
Project management and performance management: potential transdisciplinary contributions

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Abstract

As project management and performance management as management applications gain momentum in public sector settings, the question often arise as to if, how, and when these applications should complement each other in various policy implementation and service delivery initiatives. Answers to this question should be sought from various vantage points or perspectives. These vantage points may range from macro, meso, micro as well as theoretical-methodological perspectives.

The purpose of this paper is to unlock the potential for transdisciplinary contributions between Project Management and Performance Management by focusing on the methodologies, functional areas, and practical applications of both management disciplines. It is argued that the respective methodologies and their processes should be unpacked to identify the timing or moment when each discipline could, and should, make a contribution to the success of the other. This will add value to the theoretical underpinnings and practical applications of both study domains in the public sector. The respective contributions are illustrated by means of application realities of both management practices in the South African Public Service.

Keywords: project management, performance management, Public Sector applications, transdisciplinarity.

Disciplines: project management, performance management.

1. Introduction

Both project management and performance management are gaining favour in government. In the case of the South African Public Service both management applications became mainstreamed through statutory and regulatory frameworks in the quest for answers to service delivery challenges. But, as relative 'late comers' on the public management scene, project management and performance management do not as yet have the same levels of maturity as far as the managerial competencies and organisational architecture to successfully apply them, is concerned. Both management applications, however, has as far as theoretical underpinnings are concerned, relative mature methodologies in place. The challenge thus is to institute effective knowledge systems, processes and procedures in the work place for their successful application. Public managers need to appreciate the way in which these management applications complement each other in the execution of their responsibilities and functions. Public managers, due to 'silo thinking', often find it difficult to appreciate the interrelatedness and interdependencies of their various managerial responsibilities and

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functions and the related applications required such as strategic planning, financial management, human resource management and programme management.

There is a complementary focus of the two disciplines in that Project Management is about *doing*, whilst Performance Management is mainly concerned with the *how are we doing?* In compliance with their competency profiles, public managers need to understand *how* and *when* these applications should complement each other in various service delivery initiatives.

The purpose of this article is to explore the potential transdisciplinary contributions that Performance Management can add to the body of knowledge of Project Management by focusing on the methodologies of both management disciplines. It is argued that the respective methodologies should be unpacked to identify the timing when Performance Management could, and should, make a contribution to the success of projects (i.e. during its life cycle). This could add value to the theoretical underpinnings and practical applications of Project Management. Within the ambits of this article, it is not possible to explore all the potential disciplinary contributions. Therefore, the author does not argue that the specific contributions are by any means complete. It does, however, provide a foundational perspective and conceptual framework to further analyse prospective transdisciplinary contributions.

2. Project management and performance management: prospects for transdisciplinarity

Over time disciplines typically progress through various paradigmatic phases in which the discipline matures and become an established science. Due to an ever-changing dynamic environment, disciplines cannot remain relevant without constantly adjusting, rediscovering and enriching itself by making use of theories, approaches, methodology, principles and concepts from established, related disciplines (Van der Waldt, 2009:14). The relevancy and survival of management or applied disciplines are largely dependent on the degree to which they manage to adjust and reinvent itself to changing circumstances or may run the danger of becoming impoverished and ultimately even obsolete.

Bruder (1994:61) explains that transdisciplinarity is about 'transgressing boundaries' between disciplines. This transgression is healthy since such crossing usually leads to new insights and perspectives regarding phenomena. In this regard, Pohl and Hirsch-Hadorn (2007:124) refer to the 'common good' that transdisciplinarity brings. According to Medicus (2005:95) and Wiesman, Hirsch, Hoffmann-Riem, Biber-Klemm, Grossenbacher, Joye, Pohl and Zemp (2008:435) transdisciplinary research has arisen from the need for solutions for which knowledge of a single scientific discipline is insufficient. Wiesman *et al.* (2008:433-441) established fifteen propositions? regarding transdisciplinary research and highlight that transdisciplinary research includes cooperation within the scientific community. Nicolescu (2005:7) in turn argues that transdisciplinarity is about the understanding of the world and the 'unity of knowledge'. It, therefore, transgresses boundaries between scientific disciplines and between science and other societal fields and includes deliberation about facts, practices and values.

From a transdisciplinary perspective an important point to note for purposes of this article is that project management is not applied consistently and generically in all industries and application areas. Crawford, Hobbs and Turner (2006:175), for example, have found variation in project management knowledge and practices between industries, countries and application areas. The influence of industry bias is further confirmed by Evaristo and Van

Fenema (1999:276). As a field of study, project management regularly face new challenges, as the tools, methods and approaches to management that comprise the discipline, are applied to different areas, for different ends, in different cultures (Crawford, Pollack & England, 2005). As an 'emerging' profession (see PMI, 2000:3; Urli & Urli, 2000:33), the field continues to grow and adapt. The way project management is applied in the South African Public Service (locus of this study) should make provision for and is influenced by the unique statutory framework, service delivery context, methodology, and management practices in the Public Service. The same arguments may apply to the field of performance management.

Both Project Management and Performance Management can be regarded as emerging, applied management disciplines in the public sector. The Project Management Body of Knowledge (PMBOK), which led to the international professionalisation of the discipline, for example, only in 2002 published their *Government Extension* of the PMBOK. This extension was necessary due to the recognition of the unique context of government projects.

In the case of Performance Management, it was developed in the private sector and adopted by the public sector as a primary a tool to improve service delivery (Stewart, 1986:30). In the South African Government, first evidence was seen of the 'mainstreaming' of performance management and full recognition of the application value thereof with the publications in 1998 with publishing of the *White Paper on Local Government* (1998) which proposed the introduction of performance management systems to local government as a tool to ensure developmental local government. This was followed up in 2001 with the *Performance Management Guide for Municipalities* and the *General Key Performance Indicators for Local Government* (July 2001) as well as in 2002 of the Department of Public Service and Administration's *Draft Guide: Performance Management and Development (GP 5/7 1)*. The Guide on Performance Management and Development, issued by the Department of Public Service and Administration, was designed to help departments understand the implications of the new public service policy context for performance management and development, to develop an effective departmental policy on performance management and development that links individual performance to the goals of the department in a way that is relevant and appropriate to the needs and circumstances of each specific department, and to design, implement and use a system for individual performance management and development that is appropriate, relevant and effective.

Performance Management can broadly be categorized in 'organisational' and 'human resource' dimensions (Faucett & Kleiner, 1994:64; Boland & Fowler, 2000:418). Performance Management focuses not only on individual employees, but also on systems, processes, programmes, and the organisation as a whole. Organisational performance management takes a wider institutional perspective as far as the input (resources), processing (systems, procedures, methods, policies, administration, etc.), output (services and products), and outcomes (results of output) of public institutions are concerned. It refers to any integrated, systematic approach to improving organisational performance to achieve strategic aims and promote an organisation's mission and values.

Performance can be regarded as a multi-dimensional construct referring to the work as well as about the results achieved (Otley, 1999; Fitzgerald & Moon, 1996). Rogers (1994:34) argued that performance should be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of the organisation, customer satisfaction, and economic contributions. A comprehensive view is that performance is achieved in public institutions if it is defined as embracing three interrelated variables: behaviors (processes),

outputs (deliverables), and outcomes (value added or impact). Mwita (2000) regards performance management as 'a systems-based model for cultivating the achievement culture in public sector organizations'. A well-performing public institution may be regarded as one that provides quality services that minimize the performance gap between actual delivery and customer (community) expectations (Ballantine & Modell, 1998; Fitzgerald & Moon, 1996). It is the responsibility of senior public managers to identify performance gaps in service delivery and provide the framework for improvement (Horton & Farnham, 1999).

Why did performance management gain popularity in the public sector? According to Redman and Mathews (1995), the answer is sought in the fact that the public sector strives to become more commercially aware in line with the New Public Management paradigm and 'managerialism' and significant pressures on the public sector now make performance management appear more attractive (Dixon *et al.* 1998: 167). These pressures include the introduction of performance measurement in financial regulations, compulsory competitive tendering, increasing pressures on cost restraint and value-for-money, more demanding customer requirements, improved access to services, responsive to the needs of citizens, and the introduction of the *Batho Pele* (customer-first) principles in the White Paper on Transforming Public Service Delivery, 1997. Accountability has become vital in the non-profit sector as governments effect funding stringencies by introducing criteria based on the ability to prove that specified goals have been achieved. The purpose is to increase public confidence and to improve programme effectiveness by systematically holding public institutions and their political heads accountable for outcomes and results.

Due to the wide variety of performance management tools, models and techniques available such as the Balanced Scorecard, Six Sigma, Excellence Models, Servqual, and Citizen Charters, it is virtually impossible to identify a generic or common Performance Management methodology. For purposes of analysis and to operationalize the objectives of article, the transdisciplinary contributions of Performance Management will be undertaken based on the organisational and human resources dimensions of project management.

From the arguments highlighted above, the question arises as to what extent could Performance Management add value to Project Management as an emerging, applied discipline? The Project Management Body of Knowledge (PMBOK) drew a significant number of theories, principles and practices from a wide variety of disciplines including Communication Studies, Human Resource Management, Quality Management, Financial (Cost) Management, and Risk Management. It is argued that PMBOK could benefit Performance Management through the inclusion of project management theories, principles and best practices.

It should be noted that Project Management's body of knowledge could also make significant contributions to the corpus of knowledge of Performance Management, but this perspective falls outside the focus of this article.

3. Perspectives of transdisciplinary contributions: a framework

To facilitate an analysis of the contributions that Performance Management could make to the body of knowledge of Project Management, an explanatory logical framework is

necessary. Such a framework should make provision for the potential complex interrelationships between the afore-mentioned two disciplines as well as the different vantage points (i.e. epistemological, methodological, theoretical and practical) from which it could be analyzed. Figure 1 below, highlights the macro, meso, micro and methodological levels (or perspectives) from which the transdisciplinary contributions could be analyzed.

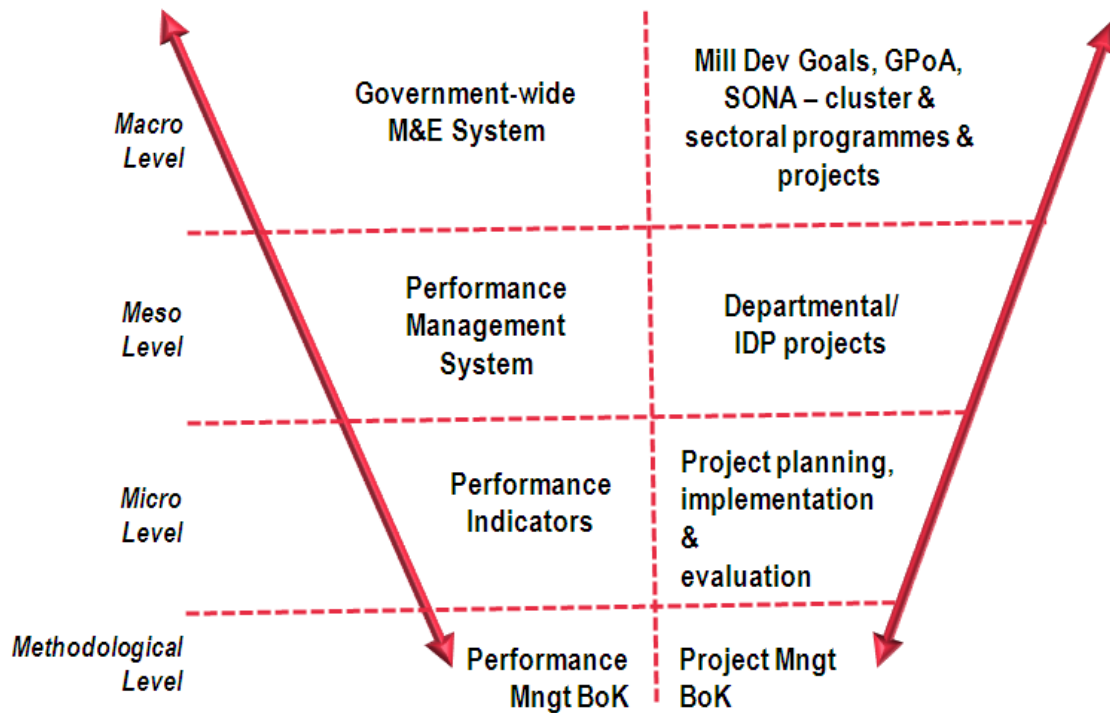


Fig. 1 Performance Management and Project Management matrix: The Complementary Interface. Source: Author’s own construction

Based on this framework, it is further possible to elaborate on figure 1 and to establish a conceptual framework for new insight that could be gained once the bodies of knowledge of Performance Management and Project Management merged (on macro, meso, micro and theoretical levels). Figure 2 below, illustrates this conceptual framework. It should be noted that both performance management and project management applications are context specific. The South African Public Service environment - and associated dynamics – will significantly impact on the transdisciplinary perspectives and insight that could emerge based on their respective contributions. Figure 2 indicates how interdisciplinarity (interface between Project Management and Performance Management) could lead to new knowledge and insight regarding public sector challenges and the way the principles of both study domains could be applied.

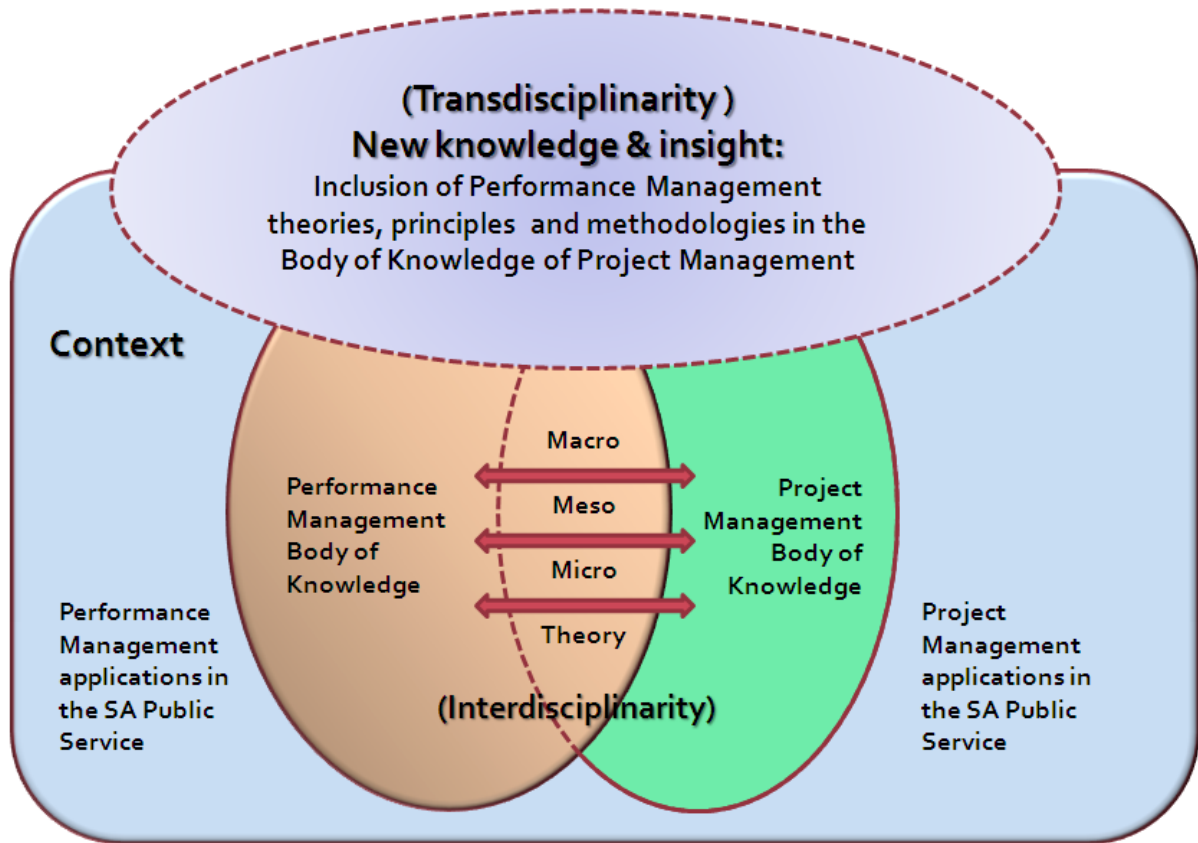


Fig. 2 Performance Management and Project Management: Transdisciplinary contributions.
Source: Author's own construction

The sections below (3.1-3.4) will analyse the potential transdisciplinary contribution on the respective levels highlighted in the matrix above.

3.1 Macro level perspective

From a macro perspective (see Fig. 1) the complementary interface should explore how the Government-wide Monitoring and Evaluation System (GWM&ES), as a macro performance management system for policy implementation in South Africa, complements strategic projects that are used as vehicles for policy implementation.

The Millennium Development Goals provided the needed impetus for the former president of South Africa, Thabo Mbeki, to propose in 2004 that a comprehensive monitoring and evaluation system be developed. His request was that such a system should facilitate reporting on the progress made on the operationalisation of the Millennium Development Goals to the United Nations, donor agencies, as well as feedback to society on government's delivery through the Government's Programme of Action (GPoA) as well as the State of the Nation Address (SONA). In 2005 Cabinet approved such development and the Office of the Presidency, National Treasury, the Department of Public Service and Administration and Statistics South Africa initiated the development of a framework to manage performance and measure service delivery of government departments. In November 2007 the Government-wide Monitoring and Evaluation System was published. The System aims to instill the systematic and coordinated monitoring and evaluation of policy and programmes to improve the management of the public sector. It monitors developmental impact through the

Provincial Growth and Development Plans and Integrated Development Plans (IDPs) of municipalities. It also enhances the quality of performance information to monitor outcomes and impact. Performance Management Systems (PMS) must assist departments and municipalities with its own performance, whilst the GWM&ES takes an outcome and sectoral perspective. For this purpose two new Ministries were created in the Office of the Presidency: the Ministry of the National Planning Commission and the Ministry of Performance, Monitoring and Evaluation. Furthermore, the Medium Term Strategic Framework (MTSF) as well as the Medium Term Expenditure Framework (MTEF) were created to align strategic priorities and budgets of departments with the vision of Government.

Vision 2025, with its twelve outcomes, and the GPoA provide the macro framework for the implementation of programmes and projects in the various clusters in Government. Each of the twelve outcomes has a delivery agreement, signed by the respective ministers. These agreements reflect Government's delivery and implementation plans for its so-called 'apex' priorities. As such, it establishes the foundation from which sectoral departments (a cluster of service-related departments) design and execute projects. Evaluation of these projects is aimed at measuring whether and to what extent the Presidency's Mid-term Development Indicators (a series of 76 policy assessment indicators developed in 2009) and performance targets are impacted.

In the case of municipalities, the Local Government: Municipal Systems Act 32 of 2000 provides for a national alignment of municipal performance monitoring with the GWM&ES. The Minister of the Department of Co-operative Government and Traditional Affairs (COGTA), after consultation with the respective Members of the Executive Committees (MECs) for local government, and organized local government, prescribe national key performance indicators for municipalities. These general indicators make provision for, *inter alia*, percentage of households with access to basic levels of water, sanitation, electricity and solid waste removal, as well as employment equity targets.

It could be argued that the more Government implements service delivery projects effectively, the higher the performance ('goodness') of Government will be rated. From a normative perspective, a performance orientation in Government is essential to adhere to the principles attached to 'good' governance. The World Bank in 1994 indicated the interface between the goodness of a government and its ability to respond to the needs of society. Bridgeman (2007:21) in this regard also illustrates the reciprocal relationship between good institutional performance and good governance. The Economic Commission for Africa (2003:5) indicates that the availability of information and transparency in order to enhance policy implementation, promote public debate and reduce the risk of corruption, are essential elements of 'goodness'. Furthermore, Hyden and Braton (1993:7), Batley and Larbi (2004), and Van der Waldt (2004:10) identified various characteristics of good governance which include elements such as the degree of trust in government, the degree of responsiveness to needs, the degree of transparency and accountability, as well as the nature of authority exercised by government over society. In this regard, the Mo Ibrahim Foundation developed 84 indicators (such as economic prosperity, safety, human rights and development) to measure the goodness of countries on the African continent (currently South Africa ranks 5th on the index; Mauritius first and Somalia last). The United Nations Development Programme (UNDP) through its Global Programme on Capacity Development for Democratic Governance Assessments and Measurements, published in 2005 different governance indicator frameworks within the Global Barometer, including the World Values

Survey, the World Governance Assessment, the Public Integrity Index, and the Afrobarometer. Through these frameworks the UNDP seeks to assist developing countries to produce disaggregated and non-ranking governance indicators to enable the monitoring of governments' performance.

Another dimension on the macro level matrix was (and still is) the establishment of a comprehensive statutory and regulatory framework to mainstream performance management in government operations. This includes, but is not limited to:

- The Public Service Act 103 of 1994 (gives direction on how state departments should manage performance in a consultative, supportive and non-discriminatory way in order to enhance organisational effectiveness, efficiency, and accountability for the achievement of results)
- The Constitution of the Republic of South Africa of 1996 (Section 195: 'performance' principles of public administration)
- The White Paper on the Transformation of the Public Service, 1995 (emphasizing the core principles of transformation to lead to service excellence)
- The White Paper on Transforming Public Service Delivery (*Batho Pele*), 1997 (set eight principles for service standards and a customer focus)
- Local Government: Municipal Systems Act 32 of 2000 (Section 38: the establishment of Performance Management Systems)
- Municipal Finance Management Act 56 of 2003 (reflecting on the need for service delivery and budget implementation plans, accountability of Section 57 managers, performance auditing and performance accounting)
- Local Government: Municipal Planning and Performance Management Regulations, 2001 (Chapter 3: sets criteria which the municipality's performance management system must adhere to).

The transdisciplinary contribution of performance management from this macro perspective lies mainly in the establishment of systems to monitor, measure and evaluate the implementation of projects aimed at operationalizing Government's Programme of Action. Measurement is aimed at establishing whether projects were implemented efficiently, effectively, and economically. From a normative perspective, performance management further provides the means to measure the 'goodness' of a government through its actions (i.e. projects).

3.2 Meso level perspective

At a meso or intermediate level of the matrix (fig. 1) the second contribution should focus on, *inter alia*, the design and implementation of comprehensive Performance Management Systems (PMS) in government institutions on national, provincial and local spheres as well as the political monitoring and oversight functions of government. All government institutions, including municipalities, are required to develop strategic plans, allocate resources to successfully implement these plans through programmes and projects, and then to monitor and report the outcomes thereof (Van Baalen & De Coning, 2011:178).

In the case of national and provincial departments, the Department of Public Service and Administration (DPSA) published 'The Guide on Performance Management and Development' in 2002 to help departments to develop policy on performance management and development that links individual performance to the strategic objectives of the

department, and to design, implement and utilise a performance management system (Van der Waldt, 2004:290). On the local government sphere the former Department of Provincial and Local Government (now COGTA) published the 'Performance Management Guide for Municipalities' in 2001. This guide was aimed at addressing the significant performance challenges that municipalities face through the design, implementation and use of a comprehensive performance management system. The PMS is intended as a strategic tool to monitor performance of projects aligned to the IDP. The PMS assist project teams to measure the efficiency, effectiveness, economy, and quality of project deliverables. The system is designed to continuously monitor the adherence to its developmental and constitutional mandate. The PMS use performance indicators, municipal scorecards, service targets, and service standards to enhance the quantification of service delivery outputs, outcomes and impacts. In this regard National Treasury designed a 'Framework for Managing Programme Performance' (2007) to facilitate the utilization of performance management in all activities of government and in the measuring of outcomes of projects. Monitoring and evaluation of these projects revolves around a number of key elements such as:

- *Inputs:* All the resources required to produce a service delivery output such as finances, personnel, equipment and infrastructure.
- *Activities:* All the functions and tasks executed to produce a deliverable.
- *Outputs:* The final products, goods and services produced for delivery.
- *Outcomes:* The results over time for specific beneficiaries, which are the consequences of achieving specific outputs.
- *Impacts:* The depth results of achieving specific outcomes, such as reducing poverty and creating jobs.

Central to the system is the development of key performance indicators to translate development challenges into quantifiable and measurable constructs. The PMS also set targets, assist with the design of roles and responsibilities of personnel to adhere to those targets, and establishes a process of regular performance reporting to facilitate accountability. A comprehensive Performance Review typically takes place during the mid-year Budget and Performance Assessment in January when the annual performance report is prepared. This review is intended to analyse municipal performance and to draw conclusions from statistics and trends in performance over the financial year and in all political and administrative structures of the municipality.

In terms of Section 43 of the Systems Act, the Minister of Cooperative Government and Traditional Affairs has determined general Key Performance Indicators applicable to all municipalities. These developments further boost political and administrative responsiveness and accountability. A PMS makes provision for organisational performance (the effectiveness, efficiency and economy of its processes and systems) and human performance through the signing of performance contracts and bi-annual performance appraisals.

Furthermore, the PMS enables provincial supervision, monitoring and support of local government projects. Provincial authorities may intervene in a municipality (Section 139 of the Constitution) if its actions (i.e. projects) result in misappropriation of funds, corruption, maladministration as well as the breach of sections 152 and 153 of the Constitution which outline service delivery obligations of municipalities.

From the above contextualisation it appears that the transdisciplinary contribution on the meso level centres mainly around the utilisation of performance management instruments such as performance management systems, performance indicators, service targets, and

scorecards to assist project teams to measure the efficiency, effectiveness, economy, and quality of project deliverables. Performance management principles and practices are also utilised as political oversight and monitoring instruments to evaluate and control government projects.

3.3 Micro level perspectives

The third vantage point from which the complementary interface between performance management and project management could be explored lies at a more micro level where the performance monitoring and evaluation of projects are built into the design and implementation of project activities and milestones. This includes, for example, the use of Performance Indicators (PIs) to measure the success (quality, efficiency, effectiveness and economy) of each activity.

The micro level perspective also includes focus on the human dimension of performance and should include the performance appraisal of project team members. The organisational dimensions of performance management should make provision for the micro management of project team members' performance. The use of a Responsibility Assignment Matrix (RAM), the Work Breakdown Structure (WBS), Planning templates, and other tools, should clearly reflect the instruments and/or criteria that will be used to assess the performance of individuals working in a project team.

Performance monitoring and evaluation of projects typically revolve around issues such as resource results (typically budget), efficiency results (deliverables on target, in scope, and according to quality specifications), and people results (productivity, performance appraisals, performance contracts, etc.)

3.4 Methodological perspective

Arguably the most significant transdisciplinary contribution of Performance Management on the body of knowledge of Project Management lies in its theoretical underpinnings. A case could be made that all contributions on macro, meso, and micro levels depend on and are informed by the theories and principles associated with the body of knowledge of both study domains.

As management disciplines, both Project Management and Performance Management have relative mature methodologies in place (Meredith & Mantel, 2000:139; Schwerin, Bourne & Reid, 2004), and there are interdependencies between them that should be explored to capitalize on the strengths of each discipline and to understand how each complement the other.

For purposes of this article the generic, Project Management Body of Knowledge (PMBOK™) Life Cycle model of Project Management is utilized as conceptual framework to reflect the potential areas where Performance Management could add value.

3.4.1 Project Management (PMBOK) Methodology

Project Management emerged as popular discipline in the late 1950s and 1960s. During the late 1970s the United States and European Project Management societies were established and project management matured as management application through the widespread adoption in business, government and the military of the matrix form of organisation. During the 1980s Project Management writings emerged and a body of knowledge became apparent. Project management societies began to provide communication on the discipline and this

continued until the mid-1980s when, first, the U.S.-based Project Management Institute (PMI) and, later, the U.K.-based Association for Project Management (APM), embarked on programs to test project management professionalism. This brought about certain guidelines and bodies of knowledge (e.g. PMBOK, APMBOK), which addressed certain methodology but not every industry and type of methodology. As far as the professionalisation of project management is concerned, the Project Management Institute (PMI) was established with its head office in the USA. The main product of PMI is the *A Guide to the Project Management Body of Knowledge* (PMBOK®) which provides a conceptual framework for the study of projects. It provides a generic view of project management. The PMBOK-guide is intended to provide a common lexicon within the profession for debating key issues in projects. PMI published the first Edition of the PMBOK in 1996, the second edition in 2000, in 2002 the *Government Extension to a Guide to the Project Management Body of Knowledge (PMBOK Guide)*, and the latest (fifth edition) in 2012.

The PMBOK comprises of ten knowledge areas, namely:

- Integration Management
- Scope Management
- Time Management
- Cost Management
- Human Resource Management
- Communication Management
- Risk Management
- Procurement Management
- Quality Management
- Stakeholder Management

Especially the quality knowledge area has reference to this article. The existing body of knowledge (PMBOK) makes provision for Project Quality Management and the question may be asked whether this knowledge area makes adequate provision for the performance dimensions of projects. To answer this question one has to conceptualise both concepts 'quality' and 'performance', and compare the differences in foci of both.

According to the *Guide to the Project Management Body of Knowledge*, Chapter 8 (1996 & 2000 editions), the project quality management knowledge area is comprised of the set of processes that ensure the result of a project meets the needs for which the project was executed. Processes such as quality planning, assurance, and control are included in this area. Each process has a set of input and output. Each process also has a set of tools and techniques that are used to convert input into output. This includes the ISO 9000, 10000 and 10006:2003 quality standards. It should be noted that the Quality Management System standards created by ISO are meant to certify the processes and the system of an organisation, thus its performance, and not the product or service itself. ISO 9000 standards do not certify the quality of the product or service. Quality control uses inspections to prove the quality standards of the deliverable projects.

There is recent evidence that project performance is receiving increasing attention. Crawford, Pollack and England (2005:175-184) through their analysis of articles in the *International Journal of Project Management* and the *Project Management Journal*, showed that there is a distinct reduction in focus on Quality Management in the project management literature over the last 10 years, while an increase in the significance of Project

Evaluation and Improvement is prevalent over the same period, especially, the Earned Value Management domain contributes principles of project performance management. Furthermore, there seems to be role confusion regarding *quality* and *performance* responsibilities in projects. It is evident that the roles of project governance structures such as Steering Committee and Project Management Offices is to 'monitor and control project *performance* – to track progress against appropriate measures' (Aubrey *et al.*, 2010:33), whilst the role of the project manager is seen to manage the *quality* of projects (PMBOK). A review of competency profiles of project managers further confirms that they are responsible for project quality and that performance is seen as an end result of a project. Furthermore, authors such as Atkinson (1999:337) argue that Project Management need to consider other success criteria than simply 'time', 'cost' and 'quality' parameters.

In a not-for-profit setting, i.e. public sector, it seems that the concept 'performance' is favoured above 'quality', probably due to the lack of customer-orientation (in spite of initiatives to put 'people first' in service delivery - see *Batho Pele*, 1997)(Faucett & Kleiner, 1994:64; Aerie & Bouckaert, 1996:12). Integrated Performance Management Systems are developed, and performance is monitored to ensure the quality of services.

In a Project Management Solutions Research Report titled 'Project Maturity: A benchmark of current best practices', the maturity of organisations in nine project management knowledge areas is generally accepted as critical to successful project completion. More importantly, the research confirms the hypothesis that there is organisational and project management performance improvement if organisations improve their project management maturity. A significant percentage (23%) of high-performing organisations is at Level 5 maturity in quality management. This is an indication that a clear distinction is made between quality and performance.

The acknowledgement that Performance Management adds value (especially in the field of earned-value analysis) to project management is not new and studies undertaken by Pinto and Slevin (1988) and Cooke-Davies (2002:185-190) illustrate how critical success factors could add value during the project life cycle.

3.4.2 *Project life cycle and performance management interface*

The life cycle perspective of projects provides a useful framework to analyse project dynamics over time since it conceptualizes work stages and the budgetary and organisational resource requirements of each stage. PMBOK proposes 5 phases in the life cycle, namely:

- *Initiating processes*: authorizing the project (usually through a project proposal)
- *Planning processes*: defining and refining objectives and selecting the best of the alternative courses of action to attain the objectives that the project was undertaken to address
- *Executing processes*: co-ordinating people and other resources to operationalize the plan
- *Controlling processes*: ensuring that project objectives are met by monitoring and measuring progress regularly to identify variances from plan so that corrective action can be taken when necessary
- *Closing processes*: formalizing the closure the project and bringing it to an orderly end.

As stated, PMBOK's life cycle is utilized as conceptual framework for purposes of this article in order to identify potential contributions of Performance Management. Below, each phase of the life cycle is explained with an indication of the kind of contribution Performance Management body of knowledge of could make.

Phase 1: Project Initiation

Contribution 1: The use of Performance Management models for project assessment

During the project initiating phase senior management (and often political heads) needs to be convinced about the feasibility of the project before it is authorized. Various Performance Management models exist such as the Excellence Model, the Balanced Scorecard, and Six Sigma that provide metrics to assess the feasibility of projects and its relative importance in terms of strategic priorities. Projects should be linked with a strategic programme and falls within key performance areas of the organisation. Performance management models could also assist in issues such as environmental impact assessments, SWOT Analysis, Baseline Indicators, and Evaluation Methods.

Phase 2: Project Planning

Contribution 2: The use of Performance Indicators to measure project success

Performance should be designed into the planning of projects. The performance of a project should be assessed at the completion of the project (summative assessment) and during its implementation (formative assessment). The performance metrics that will be used for these formative and summative assessments need to be attached to the project activities, milestones and deliverables.

Table 1: Project planning and performance management interface

Activity	Duration (actual, start, stop)	Cost	Responsible person	Performance Indicators	Standards (Level of success)
1.1 Book venue for workshop	5 days	R800-00	Elné	<p><i>Input indicator:</i> Number of attendants (RSVP)</p> <p><i>Process indicator:</i> Venue specifications</p> <p><i>Output indicator:</i> Booking confirmation letter</p>	<p>65% attendance</p> <p>90% compliance with spec's</p> <p>-</p>
1.2 Arrange catering	3 days	R1 500-00	Helah	<p><i>Input indicator:</i> Number of attendants</p> <p><i>Process indicator:</i> Dietary requirements Procurement policy</p> <p><i>Output indicators:</i> Menu confirmed with caterer Contract with caterer</p>	<p>-</p> <p>100% as per RSVPs 100% compliance with policy</p> <p>100% compliance with procurement policy Signed by CFO</p>

Table 1 above proposes a planning template format to be utilised by project teams when they develop a work breakdown structure (WBS). This template makes specific provision for the performance dimension of project activities and its design/layout is congruent with the software architecture of Microsoft (MS) Project. It facilitates the transferring of paper-based team planning to software-based planning. It is recommended that this template be utilised jointly by all project team members to collectively brainstorm the WBS of the project hereby ensuring buy-in from especially those team members who will be responsible for the execution of the activities. The performance indicators consist of input, process, output, and composite indicators to assist the project manager to assess the quality of completion. In other words, once the team member responsible for a particular activity reports to the project manager that the activity was successfully completed, the project manager will use the performance indicators and standard to determine whether it was successfully executed.

The 'Standard' column refers to the level of success that is expected. In other words, if the 'Venue Specifications' (II of activity 1 above) indicate, for example, the size of venue, accessibility, safe parking, break-away venues, a kitchen, the standard will reflect the level to which the responsible person must adhere to all the specifications. If some specifications are crucial for successful completion, the Standard must reflect accordingly. If there are, for example, 10 specifications of which 8 are crucial, the standard will be '80% compliance', meaning that the remaining 2 specifications are not critical for success. The standard further indicates the so-called 'tolerance level' for the team. Everything below this standard therefore cannot be tolerated, and the responsible team member is required to redo the activity until it achieves the expected standard.

By adding the performance indicators and standards will enable self-assessment prior to performance appraisals possible since the criteria for measurement is known to the individual who is responsible for the execution of the activity. It is suggested that these performance indicators and standards be set in conjunction with the responsible person since the person responsible is experienced in this field of activity and will be in the best position to determine what issues should be considered to ensure success. This will also minimize the potential for conflict between the supervisors and individuals since the criteria for performance appraisals are known upfront. It will also legitimize the appraisal rating since there is limited potential for disagreement whether the standard was exceeded or not. By adding these performance indicators and standards could further assist in risk management since, to a large extent, the standard is the tolerance level of the project. Should an individual not succeed in meeting the standard, chances are increased that the activity(-ies) will be unsuccessful, which in turn will put the project at risk. If the project is at risk, the institution may waste scarce resources on a bad project. It is further argued that if the performance of the respective building blocks of a project (activities and tasks) are monitored and assessed, the ultimate performance of the project will also be enhanced.

Contribution 3: Responsibility and accountability of team members, role-players and stakeholders

By utilizing the planning template (Table 1) could further assist in responsibility and accountability improvement in public institutions – an aspect which is critical for performance enhancement. The planning template pinpoints responsibility by indicating the person who is responsible for the execution of the activity. Project Management methodology adds the so-called 'RAMs' (Responsibility Assignment Matrix) which makes provision for the indication of the responsible person(-s) as well as their acknowledgement (usually in the

form of a signature) that they are responsible for a particular activity within a specific time period, budget and according to specified performance indicators and standards.

Phases 3 & 4: Project Execution & Controlling

Contribution 4: Performance monitoring during project execution

Performance monitoring ensures that project objectives are met by regular progress and status reports to identify variances from the original plan so that proactive, corrective action can be taken.

Monitoring can be regarded as a procedure to check the effectiveness and efficiency in the implementation of a project by identifying strengths and shortcomings and recommending corrective measures to optimize the intended outcomes. In the monitoring process, management should compare project execution performance against parameters defined in the baseline project plan, and take corrective action. Monitoring is not necessarily limited to monitoring of performance in project implementation. Monitoring is usually conducted in two major areas, namely compliance (pre-)testing and performance (post-)testing.

Contribution 5: Performance reporting, auditing, and accounting

Reporting on project performance is to review the project progress against expected cost, duration, and quality expectations. Status reporting should typically track the schedule and scope status, major challenges, risks, expenditure (actual versus planned amounts) and changes to the baseline plan.

Performance auditing and accounting are typically the responsibility of the chief financial officer and will use accepted practices, National Treasury Guidelines, as well as legislative compliance tests.

Phase 5: Project Closure

Contribution 6: Assessing the overall performance of the project

This phase of the project life cycle is about formalizing the closure of the project and bringing it to an orderly end. Performance Management's contribution in this phase is to provide assessment models and metrics to assess the extent to which the project deliverables meet the objectives specified. Traditionally project management success focused mainly on the dimensions of 'within time', 'within budget' and 'according to requirements' (quality and functional specifications) of a project (Redmill, 1997:30; Globerson & Zwikael, 2002:58). However, these dimensions are not sufficient to measure overall project management success. Therefore, it is important to include performance metrics which should also focus on issues such as the efficiency of the management processes, stakeholders satisfaction, the quality of the product or service delivered, the effectiveness of resource utilisation, and the outcomes and impact of the deliverables, to obtain a more complete (transdisciplinary) view of project success.

5. Conclusion

Both Performance Management and Project Management as applied management study domains gained significant popularity in public sector settings. Management applications should not be viewed in isolation. The purpose of this article was to explore the potential transdisciplinary contributions of both practical and theoretical contributions that

performance management could make to the practice and theories of project management. A conceptual framework was utilised to identify practical contributions on macro, meso and micro levels and it was found that performance management could significantly enhance project application practices in the South African Public Service. Furthermore, the potential transdisciplinary contributions from a theoretical/methodological vantage point were explored by using the generic life cycle of Project Management Body of Knowledge. Six contributions were identified during the respective phases of the life cycle.

It is recommended that further, thorough qualitative research is required to explore the transdisciplinary contributions – especially on how project management in turn could influence performance management theories and practices in order to reveal the interdisciplinary nature of contributions within a transdisciplinary perspective.

References

- AERIE, H. & BOUCKAERT, G. 1996. Organizational Performance and Measurement in the Public Sector. Westport, Connecticut: Quorum Books.
- ATKINSON, R. 1999. Project management: Cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International Journal of Project Management*, 17(6), 337-342.
- AUBRY, M., HOBBS, B., MULLER, R. & BLOMQUIST, T. 2010. Identifying forces driving PMO changes. *Project Management Journal*, 41(4), 30-45.
- BALLANTINE, J.B.S. & MODELL, S. 1998. Performance measurement and management in public health services: a comparison of UK and Swedish practice. *Management Accounting Research*, 9, 71-94.
- BATLEY, R. & LARBI, G. 2004. The changing role of government: The reform of public services in developing countries. New York: Palgrave, MacMillan.
- BOLAND, T. & FOWLER, A. 2000. A Systems Perspective of Performance Management in Public Sector Organisations. *The International Journal of Public Sector Management*, 13(5), 417-446.
- BRIDGEMAN, P. 2007. Risk Management: Good Governance. Online: <http://www.aspc.au//media>. [date accessed 25 July 2011].
- BRUDER, M.B. 1994. Working with members of other disciplines: Collaboration for success, in: Wolery, M., Wilbers, J.S. (Eds.). Including children with special needs in early childhood programs. Washington, DC: NAEYC, pp. 45-70.
- COOKE-DAVIES, T. 2002. The 'real' success factors on projects. *International Journal of Project Management*, 20(3), 185-190.
- CRAWFORD, L., POLLACK, J. & ENGLAND, D. 2005. Uncovering trends in project management: Journal emphases over the last 10 years. *International Journal of Project Management*, 24, 175-184.
- CRAWFORD, L., HOBBS, B. & TURNER, J.R. 2006. Aligning capability with strategy: Categorizing projects to do the right projects and to do them right. *Project Management Journal*, 37(2), 38-50.

- DIXON, J. 1998. Managerialism – something old, something borrowed, little new: economic prescription versus organisational change in public agencies. *International Journal of Public Sector Management*, 11(2/3), 164–87.
- EVARISTO, R. & VAN FENEMA, P.C. 1999. A typology of project management: emergence and evolution of new forms. *International Journal for Project Management*, 17(5), 275–81.
- FAUCETT, A. & KLEINER, B.H. 1994. New Developments in Performance Measures of Public Programmes. *International Journal of Public Sector Management*, 7(3), 63–70.
- FITZGERALD, L. & MOON, P. 1996. Performance Measurement in Service Industries: Making it Work. London: CIMA.
- GLOBERSON, S. & ZWIKAEEL, O. 2002. The Impact of the Project Manager on Project Management Planning Processes. *Project Management Journal*, 33(3), 58–64.
- HORTON, S. & FARNHAM, D. 1999. Public Management in Britain. London: Macmillan Press.
- HYDEN, G. & BRATON, M. (Eds.) 1993. Governance and Politics in Africa. Boulder, Colorado: Lynne Rienner.
- MEDICUS, G. 2005. Mapping transdisciplinarity in Human Sciences, in: Lee, J.W. (Ed.), Focus on Gender Identity. New York: Nova Science Publishers. pp. 95–114.
- MEREDITH, J.R. & MANTEL, S.J. 2000. Project Management: A Managerial Approach. Fourth ed. New York: John Wiley & Sons.
- MWITA, J.I. 2000. Performance management model: A systems-based approach to public service quality. *The International Journal of Public Sector Management*, 13(1), 19–37.
- NICOLESCU, B. 2005. Towards transdisciplinary education. *The Journal for Transdisciplinary Research in Southern Africa*, 1(1), 5–15.
- OTLEY, D. 1999. Performance management: a framework for management control systems research. *Management Accounting Research*, 10, 363–382.
- PINTO, J.K. & SLEVIN, D.P. 1988. Critical success factors across the project life cycle. *Project Management Journal*, 19(3), 68–75.
- PMI. 2004. A guide to project management body of knowledge. Third ed. Project Management Institute. PMI, Pennsylvania.
- POHL, C. & HIRSCH-HADORN, G. 2007. Principles for Designing Transdisciplinary Research. Munchen: Swiss Academies of Arts and Sciences.
- REDMAN, T. & MATHEWS, B. 1995. Quality management in services: is the public sector keeping pace? *International Journal of Public Sector Management*, 8(7), 21–34.
- REDMILL, F. 1997. Software projects: evolutionary vs. big-bang delivery. Chichester: Wiley.
- ROGERS, S. 1994. Performance Management in Local Government. Essex: Longmans.
- SCHWERIN, M.J., BOURNE, M.J. & REID, L. 2004. Subjective and Objective Results of Usability Testing for the U.S. Navy's Performance Management System. Paper

presented at the NATO Research Task & Technology Organization Conference held on 26-28 October 2004. Brussels, Belgium.

- SOUTH AFRICA (REPUBLIC). 2007. Policy framework for the Government-wide Monitoring and Evaluation System. Pretoria: The Presidency.
- STEWART, J. 1986. The New Management of Local Government. Institute of Local Government Studies, London: Allen & Unwin.
- STEWART, R.A. 2008. A framework for the life cycle management of information technology projects. *International Journal of Project Management*, 26, 203–212.
- URLI, B. & URLI, D. 2000. Project management in North America: Stability of the concepts. *Project Management Journal*, 31(3), 33–43.
- VAN BAALEN, J. & DE CONING, C. 2011. Programme management, project management and public policy implementation, in: Cloete, F., De Coning, C. (Eds.). *Improving Public Policy: Theory, practice and results*. Third ed. Pretoria: Van Schaik. pp.170-195.
- VAN DER WALDT, G. 2004. Managing performance in the public sector: Concepts, Challenges and Considerations. Kenwyn: Juta.
- VAN DER WALDT, G. 2009. Public Management and Disaster Risk Reduction: Potential interdisciplinary contributions. *Jamba: Journal of Disaster Risk Studies*, 2(2), 14–27.
- WIESMANN, U., HIRSCH HADORN, G., HOFFMANN-RIEM, H., BIBER-KLEMM, S., GROSSENBACHER, W., JOYE, D., POHL, C. & ZEMP, E. 2008. Enhancing Transdisciplinary Research: A Synthesis in Fifteen Propositions, in: Hirsch Hadorn, G. (Ed.), *Handbook of Transdisciplinary Research*. Dordrecht: Springer. pp. 433-441.

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