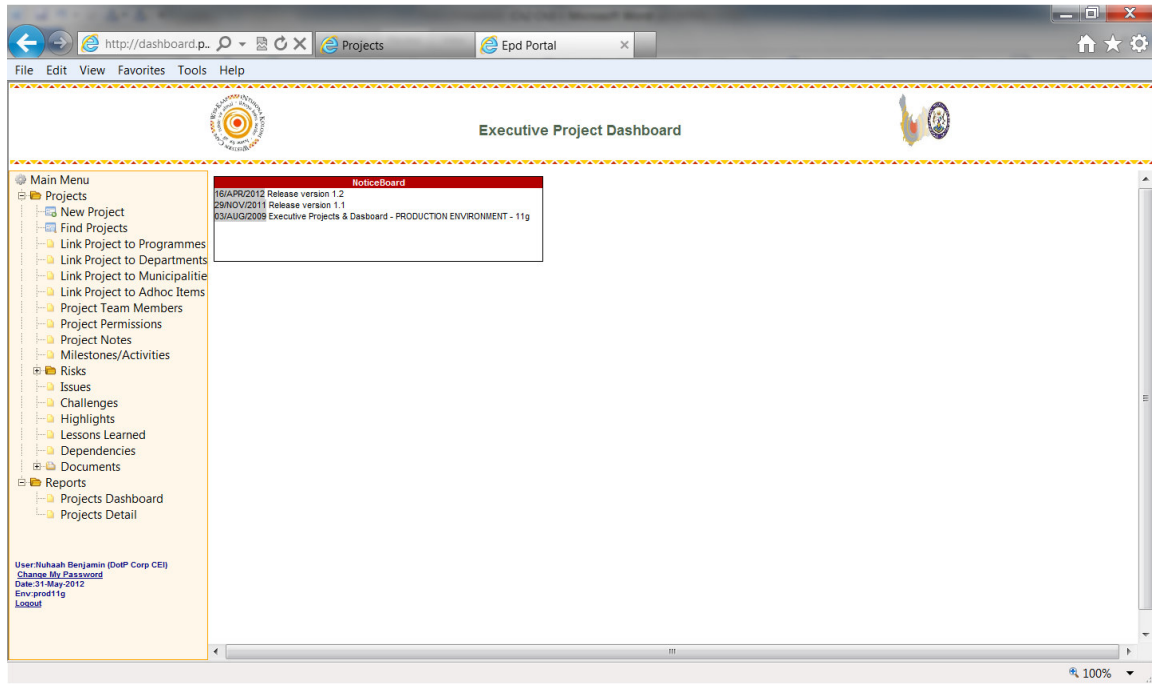


Figure 10: Executive Project Dashboard Interface

Some departments, like Human Settlements, have taken to registering all their projects on the EPD. However, the Premier only views the strategic APP projects. In the first year EPD had 226 projects active on the system, 113 active projects for financial year 2012/13, and for 2013/14, there were 317 active projects. These totals are inclusive of all departments.

At Ce-I, projects were registered on both systems. All Ce-I projects, both operational and strategic, were registered on PMON and only selected strategic projects were registered on the EPD. Currently, there are 86 projects registered on PMON for Ce-I, as shown in Table 7. For 2012/13 there were seven Ce-I projects registered on EPD; two were for CD: GMS and five were for CD: SIS. For 2011/12 Ce-I had a total of 17 projects registered on EPD; 8 were for CD: GMS and 9 were for CD: SIS.

There were four project-related operational systems running simultaneously, and in silos throughout WCG, as seen in Figure 11.

Table 7: Ce-I projects on PMON & EPD

	<i>PMON</i>	<i>EPD</i>
2011/12	89	17
2012/13	86	7
2013/14	84	14

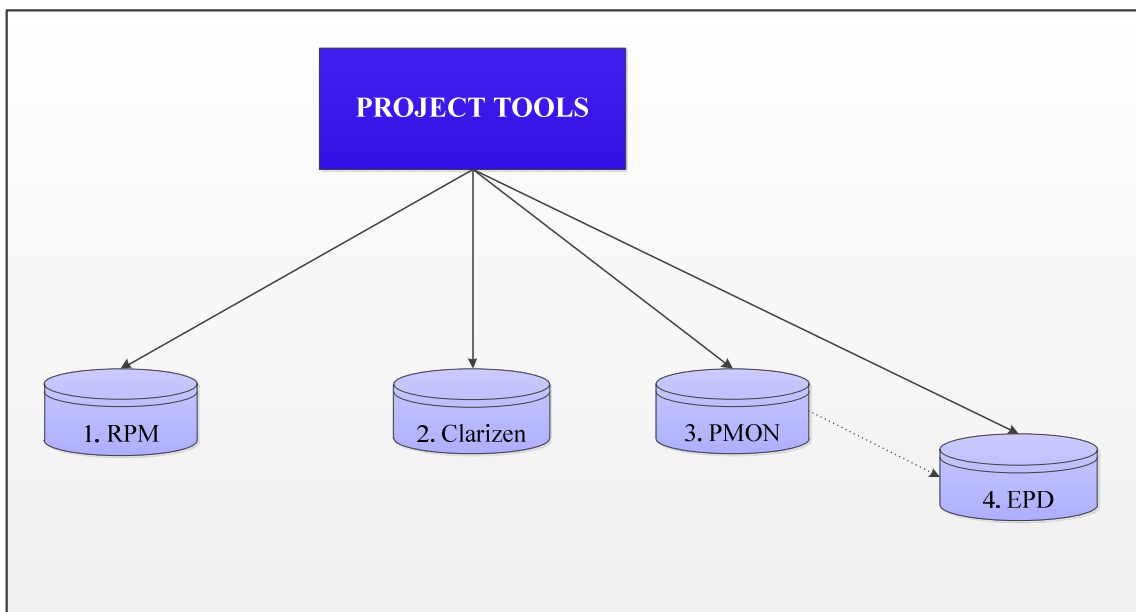


Figure 11: Current project management systems used at WCG

4.3 The Department of the Premier (DotP)

The IT department of the WCG is known as the Centre for e-Innovation (Ce-I) and is a component of the Department of the Premier. Figure 12 shows the structure of Ce-I, as it constitutes two Chief Directorates, which consist of seven Directorates.

Ce-I has implemented project management principles since 2003, and by 2005 had established a Project Management Office to manage the project implementation within Ce-I. With the move to a more project-oriented approach to managing ICT projects, Ce-I had developed a project monitoring system called PMON.

Ce-I Project Office Western Cape Province

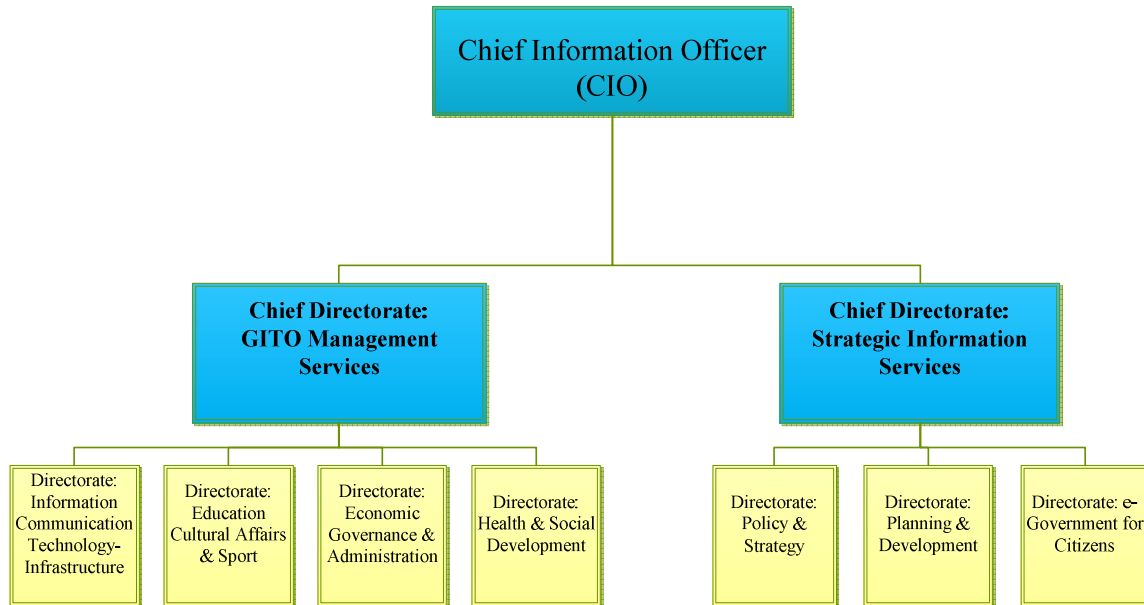


Figure 12: Structure of IT Ce-I in the WCG

PMON is a project monitoring tool rather than a project management tool; see Figure 13 for PMON interface. The system was initially developed for ICT projects undertaken for the Department of Transport and Public Works (DTPW). The system was later enhanced for use by Ce-I. Ce-I undertake an average of 90 projects annually that are registered on PMON. Figure 13 shows the total number of projects registered on PMON for the financial year 2011/2012. The projects run by Ce-I are grouped under 10 project categories, see Table 8. However, the bulk of the IT projects undertaken are categorised as either operational support projects or new developments.

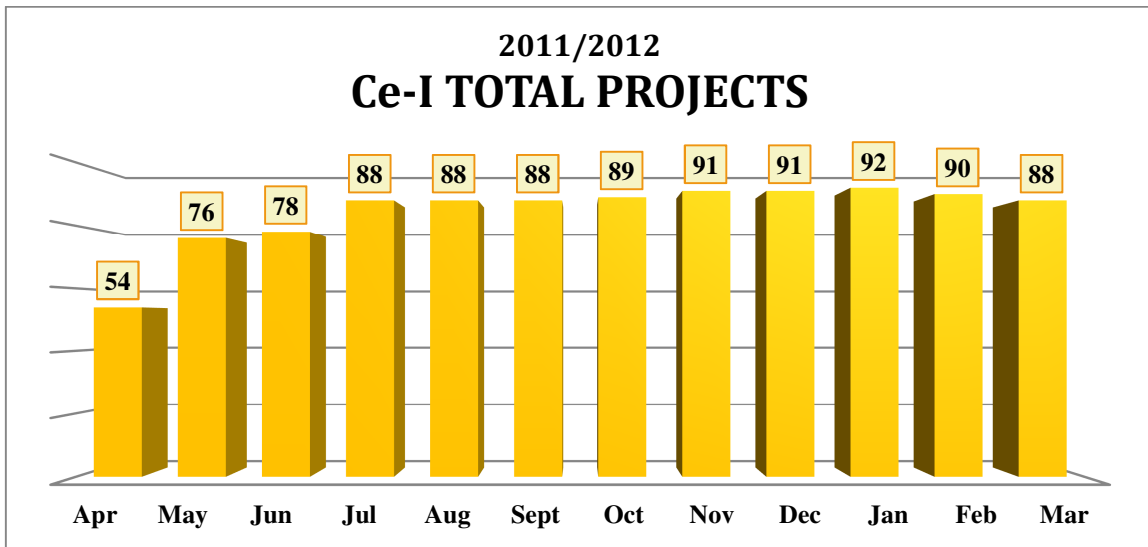


Figure 13: Number of Ce-I projects registered on PMON last financial year (2011-12)

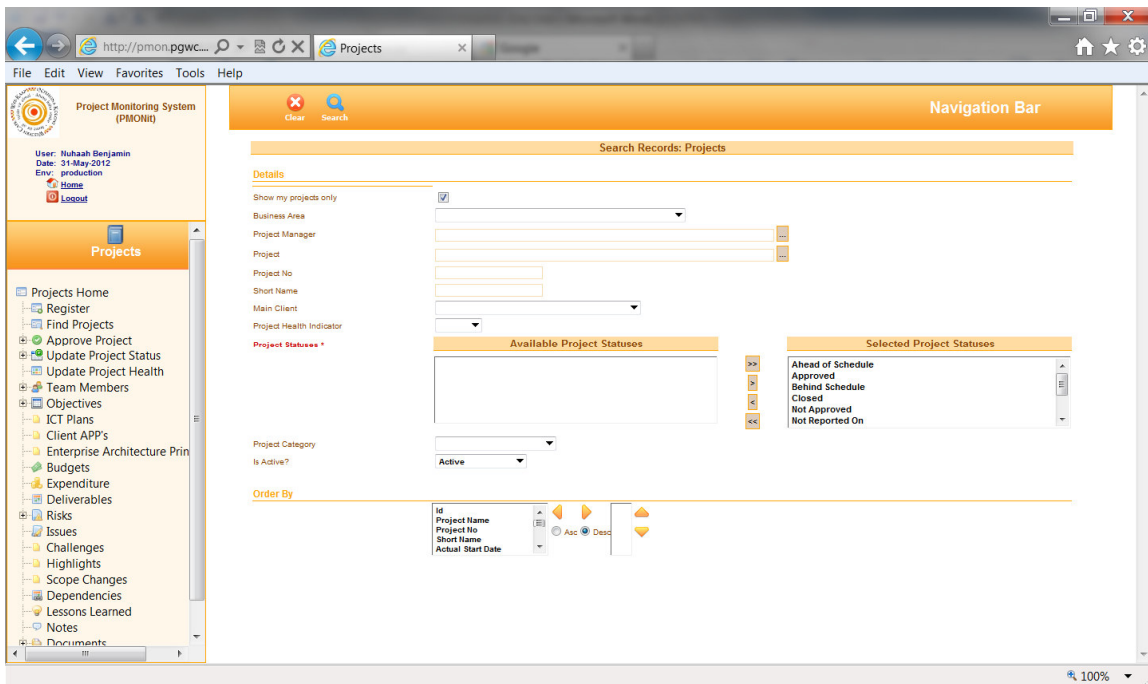


Figure 14: PMON user interface

Table 8: Ce-I Categories in which projects are grouped

Ce-I PROJECT CATEGORIES
1. New Developments
2. Technology Refresh
3. Operational Support
4. Software Release
5. Capacity Building
6. e-Government
7. Governance
8. Policy & Strategy
9. Research & Development
10. Architecture

DTPW is a department that outsource their ICT needs and these contractors in turn are still required to work in collaboration with the IT Ce-I department. DTPW had been using rational project management (RPM) application as a project management solution. The Department of Human Settlements (formerly known as the Housing Department) had contracted out a company to run their PMO, and were using the Clarizen system as a project management tool. The variations of the project management tools employed provided an indication of the complexities of PMOs that run in the public sector.

4.3 Target & Sample Population

A purposive sample from the PMOs in the Provincial Government was selected for interview. The sample was chosen to fit within the timeline and limitations of the research study. The target population was extended from the IT PMO to include the rest of the organisations PMOs. The extended PMO sample provided a unique opportunity to obtain information from both business and IT PMOs.

Only one participant per PMO was invited to participate. The participants were selected as they were actively involved PMO members of the Provincial Departmental PMOs, see Table 9.

Table 9: Summary of Respondents and their corresponding levels (n=13)

Quantity	Member	Level
1	PMO	<i>Head of PMO</i>
12	PMO	
	3	<i>Senior Management</i>
	7	<i>Middle Managers</i>
	2	<i>Administrative</i>

It was assumed that these participants had in-depth knowledge of the variables that drive value and PMO performance. Table 10 shows a summary of the sampling strategy employed (**n=13**).

Table 10: Summary of Sampling Strategy

Item	Description
Target Population	PMOs in the South African Public Sector
Sampling Frame	Western Cape Government PMOs
Sampling Technique	Purposive, Nonprobability Sampling
Sampling Unit	Individual Informants
Sample Size	13 Respondents
Consent	The Head of the Western Cape Government PMO, as well as the CIO consent was provided. Participants' consent was requested to record interviews.

4.4 Data Collection

Fieldwork commenced in March 2013 and continued through to April 2014. The conceptual framework determined the nature of data to be collected in the case study. The

process of qualitative data analysis was iterative and researchers often have to revert. Each step in the process was a process in itself: collecting data, observing, and thinking.

Qualitative research methods had been selected for this research study to allow the researcher to be immersed in the PMO contextual situation for a period of time so as to provide a first-hand naturalistic notion of what the current practices were.

The primary data gathering techniques used in this study was a combination of rating a survey and semi-structured interviews. These techniques are common for mixed method studies (Patton & Applebaum, 2003; Rocco 2003). The interviews were conducted on a one-on-one basis as opposed to group sessions where individuals may have been hesitant to express their own views (Van de Ven, 2007).

The interviews were all recorded with the participants consent. Interviews followed the interview guide shown in the Appendix. Ethics approval for the approach and the survey content had previously been provided by the Faculty of Commerce at the university. The interview process was as follows:

1. Interview requests were forwarded by email.
2. Where required, respondents were liaised with telephonically to arrange a suitable date, time and venue.
3. The interviews began with an introduction to the study and why the respondents were chosen to participate.
4. The respondents were given opportunities to ask questions.
5. The factors were explained to the respondents as the interview progressed.

Thereafter, the respondent would comment and then provide a rating on a scale of 1 to 5 on how important that factor was in their PMOs currently.

Throughout the process, field notes were taken. The researcher interpreted all interviews and the survey, which were then analysed using content analysis. Thus, methods of empirical inquiry were employed in this research.

The strength of using interviews was that they are targeted and insightful, but there was the danger of bias and reflexivity to consider. The strength of direct observations is that they present real-time events in context. Observations allow for an objective view while the participants' provide a subjective view. The closure of the interview included an open-ended question to allow participants to contribute anything further.

The following risks associated with data collection methods were noted. The data obtained through observations and interviews may be influenced by the topic, the researcher, the interviewees, their beliefs, attitudes and their involvement in the research (Patton & Applebaum, 2003). Their views, beliefs and cultural perspectives all influence the data analysis and the results of the research.

A supporting survey was conducted to ascertain the focus areas of PMOs. Respondents were asked to indicate how important the indicators were for their PMOs. Responses to the survey were collected on a five-point Likert scale (1=not important at all and 5=very important).

4.5 Data Analysis

The philosophy of interpretation is an important branch of interpretive studies (Klein & Myers, 1999). The process of interpretation moved from an understanding of PMOs to the factors that assist in the generation of PMO value. These are based on the researcher and participants understandings of the PMO contributions to efficiency and effectiveness.

Hsieh & Shannon (2005) point out the goal of qualitative content analysis is to provide knowledge and understanding of a particular phenomenon. The three approaches to content analysis are conventional, directive and summative. Conventional content analysis was employed to describe a phenomenon, with the advantage of gaining direct information without imposing theoretical perspectives. This was appropriate as the phenomenon of the PMO is still relatively new and research is limited.

The analysis provided an in depth description of the value of a PMO, and is further discussed in Chapter 5.

4.5.1 Data Preparation

The process of content analysis was used to analyse interview transcripts to reveal information of thoughts and behaviours. For the interviews, probes as well as open-ended questions were used. Notes were constructed based on the researcher impressions, thoughts, and initial analysis. The data collected from the interviews were transcribed into written text format for data analysis.

4.5.2 Unit of Analysis

The unit of analysis in this case was the PMO.

The response to each interview was unitised into the following themes before they were coded:

- Efficiency
- Effectiveness

Categories and a coding scheme was then developed and tested on sample data. The initial coding scheme comes directly from the text, and through this process, labels of codes emerged. These codes were then sorted into categories, which were organised and grouped into meaningful clusters. Then definitions for each sub category were developed. The next step was to identify exemplars of code and clusters. The coding was checked for consistency. From there, relationships were identified based on concurrence, antecedents or consequences. Conclusions were drawn from the coded data, and findings were reported.

4.6 Criteria for Research Evaluation

Whitman et al. (2003) reports that IS researchers respond more efficiently to rigour and validation processes as opposed to earlier years. Benbasat et al. (1987) claims that a clear description of the data sources used and how they contribute to the research findings is important for reliability and validity of research. These refer to criteria for evaluating the quality of positivist research.

Trustworthiness and authenticity are criteria for evaluating qualitative validity (Cresswell & Miller, 2000). Guba and Lincoln (1985) proposed the following trustworthiness criterion: credibility, transferability, dependability and confirmability. The authenticity criterion proposed included the following; fairness, enlarges personal constructions, leads to personal constructions of others, stimulates action and empowers action (Cresswell & Miller, 2000).

4.6.1. Trustworthiness & Validity

The credibility of the research results were improved through prolonged engagement in the field, persistent observation, triangulation, negative case analysis, peer debriefing and member checking. Transferability refers to the provision of sufficiently rich data sets and descriptions that enable other researchers to make judgements on the findings, and transferability to other contexts. Dependability is determined by verifying the consistency of the research process. Confirmability is determined by verifying the data, the findings, interpretations and recommendations.

To increase the validity of this study a mixed method approach was used as follows: for the purpose of triangulation, the qualitative interviews were conducted to support or dispute the results of the quantitative survey that was completed. Expansion was used to widen the scope of inquiry. The quantitative survey assessed the importance of PMO outcome indicators and the qualitative interviews assessed and provided clarity on the PMO processes employed (Rocco et al., 2003). The purpose of combining a quantitative survey with the interviews was to serve as complimentary and therefore following a mixed methods approach.

The validity of the instruments used (interviews and survey questions) had been predetermined and tested by Hobbs & Aubry (2010). The validity of the instruments was further validated by piloting the interview schedule with a small sample from a government PMO. The sample had the same characteristics as those of the case of the study, i.e. one PMO member and one senior PMO member. Hereafter, some of these guide questions were refined. The results of the pilot study were not used in the final analysis and results.

4.7 Summary

Research examined the value added by PMOs by looking at their organisational performance and their efficiency and effectiveness (Hobbs & Aubry, 2010). The aim of this study was to provide a better understanding of PMOs based on solid empirical research, which can provide guidance to practitioners and establish the basis for future research.

The philosophical assumptions that underpin this research were from an interpretive stance. This implied a subjective epistemology and an ontological belief that reality is socially constructed. The proposed research adopted case study methods applied in an interpretive research paradigm.

The research strategy adopted was to conduct a case study on the operations of PMOs at a public sector organisation. The executive members of the organisation granted their approval to conduct the study. The fieldwork commenced in March 2013 and continued through to April 2013.

The main data collection techniques employed consisted mainly of semi-structured interviews and a structured survey. For research design summary, see Table 11. This chapter provided an outline of the organisation that formed the basis for this case study.

4.8 Confidentiality & Ethics

The CIO as well as the Head of Strategic Management Information of the Western Cape Government was approached for their consent before commencing with the fieldwork and interviews for study. Furthermore, the confidentiality of all groups, individuals and parties participating in this study were respected and the University of Cape Town research ethics procedures were strictly adhered to.

Table 11: Summary of Proposed Research Design

Research Context	Efficiency and effectiveness of PMOs
Research Purpose	Explore
Philosophical Stance	Interpretive
Theoretical Framework	Competing Values Framework
Research Approach	Inductive
Research Strategy	Case Study
Data Collection Techniques	<ul style="list-style-type: none"> ○ Qualitative ○ Structured Interviews (Survey) ○ Semi-Structured (Open-Ended)
Sampling	Purposive, Non-Probability
Time Frame	Cross-Sectional

Chapter 5 – Data Analysis & Findings

This chapter investigates the factors that contribute to PMO efficiency and effectiveness as identified in the conceptual model, and will determine which of these factors are deemed important for public sector PMOs in practice. These factors identify the PMOs current focus, in practice. It will further investigate which of these factors PMO participants perceive as the most valuable for their organisation.

The study scrutinises 2 independent variables, namely PMO efficiency and PMO effectiveness, as well as 28 dependent variables that relate to these independent variables, respectively. The chapter begins with a description of the data sample followed by a complementary univariate statistical analysis.

The WCG has one multi-project PMO per department called the DPO (Departmental Project Office) with one main PMO known as the PPO (Provincial Project Office). In total, there are 13 departments (client) in the province. The types of projects' undertaken as well as the location and structure of the PMOs are varied across departments in both the size and complexity thereof.

At the time of the research study there was no Director appointed at the PPO, as the current post had been vacant. The previous acting Director had requested a transfer out of the PPO to another department.

During the study period there were debates taking place around the location of the PPO. Management had suggested that the PPO be placed directly under the establishment of the IT department in terms of the organogram structure, rather than the current location under the Chief Directorate, Strategic Management Information. However, the IT department had expressed their unwillingness in accepting this additional responsibility as they already had their own PMO to manage.

While it is acknowledged that this is not a large sample, it is deemed sufficient to generate interesting results and findings from the analysis of all the departmental PMOs. The sample, although relatively small, consists of representatives from a multitude of PMOs and is therefore able to generate significant results.

5.1 PMO Structures and Location

Figure 15 shows the variations of PMO types found that were functional in the organisation. Very few of these establishments were set up to run as dedicated PMO offices (23%). Interestingly, there are 9 variations of PMO structures setup for the 13 departments. PMOs (38%) were mostly setup in the Policy and Strategy units of the departments and run by a Middle Manager and team.

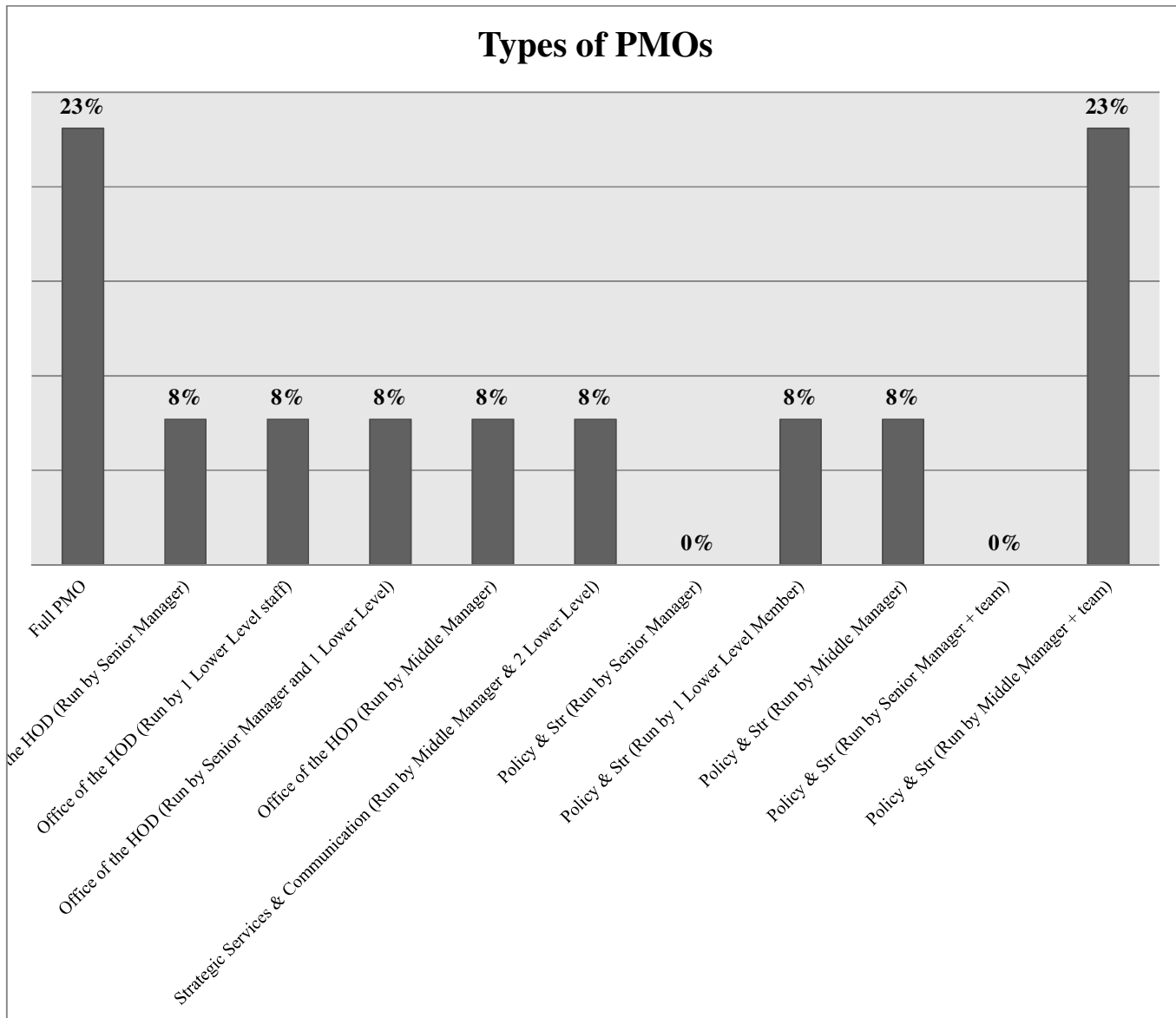


Figure 15: Variation of PMO types functioning in the organisation

In terms of location, the PMOs (other than the Full PMOs) were found to be positioned in either the Office of the HOD, Strategic Services or in the Policy & Strategy units of the organisation, see Figure 16. Despite PMOs being located at the executive level (HOD level) there are many variations of these setups, where some were even run by lower level members, see Figure 14 above. Furthermore, 77% of these PMO establishments were operating as virtual offices and not actual established offices within the organisation, see Figure 16.

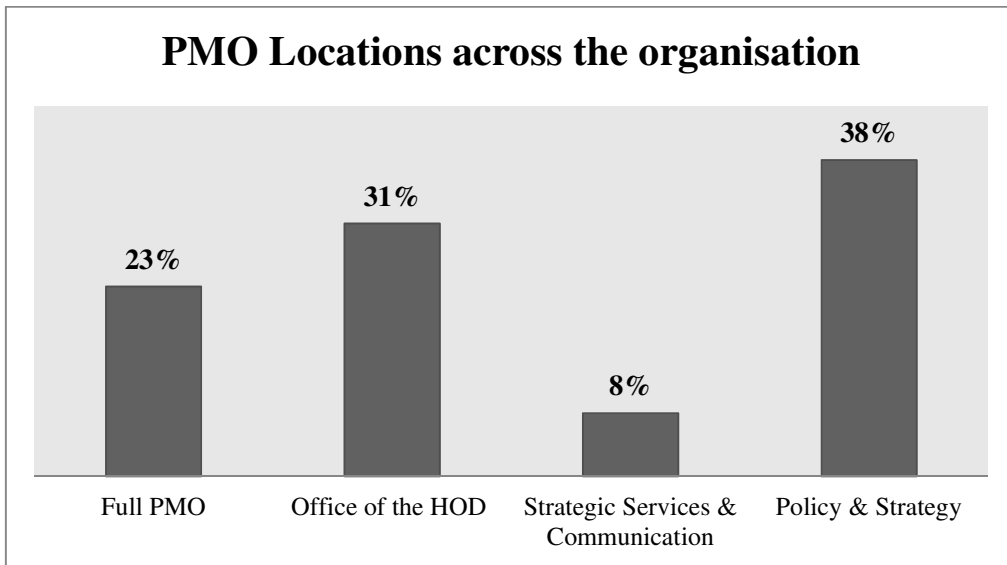


Figure 16: PMO locations across the organisation

Table 12 shows the list of top 5 efficiency factors which respondents were asked to indicate their importance on. The ratings were determined by totalling all the respondents survey results, per factor.

Bureaucracy (56) was rated the highest as the most important factor for ensuring the efficiency of public sector PMOs. This was followed by a supportive organisational structure to deliver projects (52) and the importance of the selection of “good” projects (48). This was then followed by profit from projects (47) and closely thereafter, the order in which productivity is achieved was deemed as important with a collective rating of 45. These efficiency factors were linked to productivity (60%), planning (20%) and profit (20%).

Table 12: The top five efficiency indicators in the public sector as indicated by respondents

TOP 5 EFFICIENCY INDICATORS AS FOUND IN THE PUBLIC SECTOR PMOs	
<i>RATING</i>	<i>INDICATOR</i>
56	Bureaucracy
52	Existence of an organisational structure to deliver projects
48	Importance of the strategic dimension in the selection of the “good” projects
47	Profit
45	Order in Productivity

Table 13 shows the list of top 5 effectiveness factors which respondents rated. PMO responsiveness when required (56) was rated the highest as the most important factor for ensuring effective public sector PMOs. This was followed by the ability for PMO agility (50) and the importance of initiatives in project management methodology (48). This was followed by the importance of evolution in project management processes and tools (46) and closely thereafter the PMOs ability to be innovative, creative and good at problem & conflict resolution was deemed as important with a collective rating of 45. The results show that these factors were linked to responsiveness (40%) and flexibility, adaption and innovation (60%).

Table 13: Top five effectiveness indicators in the public sector as indicated by respondents

TOP 5 EFFECTIVENESS INDICATORS AS FOUND IN THE PUBLIC SECTOR PMOs	
<i>RATING</i>	<i>INDICATOR</i>
55	Responsiveness in appointment when urgent need
50	Being agile
48	Existence of initiatives in project management methodology (sometimes being delinquent)
46	Evolution in project management process and tools
45	Innovation, creativity, and good at conflict &/ problem resolution

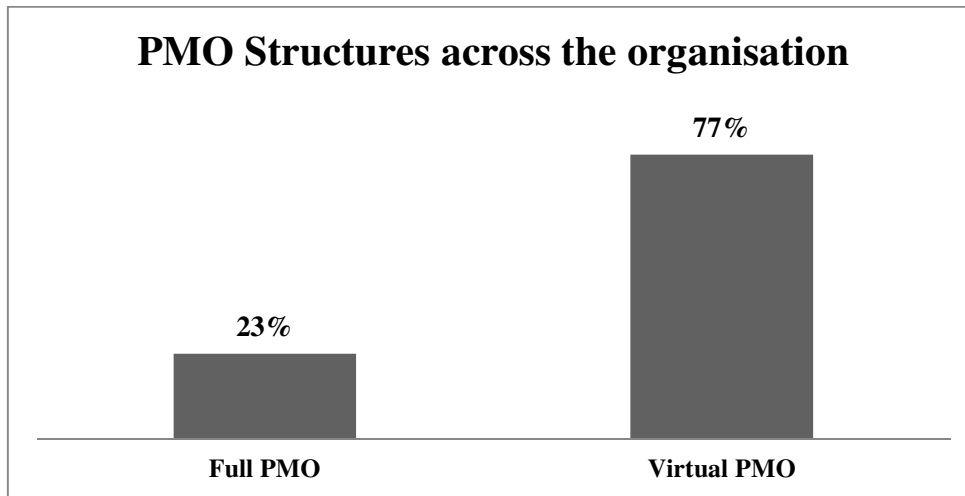


Figure 17: PMO locations across the organisation

Figure 18 represents the top ten factors collectively that were rated by respondents as the most important foci in the organisation. Of these factors, there were 5 that linked to efficiency and 5 that linked to effectiveness. From this list, it is seen that PMO members rated project management bureaucracy highly (56) as the most important factor at the organisation, followed closely by the PMO being responsive to the organisational requirements (55). Respondents felt that the importance of the strategic dimension in the project selection process (48) was as important as initiatives in project management methodology (48). In addition, the importance of the way in which productivity is achieved (45) was rated as important as the PMO being innovative, creative and being good at problem resolution (45).

Figure 19 shows the five least important factors as rated by the participants. Three were linked to effectiveness and two were linked to efficiency, see Table 14. From this, it was found that project management maturity (benchmarking, external consultants with PM knowledge, linking with external PM entities) was not much of a priority at the public sector organisation. Figure 18 also shows resource management as not being a priority for this organisation.

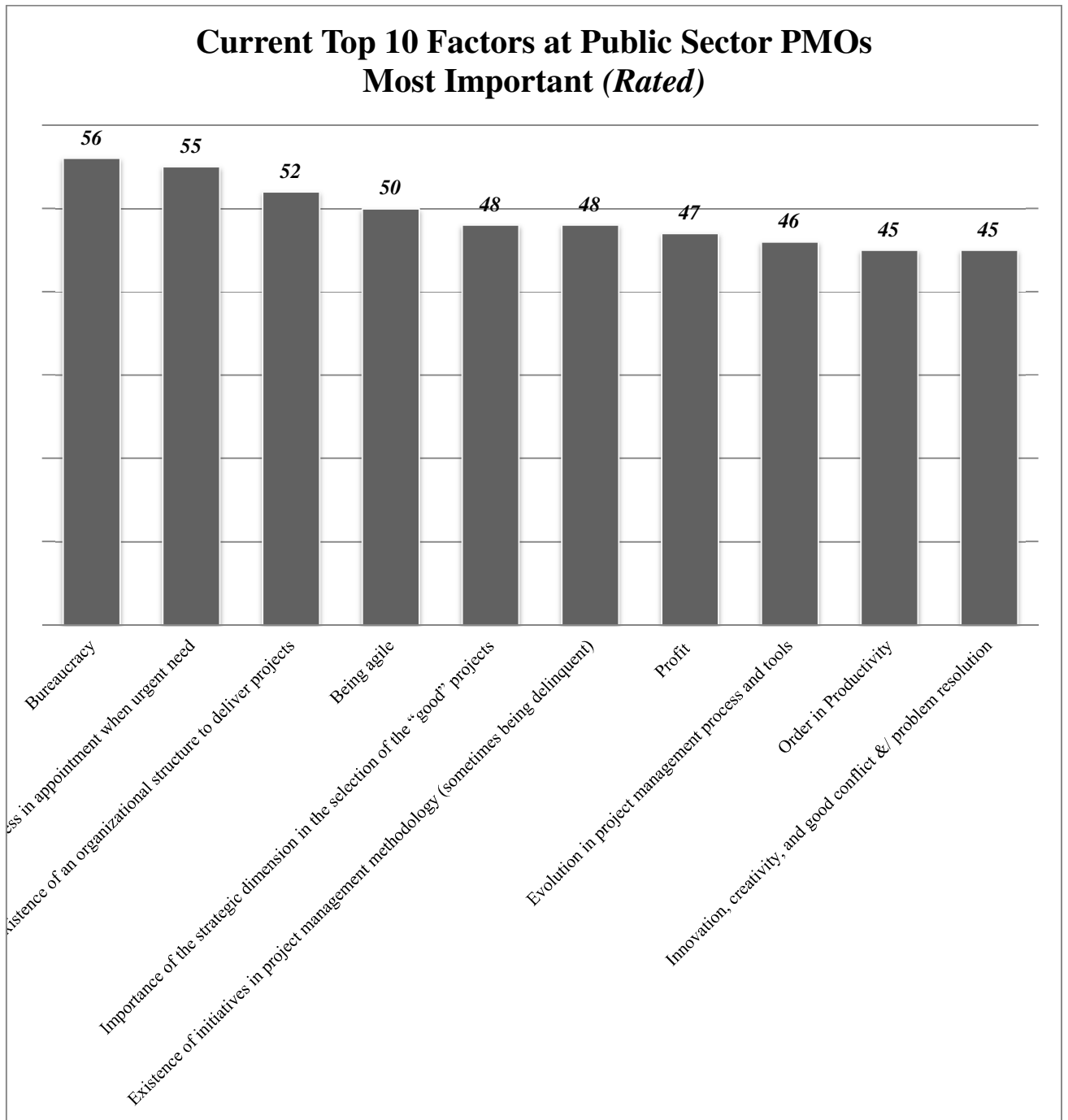


Figure 18: Top ten indicators at public sector organisation

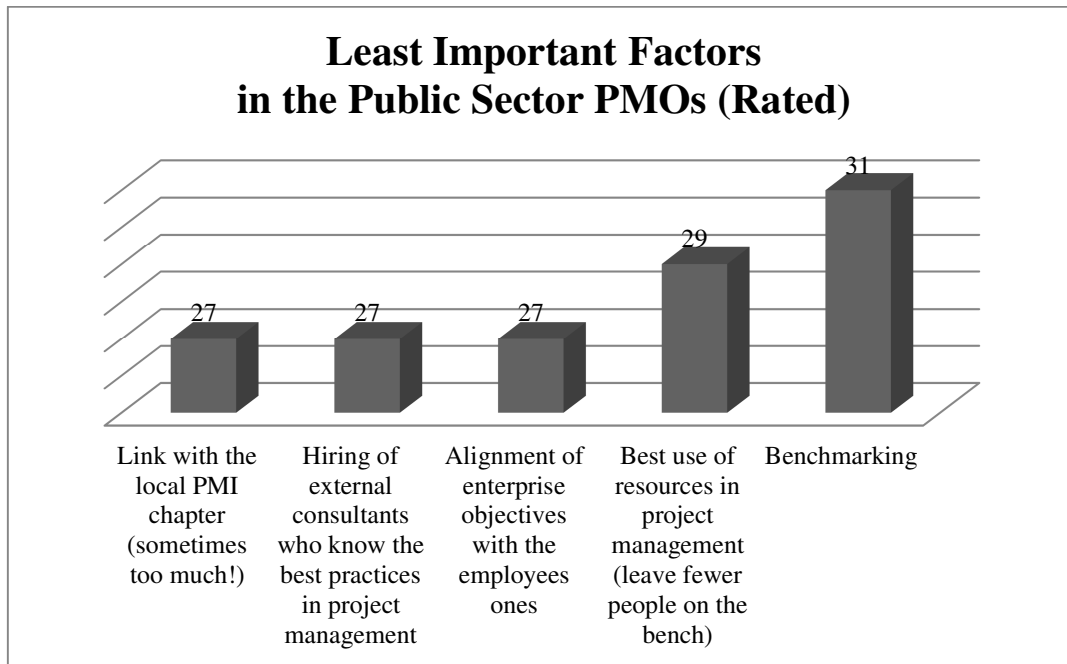


Figure 19: Least important indicators at public sector organisations

Table 14: Least important indicators in the public sector

Rated as Least Important		
24	Benchmarking	Effectiveness
25	Best use of resources in project management (leave fewer people on the bench)	Efficiency
26	Alignment of enterprise objectives with the employees ones	Effectiveness
27	Hiring of external consultants who know the best practices in project management	Efficiency
28	Link with the local PMI chapter (sometimes too much!)	Effectiveness

Figure 20 shows a summary of the top most important factors that were identified by participants in the public sector PMOs. The ratings were totalled and shows that most of the PMOs focus was on PMO efficiency (248), followed closely by a focus on PMO effectiveness (244).

In terms of PMO efficiency, the PMOs were more focussed on productivity, planning and profitability factors. There was no link to project management efficiency in the top most important factors.

In terms of PMO effectiveness, the PMOs were primarily focussed on responsiveness and flexibility. There was no initial link to the growth of the organisation, or linking to external project management environments in the top most important foci factors for these PMOs.

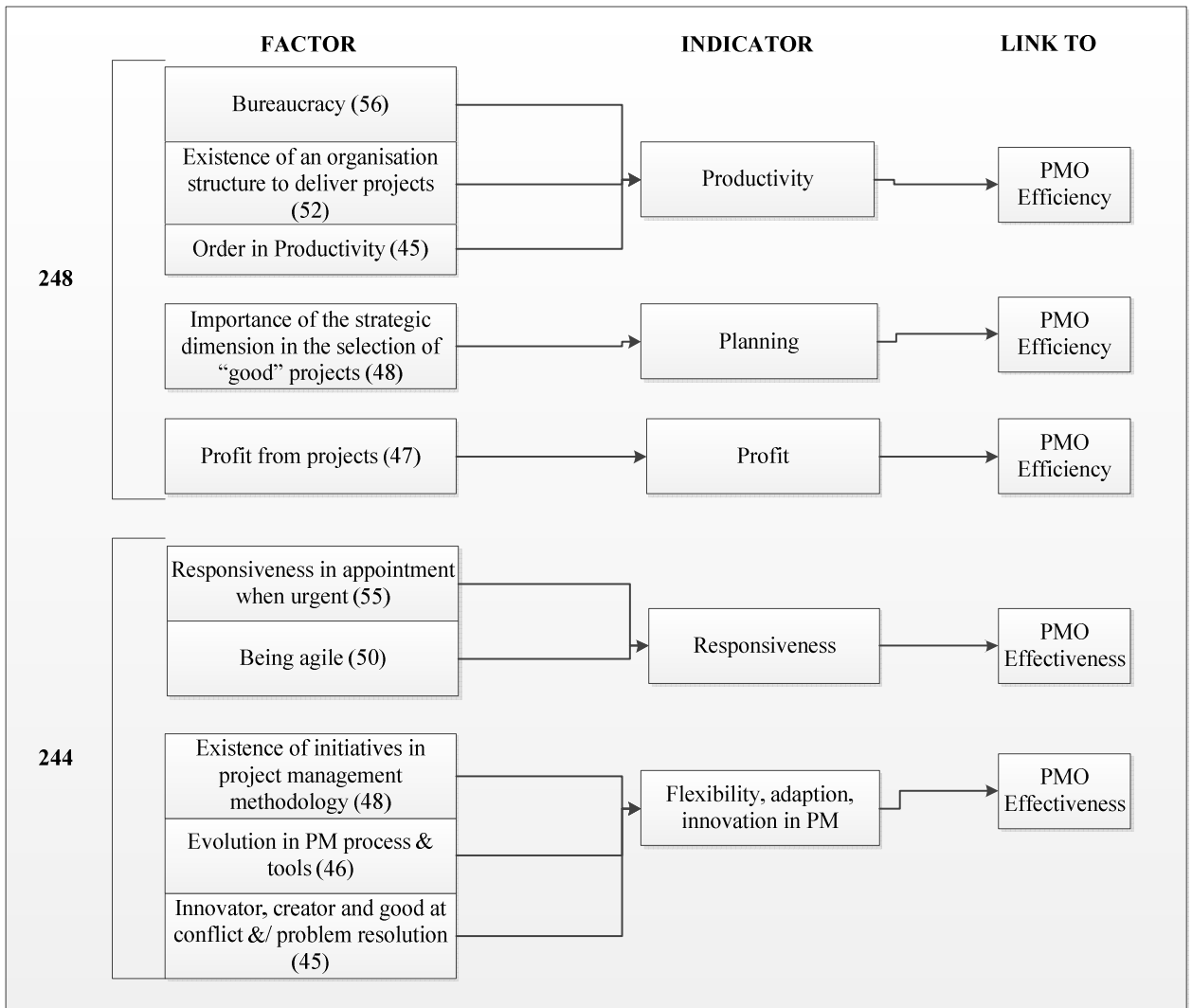


Figure 20: Summary of the top factors found in the Public Sector PMOs

5.2 Efficiency Indicators

The next section evaluates the factors that are relative to PMO efficiency indicators. Each factor was analysed to determine the current focus at public sector PMOs, as well as the stance taken by senior management on this.

5.2.1 Profit

The financial implications of projects in the public sector are substantially different to those of the private sector. Since, the bottom line was of no real concern; it was found that even the full cost per project was not known as staff resource costs per project were completely

excluded from the total project costs, unless external contractors were hired to perform tasks on projects. In this way, when departments provide a service to each other they remain unaware of the full cost implication of the projects that they undertake.

5.2.1.1 Profit from Projects

Figure 21 represents how respondents answered question 1, which determines the focus on measuring profit for the PMO. When asked about the project profits most participants (6) felt that looking at profit from projects was of considerable importance despite government not being a profit driven organisation.

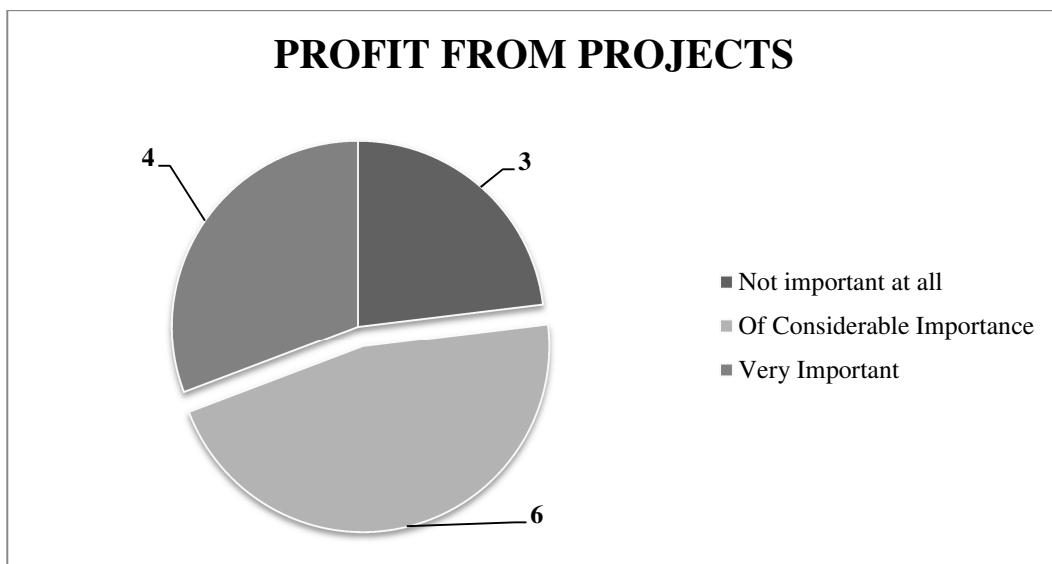


Figure 21: Ratings (Importance of profit from projects)

One participant claimed that although the PMO did not look at profit specifically, they felt that it was considerably important in terms of looking at it in terms of the “outputs of projects”, as government departments were concerned with results achieved rather than return on investment (ROI). Another participant felt that profit in the government environment could be translated in terms of “value for money” achieved, and that this was only true for cases in which an actual budget is allocated to a project. It was noted that not all projects were allocated budget amounts as many projects ran without any budget. Another participant noted that they were only concerned with the profit from projects if it was within their control and further notes challenges with interdepartmental projects.

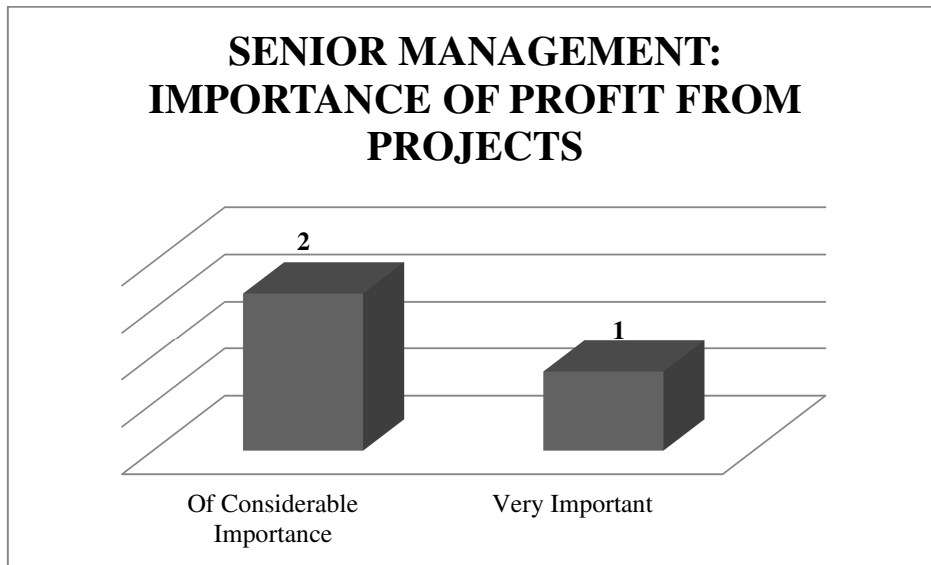


Figure 22: Senior Management Ratings (Importance of profit from projects)

The senior management in particular felt that profit from projects was of considerable importance, see Figure 22. However, they were not directly involved with projects and in most cases; their PMOs were initiated as a compliance solution.

The PMO in the financial department of the organisation felt that profits from projects were naturally very important to them, as they were the “money-related” part of business. Another respondent claimed that “usually what you find in the public service was that projects would go on and on and on, but they would actually be failing but they would just continue”. However, given that the philosophy on government budgets were either to “use it or lose it”, departments may have been motivated to continue running projects in cases where it might not be viable to do so. One respondent felt that looking at the profits “helps to, from a set framework or standard, be able to analyse and see "ok this project is not going to make it in terms of our standards and so therefore it is going to be cut out for the next financial year. So it helps with prioritising budgets, and I think in that way it is a cost saving.”

Another respondent felt that looking at the budget was very important but only for monitoring on the dashboard system, so they would query but “only when I see there is a red indicator”. This was the main function for most of these PMOs. Another respondent

felt, “if you purely look at the financial aspect and the cash flow then yes, surely it is spending the money effectively within the time that you are allowed to spend it within government, and to spend it against your deliverables.” Some cost saving initiatives were discovered that included the sale of old equipment from technology refresh projects, but there were generally very limited cost saving initiatives.

5.2.1.2 Benefits Planning in the Business Case

Figure 23 represents how respondents answered question 2, which determines the focus on benefits planning in the business case (BC). There was consensus among respondents that the benefits relative to the public sector were those that have an impact on the environment, citizens and communities at large. This was ultimately said to be achieved through efficient and effective service delivery. This, as opposed to the private sector, in which many cases the benefits are purely monetary based, i.e. profits gained or ROI.

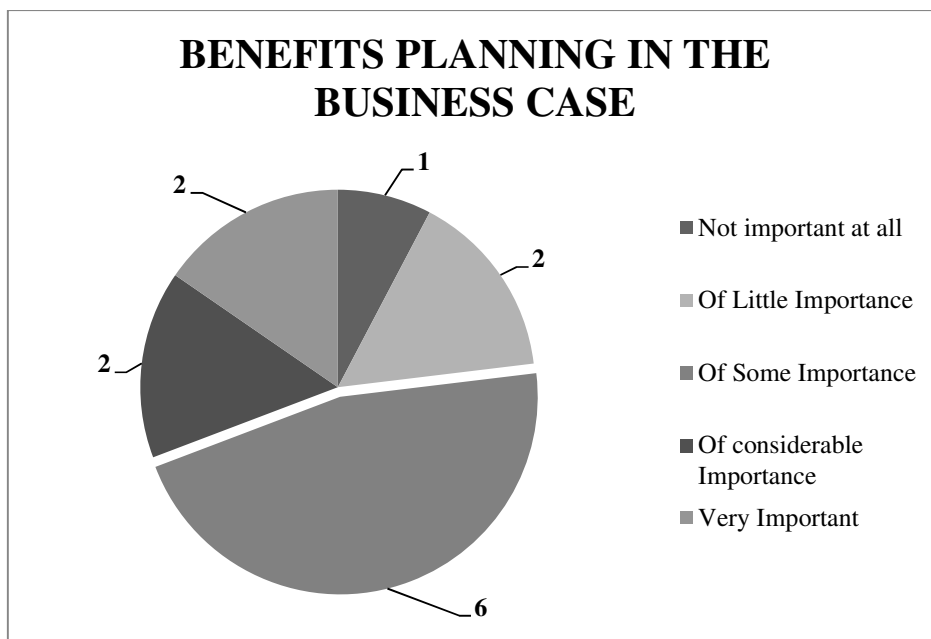


Figure 23: *The importance of benefits planning in the business case*

It was challenging to obtain any business cases or even a template from any of the PMOs. This may have been an indication of the lack of actual PMO involvement in this process or the complete absence of process within the organisation. The IT department appeared to

the most advanced in this area as they had their own template that they could easily produce, as well as a clear process defined. The only other BC received appeared to be a duplicate from the IT departments BC and was not an approved standard for the rest of the organisation.

Despite benefits planning and evaluation at the end of projects being linked to an increase in project success, it is interesting that most of the senior management felt that the importance of benefits planning was only of some importance. It was some of the middle management who were more directly involved with projects that found benefits planning in the business case as very important, see Figure 25.

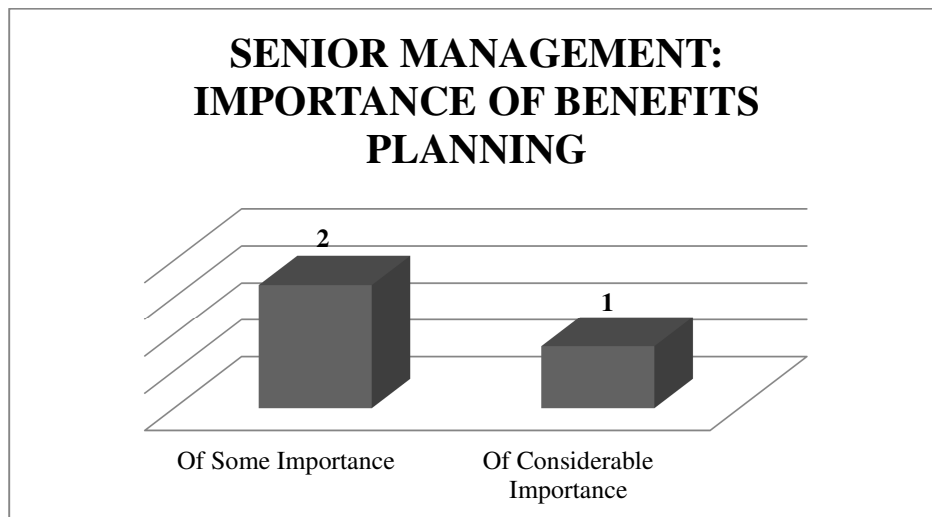


Figure 24: Senior Management Ratings (Importance of Benefits Planning)

There was one respondent who insisted that business cases were completed for their department but it was somehow referred to as a “project plan” by the department. The PMOs generally claim that business cases were completed within their departments but they never receive copies so there is no quality assurance completed by the PMO, nor any awareness of its contents.

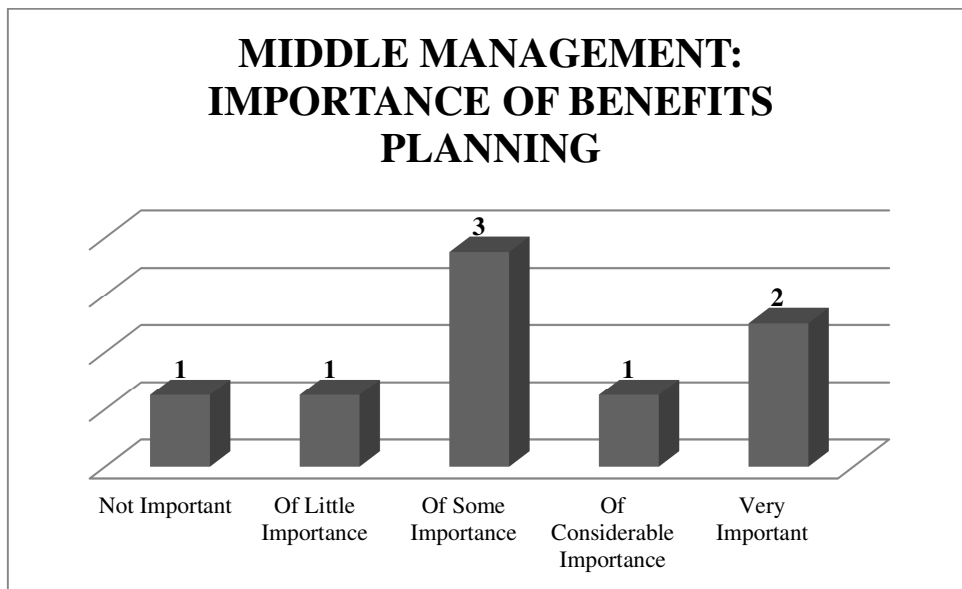


Figure 25: Middle Management Ratings (Importance of Benefits Planning)

It became clear through the study that business cases and benefits planning were largely misunderstood phenomena for the public sector PMOs. All this implied that benefits planning in the business case should in practice have been rated (1) as not important at all. However, only 1 participant rated benefits planning as not important.

Some respondents (2) felt that it was of little importance because while there was an awareness present it really was something that they would “perhaps aspire to achieve” in the future.

A relatively substantial number of (6) of respondents that rated benefits planning in the business case to be of some importance was surprising as they were not able to substantiate any further on this. However, this may have been a safer “on the fence” option to select in cases where respondents felt uncertain. For example, it was noted that one of these respondents stated that the business cases were not submitted to their PMO, yet the respondent still rated it to be of some importance.

There were 2 respondents that rated benefits planning to be of considerable importance for their PMOs and the reason for this was they stored copies of BCs in their office. Another 2

respondents rated benefits planning to be a very important factor for their PMOs and felt so “because it lays the foundation for the rest of your project”.

5.2.2 Productivity

5.2.2.1 Order in Productivity

Figure 26 represents how respondents answered question 3 that measures the order/way in which productivity was achieved. While an equal amount of respondents contradictorily found the order in productivity to be either of little importance, an equal amount found it to be of considerable importance for them. However, there was consensus reached among those who felt it was of little importance to them because they felt that they were primarily responsible for monitoring and reporting, and they had no further influence on projects.

When respondents were asked about their focus on the order in productivity for their departments, 3 respondents indicated that productivity was considerably important, this given the PMO interaction with the departmental project managers. One respondent felt that their PMO operated more as a PMO than the rest of the organisation since they were able to have some influence on the project processes that affected efficiencies within the organisation.

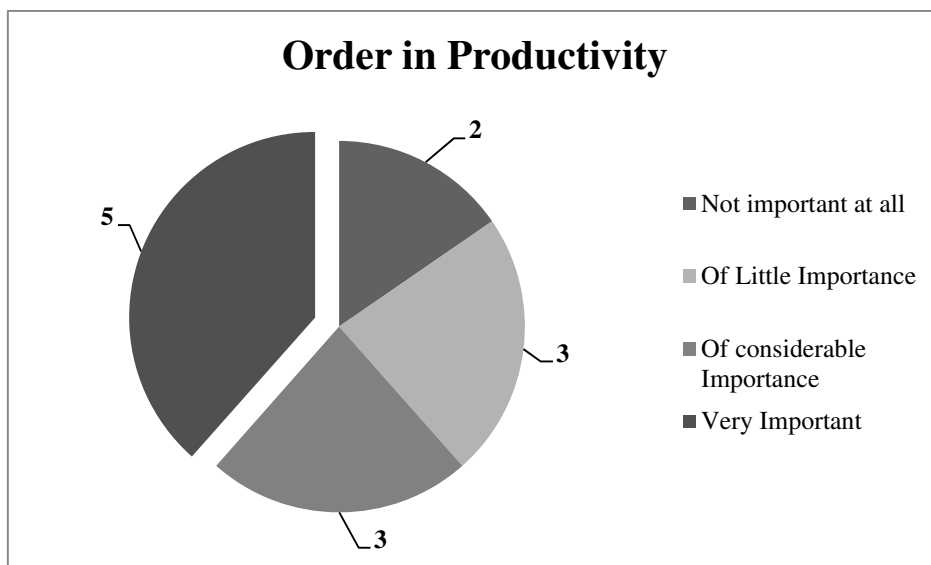


Figure 26: Order in which productivity is achieved

Some respondents (5) felt that this factor was very important for them. One PMO, on strategic level, mentioned their intervention was required to implement supportive processes that influence productivity within their department, since prior to that most of their units were operating in an “unstructured manner”. Another advanced PMO claimed they always aim to project manage in such a way as to attain best results.

However, it should be noted the PMO that appeared most optimistic had only been around for two months. This particular PMO was an entirely new establishment in the department and it is questionable whether these processes would be put in place to the level that it was rated at the time.

Some respondents (2) found that the order in productivity was not important for them at all, as there was no focus on supporting project productivity from their PMOs. One respondent adamantly stated that they had absolutely no say as to how projects were managed at all.

While senior management claimed that the order in which productivity was achieved for projects was important for them, this was in direct contrast to the middle management and lower level PMO members who felt that they had no influence to successfully achieve this, see Figure 27.

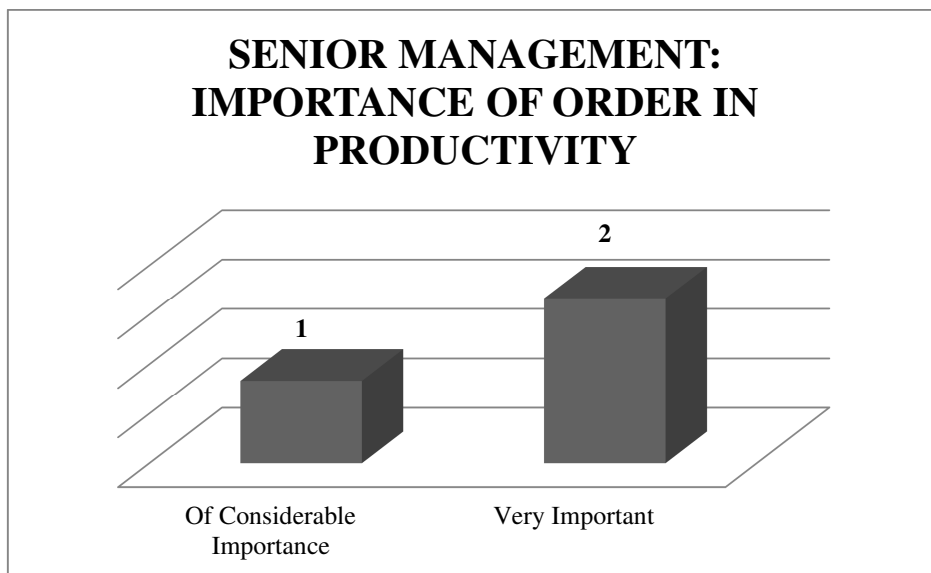


Figure 27: Senior Management Ratings (Importance of Order in Productivity)

5.2.2.2 Resource Management

Figure 28 represents how respondents answered question 4 that measures the best use of resources in projects. Some respondents found that this was not important at all, because their involvement in projects was very limited. One respondent claimed, “I don’t get involved in the actual process, all I am doing here is trying to maintain the dashboard, and I say, “trying” very purposefully”. Another respondent mentioned that the PMOs were “just a support function”.

It is noted that most project managers in the organisation were accidental project managers in that project management was completed as an add-on task and not as the core function in job descriptions. There were only a few full-time dedicated project managers that worked on projects. The dilemma with this scenario was that oftentimes on large projects consultant project managers were employed and only for a short period of time, and too much was being invested in getting them up to speed with the organisational settings.

Some respondents felt it was of little importance because while they may prompt project managers on certain things like Scope Change documentation, but they “can’t really influence anything”. Another respondent where the PMO is placed strategically claimed that resource management was not done, “no, no, no, not to that level”.

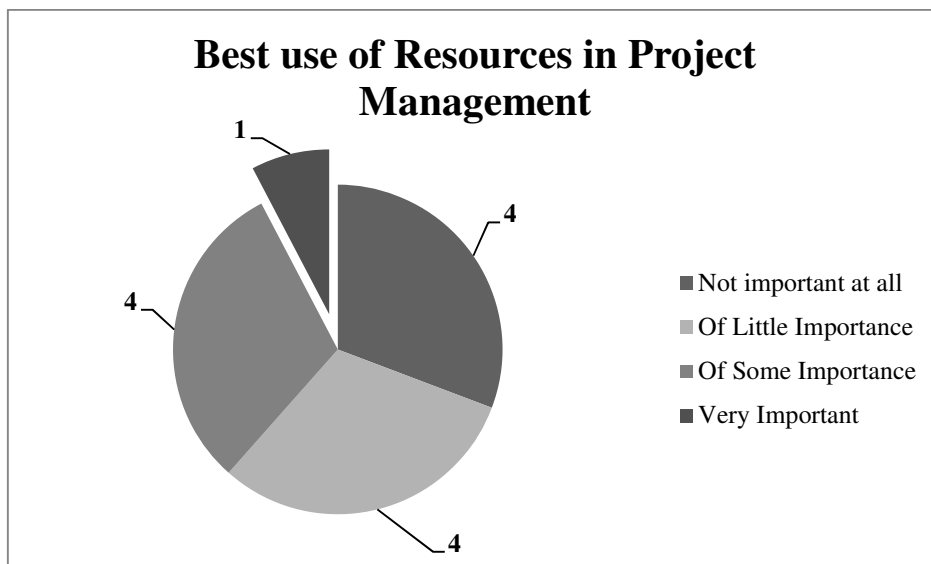


Figure 28: Best use of resources in project management

One respondent felt that it was important and something to aspire, however, there were “limitations, territory and people thinking, “Who are you?” So it can be sensitive”. One respondent felt that because they report directly to the DDGs, they were not interested in the “nitty gritty of it, I just want the feedback from it. Where we are. Why aren’t we there? What is the problem?”

Time sheets were generally not logged for managing resources in the organisation and they rely on the direct managers for managing this. Some respondents felt that even though project resource management was very important it was still not a current practice at the PMOs.

The figure below shows that senior management did not deem resource management as being of much importance for their PMOs.

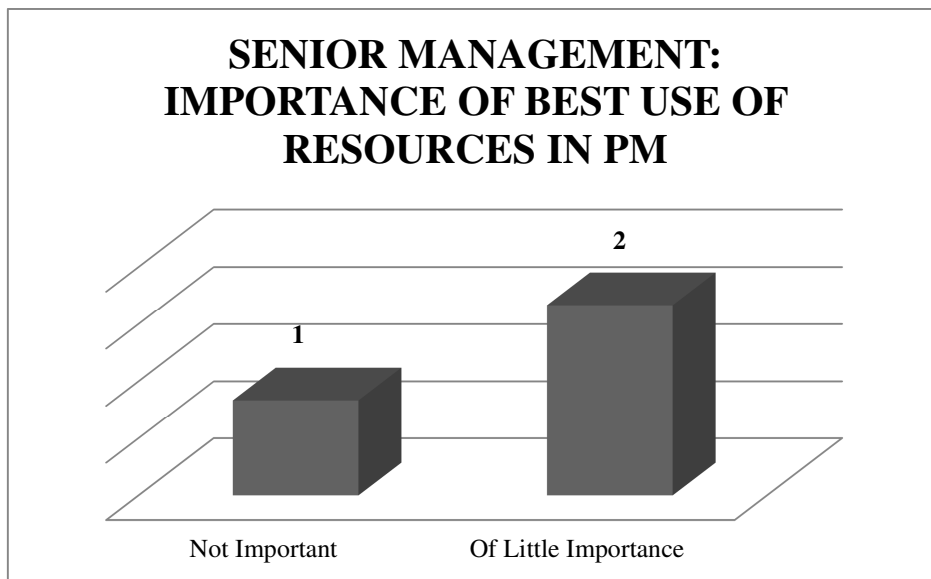


Figure 29: Senior Management Ratings (Importance of Best use of resources in PM)

5.2.2.3 Index of Productivity

Figure 30 represents how respondents answered question 5. This refers to having metrics to determine the ratio of productivity achieved over time. Another 5 respondents felt that it was not important at all, as they were only concerned with “project progress, not

productivity”. Another respondent claimed, “No we do not have a measure at all. All we do is monitor the activity on the dashboard. And the dashboard is purely a compliance issue”. Another respondent claimed that the work their PMO did is completed “off their heads”.

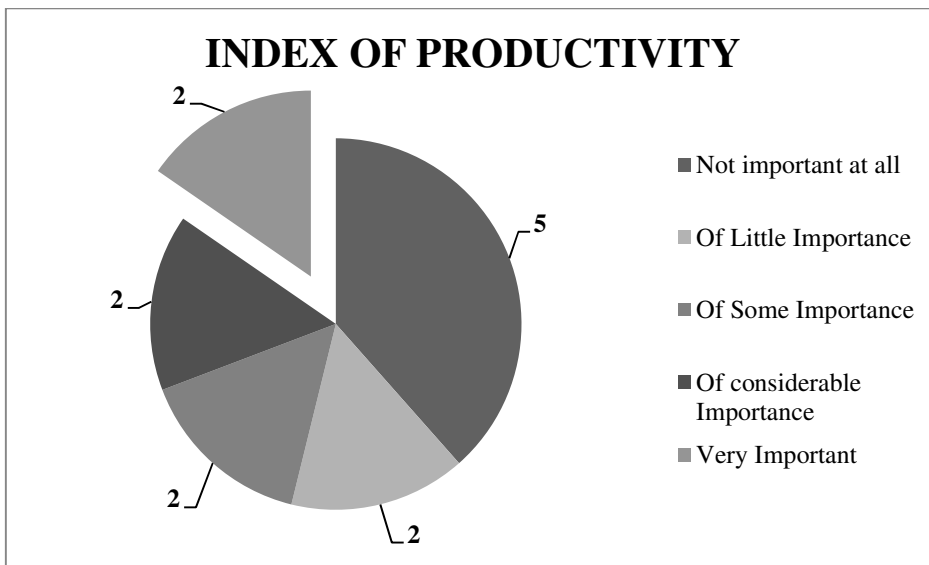


Figure 30: Importance of the Index of Productivity

Some respondents felt that while it may be of some importance, any focus on the index of productivity was not the responsibility of their PMO. Their focus was primarily on monitoring the project deliverables as they had been captured on the dashboard (system) and ensuring they were completed on time.

However, some respondents felt this was of considerable importance in terms of the indicators that the dashboard presents as these are considered by the Ministers and the Premier. Another respondent noted that while it was completed by the dashboard, “it is not fairly accurate”. Some respondents considered this very important but claimed that in practice “we are still getting there”.

There were diverse ratings for senior management who felt that having an index of productivity was very important, but other senior managers felt it was not that important, see Figure 31.

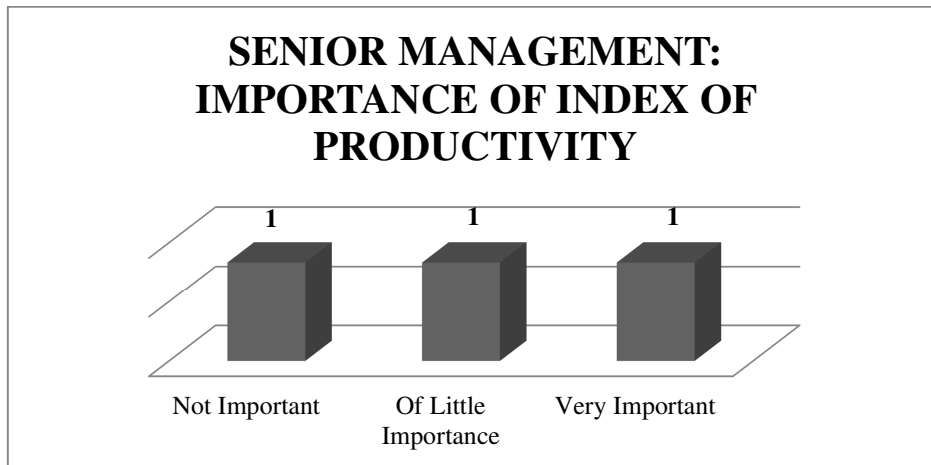


Figure 31: Senior Management Ratings (Importance of the Index of Productivity)

5.2.2.4 Bureaucracy

Figure 32 represents how respondents answered question 6. This refers to the level of project management bureaucracy practiced in the organisation. A large percentage of respondents felt it was of high importance and this was not surprising for a public sector organisation. However, completing the project management paperwork (project templates) was felt to be an unnecessary add-on task that rendered the PMOs as unpopular. All templates were manually approved by signature on hard copy forms. All documents that circulate between recipients had a route form and a memo attached to ensure surety that the form had been received. A PMO member responded that “it is more than just bureaucracy and filling in the rights forms, it is the way of doing it and the way to ensuring that benefits are measurable and reported on at the end of the day”.

There were also concerns that project managers in the public sector were actually more “project administrators” as they primarily monitor project delivery and ensure the correct templates are completed, the system is updated but they do not perform any costing exercises other than monitoring of expenditure.

According to most respondents the role of the PMO member was “dumped’ on them and they had to update the dashboard and ensure templates were completed, “and we did but deep in my heart I felt it was just a compliance issue”. Another respondent noted that while

the departments were complying they did not understand what the organisation was actually trying to achieve.

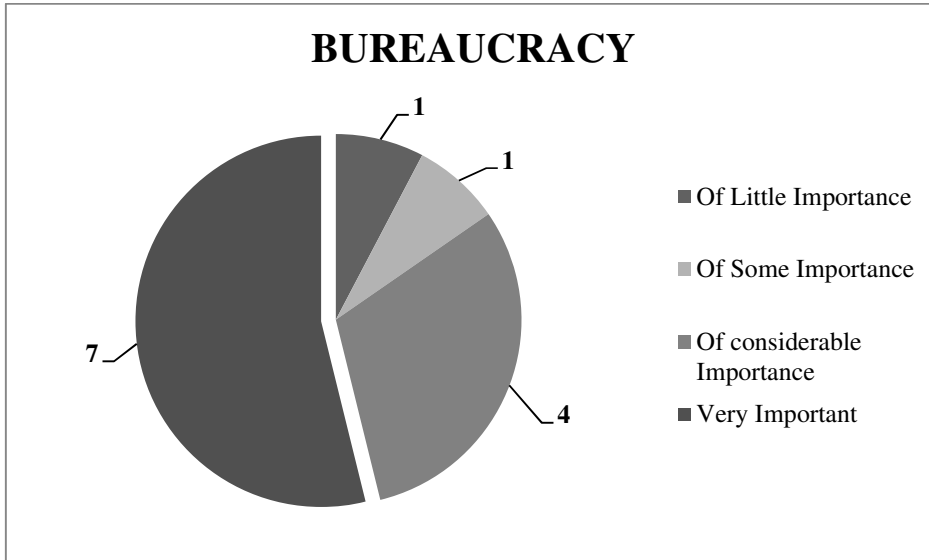


Figure 32: Importance of Bureaucracy

There is a definite sense of authority present that determines the role of these PMOs. For most of them it is a matter of compliance for a job that has to be done by someone and they have been tasked to complete it, in most cases without having any say in the matter.

Figure 33 below shows that senior management largely felt that the practice of bureaucracy in the public sector was important for their PMOs.

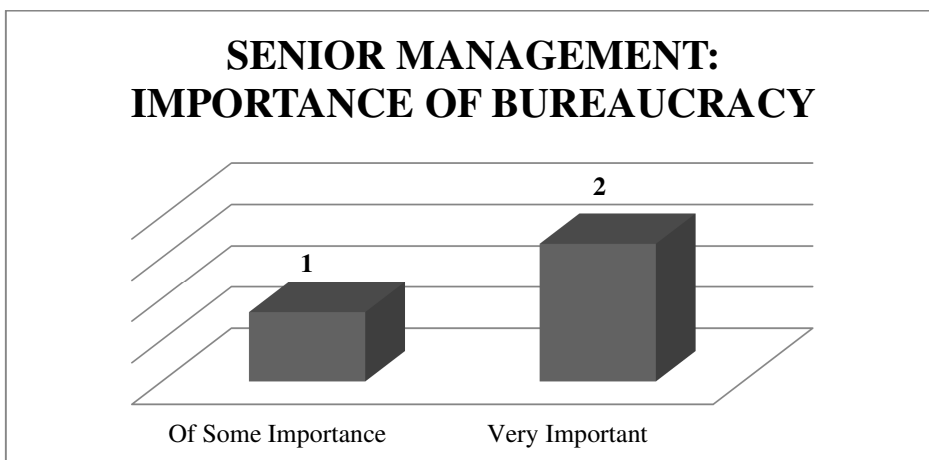


Figure 33: Senior Management Ratings (Importance of the Index of Productivity)

5.2.2.5 Internal Competition

Figure 34 represents how respondents answered question 7. This refers to the level of internal competition experienced in the organisation. There appeared to be an uncertainty present on whether competition was of any relevance for the public sector PMOs. This may be why most respondents felt safer to rate it as being of some importance.

Most PMO members appeared to be oblivious of any internal competition. They generally reported that everyone was focussed on ensuring that project tasks were completed, but there were no real measures to motivate improvement efforts. One PMO reported that some business units were territorial in that they were “always trying to avoid the other from treading on their turf”. This could potentially be an example of unhealthy competition experienced within the organisation.

There were no clear linkages between PMOs with departments or projects, and vice versa. This visibility, if present, may have enabled an increase in competition that may in turn directly or indirectly lead to future improvements.

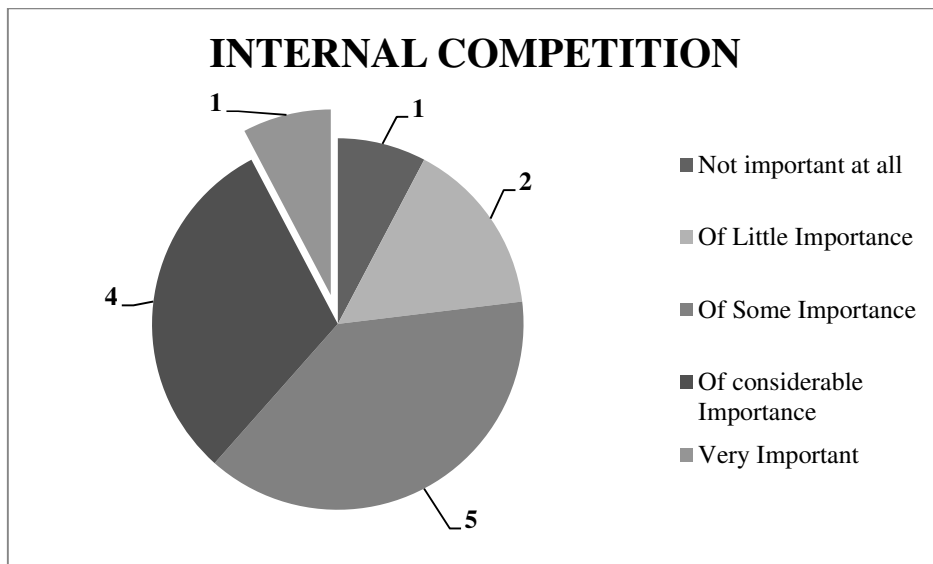


Figure 34: Importance of Internal Competition

Internal politics was noted where budget programme managers compete for the same budgets and it was noted that it comes down to who was able to “eloquently motivate for a budget”.

Interestingly, despite not being evident in their PMOs it was noted that most of senior management felt that internal competition was of considerable importance, see Figure 35.

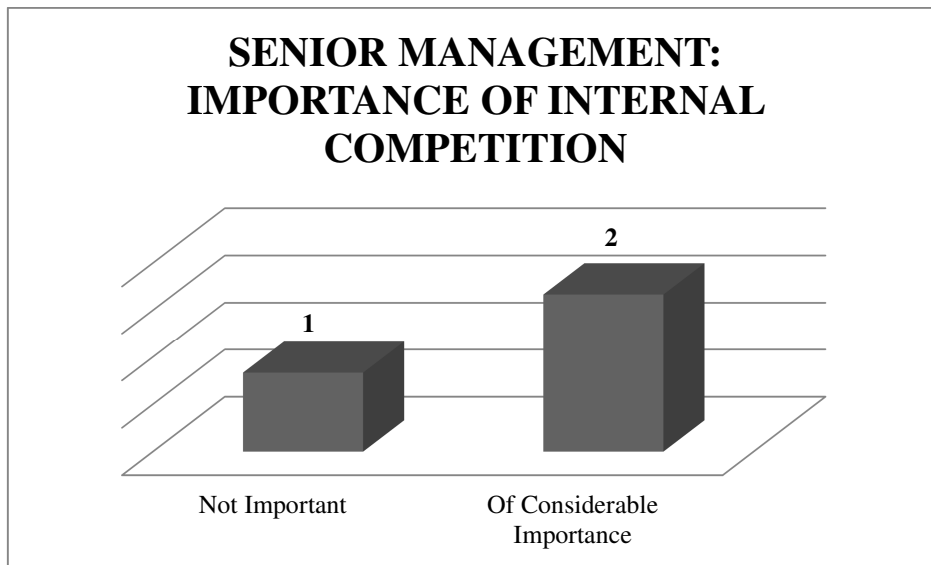


Figure 35: Senior Management Ratings (Importance of Internal Competition)

5.2.2.6 Organisational Structure to Support Management

Figure 36 represents how respondents answered question 8. This refers to the importance of the organisational structure to support project management. Most respondents felt that it was very important but had trouble articulating why. The structure of the PMO was found to be inconsistent across the organisation, and it constituted various staff levels and various PMO positioning. There is no evidence as to why some departments PMOs were strategically placed, while others were run by administrative levels.

One respondent claimed that the DPO was merely just a name assigned to them by the PPO, and that at the departments they “do not have an actual office, it is just 1 person assigned the additional task of monitoring the few projects on the dashboard, in addition to

your actual job role”. “I mean nobody talks to me or refers to me as the DPO, in the department I am just referred to as the dashboard guy”.

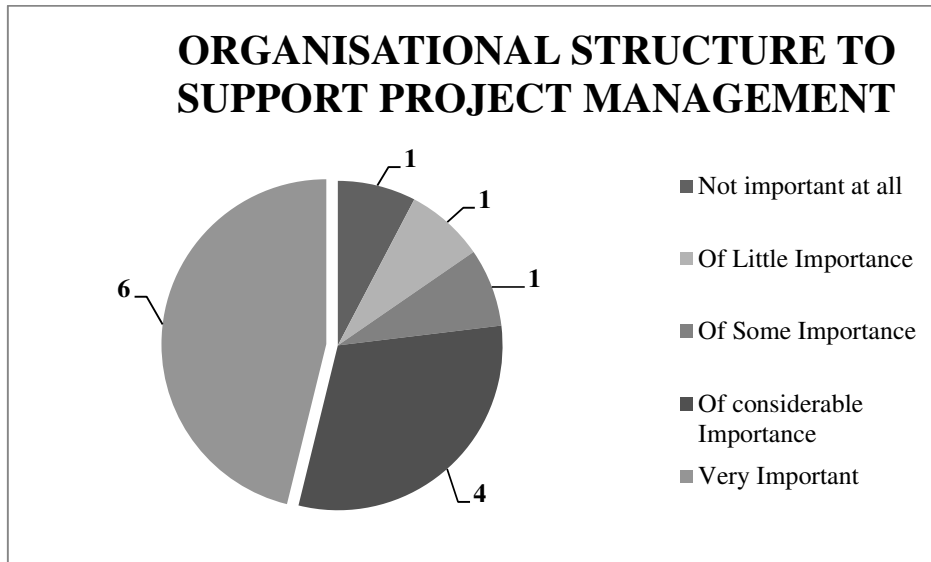


Figure 36: Importance of the Organisational Structure

There was no rational basis for the number of resources assigned to the PMOs in terms of any number of projects, complexity of projects, size of projects or the total project budget assigned. There was a general lack of passion evident for the PMO job role and in most cases, the resources claim to have had no choice in the matter. One respondent noted that “processes and systems are just dumped on us”. Most resources were not interviewed to perform a PMO function and most were not employed as Project Managers either. It was found that 69% of departmental project offices were not employed to perform the function of PMO or project management.

It appears that this structure is supported by a senior manager who found it to be of no importance at all, see Figure 37. However, some of senior management also found this factor to be very important (1) or of considerable importance (1).

The PMOs had been created and the members were elected without choice, they felt it was “by accident! I was not happy!” Despite this, one respondent claims that the creation of PMO was perhaps the first step in encouraging a united project approach.

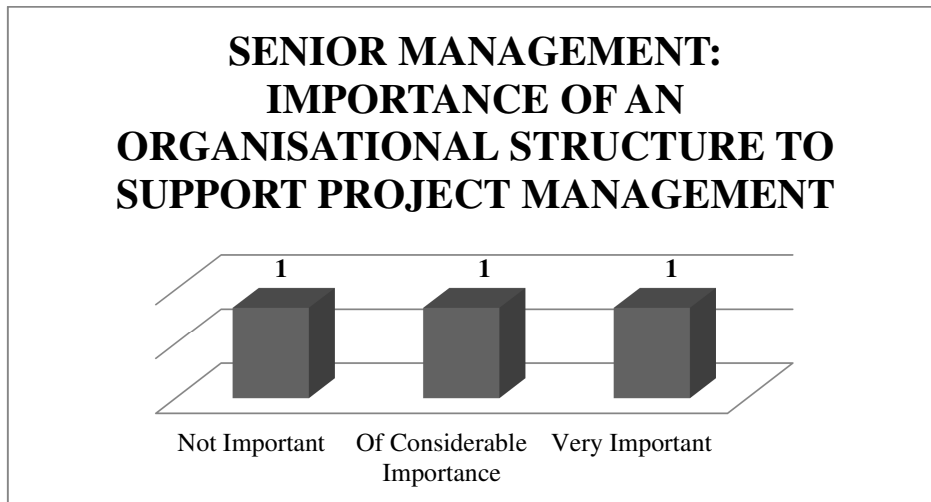


Figure 37: Senior Management Ratings (Importance of Internal Competition)

5.2.3 Planning to reach goals

5.2.3.1 Importance of the Strategic Dimension of “Good” Projects

Figure 38 represents how respondents answered question 9. This refers to the importance of the strategic dimension of projects.

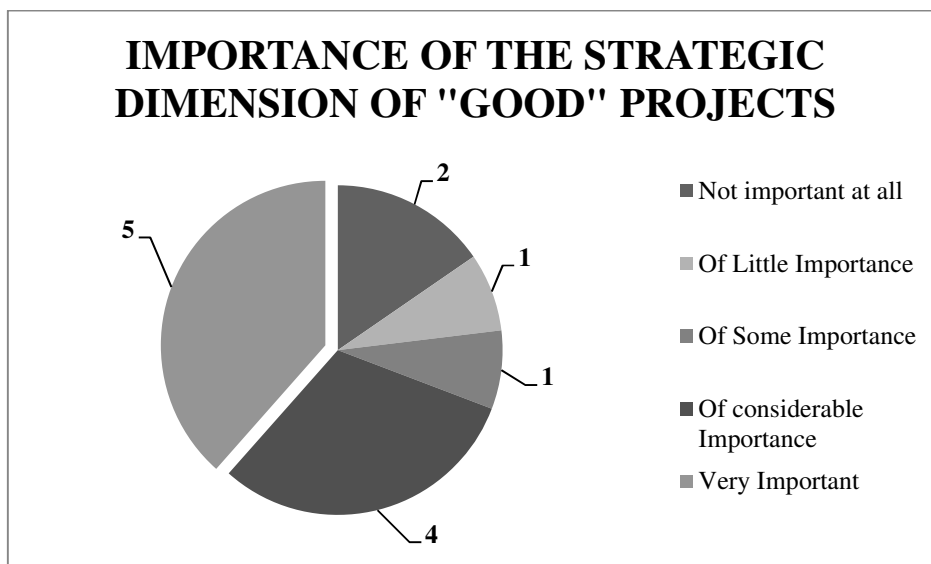


Figure 38: Ratings (Importance of strategic dimension)

Most respondents appeared uncertain when questioned on their selection process of strategic projects. They were mostly only aware of the system (dashboard) projects that

they monitor and these were selected from the Annual Performance Plan (APP) and the corresponding strategic objectives. It was noted that most departments undertook many other projects that were not reflected on the system because as one respondent mentioned “politicians up there only want to know how the citizen and society benefits”.

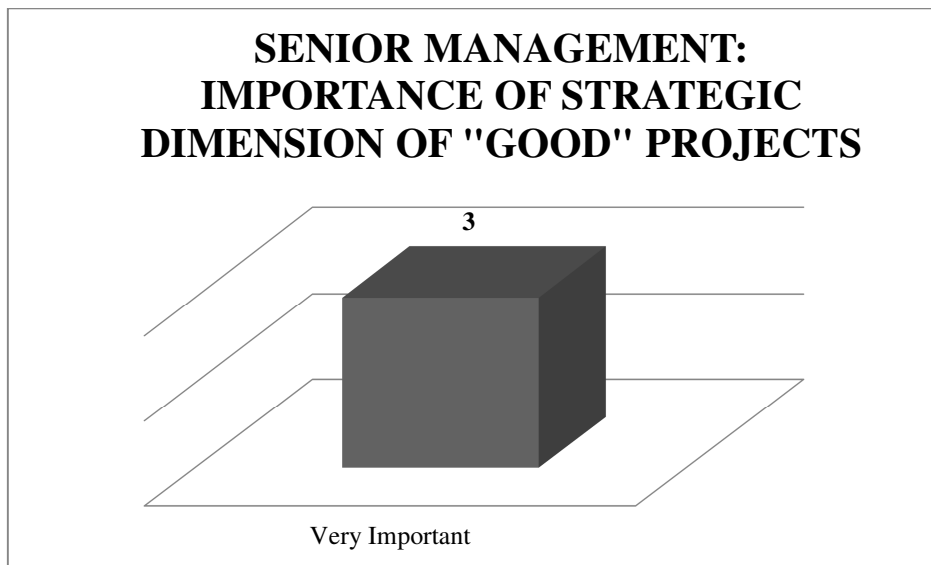


Figure 39: Senior Management Ratings (Importance of the strategic dimension)

However, senior management reached consensus that the strategic dimension of “good” projects was very important for the PMO, see Figure 39. This was not surprising for management to be aware of the importance of aligning projects to the organisations strategy.

Later it became evident that among the PMO members there was a general misunderstanding on the APPs and the new strategic objectives. Initially all APP related projects were loaded on the system, but then there was a shift noted toward new strategic objectives. The change had been initiated to align with the National Government initiatives that prompted the formalisation of strategic initiatives as PSOs. This resulted in an uncertainty on understanding and registering APP projects that appeared forgotten for the moment, despite it being the core focus for PMOs previously. The selection process was referred to as a “very murky area”.

5.2.3.2 Equilibrium in Projects of a Portfolio

Figure 40 represents how respondents answered question 10 and carries on from question 9. This refers to the level of portfolio management practiced in the organisation in terms of risk, benefits and value.

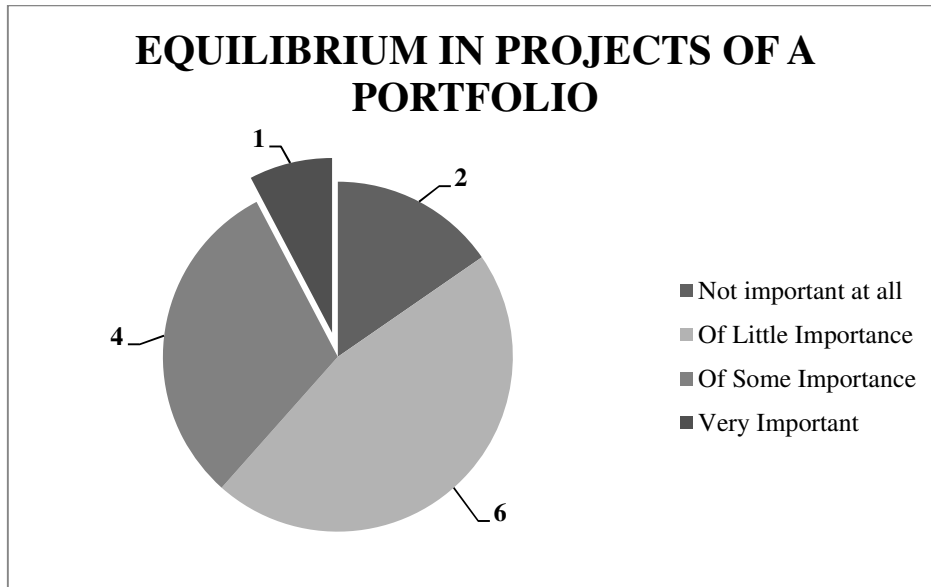


Figure 40: Ratings (Importance of Project Portfolio Management)

This question was poorly answered. The respondents that felt that it was very important could not motivate why. The rest felt that it was definitely not a current practice in the organisation and it was of little importance, but some felt that it had to be of some importance. One respondent noted, “The projects are all over the place, there is no coordinated view, so you can’t see short term, long term, value, there is no way of telling”.

The figure below shows that most of the senior management found the importance of an equilibrium in projects of a portfolio to be of little importance.

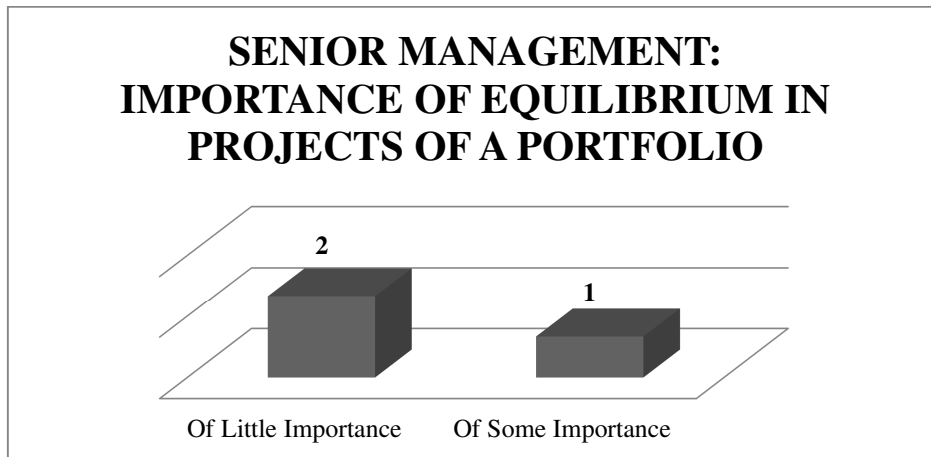


Figure 41: Senior Management Ratings (Importance of Project Portfolio Management)

5.2.3.3 Prediction of Delivery Capabilities

Figure 42 represents how respondents answered question 11. This refers to the ability of accurate predictions made by the PMO on the delivery capabilities and capacity planning to reach business goals.

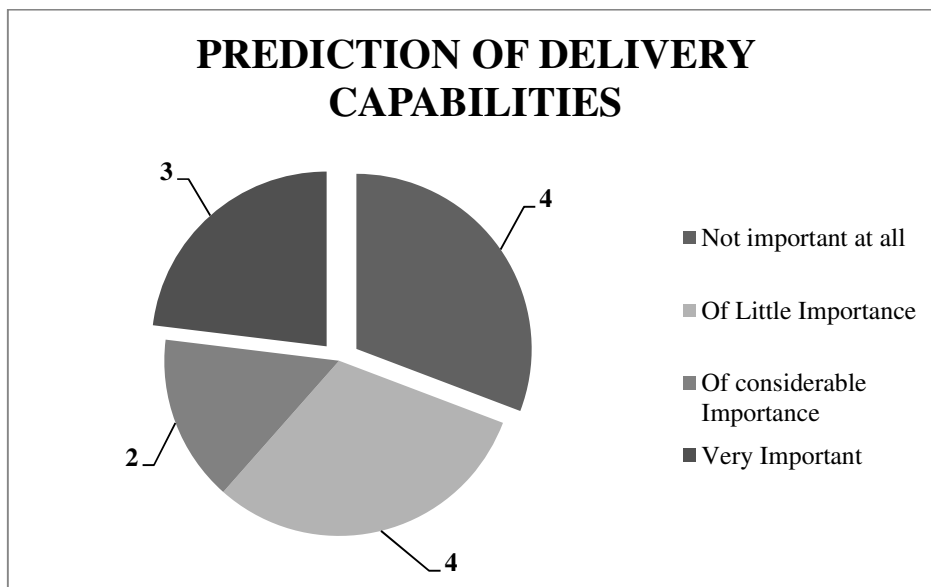


Figure 42: Importance of prediction capabilities

The PMOs were generally not involved with providing any direction on this level, even though some felt that it was important, they had no authority to intervene, and in many cases there was no interest as they maintain that the “DPO is merely a compliance issue”.

This is contradictory to senior management who rated this factor as very important for their PMOs.

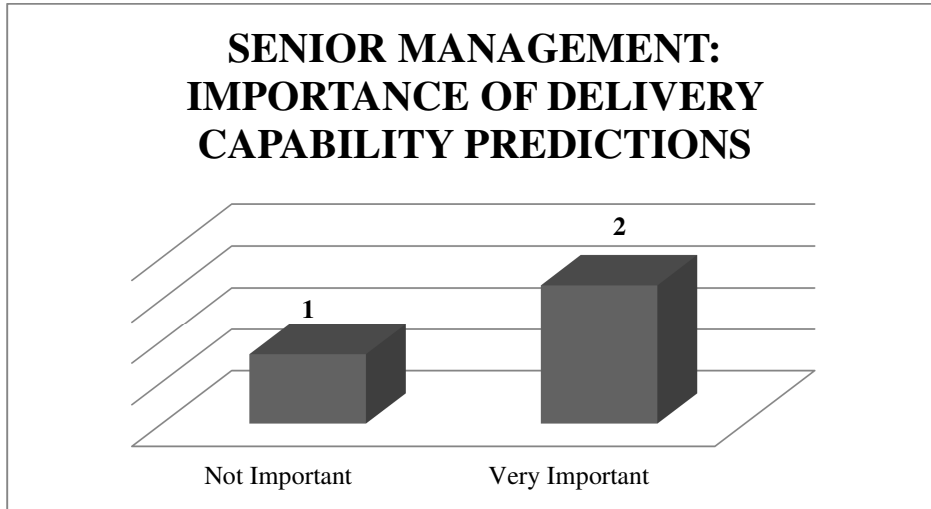


Figure 43: Senior Management Ratings (Importance of prediction capabilities)

5.2.3.4 Alignment of Enterprise & Employee Objectives

Figure 44 represents how respondents answered question 12. This refers to the alignment of employee objectives with the enterprise objectives and the PMOs link to the appraisal process.

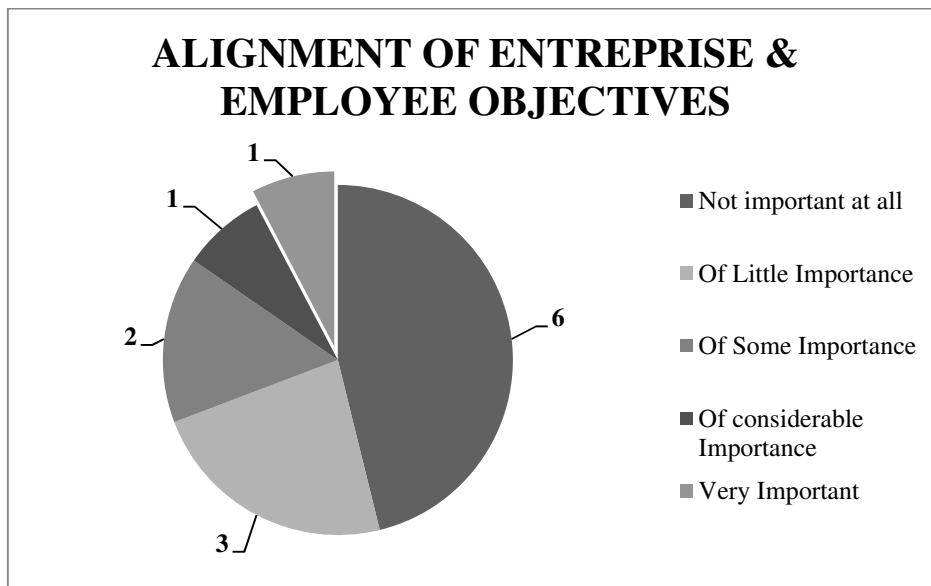


Figure 44: Importance of Enterprise Employee Objectives

In some cases, the employee KPIs were linked to the outcomes and success of projects, but generally the PMO members were not linked to any of these. This makes sense in the way these PMOs had been set up as they were not linked to any of the operational projects. Since PMO members provided the PMO service as an add-on task to their actual responsibility areas, there was no focus found on the appraisal alliance.

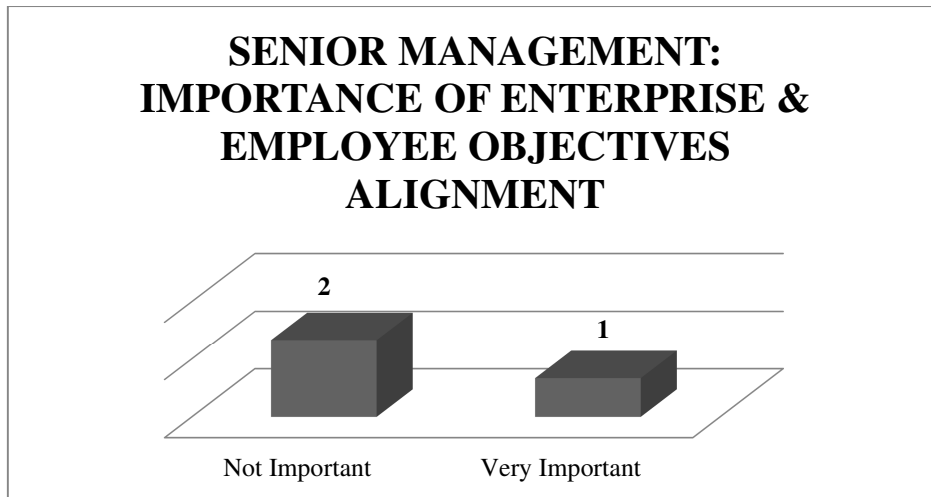


Figure 45: Senior Management Ratings (Importance of Enterprise Employee Objectives)

Interestingly, the majority of senior management did not feel the alignment of enterprise objectives with the employee objects were important, see Figure 45.

The system (dashboard) projects were monitored by PMO members on various levels, including clerks, who were responsible for printing the project reports. These reports were eventually presented to the HODs and the Premier. The PMO members therefore find themselves in an unfavourable position, as they need to ensure compliance but at the same time it is in their best interest not to ruffle any feathers of their colleagues in view of their future career prospects. In cases where project managers did not comply, “I have not heard of anybody being down-rated on their performance appraisal because of non-project management compliance”.

“We are simply managing the projects [inputs] not the people”. The PMOs were not directly linked to any appraisal process of the organisation, as they were not an official structure on the organogram. At the time of research there were debates taking place around the inclusion of the PMOs as an official structure in the organisation, but these were not implemented because of lack of departmental funding to support the structure.

5.2.4 PM Efficiency

5.2.4.1 Efficiency in Relations

Figure 46 represents how respondents answered question 13. This refers to the efficiency in relations between the PMO and the rest of the business units, which also includes negotiation on projects. When looking at the establishment of the PMOs at these departments, in most cases it was found that the PMO members had little or no authority and did not have the opportunity nor possess the expertise to negotiate on projects and were therefore not taken seriously by the business. Even PMO members at the fully-fledged PMOs reported not having any authority to negotiate on projects, and the PMO function was largely for administrative support.

Furthermore, PMO members were generally unfavourably considered in the organisation as in most cases they were seen as a nag for documentation and system updates to be completed for compliance purposes. The general feel was that there were better things to do such as the “actual work” required for the success of the project, as opposed to completing the administrative issues.

The low-level PMO members were generally tasked to follow up and ensure that project managers submit their project documentation and update the system to ensure compliance. The more advanced PMO members were tasked to assist with the completion of these documents to ensure compliance. One department claimed that since government was statutory there was no requirement for the PMO to be involved with project negotiation, as it does not happen.

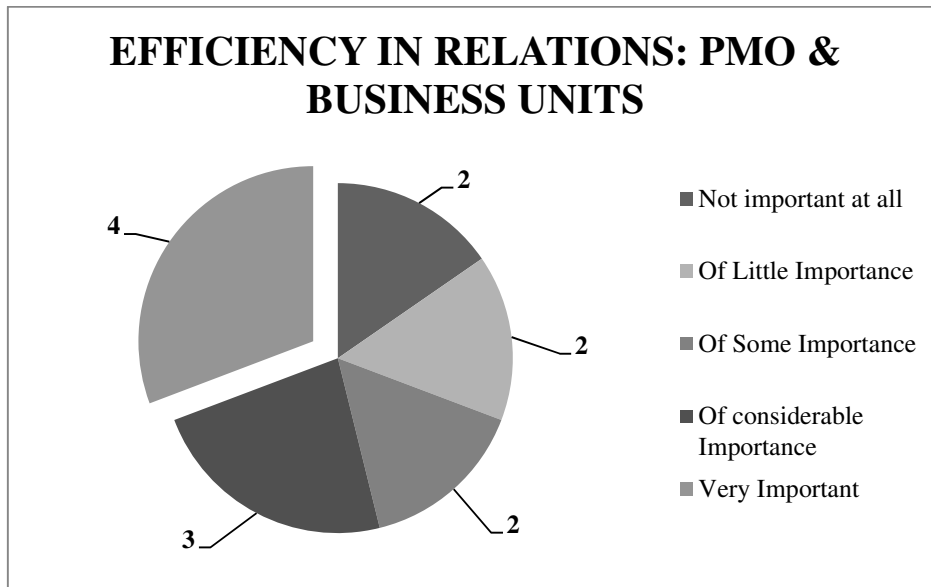


Figure 46: Importance of PMO & Business Relations

For senior management the importance of relations between PMO and business units was very important, despite it being limited in practice.

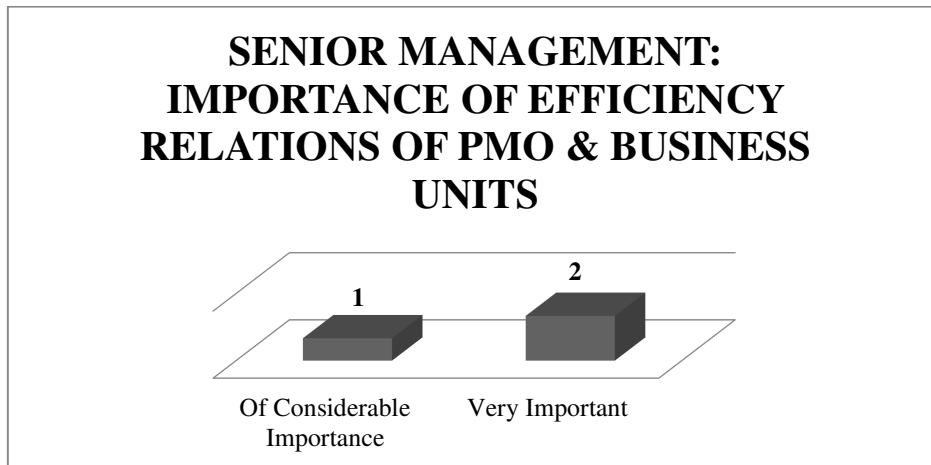


Figure 47: Senior Management Ratings (Importance of PMO & Business Relation)

5.2.4.2 Impact on Project Success

Figure 48 represents how respondents answered question 14. This refers to the direct impact of the PMO on the project successes achieved within the organisation. This question carries on from question 13 that investigated the PMOs influence on projects.

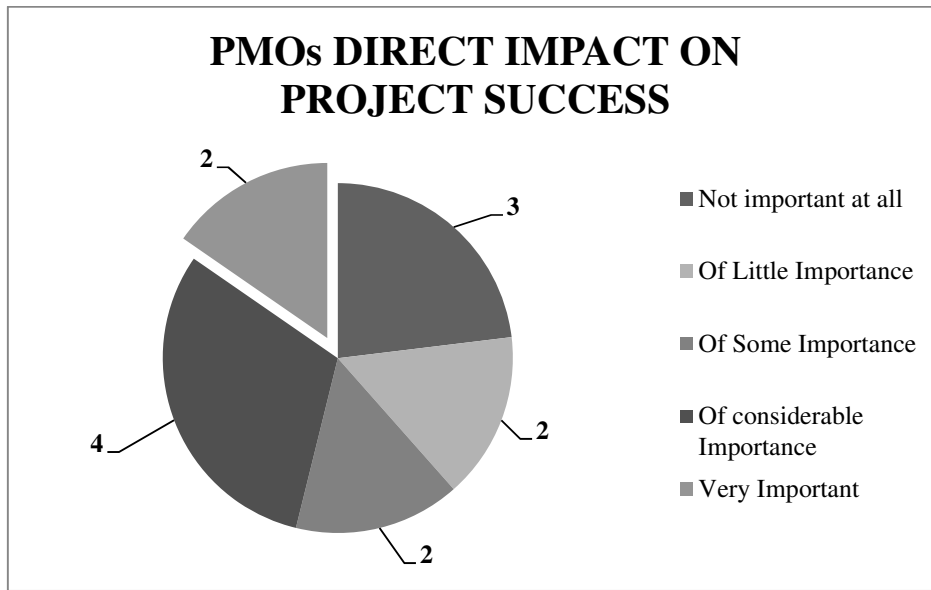


Figure 48: Importance of PMOs impact on project success

For most of these PMOs, a successful project referred to a project that had all documentation completed and deliverables were updated accordingly on the system. Some PMOs even completed the updates on behalf of the project managers.

According to senior management, the direct impact of PMOs on project success is of considerable importance despite PMO members feeling they were restricted from having any real impact, see Figure 49.

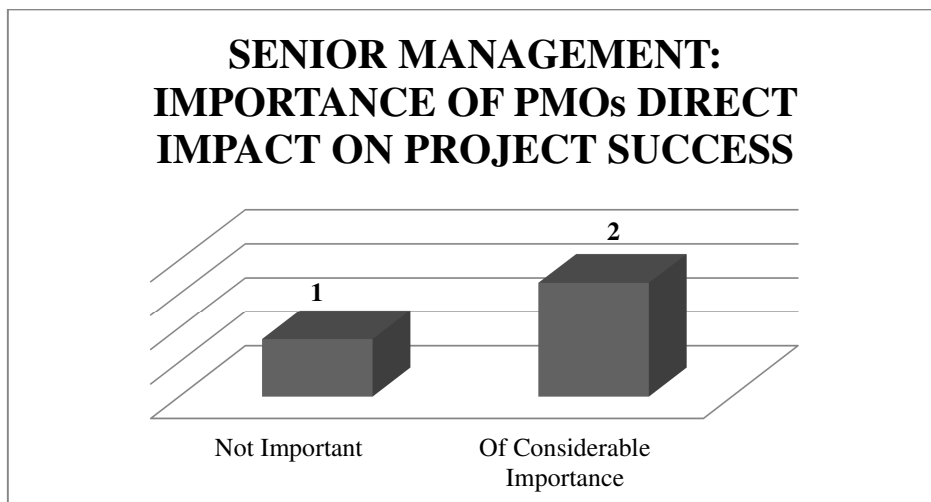


Figure 49: Senior Management Ratings (Importance of PMOs impact on project success)

At the fully-fledged PMOs, there was an attempt to be more involved to ensure success as well as strategic alignment. PMOs generally reported that their hands were “tied” because having any impact on success would have required a change in the way that work was completed and this would not be welcomed in the organisation because “if it’s not broke, why fix it”. There was the notion that projects were working fine and there was no real requirement for any PMO involved.

A PMO that functioned at HOD level reported having been able to have an impact on project success as they were directly consulted on certain projects and they achieved more respect than the other PMOs.

5.2.5 Summary

The advantage of the current organisational context is that the PMO structure for the public sector has already been initiated. This step emphasises the importance of the PMO has already been established in the organisation.

The current resource allocation was not skilled enough to successfully operate as PMO members and in most cases it was not their choice to begin with. They were generally unable to lead & advise Project Managers, as they did not possess the competency to provide this service. They were not actively involved in projects, but merely ensured that the system was updated and all compliance checks were met.

It was found that benefits planning, and particularly in the business case was an indicator that required more attention in the public sector. It should be noted that government works with zero-based budgeting and is not profit driven. The contribution made by the PMO on the order in which productivity was achieved was unclear. Respondents generally appeared uncertain on their contributions, and felt that they had possessed no authority despite their interactions with the project managers. The number of PMOs that were equipped to make meaningful contributions to productivity was very limited within the organisation.

In the public sector organisation it was found that profit, benefits planning and productivity, were all relative contributions made to the efficiency of PMO operations.

5.3 Effectiveness Indicators

The next section evaluates the factors that are relative to PMO effectiveness factors. Each factor was analysed to determine the current focus at public sector PMOs, as well as the stance taken by senior management on this.

5.3.1 Growth of the Organisation

5.3.1.1 Results

Figure 50 represents how respondents answered question 15. This refers to the results achieved through projects. In the private sector, this would relate to sales growth. However, the public sector was not concerned with sales growth but rather the efficient utilisation of approved budgets and project benefits realisation. The public sector grows by providing effective services to communities and citizens, ultimately value-add to society, and not by sales growth.

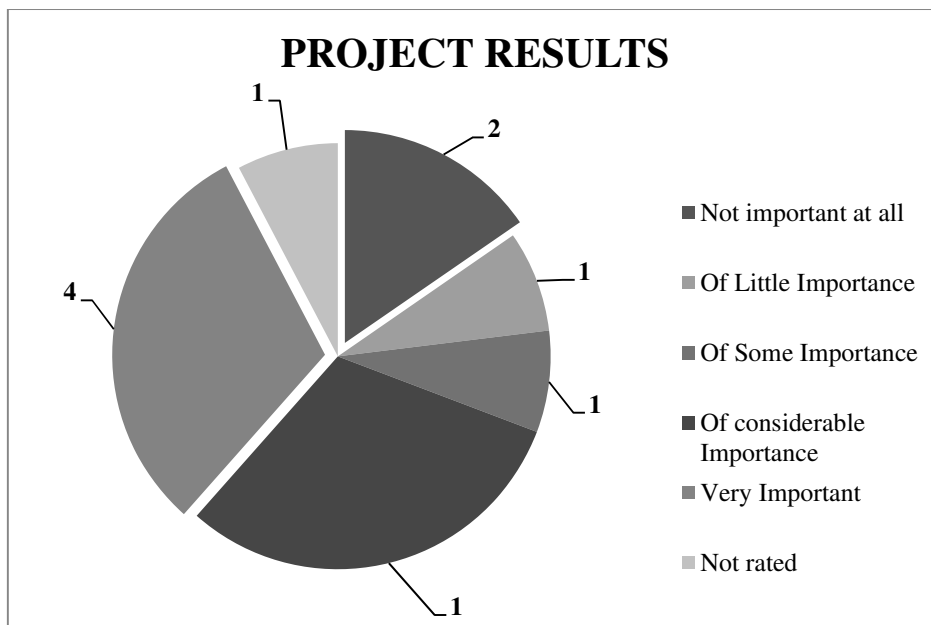


Figure 50: Ratings (Importance of PMO results)

While it was rated that measuring results achieved and benefits realised was important for the organisation, it was not a practice. This makes sense since benefits planning was not deemed an important factor for PMOs. On the other hand, the financial PMO claimed that this was very important for them, as they were required to report on budgets and effective

expenditure. In government, there was no focus on cost saving initiatives but rather an added pressure to spend budgets on time, or else run the risk of losing that budget in the next financial year. The organisation would often see a spike in spending around the end of financial year (February - March) as there was pressure to use all the allocated budget or risk having a reduced budget in the coming year.

Senior management rated the factor of results to be either very important or of considerable importance, see Figure 51. However, a senior manager chose not to rate “results from projects” as they felt that this indicator related to the private sector and was not applicable to the public sector.

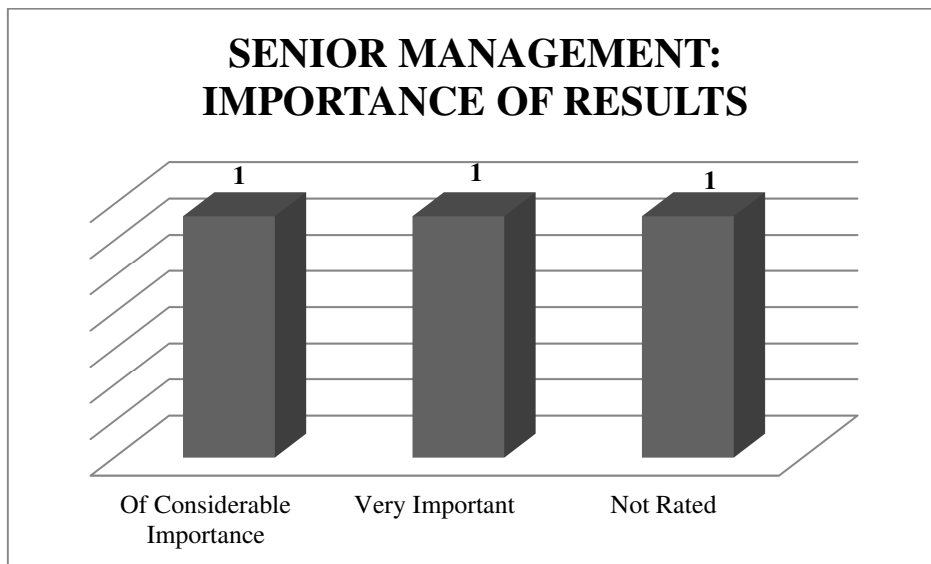


Figure 51: Senior Management Ratings (Importance of results)

One PMO at strategic level claimed that by enforcing a results-based project management approach within their department they had enabled project managers to think critically on how they were going to achieve the project outcomes. Previously, it was reported that these projects would just continue for many years without any critical review. Another fully-fledged PMO stressed the importance of completing documentation that included the lessons learned reports, objectives met and benefits realised. The IT PMO was in the process of determining the value-add of IT projects to departments.

5.3.1.2 Qualitative Element from Business Case

Figure 52 represents how respondents answered question 16. This refers to the qualitative element from the business case, and includes the business positioning. This investigates the qualitative impact that the PMO had on business.

Most respondents were unaware of their impact on the department as a business, if any. Business cases also appeared to be a foreign concept. One PMO felt that they may have positively influenced their position in the organisation as they were handed “specific political projects” due to their previous successes. Most respondents felt it was very important but was clearly lacking in practice.

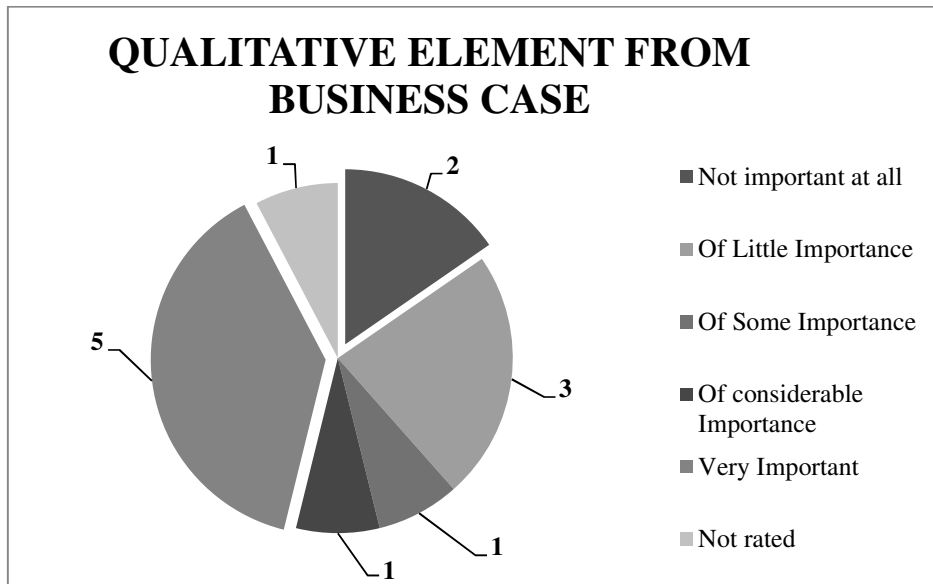


Figure 52: Importance of qualitative Business Case

The PMOs at senior level were more concerned with the outcomes of projects and what that meant for their departments. One senior respondent was particularly concerned with the implication on future business operations, as the impact of the projects directly affected their export markets. The social development department felt that it would be impossible to address every need of society making it difficult to improve the business position, and this was not present on the system (dashboard). The fully-fledged PMO completed full business cases that emphasised the need, the benefits and the value to business. Overall,

senior management largely felt that the qualitative element was very important, see Figure 52.

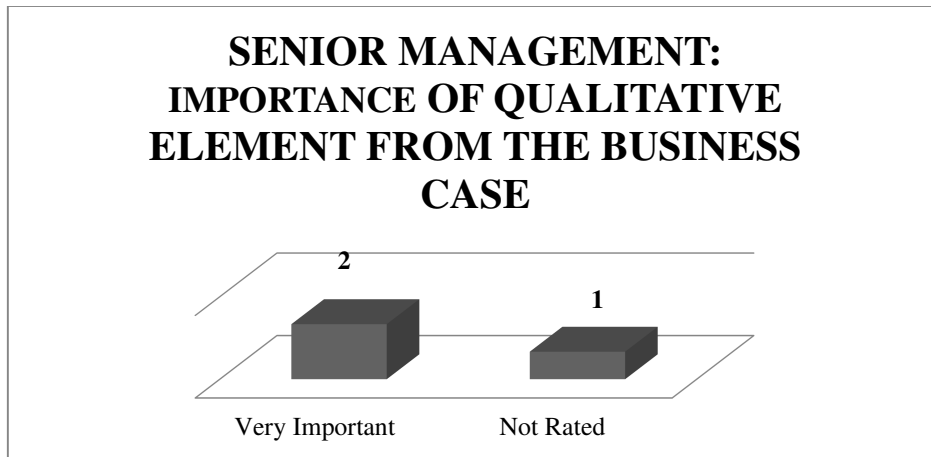


Figure 53: Senior Management Ratings (Importance of qualitative PMOs)

5.3.1.3 Project Effectiveness

Figure 54 represents how respondents answered question 17. This refers to the project effectiveness achieved, and that the project benefits were realised.

Not much is offered from respondents on the contribution of effectiveness, especially in terms of benefits realisation. The fully-fledged PMOs were the only ones that claimed some involvement in the close out of projects, but no real benefits realisation management was ever completed. “We are all just going through the motions of having that box ticked; it is not contributing towards the project line at the end of the day”.

The senior management generally felt that achieving project effectiveness was very important, see Figure 55.

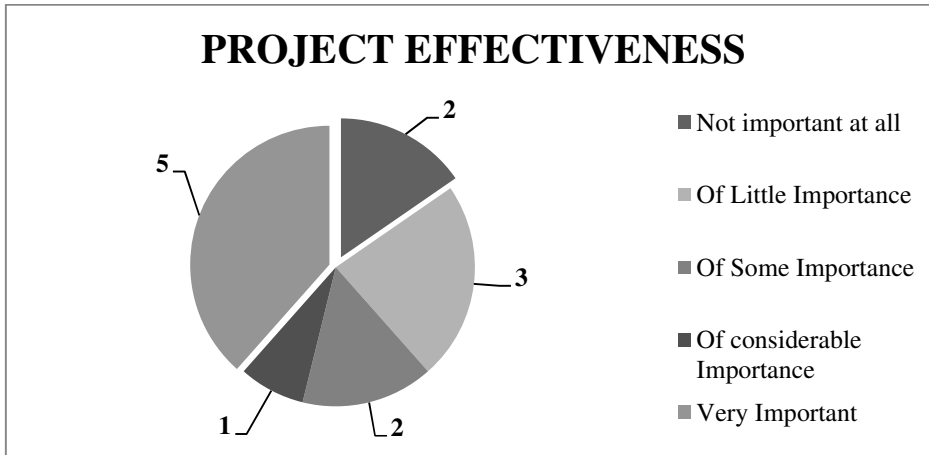


Figure 54: Importance of Project Effectiveness

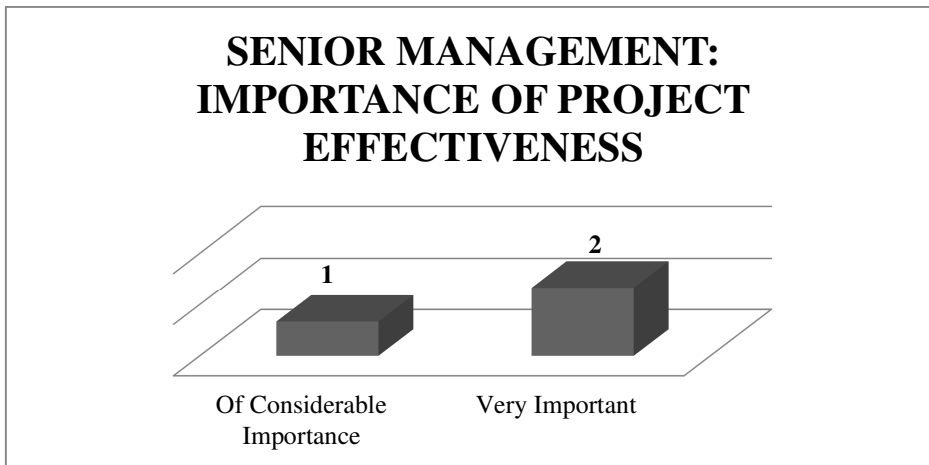


Figure 55: Senior Management Ratings (Importance of project effectiveness)

5.3.2 Flexibility, Adaption and Innovation in PM

5.3.2.1 Innovation, Creativity, Problem Resolution

Figure 56 represents how respondents answered question 18. This refers to the importance on innovation, flexibility and good conflict and problem resolution practiced by the PMO.

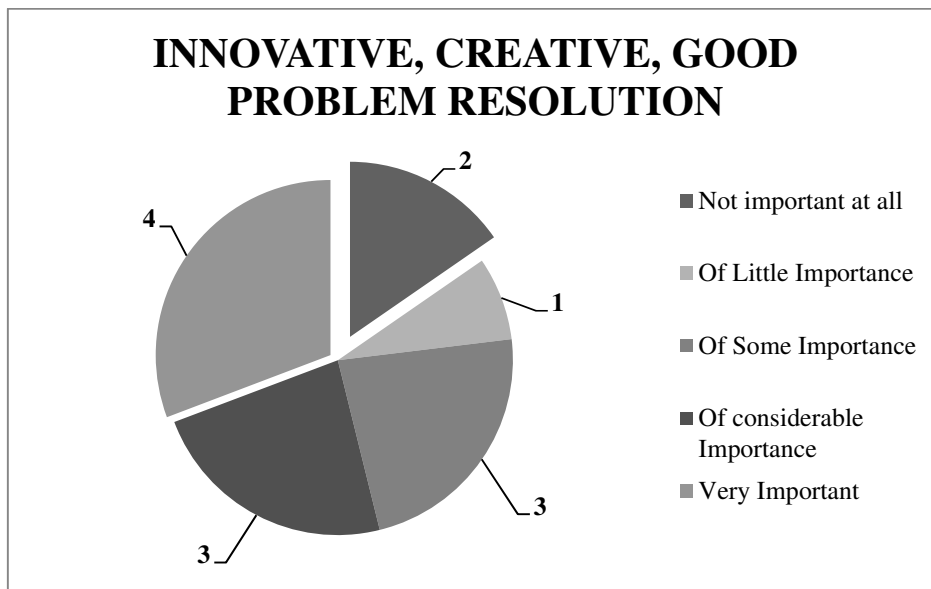


Figure 56: Importance of Innovation & Flexibility

The fully-fledged PMOs claim that they became involved “somewhere between the executives and the project managers” as they were the go-to team for information and project verification. Respondents were aware of the importance of having good conflict resolution skills and being able to work with people, for a successful PMO. However, in practice this is unlikely due to the limited authority and involvement of the PMO. From the Figure 57 below, it can be seen that senior management thoughts on this factor varied from just being of some importance to being very important.

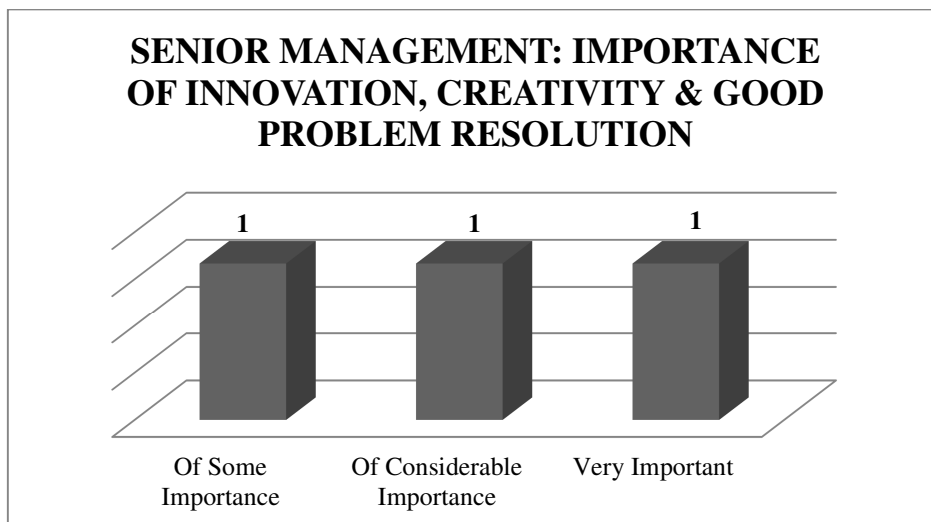


Figure 57: Senior Management Ratings (Importance of PMOs impact on project success)

5.3.2.2 Creativity Skills

Figure 58 represents how respondents answered question 19. This refers to hiring Project Managers with creative skills. The PMOs were not involved with the hiring of the personnel and they were generally not project management orientated to begin with, but still mostly felt that it was important.

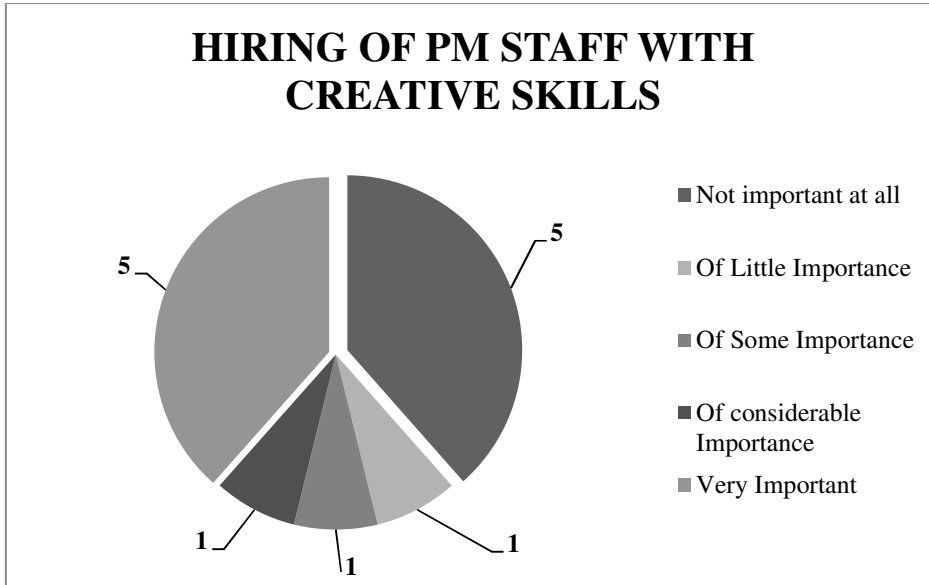


Figure 58: Importance of Creative Project Managers

One respondent claimed that the recruitment process was based on an inefficient scoring system, as it did not take into consideration issues such as attitudes. There were also budget constraints in the public sector that generally made it difficult to attract the required expert skills.

As this factor links strongly with the previous factor, it makes sense that senior management were consistent in their ratings, see Figure 59.

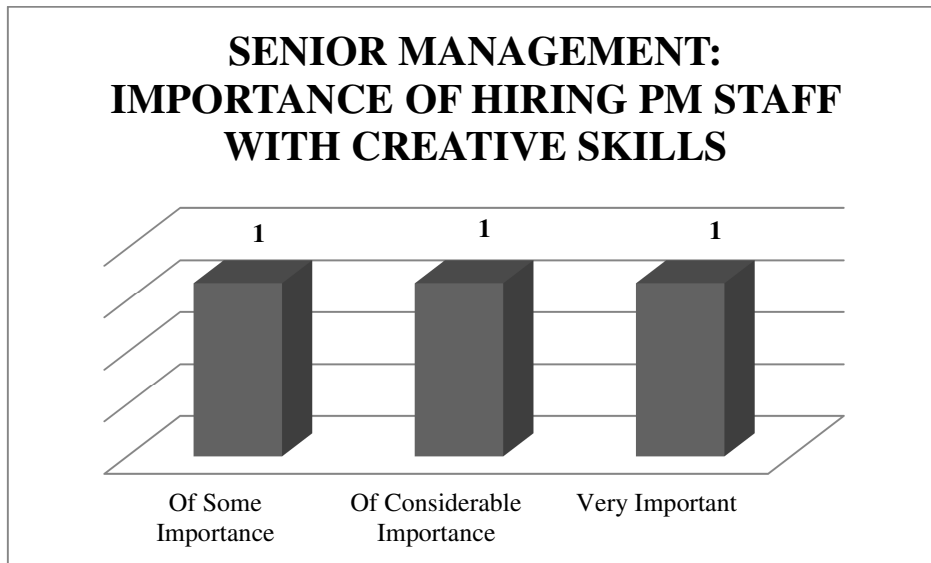


Figure 59: Senior Management Ratings (Importance of Creative Project Managers)

5.3.2.3 PM Methodology

Figure 60 represents how respondents answered question 20. This refers to the focus of PMO in taking initiatives to advance or comply with the Project Management Methodology.

Some PMOs had reported that while they allowed project managers some flexibility they still ensured that they were within compliance with the PPOs PM methodology. The flexibility involved included backdating documentation and reporting to managers for follow up on problem cases. There were not many initiatives taken by the PMOs as they mostly ensured compliance to the already approved methodology. These were often clouded by political pressures and the PMOs would find themselves in a position of having to “change gears” to accommodate unexpected changes.

Figure 61 shows that senior management differed on the importance of initiatives in project management methodology from being not important to that of considerable importance.

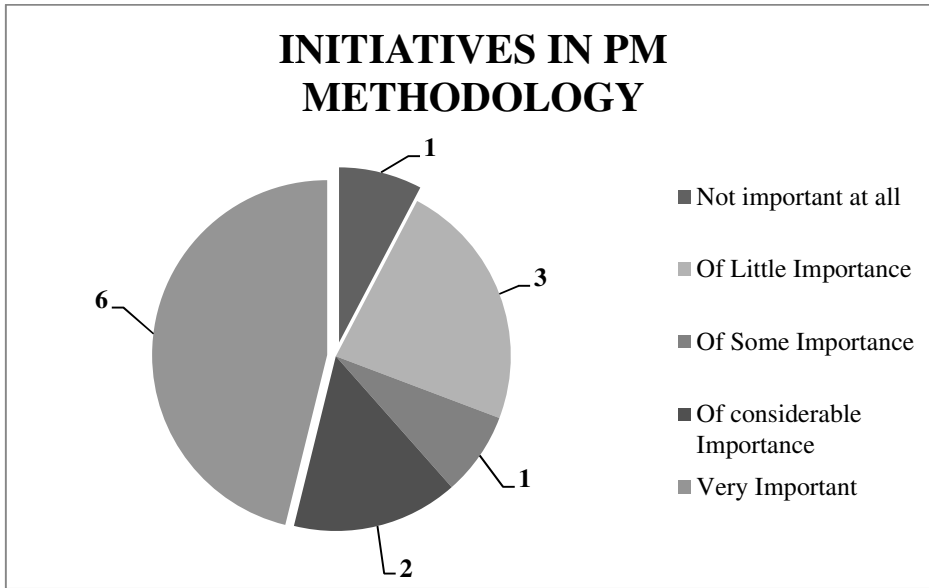


Figure 60: Percentage of Ratings (Importance of Project Management Initiatives)

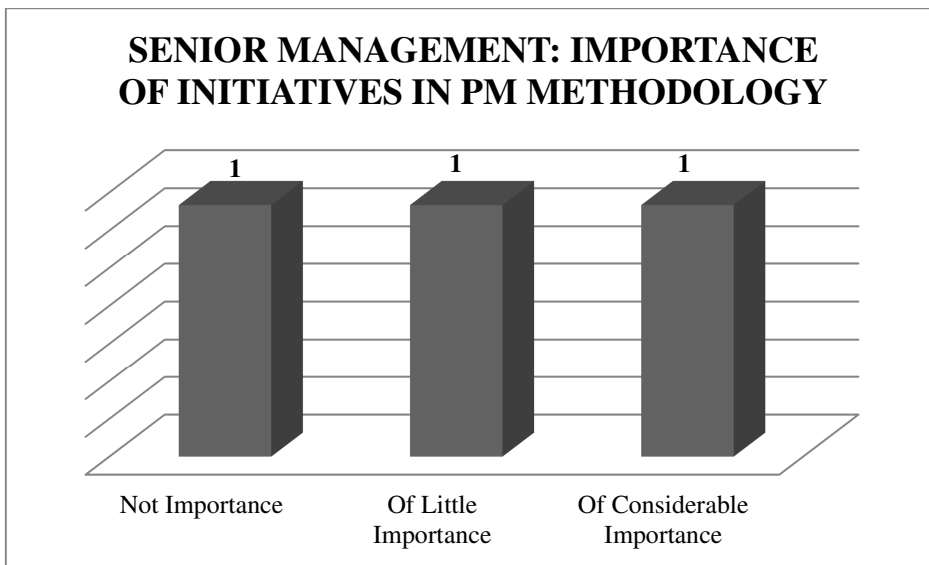


Figure 61: Senior Management Ratings (Importance of Project Management Initiatives)

5.3.2.4 Reporting

Figure 62 represents how respondents answered question 21. This refers to the PMOS ability to produce a variety of useful & accurate reports.

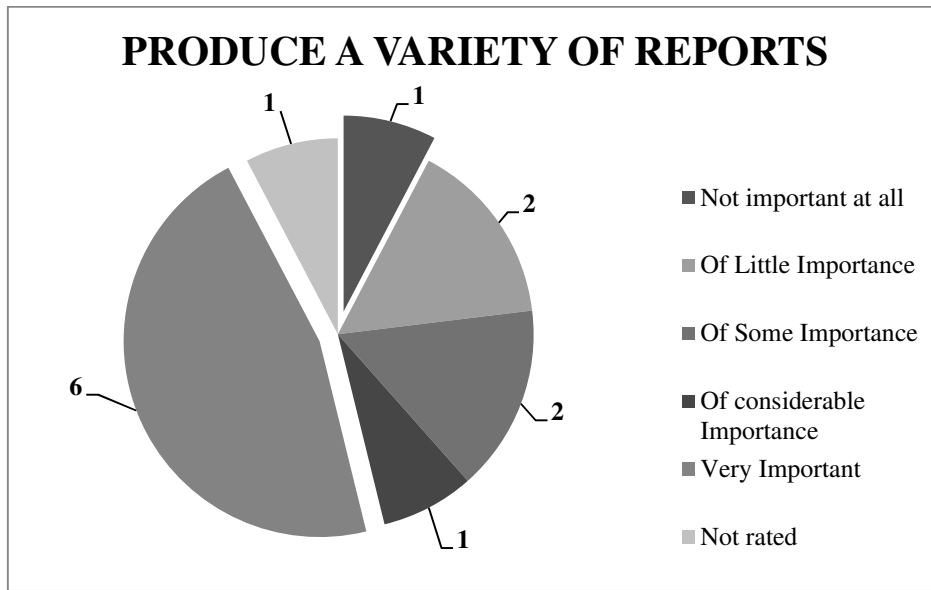


Figure 62: Percentage of Ratings (Importance of Project & Programme Reporting)

Most of the PMOs relied on the system to generate reports. These reports were presented to the heads of departments and the Premier biannually. The PMOs role was mostly concerned with the system (dashboard) reports and not the rest of the departmental projects. The more advanced PMOs were concerned with providing a variety of reports to business, depending on the business needs.

Figure 63 shows that senior management generally found it important for the PMO to produce a variety of reports, despite the PMOs not having the capacity to deliver on this. A senior manager chose not to rate this indicator as the reports produced was standard and generated from the system. They claimed there was no need for any customised or advanced reporting on their projects.

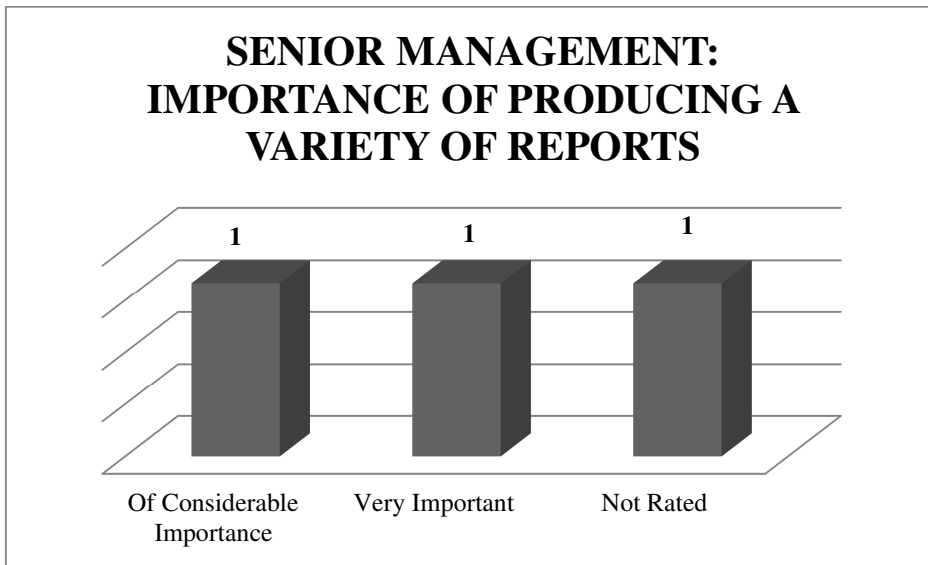


Figure 63: Senior Management Ratings (Importance of Project & Programme Reporting)

Some departments had a separate team working on departmental projects that were not strategically relative and they created and delivered their own version of reports in various formats. The advanced PMOs had their own independent project management systems running that produced a variety of reports based on their business needs. There was a distinct disjuncture found between what was reported on the system and the actual state of the projects in reality. There were some promises of a new system to address the reporting needs, but there was not much known about the system at the time of research.

5.3.2.5 External Consultants

Figure 64 represents how respondents answered question 22. This refers to the importance of hiring external consultants who know best practices in project management. Hiring of project management external consultants was not a common practice in the public sector. However, it was reported that an approach of this nature had been attempted 2 years prior to the study and despite having received positive feedback, most of the PMO members felt they did not need the expertise and advice from “outside” project managers who would not understand public sector dynamics well enough. Some felt that capacity should be built and skills developed from within the organisation. However, there were a few PMO members that felt they had benefitted significantly from this service as it had addressed project management maturity and had recommended this as a way forward.

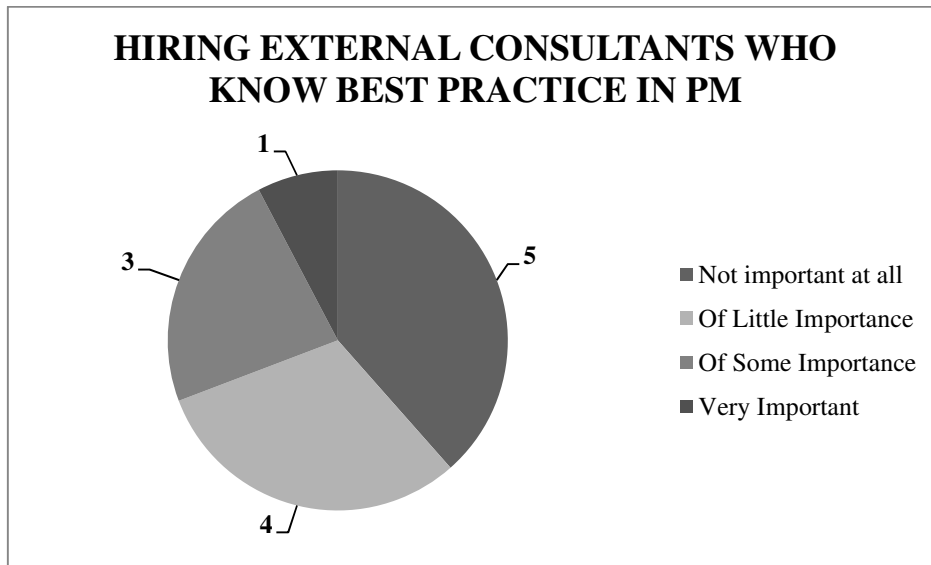


Figure 64: Ratings (Importance of Hiring Consultants)

Some PMO members noted that even though most project managers were not dedicated project management professionals, the way they performed the project tasks came naturally due to having an in-depth understanding of business functions.

Figure 65 below shows that senior management did not view external consultants' expertise as an important factor for providing project management in the public sector. This may be because they felt that the public sector in itself presented a specialised project management arena, as opposed to the private sector.

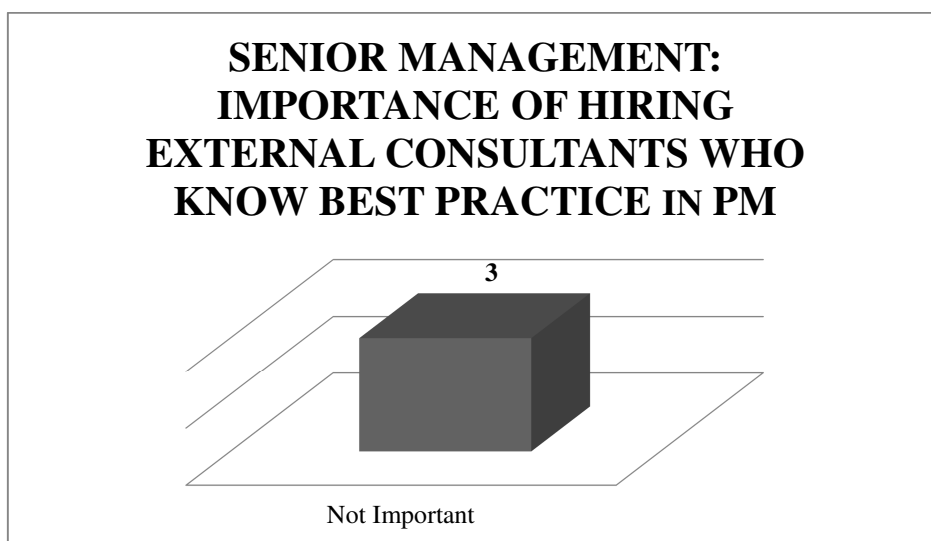


Figure 65: Senior Management Ratings (Importance of Hiring Consultants)

5.3.2.6 Evolution

Figure 66 represents how respondents answered question 23. This refers to an evolution in project management processes and tools. A respondent noted the importance of evolution and growth by claiming that “if evolution is not taking place, then there is no growth”.

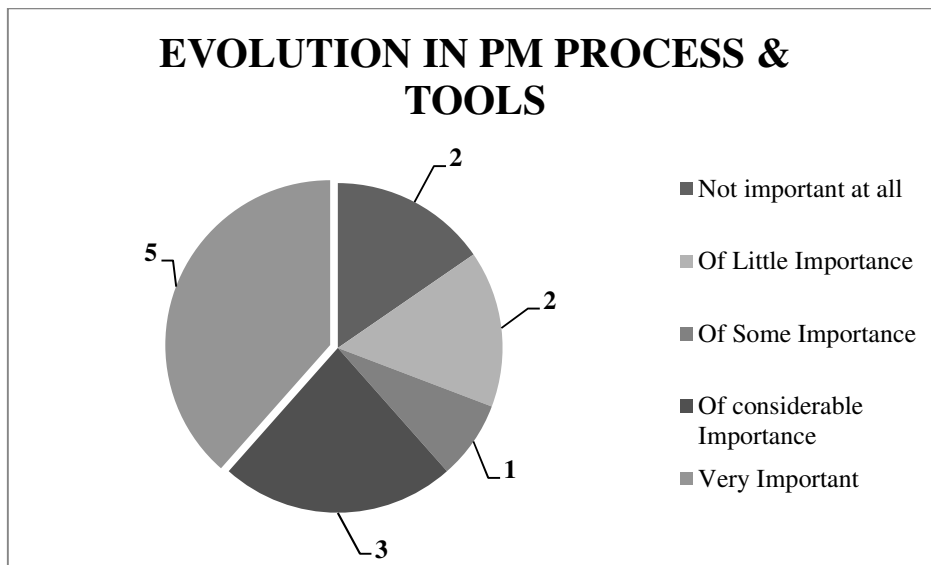


Figure 66: Ratings (Importance of PM Processes & Tools)

At the time of research there were multiple project management systems running simultaneously within the organisation. The fully-fledged PMOs each had their own independent system running. A new system was in the process of being built by Microsoft that was expected to offer an integrated solution for the entire organisation.

From the figure below it can be seen that senior management differed on the importance of project management evolution from being of considerable importance to not being important at all. This was interesting to note as it provided an insight into the lack of senior management buy-in into the new system, especially since the PMO members also lacked information on the new system expectations. At the time of research PMOs were generally aware of the new system but did not possess any further information. “I heard that there is a thing that is coming to replace dashboard but that is about it”. The system was scheduled to go live by 1 April 2013 but the PMO members anticipated delays, “It is still just bits and pieces and all over the place”.

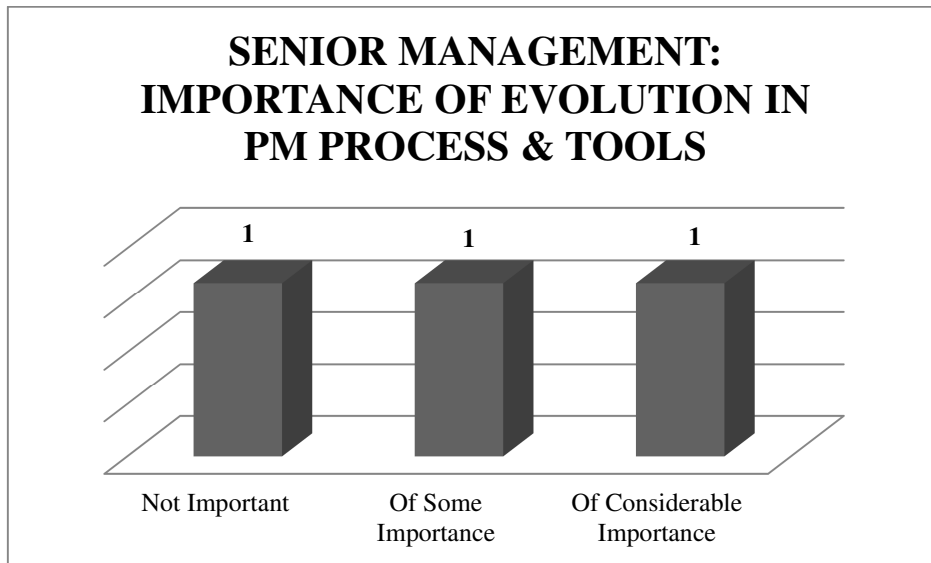


Figure 67: Senior Management Ratings (Importance of PM processes & tools)

The initial system was said to be politically driven and designed for the Premier to present information on the strategic and cabinet related projects. Part of the system was made accessible to the general public as well. The IT department was tasked to build the required system, despite some departments already running various other project management systems. One PMO claimed that they managed all their projects from their “own system” and simply copied and pasted over to the political system to ensure compliance. They claimed they comply to “keep the Premier happy”. However, there was much frustration noted with having to report the same information on various platforms just to ensure compliance. The integration of system information was lacking in the public sector and the system evolution provided the opportunity for a step in the right direction, if it was to be successfully implemented.

The biggest concern with the fully-fledged PMOs was that they required the new system to incorporate their current systems functionality. This may have been a cause for the delay in system evolution as Microsoft was tasked to ensure that the new system was adequately customised to cater for all the individual needs of the departments.

PMOs commonly experienced issues in cases where projects had progressed in reality but had not been updated on the system accordingly. Here, they were required to escalate to

senior managers but this once again renders them unfavourable in the organisation. The project managers would argue that their performance was being unfairly measured as they had produced the outputs, despite it not being updated on the system. Again, the PMOs were seen as “tattle tails”.

5.3.2.7 Stakeholders

Figure 68 represents how respondents answered question 24. This refers to the participation of stakeholders in the development and evolution of project management processes. In terms of the processes and tools used, the culture of the organisation was found to be such that they were “rebuilding the aircraft while it is in mid-air”.

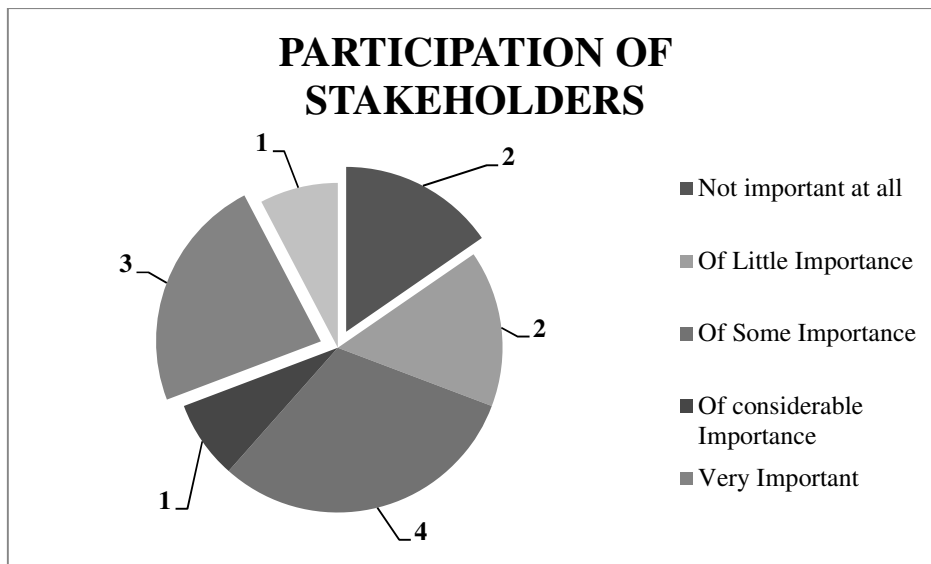


Figure 68: Ratings (Importance of Participation of Stakeholders)

There appears to be a lack of stakeholder involvement particularly when looking at the new envisaged project management system. This was evidenced in the previous question on the importance of evolution. The figure below shows that senior management were not phased with the participation of stakeholders and this they surprisingly deemed as not important to only having some importance.

PMOs were not adequately informed of the processes taking place and were generally clueless. They appear unconcerned and this may have been because the PMO function was not their core job purpose.

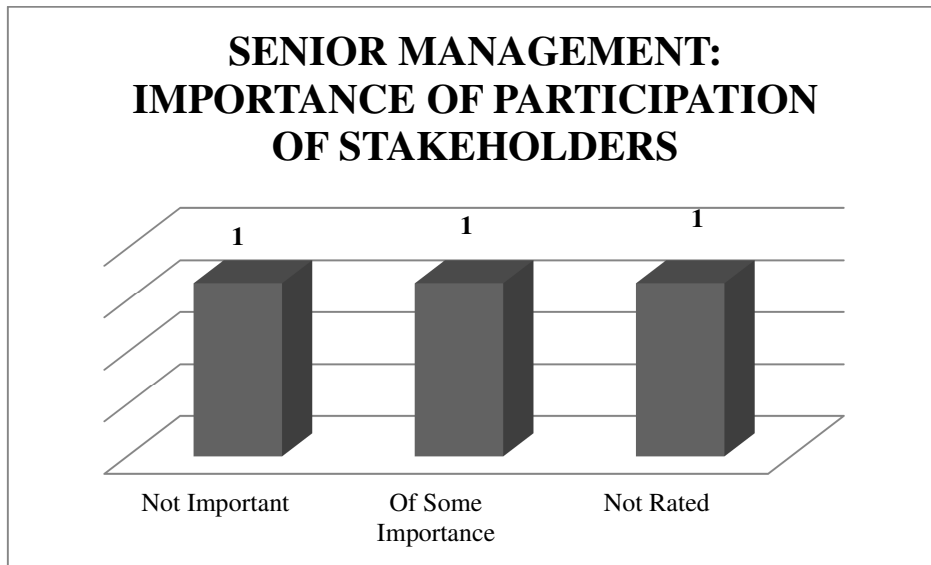


Figure 69: Senior Management Ratings (Importance of Stakeholder Participation)

5.3.3 Link with the External Environment

5.3.3.1 External Entities

Figure 70 represents how respondents answered question 25. This refers to linking with external entities for their project management expertise. Earlier it was noted that the organisation did not focus on, nor realise the importance of hiring external consultants for gaining project management expertise. The only external entities that were evident in the organisation for project management was the Microsoft team, as well the University of Stellenbosch who had designed Project Management courses for the public sector specifically. Ultimately, project management is mainly driven from one source, the PPO, and there are no further initiatives taken by the PMOs.

The senior management seemed to differ on the importance of linking with external entities from being a very important factor to not having any importance, see Figure 71.

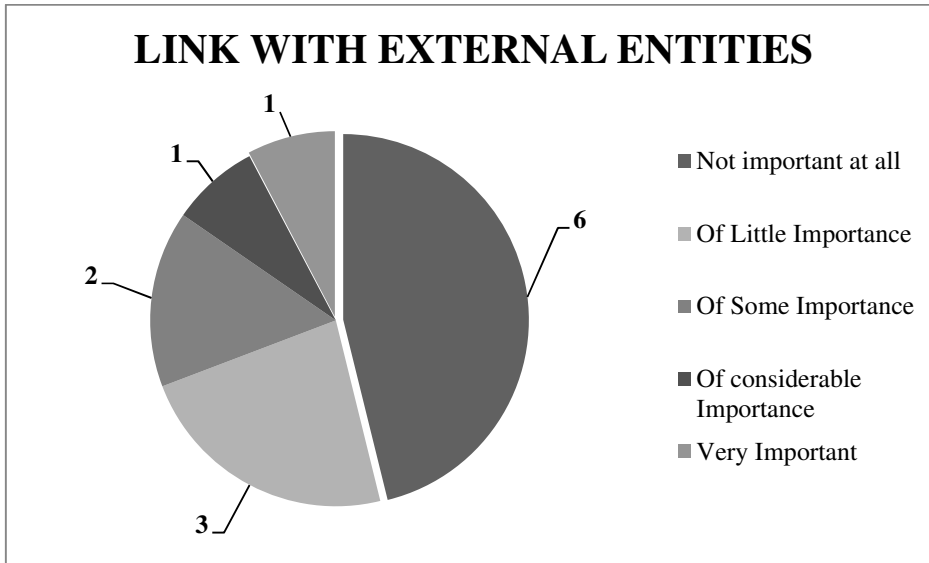


Figure 70: Ratings (Importance of Linking with external entities)

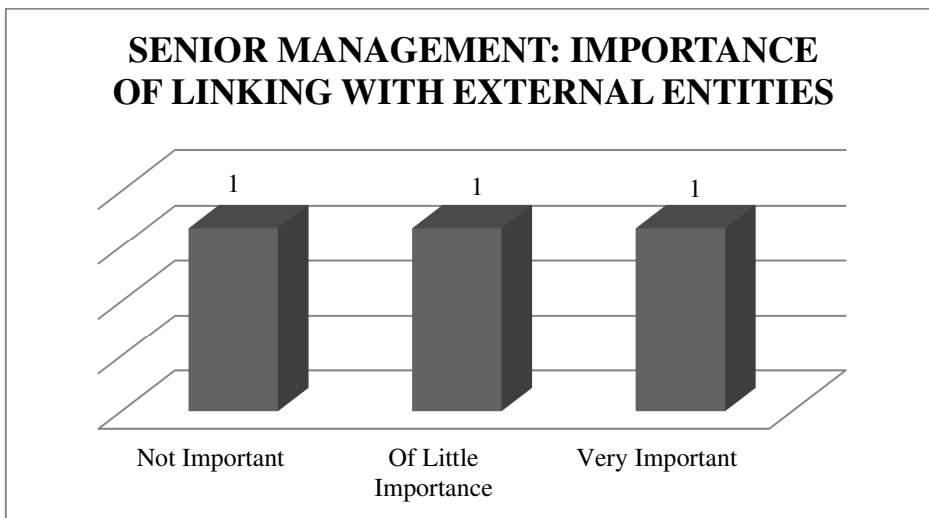


Figure 71: Senior Management Ratings (Importance of linking with external entities)

5.3.3.2 Benchmarking

Figure 72 represents how respondents answered question 26. This refers to the importance of benchmarking practiced in the organisation. Benchmarking was ranked as one of the least important factors by the PMOs. This was usually left to the PPOs discretion and was not evident in practice. An advanced PMO mentioned that one of their members had

recently attended a conference in Israel and they were hopeful for more insights to be gained from that.

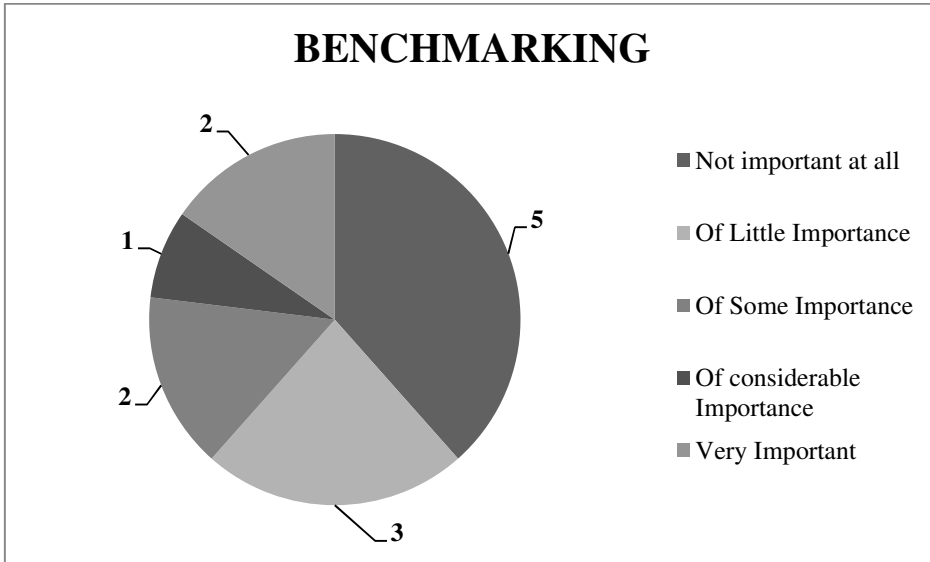


Figure 72: Ratings (Importance of Benchmarking)

Senior management also differed on the importance of benchmarking initiatives from not being important at all to having some importance, see Figure 73.

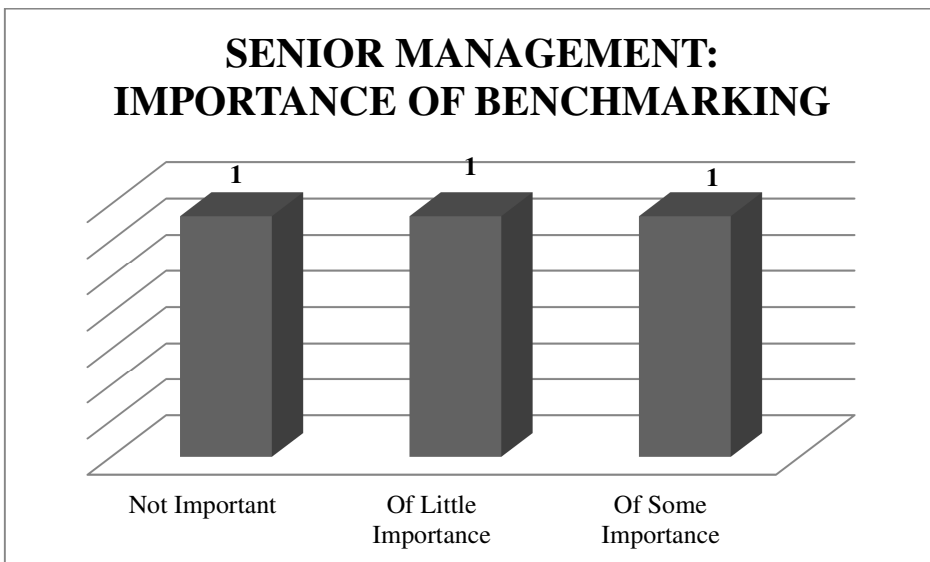


Figure 73: Senior Management Ratings (Importance of Benchmarking)

5.3.3 Responsiveness

5.3.4.1 Agility

Figure 74 represents how respondents answered question 27. This refers to the level of agility, i.e. ability of the PMO to respond quickly & efficiently, in response to the organisational needs.

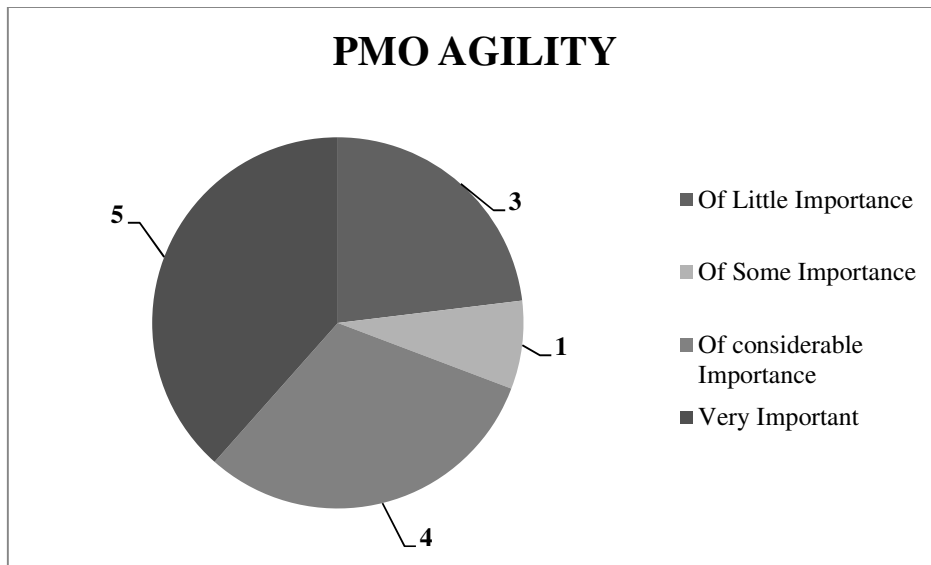


Figure 74: Ratings (Importance of Agility)

“But still it is that additional burden that it creates for my staff”. This comment illustrates the concern of PMO members to devote time and effort to advancing their structures and being more agile, as the PMO functions were add-on tasks to their actual job purpose. While some of the fully-fledged PMOs felt that they had the ability to be agile given their capacity, the other PMOs remained strictly inflexible as their additional PMO task meant they were responsive for updating the system and collecting completed templates for submission to the PPO.

Figure 75 shows that senior management differed substantially on the importance of PMOs ability to be agile. It was found that the importance of agility ranged from being a very important factor (2) to not having any importance (2) for their PMOs.

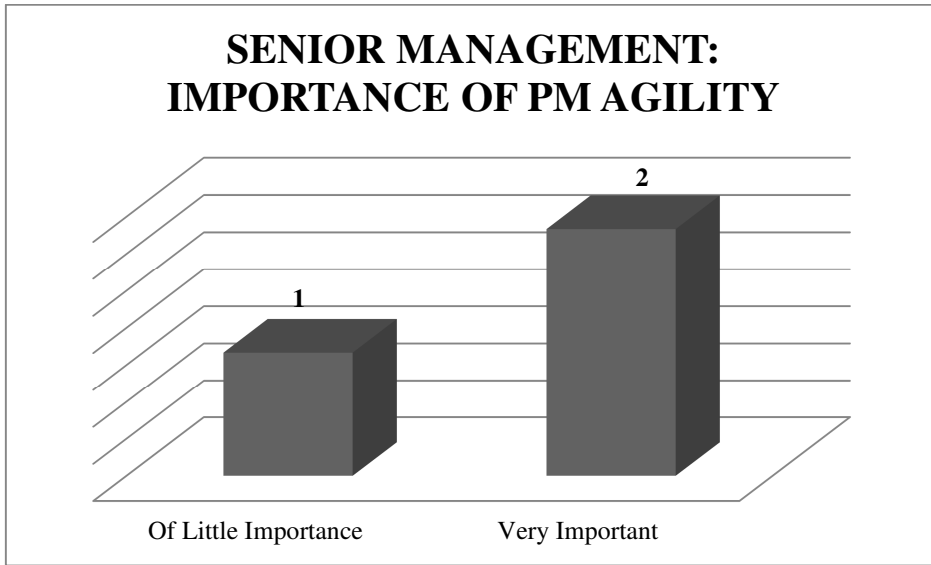


Figure 75: Senior Management Ratings (Importance of Agility)

5.3.4.2 Responsiveness

Figure 76 represents how respondents answered question 28. This refers to the responsiveness of the PMO to the organisational needs. Senior management found the importance of PMO responsiveness to the organisation was of considerable importance (2) to being very important (1), see Figure 77.

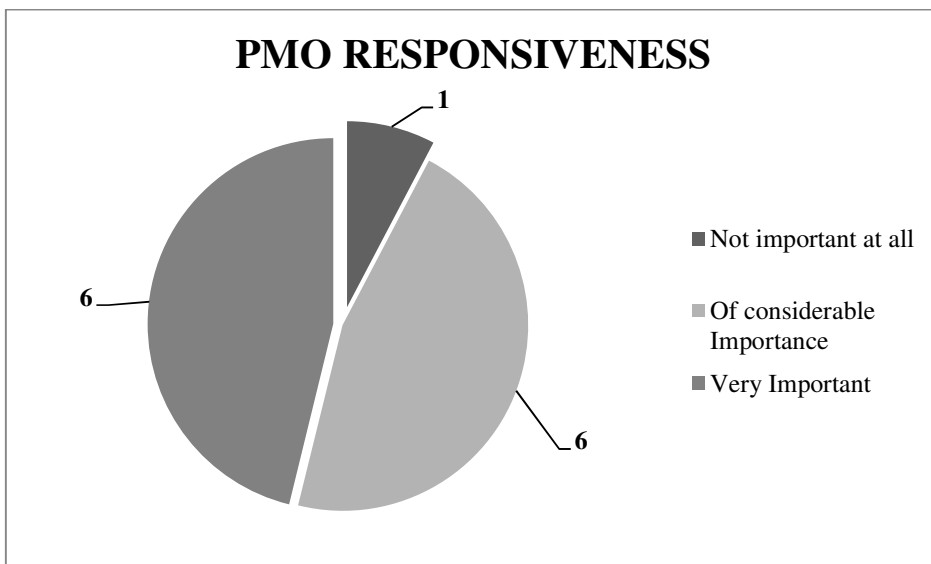


Figure 76: Ratings (Importance of PMO Responsiveness)

The fully-fledged PMOs felt they had the ability to be more responsive to the organisation than the smaller PMOs. However, for some the existence of the PMOs itself imply that the departments are responsive to business needs. Most PMOs felt that they were responsive, in respect of the requirements of the system (updates).

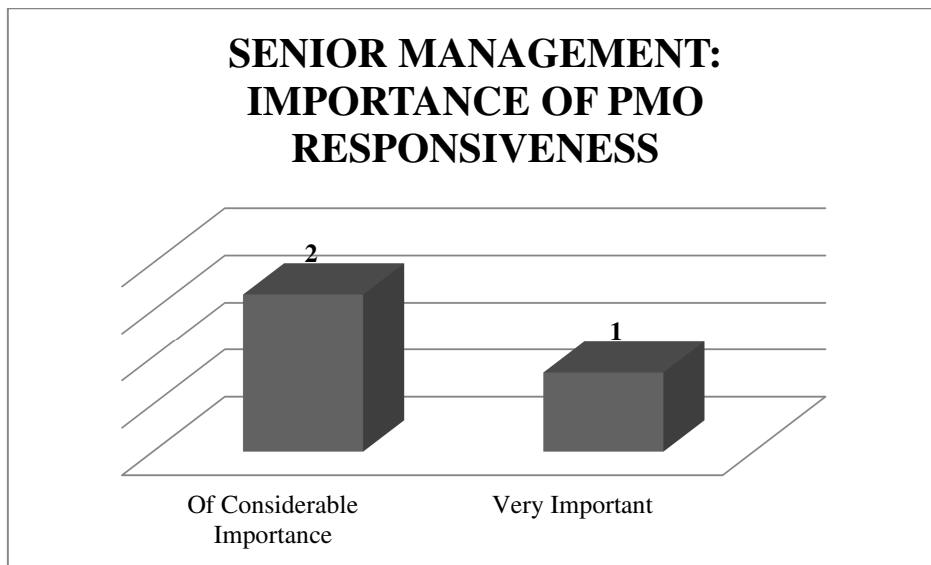


Figure 77: Senior Management Ratings (Importance of PMO Responsiveness)

Another issue found was that the business was not able to “express their needs”. Due to the disconnect between fully-fledged PMOs that do not know what the business expects from them. This was the result of business not having a clear PMO mandate, and therefore there was the danger of PMOs becoming “a dumping ground for tasks that they do not know where to place in terms of coordinating various activities, or working on ad-hoc meetings that we need to attend and our role is not always that clear”.

5.3.4 Summary

There is a need for departmental PM integration to assist with the transparency of all projects undertaken at the Western Cape government to eradicate the culture of silos and foster a unified approach. PMO members were hopeful of a new envisaged project management tool to help breach some of these gaps, but concerns remained on the capacity of the structure to maintain and foster these initiatives.

There appeared to be a balance in respect of the efficiency and effectiveness foci in the public sector. It was clear from the above that the public sector did not invest much in improving the current state of the PMO. This was seen from the lack of focus on benchmarking, hiring external consultants with expert PM knowledge and linking with external entities.

5.4 Discussion

While the principles of project management in the public sector may have been driven by political motives, it was clear that there were basic standards and principles that still had to be adhered to enable sustainable structures of efficiently operating and ultimately effective PMOs.

From the findings, it was clear that there were many variations of the public sector PMOs despite it being one organisation; this was the result of unique departmental views of PMOs that differed substantially. There were also too many varying levels of members that were comprised of these PMOs, and this resulted in different outputs produced. A large number of the PMO members were not fluent in project management, had no interest in the discipline before being made a PMO member, nor had any prior experience in the field. The inconsistencies were clearly evident from the diverse manner in which the participants answered the survey.

Furthermore, it was found that the limited dedicated Project Managers were not provided with the opportunities to develop their skills further. However, despite this it was noted that a high level of project management bureaucracy was successfully practiced in the public sector. The lessons learned from the current setup could be used to refine the structures more appropriately to deliver more efficient and effective PMOs.

It was noted that respondents generally answered the survey very optimistically but further they could not substantiate on their current practices. It is also noted that the newly implemented PMOs were highly optimistic and were very confident that they would make meaningful contributions to the organisation.

There was the notion that all PMO factors that were presented to respondents were considered as having some importance, “I’m sure it is there, it must be there, but I don’t know anything particularly”. This demonstrates the clear lack of knowledge and understanding of PMO responsibilities.

It was further found that there was a disconnect between what senior management deemed were important factors and indicators for the PMOs in the public sector, to what the middle managers found as important. It was noted that middle managers had more direct involvement in the projects.

Figure 78 shows how respondents rated their focus in the public sector in respect of efficiency and effectiveness. From this, it was seen that the public sector PMOs were largely focussed on productivity, but this is in terms of the bureaucracy practised in the organisation, the order in productivity and the existence of the organisational structure to deliver projects. They also focus largely on flexibility, adaption and innovation in project management and this was in terms of being responsive to the organisational needs and taking initiatives in PM methodology as well as the evolution of process and tools.

EFFICIENCY		EFFECTIVENESS	
PRODUCTIVITY	60%	FLEXIBILITY ADAPTION INNOVATION	60%
PLANNING	20%	RESPONSIVENESS	40%
PROFIT	20%	GROWTH OF THE ORGANISATION	0%
PM EFFICIENCY	0%	LINK TO EXTERNAL ENVIRONMENT	0%

Figure 78: Focus on efficiency and effectiveness at public sector PMOs

The lack of PMO focus on efficiency especially in terms of the relations with business units, as well as the PMOs direct impact on project success was concerning. The PMO has the opportunity to clearly display their value added to the business in this area, therefore a greater focus here is advisable in the public sector.

5.5 Extended Conceptual Model

The conceptual model factors described in previous sections was investigated to determine the focus areas of public sector PMOs, in practice. Table 15 shows the extended conceptual model that was derived from this.

There is a clear distinction noted between the public and private sectors, particularly when it comes to profit, benefits planning and productivity. These are all relative to contributions made to the efficient running of PMO operations.

Business Cases appear to be a misunderstood phenomenon in the public sector. This may be lacking because it is largely a financially driven exercise and therefore may appear to be more applicable to the private sector. It may be an option for a Benefits Case or a Value Case Document (as opposed to Business Case per say) to be devised and tailored in such a way that it facilitates efficient benefits planning and benefits realisation processes in public sector organisations.

Table 15: Extended Conceptual Model

Factors	Sub Factors	Public sector applicable	Extended Factors in Public sector	Comments
Profit	Profit from projects	X	Total cost per project; Effective budget utilisation; Cost savings to be reprioritised in project(s)	Public Sector is not profit driven, instead pressure to utilise allocated project budgets or risk losing the budget in the following financial year.
	Benefits planning in the business case	√	Benefits Realisation; Citizen (societal) benefits	Benefits must be assessed according to public benefits achieved
Productivity	Order in Productivity	√		Currently not in practice
	Resource Management	√		Currently not in practice
	Index of Productivity	√		Currently not in practice
	Bureaucracy	√		
	Internal Competition	√		Currently not in practice
	Organisational Structure to support PMO	√		Critical for PMO success
Planning in goals to reach	Importance of the strategic dimension of good projects	X		Politically driven
	Equilibrium of projects of a portfolio	√		
	Prediction of Delivery capabilities	√		Important
	Alignment of enterprise and employee objectives	√		Important
Efficiency	Efficiency in relations between PMO and business units	√		Critical
	Impact on project success	√		Critical to demonstrate PMO value to departments
Growth of the Organisation	Results (sales)	√	Results APP & PSOs met (Citizen benefits)	Economic growth
	Qualitative element from Business case (bus positioning)	√		Creating synergies between public and private sectors
	PM Effectiveness	√		
Flexibility, adaption & innovation in PM	Innovation, conflict resolution	√		Important
	Creativity skills	√		Critical
	PM Methodology			Important
	Reporting	√		Critical
	External consultants	√		Currently not in practice
	Evolution	√		Critical
	Stakeholders	√		Critical
Link with external environment	External entities	X		PMO public sector limited
	Benchmarking	√		Currently not in practice
Responsiveness	Agility	√		Important
	Responsiveness to organisation	√		Important

Chapter 6 – Conclusion

The study of PMOs in the public sector in South Africa provided a unique opportunity to investigate a cross sectional view of a widespread phenomenon: the efficiency and effectiveness of PMOs. The implementation of PMOs remains an increasing trend that organisations undertake by investing both time and budget in order to improve their project performance. However, despite this, it was found that these structures survive relatively short life spans of an average of two years. This may be the result of the PMOs being pressured to provide measureable value to executives in order to survive. The study employed a mixed methods approach in order to investigate the factors that public sector PMOs focus on to determine their efficiency and effectiveness foci. The study was unique in its scope as well as its approach.

The literature review in Chapter 2 provided the basis for the conceptual model that in turn provided the lens through which the data was analysed.

The research objectives identified for this study were:

1. What are the factors that influence the value of PMOs in terms of ensuring efficient operations?
2. What are the factors that influence the value of PMOs in terms of ensuring effective operations?

The PMO members were interviewed to:

- determine current practices linked to PMO efficiency
- determine current practices linked to PMO effectiveness
- understand challenges that may hinder them from being more efficient and effective and hinder them from providing value
- identify if there is any lack of PMO process in the organisation

Starting in an interpretivist mode the case study explored PMOs focus on factors associated with PMO performance. This was completed in conjunction with a supportive survey to provide a complementary statistical analysis.

6.1 Findings

The factors in the extended conceptual model were determined based on the data from the interviews as well as the survey to determine the focus at public sector PMOs. These were then examined to produce the revised conceptual models for PMO efficiency and effectiveness at public sector PMOs, see Figures 79 & 80.

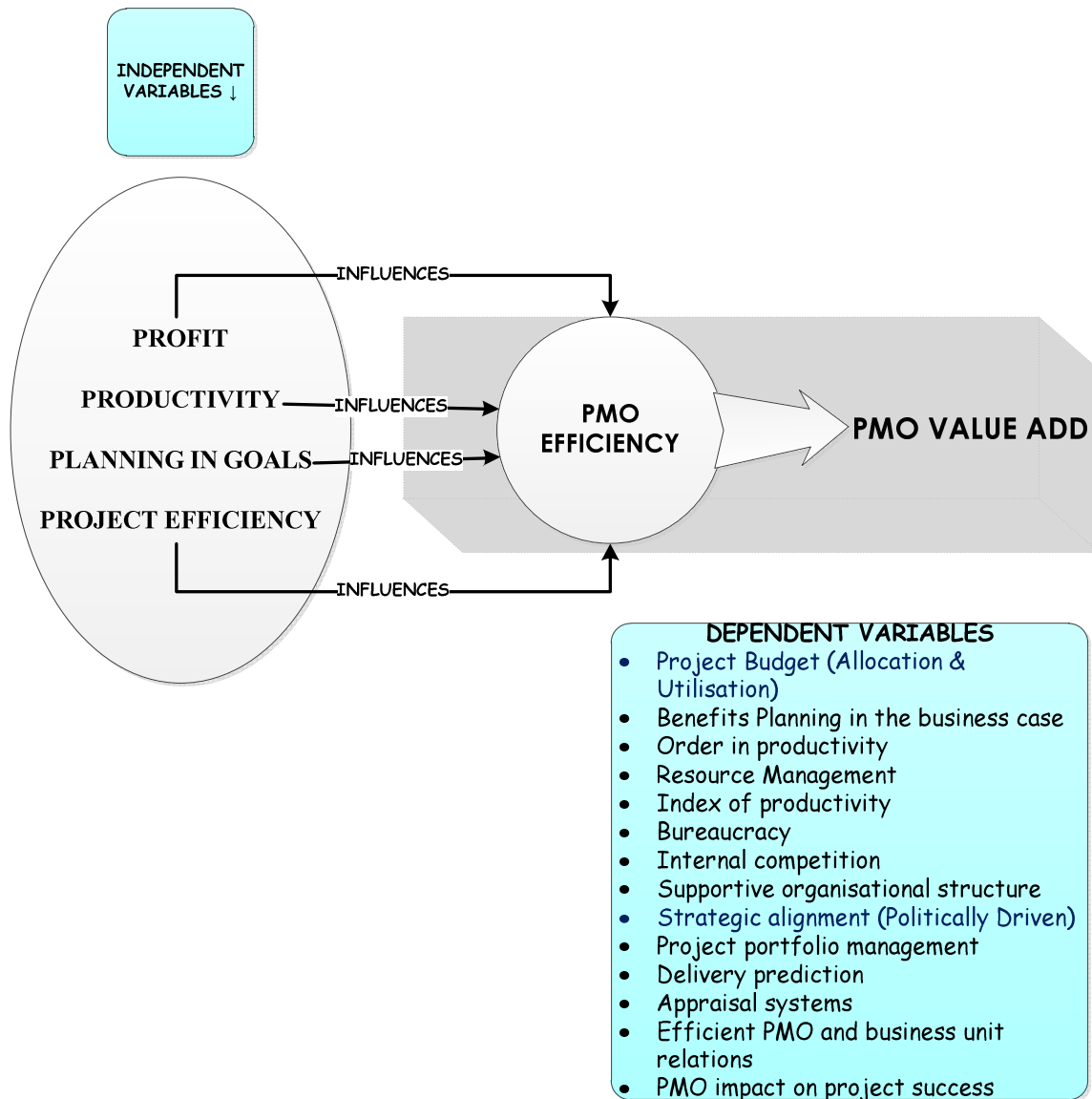


Figure 79: Revised Conceptual Model for Public Sector PMO Efficiency

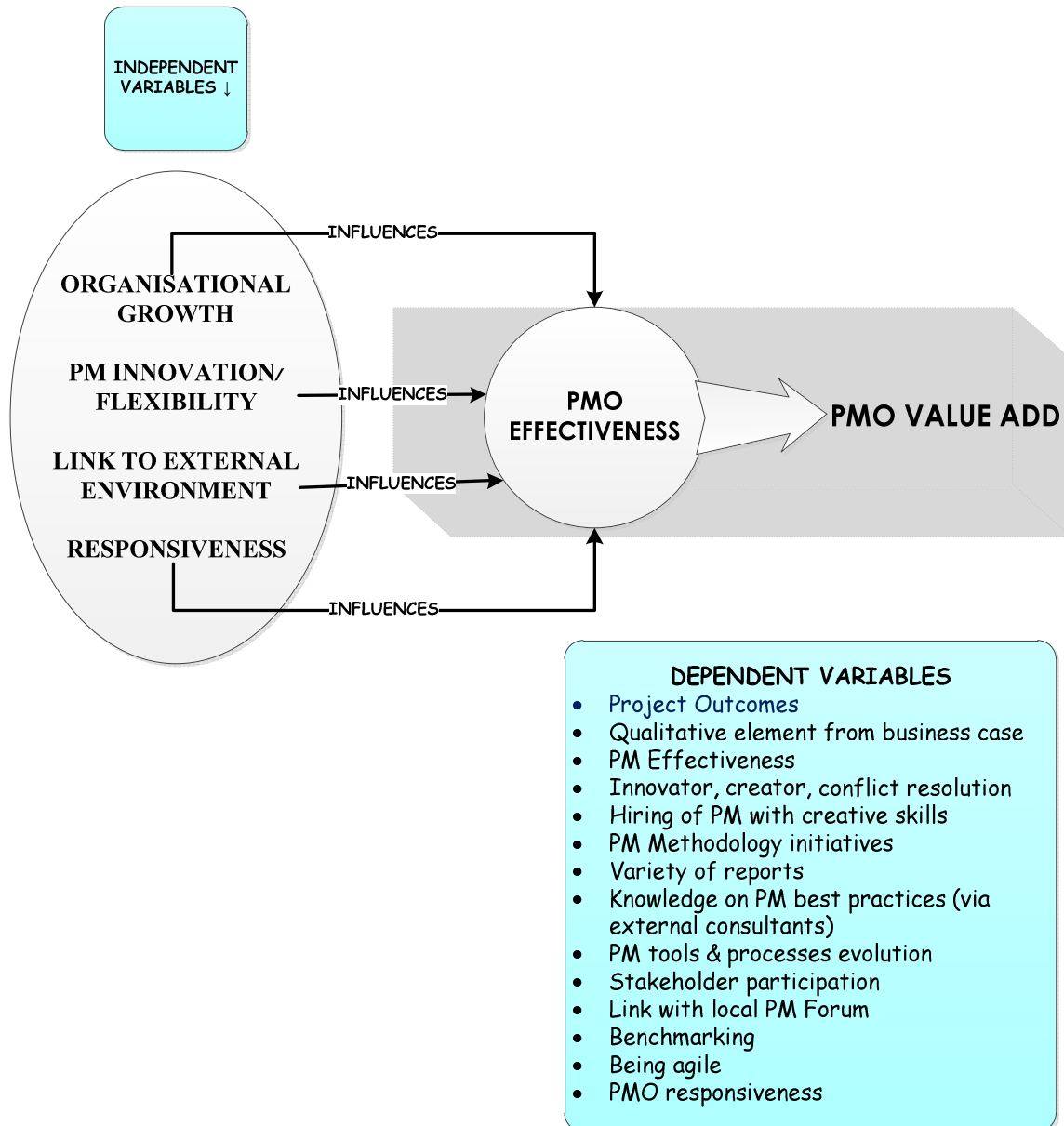


Figure 80: Revised Conceptual Model for Public Sector PMO Effectiveness

From this it can be seen that the public sector is unique in terms of profit (no ROI, rather project budgets are allocated and should be utilised effectively, zero-based budgeting), importance of the strategic dimension of projects (these are politically driven) and organisational growth (the public sector is not concerned with sales but rather that project outcomes are achieved).

However, the study revealed that the public sector exhibited administrative PMOs (Level 1 PMOs) and were largely focussed on bureaucracy, responding to organisational needs as well as the evolution of tools and processes. The PMOs were already in existence for four years, since 2009, and was at high risk of declining value and failure. The study further revealed that these PMOs evolution was limited and they were lacking substantially in the following areas: benefits planning, order in productivity, resource management, index of productivity, internal competition, the use of external consultants for their expertise, and benchmarking. Focussing on these areas has the potential to increase productivity that would improve the efficiency of PMOs, see Figure 81.

Furthermore, it was found that linking to external entities for project management expertise was largely limited to one proprietary company. A greater focus on these areas, with capacitated and competent PMO structures, would potentially result in sustainable, efficient and effective PMOs for the public sector.

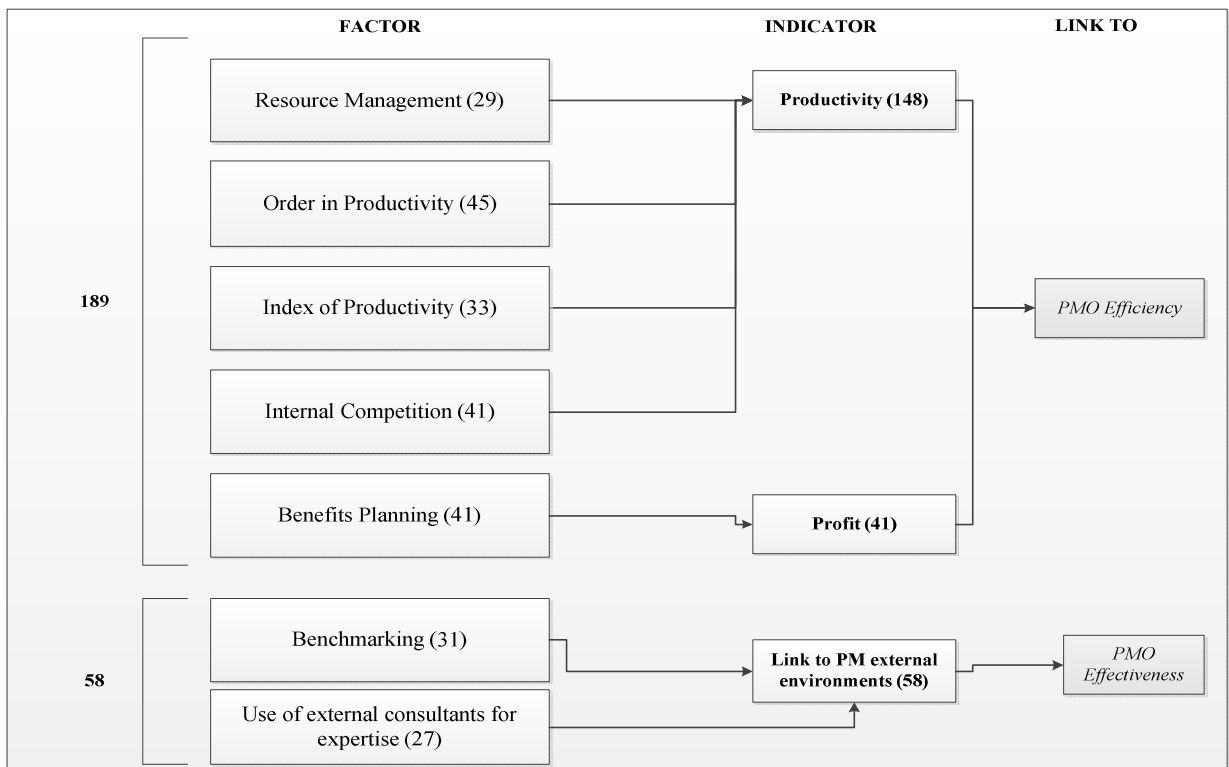


Figure 81: Focus on efficiency and effectiveness at public sector PMOs

The assessment of performance efficiency and effectiveness enables PMOs to be better measured and enables initiatives for improvement. A clear mandate is required to ensure that executive expectations are managed. Established links to appraisal systems to enable PMO performance and improvement efforts are required.

In the 2014 Budget speech the Finance Minister, Pravin Ghordon, noted the importance of government collaborating with external entities in an effort to grow the South African economy. Similarly, there is a need for public sector PMOs to collaborate with external entities to enable more efficient and ultimately effective PMOs. This can be achieved with an increased focus on benchmarking, hiring of external consultants that possess expert PM knowledge, and linking with external entities for expert service and advice. The full effect of this recommendation will be better received with skilled and competent PMOs that are able to appreciate and benefit from these types of expertise. The current structure comprises various competency levels of PMO members and is not capacitated enough to benefit from such a service.

Linking departmental PMOs and their projects, enables visibility and a working collaboration that may lead to competition that increases productivity. In order to have any real influence there must be the advancement from the day-to-day administrative focus of PMOs to more strategic involvement. It was noted that PMOs positioned on a strategic level enjoyed the respect of the organisation and were able to provide valuable contributions, granted that they were capacitated with competent resources. In the public sector, this move would also result in organisational growth in qualitative terms.

In order to increase productivity a supporting organisational structure is required, one that takes into account the diversity of all departments in the public sector. The case study showed a variation of departmental PMOs, where many offices constituted a virtual office. The office structure and positioning requires rethinking and restructuring. Points to consider would include the job roles and levels of the departmental project office members, as well as the positioning of the offices. For example, should the position be strategically placed, and if so the levels of the project officers should be higher than clerk level across all

departments. A baseline for dedicated project office members in terms of ensuring project management as well as organisational maturity must be clearly defined. This must include project management for the whole department, and not just be system driven.

6.2 Additional Observations

PMOs in the public sector should be focussed on implementing processes that evaluate projects' results, benefits and outcomes. To have the full effectiveness of the PMO it needs to be better established and positioned. Currently they are mostly the result of being accidental PMOs, in which the PMO role is an added function to an existing role.

There is a need for a paradigm shift to take effect within all PMOs, both public and private sector organisations, to move away from just “reporting on” toward becoming more involved in “contributing”. In this way, executives will see the impact of their PMOs as they move toward providing project solutions for business success.

This means that the PMO will not just be reporting to management on predominantly project performance but also on their contributions to projects, that establishes the validity and value contribution of the PMO. This will facilitate planned actions required for successful project implementations.

A further move toward reporting on business outputs achieved, and in the public sector, specifically reporting on “results and outputs achieved” through successful projects implemented. This will illustrate the projects impact on business to executives.

It is recommended that all resource costs per project be incorporated to provide a true reflection of costs per project. The levels of the PMO members should be revised to ensure standardisation and competency of resources to efficiently perform the PMO functions and operate at a strategic level.

Table 16 below shows some common themes identified across all PMOs in the public sector.

Table 16: Common themes identified from case study

THEME	COMMENTS
Lack of Resources	PMOs are faced with a lack of resources (both human and financial) required to ensure valued service to their departments. There are incompetent, unskilled PMO members, and departments do not possess the budgetary funds to alleviate this.
Reputation & Respect	Due to the reputation of PMO members and the incompetency of the required skills, the structure loses its value and as well as respect in the organisation. There is a lack of required management commitment to enable the sustainability and success of the PMOs.
Low Authority	PMOs still largely function as administrative and limited PMOs operate at HOD/strategic level. The remaining PMOs battle substantially with low authority and therefore are not able to effectively make meaningful contributions in the organisation.
Little Involvement	The PMOs primarily function as administrative and are not involved in the actual projects. Their core functions involve ensuring that project managers have updated the PM systems, and that all templates have been completed and submitted.
Reporting	Due to the limited involvement of these PMOs, they do not produce a variety of reports.
Compliance Driven	The PMOs are largely involved with ensuring PM compliance in terms of system updates and templates. They are required to monitor these aspects and liaise with respective Project Managers to ensure compliance is adequately met.

6.3 Limitations

The limitations associated with this research study are:

- This study was limited to PMOs in the public sector.

- This study did not examine the human relations, output quality and internal process models.
- The perception of performance and value can vary depending on the views of the evaluator and researcher.

Furthermore, as this was a cross-sectional case study, the environment and the setting of the study limited the research. A longitudinal study may provide the opportunity for more extensive results.

6.4 Future Research

This study has provided a view of the public sector PMO in seeking an understanding of those factors that contribute to PMO value, in terms of the efficiency and effectiveness of PMOs in practice. This was based on the competing values framework as adapted by Hobbs & Aubry (2010).

Human resource management is a factor that is limited in PMO literature, yet it is crucial for issues such as conflict resolution and for successful project management (Hobbs & Aubry, 2010). Therefore, this study could provide the basis for guiding future research on PMOs and the link to the human relations model, internal process model and the output of quality to explore the impact of these contributions to PMO value.

New PMOs are very optimistic when the structures are implemented. It would be interesting to investigate the changes to these structures after a period of time, given all the envisaged hopes.

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APPENDICES

A - Clarification of Terms

APP	Annual Performance Plan
BDN	Benefits Dependency Network
IS	Information Systems
IT	Information Technology
Ce-I	Centre for e-Innovation
CD: GMS	Chief Directorate: GITO Management Services
CD: SIS	Chief Directorate: Strategic Information Services
CVF	Competing Values Framework
DA	Democratic Alliance
DotP	Department of the Premier
DPO	Departmental Project Office
DTPW	Department of Transport and Public Works
EPM	Enterprise Project Management
EPD	Executive Project Dashboard
OPM3	Organisational Project Management Maturity Model
PBO	Project Based Organisation
PPO	Provincial Project Office
PSO	Project Support Office
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PMO	Project Management Office
PMON	Project Monitoring System
PMSA	Project Management South Africa
PSO	Project Support Office
RBV	Resource-Based View
ROI	Return on Investment
RPM	Rational Project Management
WCG	Western Cape Government

IS Information Systems
IT Information Technology
CVF Competing Values Framework

B – Consent Form

CONSENT FORM



Department of Information Systems

Leslie Commerce Building
Engineering Mall, Upper Campus
OR Private Bag, Rondebosch 77001
Cape Town
Tel: 650-2261
Fax No: (021) 650-2280

Masters Dissertation Research: Request to Participate in Study

Dear Sir/Madam

As an Information Systems Masters student, I am conducting research on Project Management Offices (PMOs) in the public sector. The variations and inconsistencies found on PMOs have, in practice, led to the legitimacy and value of PMOs being questioned over time. The study seeks to identify factors that contribute to PMO value for organisations. This may encourage PMOs to be more efficient and effective through managing explicit measures and clear indicators. It also allows for the visibility of PMO values and contributions made to organisations.

The study will involve interviewing PMO members from the 13 Departments at the Western Cape Government, and each interview should take an average of 45mins and last no longer than 60mins. The full schedule will be made available on request should consent be granted.

Please be assured that the results of the study will not divulge any particulars on individual participants or the organisation. A summary of results will be made available to interested parties after the assessment. If you have any further queries feel free to contact the researcher, or Prof Derek Smith. Contact details are provided below.

Sincerely,

Signed by candidate

Researcher
Nuhaah Benjamin Lorgat
Email: nuhaah@gmail.com
Mobile: +2782 679 0960

Student Supervisor
Professor Derek Smith
Email: Derek.Smith@uct.ac.za

APPROVED BY:

Name: Lance Williams

Title: CIO – Centre for e-Innovation

Date: 15/02/2013

Western Cape Government

Name: Zeenat Ishmail

**Title: Chief Director - Strategic
Management Information**

Date: 15.02.2013

Western Cape Government

C – Interview Guide

Rate the following variables in terms of importance for your PMO (Scale 1-5)

Rate: How important are the following indicators for your PMO?

Comment: Why you think so and what do you think is ideal for your PMO?

	1 <input type="radio"/> <i>Not Important at all</i>	2 <input type="radio"/> <i>Of little Importance</i>	3 <input type="radio"/> <i>Of some Importance</i>	4 <input type="radio"/> <i>Of considerable Importance</i>	5 <input type="radio"/> <i>Very Important</i>
1 Profit(s) from projects <i>(Bottom-line)</i>	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
2 Benefits Planning within Project Business Case	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
3 Order in Productivity <i>(Processes implemented by the PMO to support projects realised)</i>	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
4 Best use of resources in project management <i>(Productivity)</i>	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
5 Index of productivity <i>(Ratio of productivity measured over time)</i>	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
6 Bureaucracy	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
7 Internal competition (e.g., between units or departments)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
8 Existence of an organisational structure to deliver projects	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
9 Importance of the strategic dimension in the selection of the “good” projects	<input type="radio"/> <i>Not</i>	<input type="radio"/> <i>Of little</i>	<input type="radio"/> <i>Of some</i>	<input type="radio"/> <i>Of</i>	<input type="radio"/> <i>Very Important</i>

	<i>Important at all</i>	<i>Importance</i>	<i>Importance</i>	<i>considerable Importance</i>	
	1	2	3	4	5
10 Equilibrium in projects of a portfolio (<i>risk, benefits on the short, medium, and long terms., value</i>)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
11 Prediction of the delivery capabilities, resource allocation (<i>capacity planning</i>)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
12 Alignment of enterprise objectives with the employees ones (<i>PMOs involved with appraisal process</i>)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
13 Efficiency in the relations between PMO and functional or business units – (<i>negotiation on projects</i>)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
14 Project success (<i>PMO impact/role in projects</i>)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
15 Results (<i>sales, business growth, benefits</i>)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
16 Qualitative element from business case (<i>business positioning</i>)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
17 Effectiveness (<i>benefits realisation</i>)	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>
18 Innovative, creative, and good at conflict &/or problem resolution	<input type="radio"/> <i>Not Important at all</i>	<input type="radio"/> <i>Of little Importance</i>	<input type="radio"/> <i>Of some Importance</i>	<input type="radio"/> <i>Of considerable Importance</i>	<input type="radio"/> <i>Very Important</i>

19	Hiring of project management personnel with creativity skills	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>
20	Existence of initiatives in project management methodology (<i>sometimes being delinquent</i>) (<i>Innovation</i>)	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>
21	A variety of reports	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>
22	Hiring of external consultants who know best practices in project management	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>
23	Evolution in project management process and tools	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>
24	Participation of stakeholders in the development and evolution of project management processes	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>
25	Link with the <i>external</i> environment	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>
26	Benchmarking	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>
27	Being agile	1 ⊙ <i>Not Important at all</i>	2 ⊙ <i>Of little Importance</i>	3 ⊙ <i>Of some Importance</i>	4 ⊙ <i>Of considerable Importance</i>	5 ⊙ <i>Very Important</i>

1 2 3 4 5

28 Responsiveness to organisational needs
when required



*Not
Important at
all*



*Of little
Importance*



*Of some
Importance*



*Of
considerable
Importance*



*Very
Important*

Participant No: _____

Date: _____

Time: _____

Venue: _____