

An Evaluation of the Effectiveness of a Performance Management System
at Tati Nickel Mining Company of Botswana

Initials and surname: B Thipe
Student ID No. 20953585

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Supervisor: Prof. S Lubbe

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Declaration

I hereby declare that the work contained herein is my original work, and has not previously, in part or in whole, been circulated or submitted to any university for any degree, or for publication anywhere.

Signed _____

Date _____

Abstract

The purpose of this research project is to determine the effectiveness of a Performance Management System (PMS) at Tati nickel Mining Company (TNMC) in Botswana, and how the implementation of the system is perceived in terms of the general business performance of the mine. While there is an extensive body of literature and research pertaining to performance management and performance improvement, many organisations are still grappling with appropriate techniques for improving their performance. Literature on PMS is concentrated on the design and implementation of different frameworks and on the solution and management of PMS problems on different organisational arenas. Little research has been conducted in the field of the impact of PMS on business performance of mining operations. The available research usually lacks a strong methodological basis and generally adopts a quantitative approach which is not qualitatively supported. This research project has attempted to bridge this gap by approaching the research issue with a structured quantitative and qualitative research methodology. It is believed that this approach has the potential of providing more insightful findings in the impact of PMS at TNMC. In doing so, it will lead performance managers and business managers in general to a better selection and optimisation of PMS factors that will produce a positive impact on their business performance.

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Chapter One: SCOPE OF THE RESEARCH

1.1 Introduction

Tati Nickel Mining Company (TNMC) is a nickel mining operation based near Botswana's second capital Francistown. The company currently has an establishment of over one thousand one hundred employees (1100). In addition, the mine has outsourced some of its core operations to specialist contractors in the nickel mining industry. These contractors employ in excess of one thousand (1000) people, which puts the overall human resource base of TNMC at over two thousand people (TNMC, 2012).

Tati Nickel Mining Company has in place a Performance Management System (PMS) that assists the company in managing both its core employees and its contracted staff. According to the TNMC's PMS Philosophy Document, the Performance Management Systems at the mine are expected to align the outputs and behaviours of all its employees to the overall performance objectives of the business. Further, the PMS must drive the achievements of the outputs and the way the outputs are achieved and aligned to the espoused values of the organisation. In that regard, PMS at TNMC is targeted at achieving high productivity levels of staff as it integrates both a development setting of performance goals, review of performance against set targets, development to build the necessary competencies to support the strategy of the organisation as well as performance reward mechanism that recognises excellence in delivery (TNMC, 2009).

This paper provides the scope of the research work in chapter 1. The literature review of the topic under discussion is provided under chapter 2, which looks at the various theoretical concepts of PMS. Chapter 3 describes the process of undertaking this research work (research methodology) and chapter 4 presents data from the research work as well as the analysis of the results. Finally, chapter 5 makes conclusions and recommendations based on the work undertaken.

1.2 Country background

Botswana attained self-governance in 1965, after 80 years as a British Protectorate and became independent on 30 September 1966. Botswana maintains freedom of speech, freedom of the press and freedom of association, and affords all citizens equal rights. All these rights are enshrined in the Constitution of Botswana, which also provides for a unicameral legislature, with Members of the National Assembly directly elected from the constituencies and themselves elect additional specially elected members and a Speaker of the National Assembly (Botswana Government, 2009).

The Country is landlocked, semi-arid, consisting of 582 000 square kilometres, about the same size as Kenya or France. It shares a border with Zimbabwe, South Africa, Namibia and Zambia. Botswana's population, according to the 2011 census, yielded a de facto population count of 2, 024, 904 compared with 1,680,863 in 2001 and 1,326,796 in 1991 (Botswana Government, Population and Housing Census Report, 2011).

When Botswana attained its Independence, it was counted among the least developed and poorest nations in the world, with a per capita income of about USD 94 (Rand 67 then), very little economic and social infrastructure and most of the population (87% of the workforce) engaged in subsistence agriculture. Less than a third of the population had ever been to school and only a handful of Botswana had any post-secondary level qualifications. Agriculture, mostly pastoral traditional agriculture, accounted for over 40 per cent of GDP. Over 30 per cent of Botswana men between the ages of 20 and 40 were working in South Africa, especially in the mines. Apart from the railway line, communications and infrastructure were barely developed. Prospects for the development of the economy seemed bleak, and the Government was dependent on foreign aid, not only for all its investment projects, but also to finance its recurrent expenditure (Botswana Government, 2009; 2005).

Botswana's progress is reflected not only in the rapid improvement in many economic indicators, such as GDP, per capita GDP, the incidence of poverty, levels of formal sector employment and foreign exchange reserves, but also in measures of human development, such as levels of literacy, education, child and maternal mortality rates, life expectancy, etc. For many human development indicators, Botswana has recorded notable progress since Independence. However, HIV/AIDS is threatening to reverse much of that progress, and has resulted in an increase in mortality rates, especially infant mortality and a sharp fall in life expectancy during the past decade (Botswana Government, 2009).

The country is in the process of implementing its 10th national development plan (NDP 10) which promotes a private sector-led economic development. Tati Nickel Mining Company in Botswana plays a major role in such an effort as one of the leading mining concerns in the country. It is on that basis that a robust and effective performance management system is required for the success of the mine, which will in turn contribute to the economic development of Botswana (TNMC, 2012).

1.3 Background of the study

The study of performance management systems in Botswana has largely been confined to the public service. This is so partly because the government is the major player in the economy in terms of employment, contribution to GDP and the services that it offers to the general public. Whilst many organisations, including private sector companies, have introduced PMS to improve delivery of their services and operations, this sub-topic on performance management systems in the country will be confined largely to how and why a PMS has been introduced in the Botswana Public Service (Botswana Government, 2005).

Performance Management Systems in the Botswana Public Service have been implemented under the framework of Public Sector Reforms. The PMS has influenced

the administration and governance affairs of the country since independence in 1966. As a result, Botswana was transformed from being one of the poorest countries in 1966 to attaining its current middle-income status. The country has achieved relative socio-economic growth which increased the per capita income to about BWP18, 300 in 2010 from a meagre BWP60 at independence. This was made possible by the adoption of a national planning process coupled with relative prudence in the use of resources (Botswana Government, 2005) For a long time, inefficiencies were hidden under the veil of relatively low demands for public service goods and services from a nation just emerging from the agrarian era, with little complexities. The changing landscape brought about by globalisation revealed the need for rediscovery. There was a need to change the systems, structures and processes to facilitate economic development and to accommodate the growing demands and expectations of the citizens. This then became the main driving force that provided an impetus for the introduction of Performance Management Systems (AED, 1996).

Efficiency-driven reforms gained momentum in the 1990s with the establishment of the Botswana National Productivity Centre (BNPC) and several reforms measures such as Work Improvement teams (WITs) strategy, privatization and outsourcing. The government further made a deliberate move to provide lucrative conditions to attract foreign investors by removing trade barriers, making credit accessible to foreign investors among other initiatives. As a result, there was a rise in capital investments which contributed significantly to the country's infrastructural development (Botswana Government, 2005). Other reform initiatives that were implemented to influence the investment climate included the re-engineering of business processes to improve efficiency in doing business in Botswana; the introduction of the tax reforms, privatisation, outsourcing, effective procurement, e- Government and robust measures to fight corruption (Botswana Government, 2005).

The attainment of Vision 2016 (Botswana's National Vision and 50th Independence Anniversary), has shaped the strategic focus of PMS implementation in Botswana

(Botswana Government, 2005). The National Vision was conceived during National Development Plan (NDP) 7, but its implementation started in earnest only during NDP 9. However, a re-alignment of the strategy was made during the development of NDP 10 where the national strategy was based on the Vision framework to ensure alignment and achievement of 'prosperity for all'. The attainment of the National Vision required a major shifting of priorities, and represented a major thrust in the PMS agenda focus through the implementation of an Integrated Results Based Management (IRBM) system. IRBM informed the planning for NDP 10, and also helped to focus national efforts towards achievement of the already defined national priorities, identified as 'pillars' in the national vision document. Through the IRBM, another major achievement was that it was now possible to consolidate or bring together other major reform tools used within the framework of PMS that had otherwise lacked integration right through NDP 7 to NDP 9 (Botswana Government, 2005; 2009)

The Government of Botswana found it fitting that since the objectives of IRBM were in line with the intentions of PMS, then IRBM, as it had happened with other reform tools, should be juxtaposed into the existing performance management structure in order to reduce confusion to the implementers who have become used to the PMS concept (Botswana Government, 2005; 2009).

The PMS agenda has always been premised on the following issues:

1. Improvement of performance and service delivery across the whole Government, which is made even more necessary by the current President's Roadmap that includes 'Delivery' as a key guiding principle for all Government employees;
2. Coordination of delivery and ensuring that implementation agencies work in harmony;
3. Reducing duplication across Government, saving on development and operational costs, and delivering more with less;
4. Enhancing skills and capabilities of public servants, and ensuring that competencies built lead to better responding to citizen and general business needs;

5. Establishing service transformation as a top priority outcome (Botswana Government, 2005).

1.4 Problem statement

The implementation of performance management systems across the world has been widely regarded as an impetus to higher levels of performance and productivity of the workforce. However, organisations have not been able to derive optimal value out of the investment that they have made on performance management systems. Tati Nickel Mining Company has invested a considerable amount of resources in its PMS. Despite such investment, there are still pockets of under-performance across the organisation.

The world economy has also brought in a period of major development, extended and fierce competition. In the same light, Tati Nickel Mining Company is facing various challenges brought about by the new economic order which is characterised by fierce competition, increased demand for higher remuneration, and extended periods of sluggish economic performance and recession. This has led to, among others, declining mineral ore grades, high production costs, poor commercial terms of selling products, declining commitment of staff in response to the global economic challenges and loss of qualified staff to competitors (TNMC, 2012).

The effectiveness of performance management systems to be responsive to the challenges mentioned beforehand has therefore become an imperative. Tati Nickel Mining Company, just like other organisations the world over, has to ensure that its Performance Management System is robust enough to meet the challenges of competition, is price sensitive to world commodity markets, attracts qualified labour and sufficiently motivates its staff to commit to expectations and demands of the organisation. PMS at TNMC has to compare with the best systems in both the private and public sectors with which it competes for the same labour and other resources. Despite the implementation of PMS at Tati Nickel Mining Company, there is a need to

establish whether the desired levels of productivity have been achieved, and examine the impact of such system in sustaining the operations of the mine.

1.5 Research aims and objectives

1.5.1 General aims

The general aim of the research project is to evaluate effectiveness of the TNMC performance management system on employee productivity, and to propose interventions for strengthening the system based on best practice and experience of other organisations.

1.5.2 Research questions

- Are there clear linkages between TNMC strategic and business plans and the performance outputs of each individual employee and business units?
- What is the level of engagement and awareness of that is supportive of a high work culture?
- What is the level of employee awareness of PMS processes at TNMC, and the perceived benefit on individual productivity, motivation, morale, performance levels and employees welfare?
- How well are the performance reviews linked to performance rewards at TNMC?

1.5.3 Specific objectives

The specific objectives of this research were to:

- 1 Determine clarity of linkages and alignment between high level business objectives with lower level objectives at both business unit and individual level;
- 2 Establish level of engagement, coaching and mentoring of staff;
- 3 Ascertain the level of awareness of TNMC employees on PMS processes and procedures;
- 4 Determine employee perception on the benefit of PMS with regard to productivity, morale, welfare, rewards, reviews and general motivation;

- 5 Determine best practices in performance management across high performance organisations;
- 6 Recommend management interventions and strategies to propel TNMC to high performance and productivity levels.

1.6 Method of investigation

1.6.1 Research design

The research would be done by way of collecting data from both management and the employee population in order to see the perception on PMS across the spectrum. Data will be collected from past performance reviews to draw trends on productivity levels at TNMC. There literature presents a review to compare the programmes in place and the effectiveness of these initiatives. The research is mainly quantitative. There are some qualitative aspects to the research and some are comparative with selected organisations. Some questionnaires have been designed for the employees to give feedback and an analysis of this survey was done. The research follows all the ethical considerations for doing research such as anonymity of respondents. The survey results are then compared to some literature review to assess the relevance of the PMS with the situation on the ground at TNMC. Data collection at other selected organisations was done through desk-top research and targeted interviews.

1.6.2 Selection of mine employees.

Employees were randomly selected at all business units of TNMC to respond to the given questionnaire. The aim was to have a sample which is statistically significant for the establishment of TNMC. There was representation across all cadres, levels, and as much as possible, representation was balanced in accordance with all other demographic imperatives of the workforce such as age, gender and ethnicity.

1.7 Layout of the study

The study commences with a literature review which entails introducing PMS as a management concept. The literature review also interrogates related topics such as performance measurement in the context of performance management, performance management and the Balanced Scorecard methodology and requirements for successful implementation of PMS. The review also looks at issues of performance culture, performance management in the context of globalisation and finally presents a case study of performance management in a mining operation.

Following the literature review there is the consideration of the research methodology which looks at research design, discusses qualitative and quantitative approaches to research, presents the methodology to be used, look at issues of ethics in research, as well as presenting some limitations of this research work.

Data are presented and analysed following the undertaking of the research. Analysis started with the participants' profile, and went on to analyse results of the different aspects of PMS at Tati Nickel Mining Company. The analysis utilises frequencies and correlation analysis. The study was concluded by providing a summary of the research work, went on to test the research questions, provided specific recommendations based on findings of the study and made conclusions.

1.8 Conclusion

1.8.1 Summary

The investigation of the Effectiveness of PMS at Tati Nickel Mining Company (TNMC) is anchored on background studies which provide the performance management landscape in Botswana in general. The problem necessitating the study is also detailed as are the aims and objectives which are to be fulfilled by this research work.

1.8.2 Limitations

The study was limited to TNMC company operations at Phoenix Mine in Francistown as well as selected employees as coverage of all employees requires more resources.

The study will also be hampered as performance records are treated as confidential information between the employer and the employee.

Chapter Two: LITERATURE REVIEW

2.1 Introduction

Performance Management Systems have dominated the quest for performance improvement of organisations the world over. They have largely been born out of the need for effectiveness, efficiency, high accountability and need for less bureaucracies, especially in public sector organisations (Halachami, 2005; Holloway, *et al.* 1999). The significant role of performance management systems is that they would help organisations to identify areas of poor performance and put in place structured ways and interventions to deal with those. It also recognises good performance and the need to reward it for (Theron, 2000).

2.2 Performance Measurement and Performance Management

The terms 'performance management' and performance measurement' have been widely used interchangeably in literature (Halachami, 2005; De Waal, 2002). However, Radnor and McGuire (2004) argue that performance measurement is used for measuring whilst performance management uses the outcomes of measurement to manage performance. As such, performance measurement and performance management are both components of a performance management system (PMS). The part in which the multidisciplinary nature of performance management has been most broadly and successfully investigated is that of performance measurement. .

Following their review of the performance measurement literature Neely *et al.* (1995) defined performance measurement in its strictest sense as the process of quantifying the efficiency and effectiveness of action. Neely (1998) has further identified the activities required to measure performance by defining a performance measurement system as consisting of three inter-related elements:

- Individual measures that quantify the efficiency and effectiveness of actions.

- A set of measures that combine to assess the performance of an organisation as a whole.
- A supporting infrastructure that enables data to be acquired, collated, sorted, analysed, interpreted and disseminated.

Performance is complex and requires a set of objectives to assess and manage. . However, the definition of performance measurement has further been broadened by other scholars such as Gates (1999) and Otley (1999) to include strategy development and the strategy execution.

Performance Management System is a set of activities that include the creation of performance objectives and goals; defining performance measures that help in the drawing of action plans / decision-making; implementation of action plans and the evaluation of achievement of performance objectives. It is clear that a performance measurement system can form 'the information system that is at the heart of the performance management process, and integrates all the relevant information from all the other performance management systems' (Bititci *et al.*, 1997).

2.3 The value of Performance Management

A review of the literature identifies many reasons for managing performance which can broadly be categorised into the following:

- 1 **Strategy formulation:** determining what the objectives of the organisation are and how the organisation plans to achieve them.
- 2 **Managing the strategy implementation process:** examining whether an intended strategy is being put into practice as planned.
- 3 **Challenging assumptions:** by focusing not only on the implementation of an intended strategy but also on making sure that its content is still valid.

- 4 **Checking position:** by looking at whether the expected performance results are being achieved.
- 5 **Complying with the non-negotiable parameters:** by making sure that the organisation is achieving the minimum standards needed, if it is to survive (e.g. legal requirements, environmental parameters, etc.).
- 6 **Communicating direction:** to the rest of the employees, by passing on information about what are the strategic goals individuals are expected to achieve, and also to external stakeholders on partnership imperatives and the role of the stakeholders in assisting the organisation to achieve its goals.
- 7 **Providing feedback:** timely and regular reports to employees about their performance and the organisations performance.
- 8 **Evaluating and rewarding:** To motivate employees in improving their performance and reaching goals that achieve organisational strategy.
- 9 **Benchmarking:** comparing organisational performance internally and externally.
- 10 **Decision-making:** aid and inform management on decision-making processes, with heavy reliance on performance measurement information.
- 11 **Team-learning:** Encourage improvement and learning (Eccles, 1991; Euske, 1993; Bititci, *et al.*, 1997)

These strategic performance management (SPM) system roles can be classified into three main categories:

- Strategic: comprises the roles of managing strategy implementation and challenging assumptions.
- Communication: comprises the role of checking position, complying with the non-negotiable parameters, communicating direction, providing feedback and benchmarking.
- Motivational: comprises the role of evaluating and rewarding behaviour, and encouraging improvement and learning (Martins & Salerno, 1999).

Research has suggested that how a strategic performance management system is used influences business outcomes including organisational learning, strategic control and

interaction (Martins & Salerno, 1999). A management control system is categorised as interactive when top managers use it to personally and regularly involve themselves in the decisions of subordinates (Neely, 1999). When systems are used for this purpose, four conditions are typically present: Information generated by the management control system is an important and recurring agenda addressed by the highest levels of management; the process demands frequent and regular attention from operating managers at all levels of the organisation; data is interpreted and discussed in face-to-face meetings of superiors, subordinates, and peers; the process relies on the continual challenge and debate of underlying data, assumptions and action plans' (Simons, 1991).

A performance management system is meant to be interactive (Neely, 1998; Kaplan & Norton, 2001) since its main roles are to facilitate the implementation of the business strategy and to question strategic assumptions. Weber and Schaeffer (2000) posit that given the multitude of measures, organisations which use the balance scorecard, as an interactive system, will be overloaded. Consequently, they will not be able to interactively use the system. This is, however, challenged by the research of Lipe and Salterio (2000). In addition to its strategic purpose, the motivational purpose of strategic human resource management has also been stressed as a critical factor for its effectiveness (Eccles, 1991; Kaplan & Norton, 1992, 1996b, 2001; Otley, 1999).

When integrated with a compensation system, PMS can be a motivational tool. In Botswana, the government has integrated a Performance Based Reward System (PBRS) within the core PMS framework. PBRS here is exclusively used for the review of performance and related rewards in line with the public service rewards menu. It is guided by PMS in that all the performance objectives are predetermined with the PMS framework, and performance reviewed at set intervals (Botswana Government, 2005).

Some studies have exclusively focused on the behavioural and performance effects of using the measures included in an organisational PMS system for reward and evaluation purposes. Moreover, an aggregated analysis of the findings extracted from those studies shows some contradictory results. For instance, two practitioners'

surveys, one carried out by Gates (1999) and several case studies presented by Kaplan and Norton in their 2001 Balanced Scorecard book have shown positive behavioural and business effects of the use of PMS to determine pay.

Further, the perceived linkage between BSC metrics and divisional strategy has a significant and positive effect on the use of these metrics in individual's performance evaluation processes. But again, research by Ittner *et al.* (2003a) has revealed that the use of scorecard measures in compensation might produce dysfunctional behaviours that can diminish the value of the PMS itself and of organisations' business performance in the long run. In Ittner *et al.*'s (2003a) study, the use of the Balanced Scorecard for pay determination in the studied company increased the level of subjectivity in the reward system. Subjectivity of the system was found to make superiors: to decrease the 'balance' in bonus by giving financial measures more weight; performance evaluation based on other factors not on the scorecard; moving the goal posts; to ignore measures that were predictive of future financial performance.

Complaints of favouritism became ripe in the organisation and hence the use of scorecard in determining performance rewards was questioned. The survey of the effectiveness of PMS at Tati Nickel Mining Company will seek to determine the appropriateness and acceptability of PMS in performance reviews and rewards determination.

In the case of the Botswana Public Service, due process was followed in that whilst Balanced Scorecard was introduced for strategic planning and performance reporting, PBRs remained the tool for performance reviews and rewards.

The problem of how organisations should assess their performance has been challenging management commentators and practitioners for many years. Financial measures have long been used to evaluate performance of commercial organisations. By the early 1980s, however, there was a growing realisation that, given the increased complexity of organisations and the markets in which they compete, it was no longer appropriate to use financial measures as the sole criteria for assessing success (Kaplan

& Norton, 1992). The shortcomings of traditional measurement systems have triggered a revolution in the field of performance management (Eccles, 1991; Neely, 1999).

Attention has since tended to focus on how organisations can design more appropriate measurement and management systems (Kaplan & Norton, 1992).

Based on literature, consultancy experience and action research, numerous processes have been developed that organisations can follow in order to design and implement performance measurement systems (Bourne, Neely, Platts & Mills, 2002). Many structures have been proposed that support these processes. The objective of such structures is to aid organisations outline performance in a method that reflects their objectives and assesses their performance appropriately, this is often done by defining performance measures that reflect these strategic objectives.

The performance structures identified display a number of key characteristics that help an organisation to identify an appropriate set of criteria against which to assess and manage their performance:

- The work of Kaplan and Norton (1992); and Keegan *et al.* (1989) emphasises the fact that the set of measures used by an organisation has to provide a 'balanced' view of the business. The set of measures should reflect financial and nonfinancial measures; internal and external measures; and efficiency and effectiveness measures.
- The populated framework of measures should provide a succinct overview of the organisation's performance. For example, the simplicity and intuitive logic of the Balanced Scorecard has been a major contributor to its widespread adoption as it is easily understood by users and applied to their organisation (Kennerley & Neely, 2001).
- Each framework demonstrates the need for organisations to implement a set of performance measures that is multi-dimensional. This reflects the need to measure all the areas of performance that are important to the organisation's success. However there is no consensus over what the dimensions of

performance are. The EFQM model provides the broadest indication of dimensions of performance to be measured (Bititci *et al.*, 1997).

- The Performance Measurement Matrix (PMM) provides comprehensiveness. It is possible to map all possible measures of an organisation's performance onto the framework and identify where there are omissions or where there is a need for greater focus. However, the PMM provides little indication of the different dimensions of performance that should be measured (Fitzgerald *et al.*, 1991).
- The Tableau de Bord, along with the work of Bititci *et al.* (1997), demonstrates the fact that performance measures should be integrated both across the organisation's functions and through its hierarchy, encouraging congruence of goals and actions.
- The Tableau de Bord and the work of Fitzgerald *et al.* (1991) explicitly, and the Balanced Scorecard and Performance Pyramid implicitly, explain how results are a function of determinants. This demonstrates the need to measure results and drivers of them so that the performance measurement system can provide data for monitoring past performance and planning future performance. This demonstrates the way in which measures contribute to an organisation's planning (feed forward) and control (feedback) system (Brignall & Modell, 2000).

2.4 Performance Management and the Balanced Scorecard

Norton and Kaplan's Balanced Scorecard is a common and accepted approach to organisational performance management. It has been suggested that 60 per cent of Fortune 1000 companies have experimented with the BSC (Silk, and the latest data, from the Gartner Group, suggest that over 50% of large US firms had adopted the BSC by the end of 2000) (Kaplan & Norton, 1992). In a survey of management techniques and tools in 15 countries in North America, Europe, Asia, and South America. Rigby (2001) finds that about 44% of organisations in North America utilise the BSC.

Although when first introduced in 1992 it was promoted as a performance measurement system, the Balanced Scorecard has evolved and that evolution highlights some important issues regarding the management of organisational performance.

Originally the Balanced Scorecard prompted users to identify an equal number of measures in each of four perspectives: Financial perspective; Customer perspective; Internal Processes perspective and the Innovation and Learning perspective. This demonstrated the need to balance financial and non-financial measures; internal and external measures; leading and lagging measures; and short and long-term measures (Kaplan & Norton, 1992).

The approach encouraged managers to overcome the shortcomings of traditional financial measurement and ensuring that managers don't take a narrow view of performance based on too few measures. The Balanced Scorecard has become common terminology among executives; however, since its introduction the concept has evolved further.

With its evolution, the importance of the balance of measures has decreased and focus has moved to linking performance results with the initiatives that enable the attainment of performance outcomes. This change in emphasis is reflected by many works, including those of Cobbold and Lawrie (2002) and Speckbacher *et al.* (2003) who have identified different types of the Balanced Scorecard. This can cause some confusion, particularly as this evolution has also seen emphasis of the Balanced Scorecard change from performance measurement to strategy development and strategic control, with a broader performance management view.

Having balance in the number of measures is no longer considered strictly necessary. The number of measures or initiatives per perspective are now determined by the level of maturity in the use of the scorecard, organisational level of complexity and the strategic focus that an organisation adopts. In that, a customer oriented organisation will have a loaded customer perspective, and a people centred agency will have most of its scorecard components around the people and innovation perspective. The ultimate should be the understanding of how the different components contribute to the overall objective of an organisation (Kaplan & Norton, 1996; 2000, 2004).

Kaplan and Norton recommend the use of strategy maps to understand how the drivers of performance affect organisational objectives. Strategy or success maps clearly link performance outcomes to the drivers of those outcomes. Organisational drivers such as Employee Development or Employee Satisfaction affect financial, external, lagging, long-term measures such as Return on Capital Employed or Profit Growth. The strategy map provides a model of the performance of the organisation which tells the story of the organisation's strategy that can be presented as a snapshot covering only a single page (Cobbold & Lawrie, 2002).

Creating performance management measurement systems is about determining which measures to choose, and which measures to disregard. The main objective of the Balanced Scorecard and performance is that measurement should clearly reflect what the organisation is planning to achieve. It aims at prioritising a few among the many available as per the Pareto's 20:80 principle. Therefore, for an organisation to achieve its key objectives it needs to develop appropriate measures and track them. When management teams do this together it clarifies their thinking on what is important (Kaplan & Norton, 1996; 2000, 2004).

Debates help in refining views and clearly defines models on how organisations should lay down their objectives. This process is highly beneficial as it helps the management team to explain and accept the strategy even though the process of measuring is not fruitful. It generally also builds in the necessary buy-in to PMS by the leadership (Kennerley & Neely, 2001).

The key objectives that the organisation is aiming to achieve should be on the strategy map and these displayed on one page. This is an extremely good communication tool both within the management team and for communicating the objectives by demonstrating how the actions of employees throughout the organisation contribute to its overall objectives (Kennerley & Neely, 2001).

Despite its popularity the Balanced Scorecard is not without its critics, Norreklit (2000) for example, questions the existence of a causal relationship between the different perspectives of measurement (financial, customer, internal processes, and people and learning); the fact that this system does not address the needs and wants of all the stakeholders of a company; and the lack of theory behind the scorecard concept. Brignal (2002) makes similar criticisms of the balanced scorecard arguing that the interrelationships among performance variables are not confined to a universally valid one-way linear chain of cause and effect; nor a series of interdependencies. Additionally, he claims that a Balanced Scorecard cannot be balanced and integrated. Rather than that, some managers may rationally de-couple their scorecard in an attempt to maintain balance among stakeholders of unequal power affecting the relationships among balanced scorecard dimensions. Finally, he stresses the fact that social and environmental aspects of organisational performance are a major omission from mainstream performance management models.

One of the main benefits of the Balanced Scorecard in particular is that it 'translates strategy into action', and that measures should be derived from strategy (Kaplan & Norton, 2001). This is such a conceptually appealing notion that few people stop to question it. In reality, Neely *et al.* (2002) argue, strategies are reactions to opportunities or threats in the organisation's operating environment. Understanding the operating environment must, therefore, be the starting point.

On the other hand, it has been widely accepted that the stakeholder concept is probably the most consistent with the environment that organisations face on a regular and contemporary basis (Svendsen, 1998). Hence taking a stakeholder approach is most appropriate if organisations are to identify objectives and manage performance which is consistent with the environment in which they operate. Furthermore, Svendsen (1998) continues to argue that a stakeholder approach enables alignment of traditional organisational strategies with social and ethical issues which are at the heart of the growing corporate social responsibility movement.

Knowledge of stakeholders' changing wants and needs and how well the organisation is satisfying them is both the output of prior strategies and the basis of new strategies (Freeman, 1984). The starting point for deciding what to manage shouldn't be 'What is the organisation's strategy?' but instead, 'Who are the organisation's key stakeholders and what do they want and need?' Therefore, stakeholder satisfaction is the first viewpoint on performance encapsulated in the Performance Prism a stakeholder focused approach to developing an organisations performance measures and strategy map. Furthermore, an organisation's strategies, processes and capabilities have to be aligned and integrated with one another if the organisation is to be best positioned to deliver real value to all its stakeholders. In addition, organisations and their stakeholders have to recognise that their relationships are reciprocal (Freeman, 1984).

The BSC approach helps build a stakeholder focused measurement and management system by answering a number of key questions such as:

- Who are our key stakeholders and what do they want and need?
- What do we want and need from our stakeholders on a reciprocal basis?
- What strategies do we need to put in place to satisfy these twin sets of wants and needs?

What processes do we need to excel in to enable us to execute our strategies?

What capabilities do we need to put in place to allow us to operate and improve these processes? (Svendsen, 1998).

It should be noted that the Balanced Scorecard is not a prescriptive measurement framework. Instead, the Performance Prism is a tool that can be used by management teams to influence their thinking about what the key questions are that they want to address when seeking to design their performance measures and measurement systems, and so manage their business. This approach, it is argued, would satisfy both the resource-based theory of the firm (i.e. what resources form the firm) and the resource dependency view (i.e. what resources are critical to obtain). By using this approach organisations can explicitly link the processes that they undertake to the wants and needs of their stakeholders. At this level it is possible to make decisions

about priorities and objectives for individual activities and processes, and understand how actions at that level will affect stakeholders and their contentment (Goold & Quinn, 1990).

Since the organisation's strategy is supported by management systems, changes in the strategy should always be matched by changes in the measures used to assess it. Irrespective of the structure used to develop the original measures, over time these should change to reflect the organisation's changing circumstances and hence a measurement and management system should always be tailored to reflect the strategy being followed (Goold & Quinn, 1990).

Performance monitoring systems have been adapted by many organisations at considerable expenses. However, without these initiatives most organisations will find themselves static and uncompetitive. In today's complex business world, in order to be successful organisations must employ continuous improvement to their strategies.

A number of reasons, especially the propensity of performance measures to become obsolete or to be unable to distinguish good performance from bad, trigger continuing creation of performance measures dissimilar from and therefore weakly correlated with existing objectives. The result is a paradox of performance where organisational control is maintained by not knowing exactly what performance is. Eccles (1991) suggests that it is necessary for businesses to evaluate and modify their performance measures and hence performance management in order to adapt to the rapidly changing and highly competitive business world.

A number of authors support the need to reflect on what is being managed in order to be updated on the changes happening in the business environment (Meyer & Gupta, 1994; Ghalayini & Noble, 1996; Dixon *et al.*, 1990). There is, however, little evidence of this taking place. Furthermore, a new measurement "crisis" is being seen due to the ineffective management of the performance in organisations. Kennerley and Neely (2003) go on to classify the capabilities required to maintain a dynamic measurement

system which changes to reflect the organisation's circumstances. These capabilities fall under the categories of Process, People, Culture and Systems.

2.5 Requirements for a successful Performance Management System

For effective decision making and planning process it is important to identify the right objectives to manage performance. Research by Ernest and Young (1999) has found that when valuing companies investors value strategy execution more importantly than quality of the strategy being implemented. Despite this, relatively little attention is dedicated to the integration of planning - what should be managed and execution - how should it be managed. Very often, performance reports used by Executives sometimes consist of tables of data or limited visualisations of data which provide little insight into the actual performance situation or action that is required to improve (Kennerley & Neely, 2003).

In the field of quality management, the Deming Cycle (sometimes known as the PDCA Cycle) is a well-established improvement methodology which incorporates four stages Plan, Do, Check, Act (Herrmann, 2001). Primarily, the Deming cycle is applied to individual processes, but its constituent phases lie at the heart of performance management as they integrate planning, action and monitoring of performance to ensure continuous improvement and the achievement of objectives. In addition, the Deming Cycle is about learning in a systematic way what works and what does not.

Extension of the Deming cycle principles to organisational level performance management can be problematic. It has become increasingly difficult to convert the large amounts of data available into meaningful information. Managers today complain of 'drowning in data while thirsting for information' (Herrmann, 2001). Organisations seem to be generating data at a much faster rate than any manager can master, and in parallel to that, the useful life of that data is collapsing. 'One of the most enduring traits of the information age is that we have focused too much on mastering transaction data

and not enough on turning it into information and knowledge that can lead to business results' (Davenport *et al.*, 2000).

The difficulty has never been lack of suitable tools or established techniques. Data analysis, interpretation and visualisation are tool which have been around for many years. Systems like Industrial Engineering developments, Quality Management systems, and Information Visualisation techniques have provided ways to extract value from data. So the problem has never been the lack of IT capabilities or business systems to deploy these tools. In the year 2000, World Research Inc. estimated that the 'business intelligence and data warehousing' tools and services market was growing at an average of more than 50% and was estimated to reach \$113 billion by 2002.

To fully benefit from the performance review process the skills and knowledge of the executives should be focused on discussing the performance measures issues and actions necessary to meet organisational objectives rather than the actual measure. Authors such as Newman (1995), Rasiel and Friga (2001) and Kennerley and Bourne (2003) recommend methods which extend concepts in the Deming cycle process so that it incorporates performance measurement into the broader performance management activities by ensuring there is a methodical approach to identifying objectives; collecting, analysing and interpreting data; communicating insights; making decisions; and monitoring performance to ensure that objectives are achieved. Furthermore, Marchand *et al.* (2001) highlight the need to integrate IT, people and practices to deliver insights and business results. The Balanced Scorecard Collaborative, as applied by the Botswana Government, recommends some improvement measures that entail the following basics:

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- Agenda to be focused on the key performance indicators as represented by the organisation's strategic map. Each key objective to have a series of questions, i.e. 'is the objective achieved?' and the reasons given on the outcome. This is ably done through IIAA reporting analyses issues, implications, actions and

accountabilities necessary for improving performance and identifying performance gaps.

- 'Performance Analysts should provide performance data insights by analysing and interpreting data. In the Botswana Government situation, these are called measure owners.
- Data presented to the Executives should be analysed and interpreted by performance analysts. The analysis should include identification of root causes of the results with proposal of possible future action plans. This enables the executives to focus their attention on discussing the issues raised and the actions necessary to meet organisational objectives. Again, in the Botswana Government situation, monthly Ministerial Performance Improvement Committee meetings are used to deliberate on the process.
- Creation of platforms (Community of Practice) for analysts to learn from each other and improve analysis skills. Learning of best ways to communicate to the decision makers by proper displaying messages depicting the performance of the organisation.
- Meetings to be focused on identifying and discussing future action plans rather than discussing data. The result is time being used effectively and efficiently at the meetings. Through an issues management process action plans are prioritised and completed as and when necessary. Community of Practice in the Botswana Government is the Performance Improvement Coordinators Forum, or simply PIC Forum, which deliberates on common performance improvement issues.

Following these steps moves the focus performance management from review of past performance to the discussion of how strategy is executed to deliver future performance objectives. This focuses executive attention on the issues facing the organisation in the future and the achievement of strategic objectives. A systematic process for using performance measurement to check whether strategy is being implemented and whether performance is improving in line with strategic objectives as described represents a process of single-loop strategic learning (Argyris & Schon, 1996).

Target setting and milestone setting have also been stressed as a critical for the effectiveness of performance management and management. Guidelines regarding the identification and selection of these elements seem to be insufficient in the SPM literature. Kaplan and Norton (1996), for example, only recommend the use of 'stretch targets'. Ahn (2001) proposes that the interdependencies between the measures should be taken into account when quantifying the values of the targets to be attained each year. There is little evidence in relation to the use of targets across broad multidimensional perspectives of performance. Johnston *et al.* (2001) have found that most continuous improvement targets are based on past performance; and that usually, targets are imposed by managers without consultation, with rewards linked to the achievement of those targets. This practice increases the level of resistance to targets and deteriorates the value of the PMS system. In the management control literature, a few more studies can be found regarding the target-setting process within accounting systems (Merchant & Manzoni, 1989).

Statistical analysis of performance data has been used in some organisation to prove whether the strategy being pursued is leading to the desired results. This allows double-loop strategic learning to be put in place by testing the assumptions that support the strategy of the organisation. The hypothesis of the Strategy Map is tested by gathering and analysing data from performance measurement which enables the executives to make decisions whether the assumptions meant to support the strategy are valid and whether to change the strategy (Argyris & Schon, 1996).

Performance management systems must be integrated to the budget process and the compensation process in order for the get full benefit from the performance management process. With a few researchers having started to investigate the integration of performance management to budgeting and compensation systems there is little academic research existence in this field. (Ittner, Larcker & Meyer, 2003a). For instance, a study conducted by a Hay Group's consultant (Manas, 1999), has found that the linkage between PMS systems and compensation practices varies significantly from one organisation to the other. Out of fifteen companies studied, thirteen had used their scorecard for determining base pay. Six of them had linked the scorecard to annual

incentives only; three to annual and long-term incentives; one to long-term incentives only; one to base pay and annual incentive; and two to base pay, annual and long-term incentives. None of them had linked the scorecard only to base pay or to base pay and long-term incentives on it.

Implementation of PMS in an organisation should be approached with a change management process for a buy-in by all stakeholders (e.g. Bourne *et al.*, 2002; Kaplan & Norton, 2001). In this sense, factors such as the following are crucial for an effective PMS implementation:

Leadership commitment starts with a clear agreement at the top on the strategy, goals, measures and the performance targets to be implemented

Leadership participation and accountability: having the agreement, commitment and leadership at the top is insufficient if it does not go along with having the agreement, commitment and leadership of the rest of the management team. Furthermore, the involvement of employees is also crucial. Inviting managers and employees to assist in the development of the system facilitates their buy-in, and enhances their trust, understanding, and ownership of the performance measures. It is also important to involve the Human Resources and the Information System functions. It is essential that managers become accountable for the performance being managed

Capacity-building: employees at all levels need to learn the principles of the system, its measures, tools and procedures (Kaplan & Norton, 2001). Individuals can distort the information system by smoothing, biasing, focusing, gaming, filtering, 'illegal' acts so it is important to train and educate individuals on how to engage rather than bypass the causes of dysfunctional behaviours.

Communication and feedback: The factor 'communication' is one of the most cited in the literature. In communication there a number of aspects that can affect the implementation of performance management in an organisation. Importantly verbal and non-verbal communication is highlighted in change management literature (e.g.

presentations, manuals, conversations, newsletters, reports, etc.) to be used to show aspects of the performance management process and promote buy-in by the stakeholders in the organisation (Bourne *et al.* 2002b; Kaplan & Norton, 2001; Goold & Quinn, 1990)

PMS reporting structure: it is important to design an information management system to collect, analyse and report data efficiently. Flawed of data will result in all uses of data to be flawed including crucial executive decisions made based on that data? Using an IT system to support these tasks seems to be critical.

Franco and Bourne (2003) have identified most of the factors that significantly affect the use of PMS. A change management process is required to manage both the implementation of the performance management system as well as the management of the change resulting from the performance management review.

1. Corporate culture - Studies highlight two type of culture. One that promotes team work, risk taking and problem solving and one that is based on continuous improvement using the PMS system.
2. Alignment - strategies and goals should be integrated and linked with the responsibilities of managers and their performance matched.
3. Review and update - the strategy and performance should be reviewed periodically with focus on the development of action plans to close the gaps in the performance and these actions plans also reviewed periodically.
4. Communication and reporting - regular and formal feedback should be emphasised.
5. Involvement of employees. It is imperative to involve everyone for efficient buy-in of the performance management process. Everyone should be involved in the development of and definition of measures so that they own the process.
6. Senior management should understand the system.

7. Compensation link – achievement of the performance management measures should be linked to clear set up rewards. The words ‘incentives’, ‘rewards’ and ‘compensation’ should be clearly defined to avoid confusion.
8. Commitment by Management - without the ownership of the leadership of the organisation the PMS process will not be successful
- 9.
10. Acceptance of the strategic map by everyone
11. Existence of information management system and data processing

For the organisation to achieve its desired outcomes both organisational and individual activities should be aligned. The behaviour of employees should be aligned to the strategy and they should also be motivated (de Waal, 2002; Malina & Selto, 2002). As a result, it is crucial that performance management activities integrate culture, process, procedures and the management of people to generate learning and continuous improvement (Saltmarshe *et.al*, 2003).

2.6 Performance Management in the era of modernisation and globalisation

Public service enterprises in many advanced economies, such as the West, have come under immense pressure to improve efficiency and effectiveness and reduce the demands on the taxpayers. The quality of service and the volume of service should be increased without any increases in the taxpayers ‘contribution. In the drive to achieve this new description names like ‘new public sector’ or ‘new public management’ have been suggested.

Performance management, through the use of performance targets and league tables, has been one of the main tools used by the UK Government in its attempt to push through its modernisation programme and demonstrate that value for tax-payers money is being delivered. Similarly, the same has been adopted by Botswana Government to

ensure that its PMS strategy is alive to the current and future demands brought about by globalization and competitiveness.

Despite Government intentions, media attention has focused on examples of performance targets, and pressure to achieve them, driving inappropriate behaviour. There are many examples which highlight the problems that performance targets are causing. Public Sector workers, politicians and commentators doubt the value of using performance targets with broader questions raised about the applicability of private sector approaches to public sector organisations. From Canadian experiences, Brown suggests that there are two main factors limiting the application of performance management approaches in the public sector: Unionisation limiting the ability to change working practices and the difficulty of measuring performance outcomes. Symon (2004) provides anecdotal support for the general resistance to change in the public sector with preference for doing things as they have always been done.

However, there is also research that opposes this view, suggesting that it is possible to apply private sector approaches in general and performance management in particular in the public sector. Jackson (1995) recognises that the differences between public sector and private sector management are frequently emphasised but goes on to argue that in both sectors the fundamental objective is to create or add value. This value is defined in terms of the needs and requirements of the stakeholders in the organisation. Both public and private sector organisations have to manage and balance the needs of the various stakeholders to deliver the highest level of value. Although the stakeholders are different both public and private sector organisations need to manage this balance. Jackson recognises that value for money indicators tend to focus narrowly on economy and efficiency rather than focusing on the satisfaction of the broader range of stakeholders.

Euske (2003) further discusses the differences between management of public, private and voluntary sector organisations. Whilst he recognises that the contexts are different, he argues that these differences are often used to reject possible solutions, and that claiming that organisations are unique limits possible solutions acting as a barrier to

possible change. In July 2003 a report by the Commons Public Administration Committee went further and argued that if used appropriately measurement can play a 'vital part' in improvement efforts. Whilst research in South America suggests that an effective planning oriented approach to performance evaluation can effectively enhance democratic accountability, supporting the thesis that democratic accountability and public administration modernisation can be done together if performance management is done effectively (Ospina *et al.*, 2004).

Following the extensive review of Performance Management Systems in Botswana in 2005, it has been suggested that if a PMS is implemented correctly, it can bring about positive results, but if it is done wrongly, then it can be disastrous to performance. In addition, the report highlights various ways in which performance management should be improved for greater efficiency and effectiveness in the delivery of public services. In relative terms, performance management in the public sector is still in its infancy (Botswana Government, 2005).

The 1980s and 90s saw enormous interest in the subject with many leading organisations redesigning their performance measurement and management systems to reflect their changing circumstances. This has resulted in over a decade of experience and research that has provided insight into the ways in which performance measurement and management can be used most effectively. Whilst by no means all of the practice in the Private Sector can be described as good and differences in context must always be considered, it would appear that there are lessons from the experience and research in the Private Sector that could assist the Public Sector overcome some of the performance management problems that are being experienced. The Botswana Government formally adopted its PMS in 1999, and continues to be on a learning curve as it enhances the institutions, structures, processes and governance of implementing the system (Botswana Government, 2009)

One of the key messages from the performance measurement revolution in the private sector has been the need to measure performance which reflects the organisation's improvement priorities not just to report externally. In the private sector this meant not

only collecting the financial data required for the financial accounts but also the nonfinancial drivers of that performance. In the Public Sector this would suggest setting targets that are relevant to the individual agencies, not just measure the targets that the government requires.

Given the well-accepted adage that ‘what gets measured gets done’ or more pertinently for the Public Sector ‘what gets targeted and rewarded gets done’, performance measures need to reflect the objectives of the organisation and should also reflect current performance priorities. Measures should move from compliance with external standards towards checking whether an organisation is achieving its objectives and improving in areas of poor performance. Furthermore, Alcock (2004) found that problems arise when there is over centralisation of targets as they can often contradict with the priorities of local service delivery. And if measurement and targets are imposed from above there is no ownership and hence reduced commitment to achievement of targets.

Without integration of measurement with the management of people to change behaviour, measurement is an activity that adds no value. Having a performance management system that identifies and prioritises the needs and expectations of all stakeholders is key to better performance. The needs of stakeholders in an organisation need to be converted into action plans and integrated into the people and processes to ensure that these delivered. Tools such as Strategy Maps have successfully been used to explicitly link top level objective to the drives of performance, demonstrating how individual performance targets and employee actions contribute to the achievement of organisational objectives (de Waal, 2002).

While the criteria that determine success of an organisation might be similar to or the same as a comparable organisation, it is unlikely that their importance or the performance of the organisations will be the same. For example not all public services are going to be equally important to the residents of different Local Authorities, just as the Local Authorities are not likely to be equally capable of delivering them. This suggests that the same target is unlikely to be appropriate for all Local Authorities or all

schools, etc. A target that prompts performance improvement to the desired level in one organisation, might already be achieved by another but unachievable by a third.

Lessons from past experience and research suggest that targets, and hence improvement priorities, should be relevant to the requirements of the organisation's stakeholders. Furthermore, it is unrealistic to expect achievement of targets that the organisation's processes are incapable of.

There has been considerable work in the manufacturing field on the concept of process capability and the use of control charts. Increasingly this is also being applied to other organisations' processes. By mapping and measuring process performance we can assess the performance that the process is currently capable of. Targets set above a processes capability will not be achievable. If the capability of a process is below an acceptable level of performance additional investment in the resources and capabilities will be required to increase its capability (Symon, 2004).

Symon (2004) further goes on to posit that inn the private sector, numerous branch-based organisations have implemented measurement systems with common measures but with targets that are set to reflect local improvement priorities and capabilities.

2.7 Performance culture

One of the most difficult issues with regard to performance measurement and management is developing a culture that accepts performance measurement as a tool to help the organisation improve. Many areas of the public sector are blessed with people who are committed to improving public service, which is ultimately the objective that the government is trying to achieve through its use of performance targets. Measurement and targets can be a valuable tool to help achieve this objective if workers understand how measures and targets contribute to that objective (Lester, 2004).

However, the effort required to get acceptance of measurement as a tool to help improvement should not be under-estimated. It requires considerable communication to highlight how measurement will help rather than hinder performance improvement. Furthermore, experience would suggest that considerable leadership is required to demonstrate that measurement is being used to help the organisation and the people within it to learn and to support improvement, not just a way of assigning blame for poor performance. As they say, 'culture can eat strategy for lunch' (Norton & Kaplan, 2001; Lester, 2004).

This discussion demonstrates that there are issues currently facing public sector organisations that are common to organisations in the private sector. It would appear that some of the lessons learnt over the last 20 years in the private sector can be used to inform public sector activities. There are examples of public sector organisations that have successfully taken the appropriate principles and applied them to develop relevant management systems that help them improve performance (Lester, 2004).

2.8 Performance Management in mining operations – A case study

Freeport McMoran is one of the largest producers of copper, gold and molybdenum. The company has mines in North America, South America and Asia. It generates over \$16 billion in total revenues per annum, and over \$1 billion in net income. It is a very big business that uses large equipment, with various and different technologies used in its operations across the globe.

Over the years, with the change in prices for copper, the strategy for Freeport McMoran has had to be changed to respond to the falling copper prices. The company resorted to reducing its operational costs to optimize profits through various means such as maintaining low equipment downtime, sharing or resources and leasing of equipment. The new business strategy has entailed shipping maximum volume of production at the fastest speed possible, efficiency in delivery of other services and re-designing operations to maximize the production pipeline.

As the company brought into place the new strategy, it was difficult for the leadership to direct and monitor the changes effectively because each mine is operated independently. Decentralisation of the operations also meant that the corporate level had no certainty over performance metrics at the operations. This therefore called for the adoption of a new performance management process that could track performance across all areas.

At the end of it all, though there were problems of alignment with lower structures due to the level of decentralisation, a well-adopted and transparent performance management system helped the organisation not only to achieve its goals, but also to compete and survive in the midst of the volatile markets. It was also proven beyond doubt that performance management is a business process, and not just a human resource process (Bersin, by Deloitte, 2008)

2.9 Conclusion

This review has attempted to address the issues in relation to the research questions posed in this work. Though extensive, it is not exhaustive as there is abundant literature on organisational PMS. Literature clearly shows that to manage performance activities effectively one should measure the right things and measure them accurately. Many methods and principles have been suggested to develop and implement correctly performance management. However there are clear themes which underpin these activities. These can be summarised as thus:

1. Performance management should be integrated horizontally across the organisation;
2. The performance being managed should reflect the requirements, wants and needs of all of the key stakeholders of the organisation and not just reflect a limited set;
3. Performance management should be integrated vertically linking the strategies and objectives of the organisation to the execution of activities which will facilitate their achievement;

4. Explicit understanding of linkages across the vertical and horizontal integration (e.g. through success maps) enables consideration of conflicting priorities and trade-offs that need to be made in order to achieve overall objectives;
5. The performance monitoring, review and action planning process should be structured around the strategic performance objectives of the organisation;
6. Processes and systems should be designed to extract and communicate insights rather than performance data;
7. All systems and processes should be aligned with each other, driving behaviour towards the performance objectives;
8. Effort should be dedicated to developing an appropriate culture to train the organisation's employees and elicit commitment to performance objectives.

Whilst many of the tools and frameworks proposed in the field of performance measurement and management have been designed for commercial organisations in the private sector, there is some evidence that some of these generic process focused principles are also applicable in the public and not for profit sectors (Cutt & Murray, 2000; Sawhill & Williamson, 2001).

It is also clear from this literature review that lack of clear goals for a PMS is one of the greatest challenges associated with PMS implementation. As such, there should be a clearly defined strategy that articulates not only the goals of the organisation, but also the goals that need to be achieved by the PMS. It is also advisable to take issues of culture and change management seriously, so is the need for continuous learning, feedback and engagement of all the stakeholders involved in the process.

3.0 Chapter Three: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology used by the researcher to collect data. It identifies and explains the research design, population, methods of data collection, analysis and presentation. The chapter also presents the problems encountered and ethical considerations observed during data collection.

3.2 Research design

According to Bless and Higson-Smith (1995), a research design is a specification of the most adequate operations to be performed in order to test a specific hypothesis, under given conditions. Research design revolves around the following:

- Surveys
- Experimentation
- Case studies

Survey research involves obtaining information directly from a group of individuals (Dane, 1990). This method would be appropriate where views and opinions of the group being studied need to be captured directly.

Mouton (1998) describes experimental research as taking action and observing the consequences of that action, design would be appropriate for scientific observations.

According to Rowley (2002) case study research seeks to undertake a modest-scale research project based on a workplace or a comparison of a limited number of organizations. Rowley (2001) identified that a case study research project uses a variety of evidence from different sources such as documents, artefacts, interviews and observations.

For purposes of this study, a case study approach was adopted since it analysed TNMC only. Both qualitative and quantitative methods were used.

3.3 Qualitative approach

This approach enables the use of many different data sources through the process of triangulation of evidence and this would be achieved through using multiple projects i.e. successful and unsuccessful, collecting data from key multiple informants i.e. managers, general staff members and using data sources such as journals, books and other documents. Data collected is usually holistic and with a strong potential for revealing complexities (Amaratunga *et al.*, 2001).

The qualitative aspect will be evident when the researcher conducts in-depths interviews and questioners with the executive team, heads of departments and general staff members.

3.4 Quantitative approach

This method allows for one to look at distinguishing elemental properties and empirical boundaries and would allow for measuring how much and how often a certain factor appears and the method would allow for examining the behavioural component (Nau, 1995).

The quantitative aspect will be evident when the researcher reviews the production levels against set targets over a period of 2 years. Financial data in the form of production sheets, sick leaves, authorised leaves were examined and evaluated over a period of two years.

The use of two methods compensates for the weaknesses and strengths of one over the other. The mixed-method approach was adopted on the basis that the effectiveness

of triangulation rests on the premise that the weaknesses in each method will be compensated by the counter balancing strength of the other (Amaratunga *et al.*, 2001). This is supported by Jick (1983) as cited by Jarratt (1996). He suggests that the two methods should be viewed as complementing each other rather than as rivals. Dunn *et al.* as cited by Mangan *et al.* (2004) argue that a given field may be under-achieving if all of its research is being conducted within a narrow methodological domain and the approach would provide for data triangulation by cross-validation of the outcome.

3.5 Methodology

According to Hussey and Hussey (1997), methodology refers to the collection and analysis of data. They add that the fundamental means of collecting data is through obtaining information directly from a group of individuals. In this study, surveys of employees at various levels in the organization were used to collect information.

The procedure for executing the methodology was as follows:

- a) Obtaining a list of names of the executive team, heads of departments and general staff;
- b) Sampling of the names from each staff segment;
- c) Checking availability of sampled staff and making replacements where necessary on account of absences or wrong name selection; and
- d) Distributing and administering questionnaires to sampled staff.

3.6 Population and sampling methods

3.6.1 Population

Welman and Kruger (1991:18) define a population as a study object, which may be individuals, groups, organisations, human products and events.

This refers to the overall research population from which a sample is selected for the study. It defines all members or subjects with similar characteristics, denoted as Pop = N. In this study, three target populations of TNMC executive team (N₁), head of departments (N₂) and general staff (N₃)

Table 3.1 Distribution of Target Populations

Target Group	Notation	Target Pop
Executive Team	N ₁	10
Heads of Departments	N ₂	15
General Staff	N ₃	150
Total target population	N	175

3.6.2 Sampling

The process of selecting a sample of subjects to take part in the study is called sampling. For all practical purposes, it is necessary to survey all individuals or subjects in a population in a study (Cronjé, 2005). Instead, a sample, which is a subset of a population, is studied and then results generalised to the population. This therefore requires use of sampling methods which are based on the judgement of the researcher and which should also take into consideration the characteristics of the sample (Kuhn, 2003; Bless & Higson–Smith, 1995). The sampling approach used in this study is the stratified random sampling method.

Table 3.2 Sample strata and cases for respondents

Stratum	Cases per stratum (N)	Cases in sample (n)	Sample cases as a % of stratum cases (n/N)
TNMC Executive	10	7	70%
TNMC Heads of Departments.	15	10	67%
General staff	175	127	73%

3.6.3 Data collection

Different forms of data collection methods were used. Questionnaires through face to face interviews and in depths interviews were used to collect primary data. According to Churchill and Lacobucci (2002), primary data are originated by the researcher for the purpose of the investigation at hand while secondary data are statistics that already exist that has been gathered for a previous purpose and not for the immediate study at hand.

Secondary data were collected via the Internet, literature from journals and books.

3.6.4 Questionnaire

According to Hussey and Hussey (1997:161), a questionnaire is a list of carefully structured questions, chosen after considerable testing, with a view to soliciting reliable responses from a chosen sample. The aim is to find out what a selected group of participants do feel or think. Questionnaires were sent out to respondents.

3.6.5 Administration of the Questionnaire

The questionnaire was completed by the participants directly with the researcher's assistance due to reasons such as time constraints. Some participants were allowed to take them home so they could complete them in their own time in the comfort of their own homes.

3.6.7 Advantages of a Questionnaire

- The questionnaire format was standardised thus presenting a uniform presentation

- Questionnaires are seen as a relatively inexpensive way of getting people to provide information
- Participants answered questions in the comfort of their homes and in their own time
- Interviewer bias was reduced as the questionnaire is self-administered (Babbie, 2008).

3.6.8 Disadvantages of a Questionnaire

Forced rating scales might have caused the respondents to choose an available option though it might not accurately capture their perceptions.

For purposes of this study, the researcher opted to conduct both questionnaire and interview methods due to the time constraints, at the same time hoping to extract quality data (Babbie, 2008).

3.6.9 Interviews

According to Hussey and Hussey (1997), a phenomenological approach suggests unstructured questions. Questions are likely to be open-ended and probes may be used to explore answers in depth.

The questions for this study were open-ended and the interviews semi-structured as each situation warranted different questions in order to obtain similar information.

3.7 Ethical considerations

According to McNamara (1994), there are five ethical concerns to be considered when conducting survey research. This research therefore kept to the guidelines as provided by McNamara (1994):

- 1 Voluntary participation

- 2 No harm to respondents
- 3 Anonymity and confidentiality
- 4 Identify purpose and sponsor
- 5 Analysis and reporting

A major ethical consideration of any research is that the respondents do not come to any physical and emotional harm. By its nature, this study did not in any way expose the respondents to any danger. All respondents were guaranteed anonymity. No names or any information that could be used to identify particular respondents have been employed in reporting the research findings. Answers to all the questions were kept confidential and no responses from a particular respondent were analysed or used separately. Instead responses were used only in combination with the responses from other participants.

Another ethical consideration is that the respondents' participation is voluntary. In view of this, all respondents were informed of their right to voluntary participation at the beginning before the questionnaires were administered and assured that they could choose to exit the interview at any point that they did not want to continue. The respondents were also informed of the objectives of the study and what the information was to be used for.

3.8 Limitations

3.8.1 Validity

An instrument is valid if it measures what it is intended to measure and accurately achieves the purpose that it was designed for (Patten, 2004; Wallen & Fraenkel, 2001). Patten (2004) emphasizes that validity is a matter of degree and discussion should focus on how valid a test is, not whether it is valid or not. Patten (2004) further emphasizes that no test instrument is perfectly valid. Wallen and Fraenkel (2001) advocate this by arguing that the researcher needs some kind of assurance that the instrument used will result in accurate conclusions. Validity can often be thought of as judgmental.

3.8.2 Data processing

The primary data collected were subjected to analysis and interpretation through frequency tables, graphs, descriptive statistics using means, and analysis of comments made in open-ended questions. The statistical tool of analysis was Statistical Package for Social Science (SPSS). Other support computer applications included excel spreadsheet and word. Presentation of data was done through tables, charts and descriptions. Chapter four analyses the data and presents the results.

3.9 Conclusion

This chapter dealt with the research methodology of the case study in question. The research methodology was described in terms of design, population, sampling methods and instruments used for data collection.

Chapter Four: DATA PRESENTATION AND ANALYSIS

4.1 Introduction

4.1.1 Summary of research questions

The respondents were asked questions dealing with various levels of performance management system but under the broad areas of (a) commitment and Support to PMS; (b) PMS implementation; (c) Performance measurement; and (d) Change management. The area of PMS implementation further looked into (e) employee participation and awareness about PMS; (f) knowledge and skills about PMS; (g) time allocated PMS; (h) alignment of PMS with performance rewards as well as the (i) use of ICT in PMS.

4.1.2 Population and sampling

Employees were randomly selected at all business units of Tati Nickel Mining Company (TNMC) to respond to the provided questionnaire. Out of the 1100 employees of the Mine, the target was to hand out the questionnaire to 175 employees, stratified such that there would be representation across all cadres, levels, and as much as possible, sample balanced in accordance with all other demographic imperatives of the workforce such as age, gender and ethnicity and the length of service with TNMC.

The response rate was on average 142 employees, representing an 81% response rate. The researcher conducted face-to-face interviews with the selected employees.

4.2 Participants profile

It is noted in Figure 4.1 below that the majority of the participants interviewed are in the 31 – 50 year age groups. In all, 69% of all the respondents are aged between 31 and 50 years, followed by 21% in the 51 – 60 year category. There are 10% of the respondents under 30 years and none above 60 years.

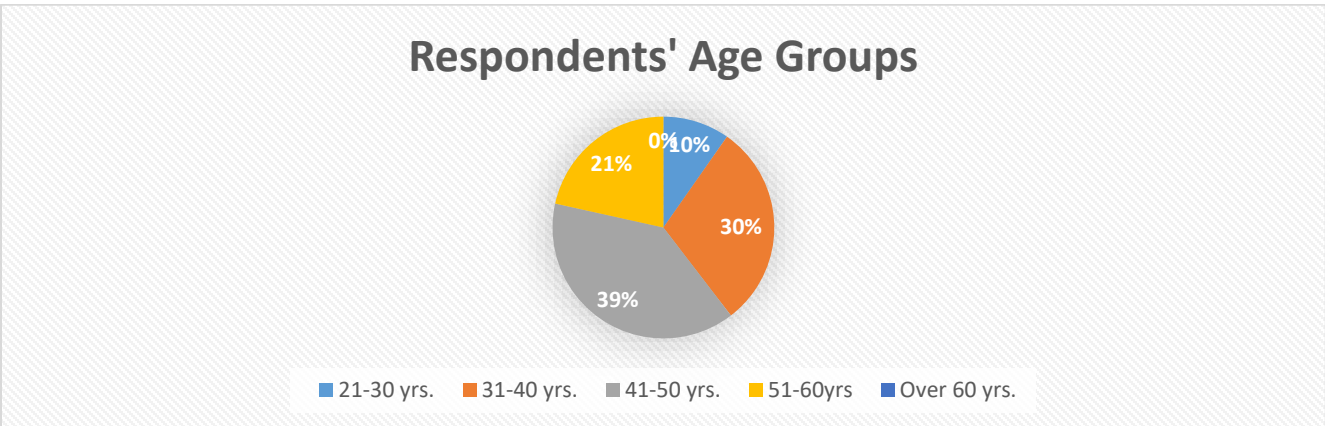


Fig 4.1 – Respondents by age group

In terms of gender, 72% of the respondents were males. This is consistent with the overall establishment of the mine, and mining operations elsewhere, which employ more males than females.

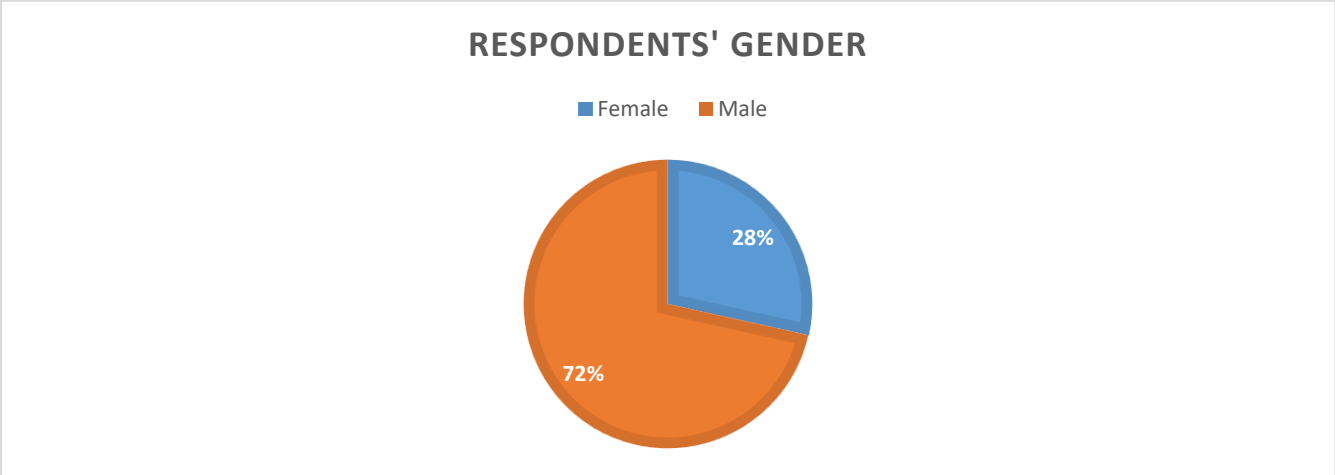


Fig 4.2 – Respondents by gender

Most of the respondents have served Tati Nickel Mining Company for between three to eight years as shown at Figure 4.3 below. The maximum level of length of service respondents is 45 out of 144 (or 31%) meaning that most of the employees have been in the employ of the mine for five – six years.

The number of respondents who have served the mine for more than 10 years is the minimum at only 5 (3%) of the respondents. The implication here is that there are fewer people who serve the mine for periods exceeding ten years, which might have a

bearing, either positive or negative, on performance. Whilst organisations tend to adopt the ‘first-come, first go’ principle in times of retrenchment, literature has shown that length of employment has no significance on performance. In a 1981 paper, Howard Gordon notes that three separate studies on the relationship between length of service and employee performance indicated direct, inverse and no relationship between the variable. As such, there is no conclusive evidence between the length of service and performance level.

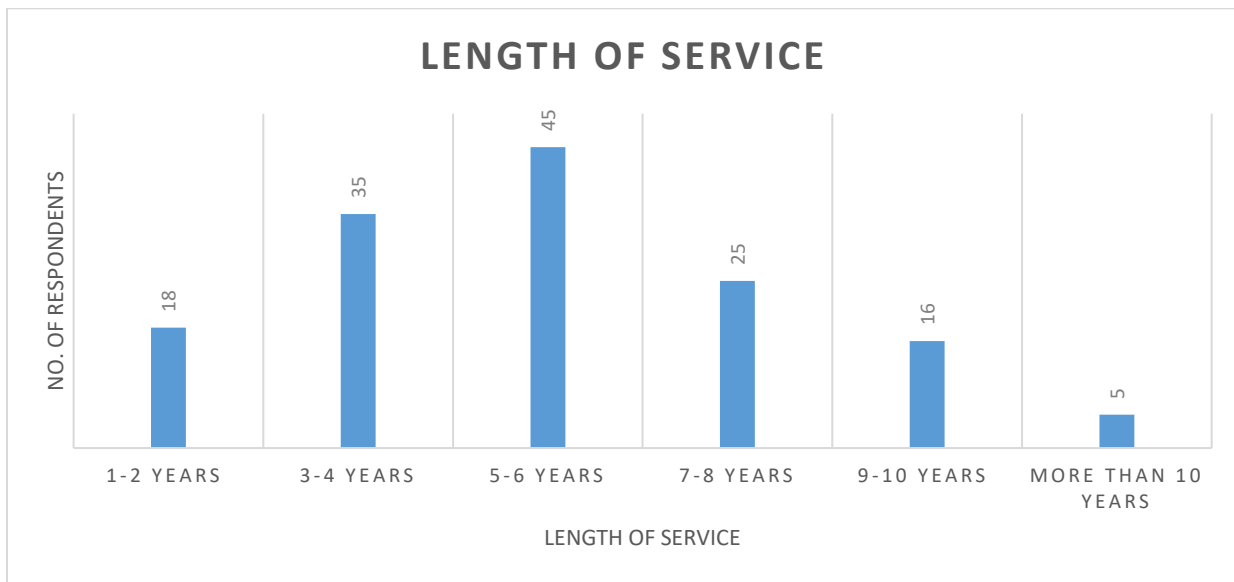


Fig 4.3 – Respondents by length of service at TNMC

Again, in terms of staff segments, more technical staff among the respondents, accounting to 51%, followed by support staff at 23%. This denotes a hierarchical structure since management and the executive account to 14%. The rest of the respondents are the professional staff such as engineers and accountants at 13%.

It should be noted that strong management support is critical for the effectiveness of PMS under any setting. Employee participation is also equally important to ensure sustainability of PMS, not only as a performance improvement strategy, but also for employee motivation, attraction, retention and loyalty. This is supported further by literature which ranks leadership commitment among the highest influencers of success in PMS (Bourne *et al.*, 2002; Kaplan & Norton, 2001).

Overall, there is a positively skewed pattern on the implementation of PMS at Tati Nickel Mining Company of Botswana, with the majority of the respondents falling within the *agree* to the *strongly agree* variables under the categories of commitment and support to PMS, effectiveness of PMS implementation, effective use of the performance measurement system and change management success.

4.3 Survey results from Tati Nickel Mining Company (TNMC) on the effectiveness of the Performance Management System

4.3.1 Correlation analysis

There are different statistical techniques that have often been applied in the study of performance management. Hair (1995) has argued that the application of both univariate and multivariate statistical techniques is suitable for observation and analysis of performance management data. Hair further indicates that the most often used techniques in this context are: Correlation, regression analysis, analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA). This study uses correlation, which is appropriate for finding the relationships between different pairs of variable in terms of their influence on performance management. Correlation is also chosen for its simplicity, as otherwise use of other techniques would have required a different and costly design of the survey process. Correlation is presented between and amongst PMS implementation, performance measurement and change management.

The analysis will also investigate the correlation of selected sub-components of the above stated variables in relation to issues such as culture, use of ICT in performance management, rewards, staff participation and engagement, PMS awareness and such other related issues. It should be stated that there were fifty (50) variable sub-components, and hence the analysis will be confined to a few of these. Annexures shall therefore provide the full correlation report findings.

Table 4.3.1 Correlation between Variable Sub-Components: Commitment and Support to PMS

		There is full management commitment to PMS at Tati Nickel	The management accords sufficient time for PMS	Management is serious about PMS	There is middle management commitment and staff for PMS use and implementation	Management has adopted the right style of PMS	All employees fully participate in PMS interventions
There is full management commitment to PMS at Tati Nickel	Pearson Correlation	1	.641	.831	.648	.902	.520
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	141	139	141	140	140	140
The management accords sufficient time for PMS	Pearson Correlation	.641	1	.799	.261	.616	.255
	Sig. (2-tailed)	.000		.000	.002	.000	.002
	N	139	142	142	140	139	141
Management is serious about PMS	Pearson Correlation	.831	.799	1	.461	.825	.376
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	141	142	144	142	141	143
There is middle management commitment and staff for PMS use and implementation	Pearson Correlation	.648	.261	.461	1	.563	.835
	Sig. (2-tailed)	.000	.002	.000		.000	.000
	N	140	140	142	142	140	142
Management has adopted the right style of PMS	Pearson Correlation	.902	.616	.825	.563	1	.476
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	140	139	141	140	141	140
All employees fully participate in PMS interventions	Pearson Correlation	.520	.255	.376	.835	.476	1
	Sig. (2-tailed)	.000	.002	.000	.000	.000	
	N	140	141	143	142	140	143

Table 4.3.1 above indicates a modest to strong correlation between management commitment to PMS and seriousness to PMS, middle management commitment, sufficiency of time accorded PMS, and adoption of the right style of PMS. There is a

strong correlation of 0.902 between management commitment to PMS and adoption of the right style of PMS. The correlation coefficient between commitment and seriousness is also high at 0.831, followed by management and middle management commitment at 0.648.

In terms of relation between commitment and time accorded to PMS, the correlation coefficient is 0.641 whilst commitment and employee participation are the lowest at 0.520. The degree of association between PMS commitment variable sub-components is therefore very strong. This association is further supported by the level of significance of .000 which tells us that there is at least a 99.9% likelihood that the relationships are significant. The level of significance is calculated using both the size of the correlation coefficient and the variance in response. Notable here is that the implementation of PMS at TNMC is relatively successful.

Literature supports the idea that senior and line management commitment to PMS is the single most important factor for PMS success. Armstrong and Baron (2003) also believe that PMS is owned by management and not by an HR business unit, and that if such commitment is not forthcoming, then PMS is doomed to fail.

The commitment shown by management at Tati Nickel Mining Company (see Frequencies) is indicative of the relative success of the initiative at the mine. The discussion below and the results presented may point to this phenomenon in terms of how management commitment supports implementation, performance measurement processes and change management for PMS. Management commitment will therefore be used as a central reference for analysis of the effectiveness of PMS at Tati Nickel Mining Company (TNMC) of Botswana.

Table 4.3.2 Correlation between Management Commitment and PMS Implementation

		Strategy is aligned to PMS implementation	There is adequate knowledge and skills with regard to PMS	There is a strong link between PMS and the performance reward system	There is sufficient capacity and resources for PMS implementation	The current ICT system fully supports PMS
There is full management commitment to PMS at Tati Nickel	Pearson Correlation	.907	.618	.430	.532	.428
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	141	139	140	139	140

There is a very strong correlation of 0.907 between management commitment and strategy alignment to PMS implementation. This shows that the leadership sees PMS as a critical component for delivering strategy. This management commitment is further seen in its influence on advocacy, knowledge, skills and capacity provision for PMS which stand at 0.618 and 0.532. These are relatively high correlation coefficients as they are above 0.5. The level of significance is again at 0.000 denoting a 99.9% likelihood of influence of variables. It can also be concluded from the table above that the degree of association between commitment and rewards, as well as commitment and use of ICT in PMS, though present, are relatively lower with co-efficient of 0.430 and 0.428 respectively.

Kaplan and Norton (2001) argue that the weakness in a performance management system arises primarily because training and knowledge-sharing have not been thoroughly conducted in the organisation implementing the system. The relative success at TNMC therefore suggests that knowledge and skills were transferred during implementation. Communication, according to Kaplan and Norton (2001) is critical, are therefore necessary to create enthusiasm, understanding, and commitment.

Table 4.3.3 Correlation between Management Commitment and Performance Measurement

		There are no difficulties in getting data to calculate performance indicators	The organisation measures the right KPIs	There are too many KPIs defined	It is difficult to define KPIs	The KPIs are linked to department, team and individual responsibilities
There is full management commitment to PMS at Tati Nickel	Pearson Correlation	.499	.907	.527	.618	.480
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	139	140	140	141	140

Commitment to PMS implementation influences an appropriate performance measurement setting. Agyris and Schon (1996) argue that performance measurement information is important for checking validity of the strategy, and whether a strategy needs to be changed, and to influence the necessary learning in an organisation. It is for this reason that particular attention must be in terms of ensuring that it is easier to populate performance data; that an organisation measures the right key performance indicators (KPIs), that the number of KPIs should be appropriate, and that the KPIs are linked to lower tiers such as Departments, Units and Individual employees in an organisation.

Commitment and measuring the right KPIs have a strong association at 0.907. However, there are differing results in terms of other performance measurement variables, indicative of mixed views in terms of appreciation of performance measurement. This calls for more advocacy in this area as depicted by the situation shown in table 4.3.3 above. The table on the next page shows results of association of management commitment and change management. Just like management commitment, organisation culture is seen as yet another important factor for PMS success. Markus (2004) argues that the most critical and frequently experienced challenge in the adoption of PMS within organisations is organisational culture. Continuous communication to reduce resistance to change is therefore important, and is seen by Kotter (2007) as being responsible for building the right culture and behaviour for any change initiative.

Franco and Bourne (2003) identify corporate culture as a key to influencing organisational performance. According to de Waal (2002), performance is an outcome of both organisational and human activities, and positive performance outcomes arise when the behaviour or culture of employees is aligned with the strategy of an organisation. The correlation co-efficient below indicate a strong association between management commitment and performance management culture (0.620) and priority given to PMS (0.618). There is also relative association with attitude towards PMS (0.526), focus on change management (0.539) and consistent use of PMS (0.548).

Table 4.3.4 Correlation between Management Commitment and Change Management

		There is positive attitude to PMS by all employees	There is an inherent positive level of performance management culture	The organisation sees enough benefit from PMS	There is sufficient focus on change management process	PMS is given high priority by management	The organisation is in a stable phase	PMS is consistently used
There is full management commitment to PMS at Tati Nickel	Pearson Correlation	.526	.620	.479	.539	.618	.480	.548
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
	N	139	140	140	141	140	139	137

However, it is noted that there is a lower association on commitment and PMS benefit (0.479) and organisational stability (0.480). The mine's ABC Turnaround strategy suggests that there is some level of instability within the organisation, as shown by a weaker correlation.

The change management aspect is therefore critical. As supported by Bourne *et al.* (2002), Kaplan and Norton (2001), PMS implementation should be approached from a change management perspective. The authors further rate management commitment and change management as top most priorities for successful PMS implementation.

Performance is the result of both organisational and human activities. As such, performance outcomes only arise when the behaviour of employees is aligned with strategy and when employees are motivated (de Waal, 2002).

4.3.2 Frequencies

4.3.2.1 Commitment and support to PMS

The survey results indicate that there is relatively good commitment to PMS at Tati Nickel. Out of a total of 142 responses under the item, a total of 111 respondents, or 78%, have agreed strongly to the notion that there is commitment to PMS at the mine. Management commitment and support to PMS, or any performance improvement intervention for that matter, are critical. This is similarly supported by among others Kaplan and Norton (2001) and Bourne *et al.* (2002).

The support by management is also an indication of the value that management attaches to PMS. However, there is always room for improvement so that the doubts as regard support can be removed such that all employees can feel and see the support of PMS equally across the organisation. Below is a figure showing the absolute figures with regard to the question on management commitment to PMS at TNMC.

As can be seen from the figure on the next page, on being asked whether they agree or disagree on the issue of management commitment to PSM at TNMC, 13 out of 142 respondents (9%) and 18 of the respondents (13%) moderately disagree and disagree which means that 22% of all the respondents are of the view that there is no management commitment. However, the majority of the respondents (78%) believe that management is committed.

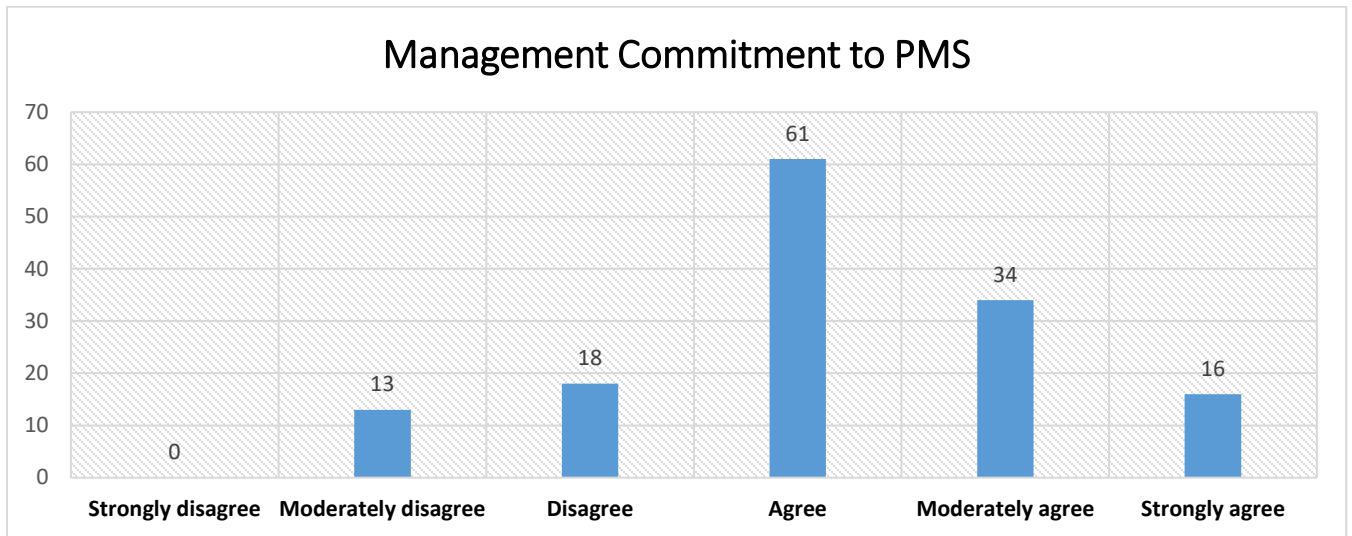


Fig. 4.5 Management commitment to PMS at Tati Nickel Mining Company

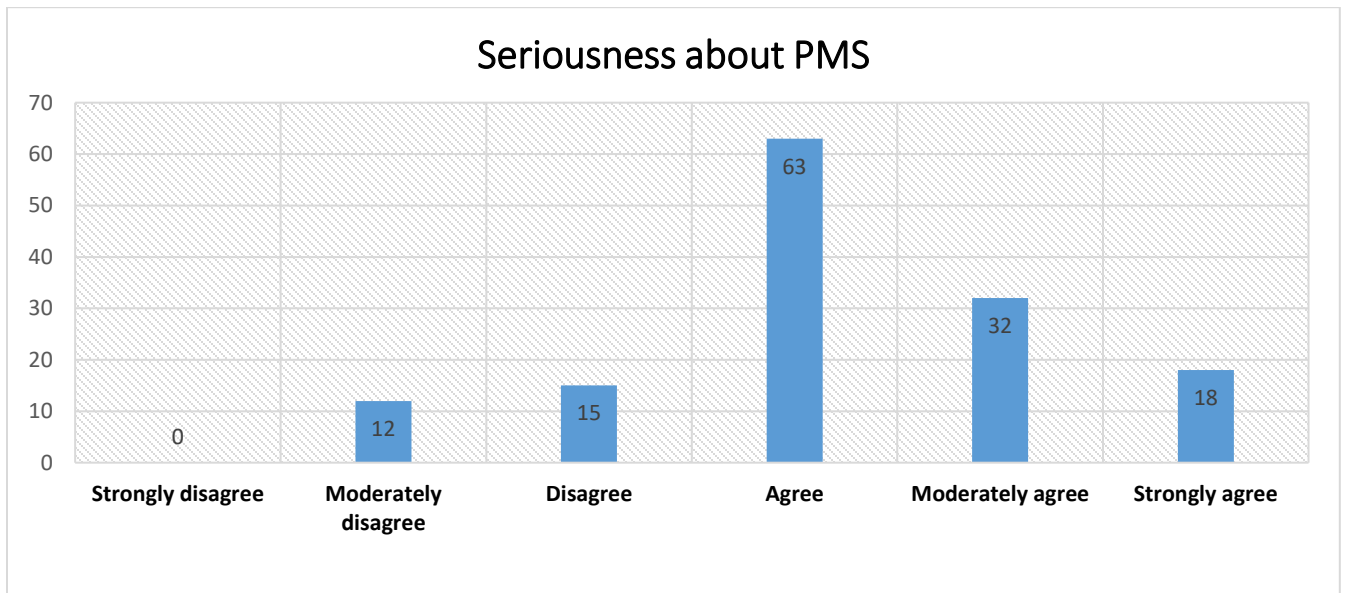


Fig. 4.6 Seriousness about PMS

The survey also sought to check the seriousness of management on PMS in order to corroborate or understand the correlation between commitment and seriousness. As shown in figure 2 above, almost the same number of respondents are of the view that there is seriousness of management on PMS. Equally, authors such as Kaplan and Norton (2001), Bourne *et al.* (2002) view seriousness and commitment by stakeholders as important aspects for success in PMS implementation.

There is therefore a strong correlation between commitment and seriousness to PMS at close to perfect correlation of 0.99. Out of the 140 responses to the question about management seriousness to PMS at TNMC, 81 % of the respondents indicated *agree* up to *strongly agree*.

On the middle management and general staff commitment to PMS, the results are similar to commitment at the higher level, which is an indication that the cascading of the initiative has been consistent across the organisation. Similar results have been attained for the time that management accords to PMS, as well as adoption of the right style of PMS as illustrated in figures 4.7 – 4.9 below.

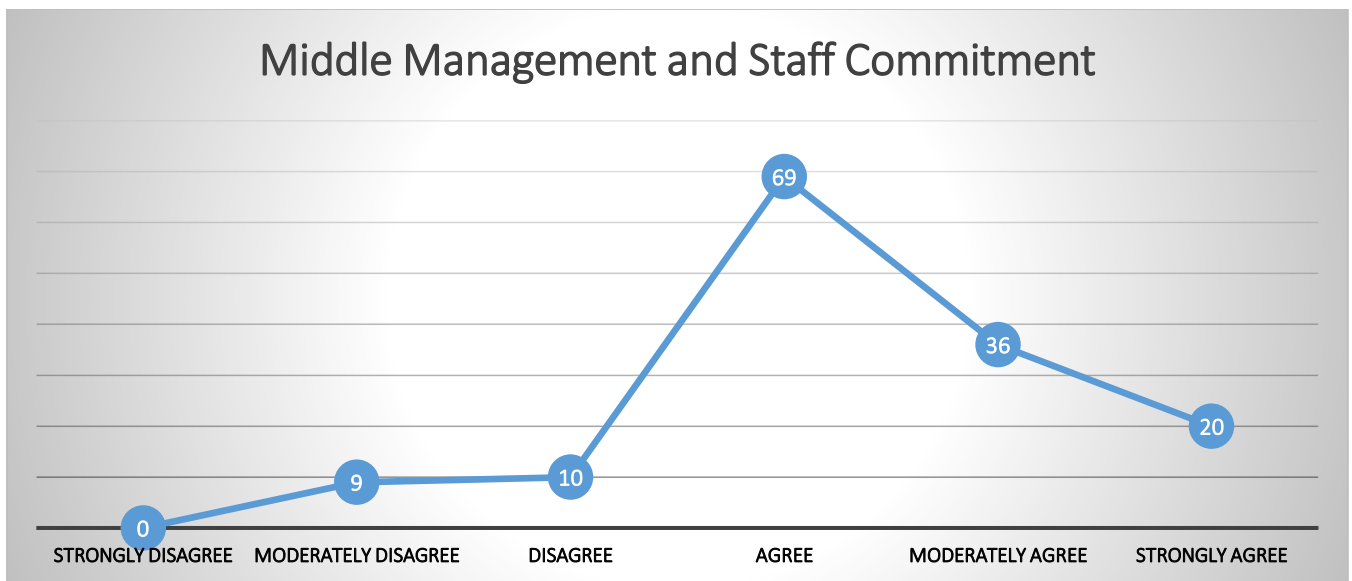


Fig. 4.7 Middle Management and Staff Commitment to PMS

The above indicates that there is general agreement that middle management and general staff are committed to PMS, and therefore understand the objectives of PMS. This can also be construed to mean that PMS at TNMC acts to motivate staff and is well attached to performance rewards. Only 19 employees responded here (13 %), stating that they disagreed that there is commitment of the middle management and general staff to PMS, while the rest of the 87% respondents opined that there is commitment across the specified employee segments. As noted earlier in this chapter, commitment is key to the success of PMS.

In terms of the time accorded to PMS, it is also noted that PMS at TNMC is seen as an integral part of improving performance, and is therefore accorded sufficient time for implementation. On being asked if management accords sufficient time to PMS, 85% of the respondents answered in the affirmative. Further illustration is provided in figure 4 below which shows that out of the total of 142 responses, the numbers of *strongly agree*, *moderately agree*, *agree*, *disagree*, *moderately disagree* and *strongly disagree* are eighteen (13%), 24 (17%), 66 (46%), 22 (15%), and 12 (8%).

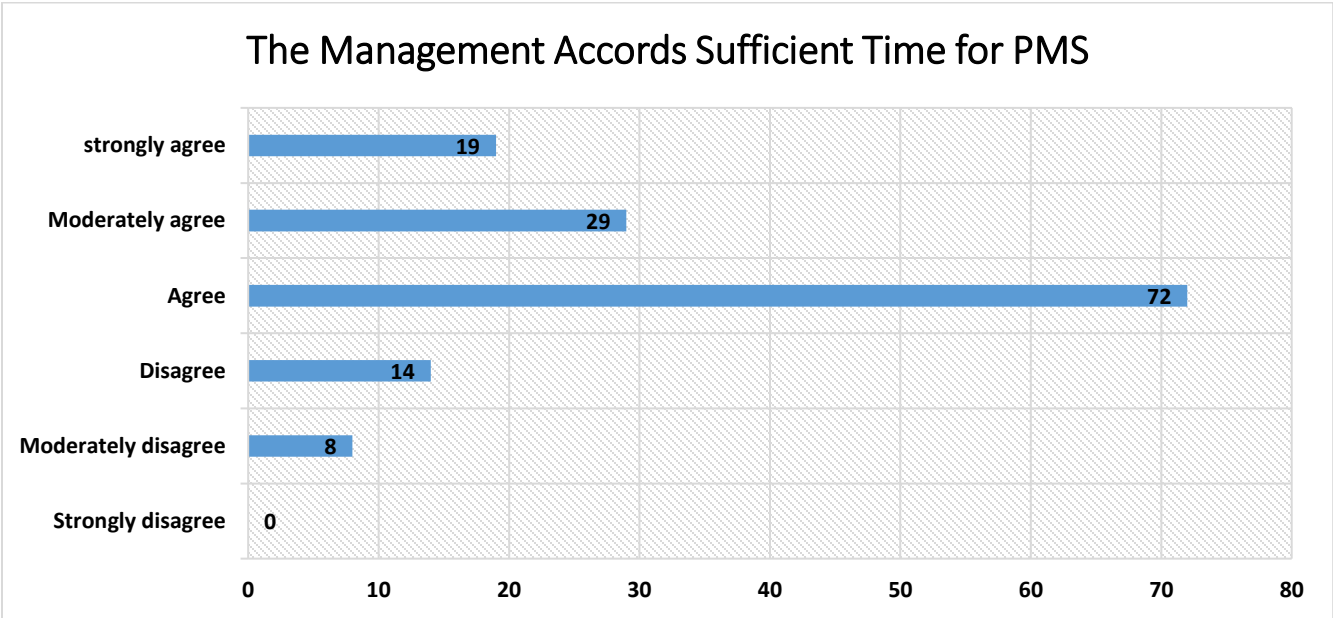


Fig. 4.8 Sufficiency of Time Accorded to PMS

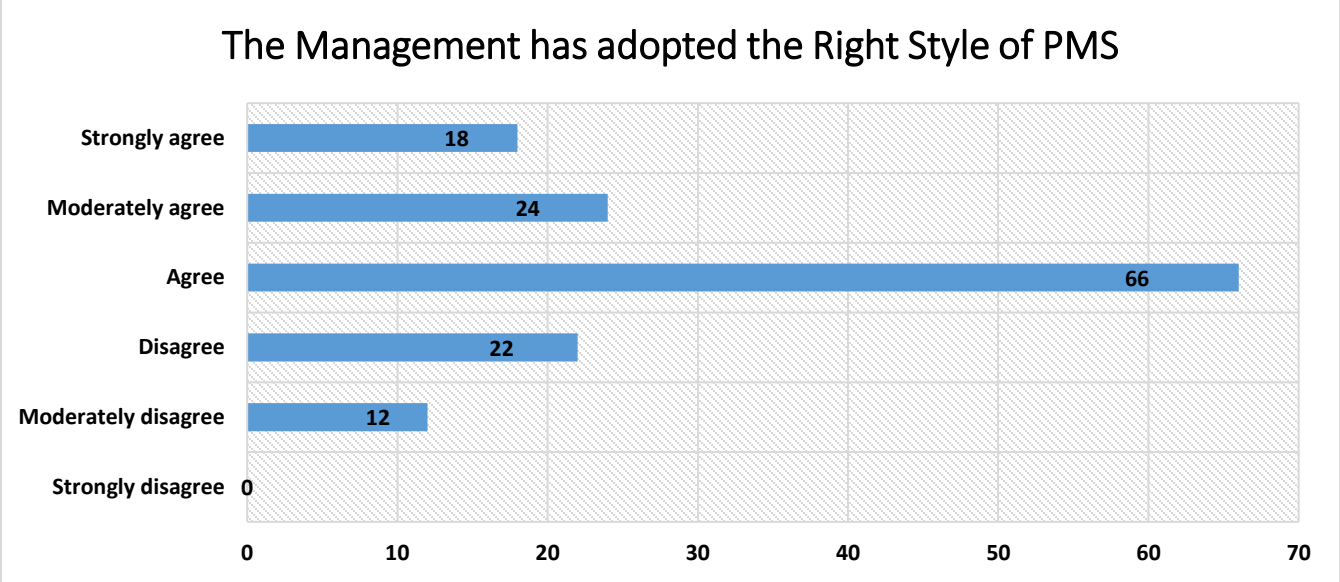


Fig. 4.9 Style of PMS adopted

As is clearly evident above (Fig 4.9), the agreement index takes up 100 out of the 142 responses (70%) and is therefore consistent with other indicators of commitment and support to PMS. Again, the view already posited by Kaplan and Norton (2001) as well as Bourne *et al.* (2002) holds water in that regard.

4.4 Correlation analysis on commitment to PMS

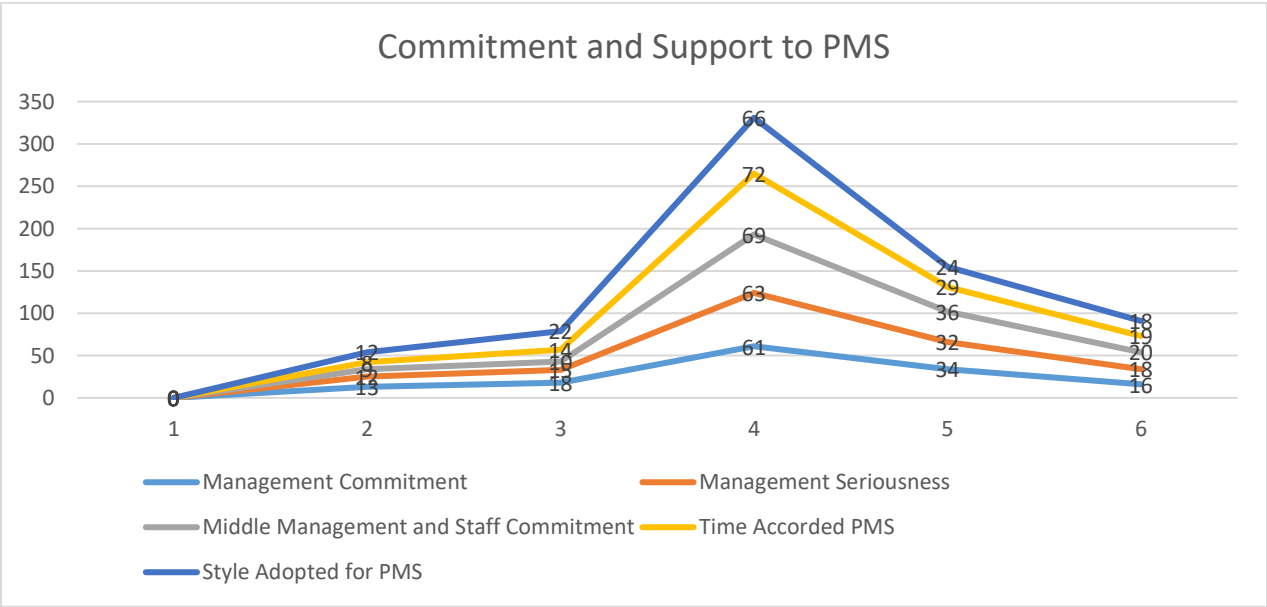


Fig 4.10 Commitment and support to PMS

The above indicates strong correlation of variables pertaining to commitment and support to PMS, with almost a perfect correlation co-efficient of 0.98. This implies that all the variables of commitment and support to PMS increase in the same direction. Management commitment has a positive influence on seriousness, middle management and general staff commitment, time accorded PMS and style adopted for PMS implementation. This view is supported by Franco and Bourne (2003), and illustrated through the table of results below.

Table 4.1 Commitment and support to PMS

Management Commitment	Management Seriousness	Middle Management and Staff Commitment	Time Accorded PMS	Style Adopted for PMS
0	0	0	0	0
13	12	9	8	12
18	15	10	14	22
61	63	69	72	66
34	32	36	29	24
16	18	20	19	18
142	140	144	142	142

4.5 PMS implementation

A total of fourteen questions were asked the respondents regarding the implementation of PMS. In consonance with questions regarding commitment and support to PMS, it appears from the results that the implementation of PMS at TNMC has been very effective, and was undertaken in conformity with success guidelines of such an undertaking. The tables below summarise the results of the survey regarding PMS implementation.

Table 4.2 Participation, awareness and objective/goal clarity

	All employees fully participate in PMS interventions		All employees are fully aware of PMS		There is clear support to PMS objectives among staff		The implementation of PMS has a clear goal	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Strongly disagree	1	1	0	0	2	1	3	2
Moderately disagree	14	10	10	7	20	14	17	12
Disagree	24	17	18	13	28	20	23	16
Agree	60	43	68	47	60	42	66	46
Moderately agree	22	16	24	17	20	14	23	16
Strongly agree	20	14	24	17	12	8	11	8
TOTAL	141	100	144	100	142	100	143	100

Table 4.2 above shows that there is a high level of participation by the majority of employees in the implementation of PMS at Tati Nickel Mining Company. In all 73% of the respondents are in agreement that participation in PMS exists. This is opposed to only 39 employees out of the 141 who responded to the question. Whilst it is common that support staff often feel left out when interventions such as PMS are implemented, it is worth noting here that the number of support staff engaged in the survey stands at 32, and perhaps this could be an indication that improvement is required to bring the support staff on board. Again, there is hope in that technical staff who actually drive the organisation’s core business are in the majority, and most of them are participants in PMS.

Among the many variables responsible for successful PMS implementation, Franco and Bourne (2003) point out that there are great benefits in making everyone involved in PMS as this would create the necessary buy-in and reduce resistance to performance management. Further, de Waal (2002), is of the view that employee engagement acts to motivate employees for the success of PMS adoption and performance enhancement.

Table 4.3 on the next page also shows clearly that PMS cuts across all levels of the organisation, though, though with 28% of the employees saying they disagree, again,

pointing to the need to take PMS to areas and levels where it is yet to be felt. The level of awareness about PMS stands at 81%, which is commendable as it denotes potential for success. Employees need to be aware of any change and performance improvement strategy before they can accommodate and support it. In that regard, support for PMS stands at 64% as depicted in table 4.2 above. Also critical and in close sync with participation and awareness is the clarity of goals and objectives for PMS. As the case is, 72% of the interviewed staff are clear about the goals of PMS.

The issue of alignment of PMS to strategy is meant to ensure that the PMS drives the business of the organisation. The PMS should therefore be integral to the operations of an organisation, and should not be seen as something parallel. In that, 77% of the respondents view the PMS as being aligned, while 23% disagree. Again, alignment must be felt by all organisational members so that effort is driven towards achievement of common results. Employees who feel dis-alignment will therefore be highly likely to be pursuing interests which are again organisational mission.

On capacity for implementation, the results clearly show that the PMS is well budgeted for, and that it is something that the leadership at TNMC believe in. There is sufficient knowledge and skills, as well as resource capacity for the implementation of PMS. Table 4.2 shows that up to 82% of the sampled employees agree that there is adequate knowledge and skills with regard to the PMS. By the same token, a hefty 92% of the interviewed staff feel that capacity and resource for implementation are sufficient.

These figures give hope, and satisfaction that the leadership at Tati Nickel have high regard for PMS. The figures further corroborate the view that there is full support and seriousness at which the leadership give to PMS. Room exists, however, to get the necessary buy-in from the remaining part of staff so that PMS is indeed a value-adding initiative for the entire organisation.

Table 4.3 Rewards, integration and sustainability of PMS at TNMC

	PMS is used for daily management of the organisation		There is a strong link between PMS and the performance reward system		There is regular maintenance and updating of the PMS		There is an organisation member/business unit assigned to take ownership of the PMS	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Strongly disagree	0	0	6	4	0	0	0	0
Moderately disagree	10	7	9	6	5	4	10	7
Disagree	16	11	52	36	11	8	16	11
Agree	71	50	33	23	77	55	73	51
Moderately agree	27	19	26	18	29	21	27	19
Strongly agree	19	13	17	12	19	13	17	12
TOTAL	143	100	143	100	141	100	143	100

Whilst there seems to be strong consistency in terms of responses across all the questions asked in the interview, there seems to be a striking departure in terms of the use of PMS and the company's reward system. Almost half of the respondents (46%) fail to see the connection between the PMS and rewards. A question of rewards is sensitive as it is often associated with personal gain, as opposed to organisational gain. It is therefore not surprising that a considerable number of employees feel that PMS and rewards are detached. On the questions of the PMS being used as a daily management tool, regular maintenance of the system and taking direct ownership of PMS, answers in the affirmative stand at 82%, 89% and 82% in that order. Among others, Theron (2000) supports the view that rewards are important components and integral to PMS success.

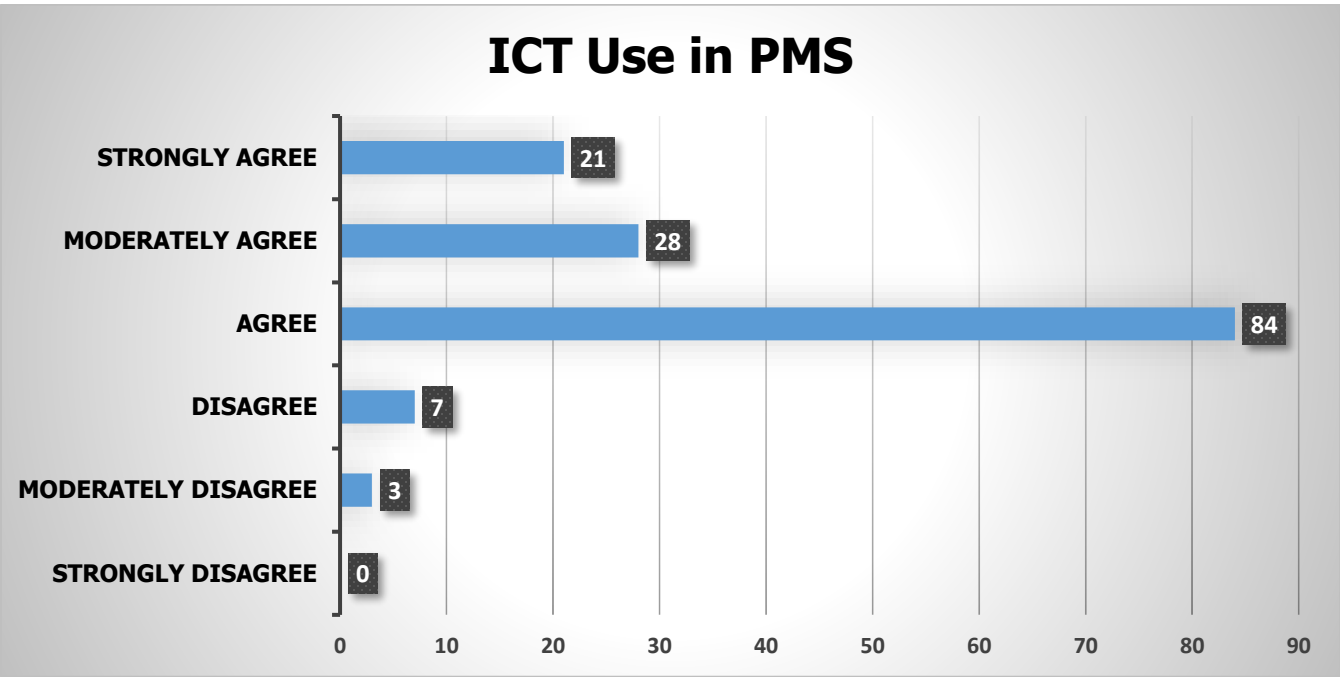


Fig 4.11 ICT Use in PMS

The survey also sought to investigate whether ICT was being used to leverage PMS, and it has been established that indeed ICT is heavily used. This is supported by the responses on Figure 4.11 above which shows that 133 out of 143 (or 93%) responses are within the agreement scale. This is good for performance tracking and management reporting purposes, as well as the associated implementation efficiencies. Marchand *et al.* (2001) also highlight the importance of integrating ICT into PMS to deliver performance insights and business results. ICT also plays a critical role in leveraging information for performance management.

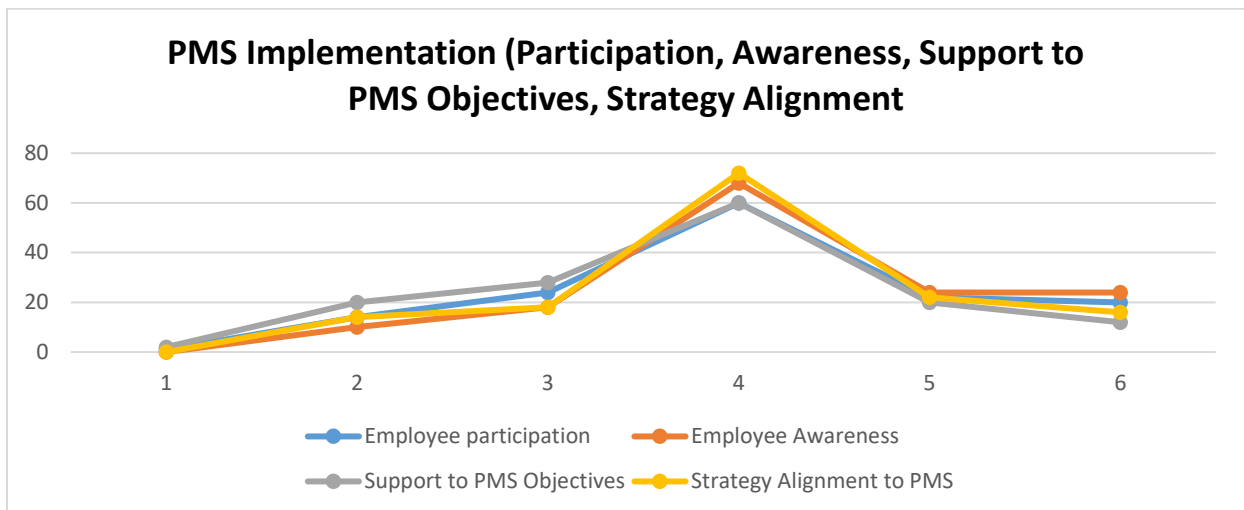


Fig 4.12 Participation, awareness, support to PMS and strategy alignment

The figure above shows that participation, awareness, support to PMS and strategy alignment take the same pattern, meaning that they influence each other in the same direction. There is a similar pattern with the skills and knowledge of PMS as they relate to time, and daily utilisation of PMS. Kaplan and Norton (2001) argue that employees at all levels need to learn the principles of the PMS system, and that it is important to train and educate individuals to elicit the requisite behaviours.

Change management literature also highlights the relevance of verbal and non-verbal communication (e.g. presentations, manuals, conversations, newsletters, reports, etc.) for promotion of PMS in general and to facilitate organisational buy-in (Bourne *et al.* 2002; Kaplan & Norton, 2001; Good & Quinn, 1990). Watkins and Leigh (2012) argue that the weaknesses in a performance management system arise primarily because knowledge and awareness are not transferred in the organisation to support its implementation. They call for regular, and not once off, communication to ensure commitment.

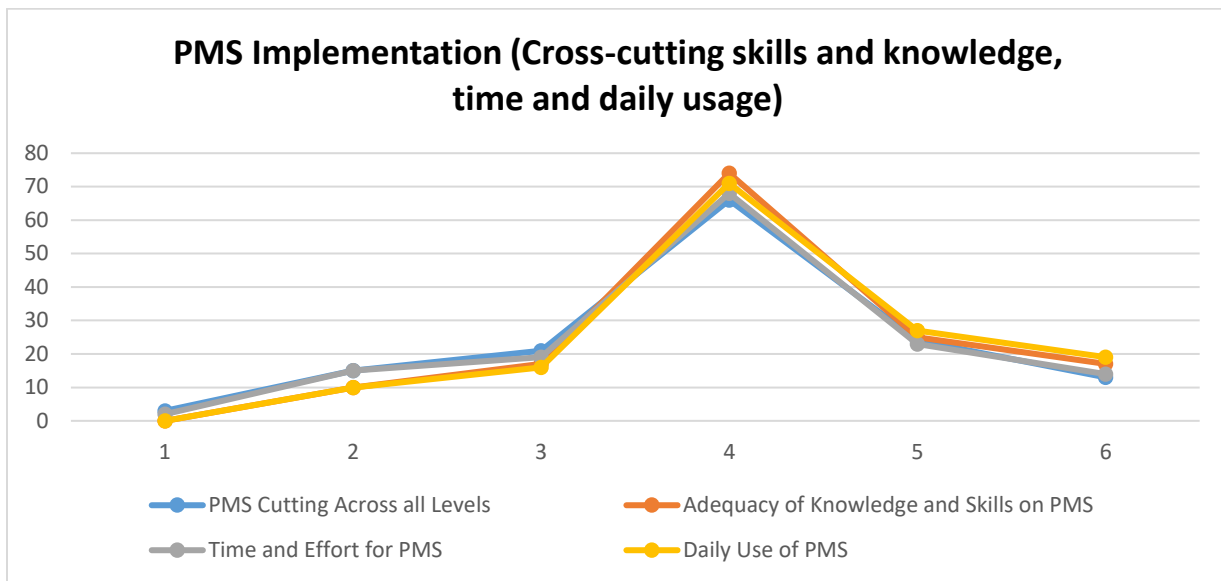


Fig 4.13 Cross-cutting skills and knowledge, time and daily use of PMS

4.6 Performance measurement

Performance measurement is a critical component of any performance management system. Measuring performance is used for tracking performance in terms of strategy execution of an organisation. It is important to measure correctly, and performance measures must give a semblance of the actual level of achievement for delivering the mission and vision of an organisation. Literature (Halachami, 2005; de Waal, 2002, Neely *et al.*, 1995) suggests that it is equally important that in defining scores, the measures must be 'SMART', correct and be at the right level, easy to collect data and the measurement clearly linked with the delivery framework for individuals, teams and the entire organization.

Table 4.5 Performance Measurement agreement levels

Performance Measurement Variable	Strongly disagree	Moderately disagree	Disagree	Agree	Moderately agree	Strongly agree
There are no difficulties in getting data to calculate performance indicators	3%	12%	16%	42%	16%	11%
The organisation measures the right key performance indicators (KPIs)	3%	13%	19%	39%	18%	8%
There are too many KPIs defined	1%	11%	19%	44%	16%	8%
It is difficult to define Key Performance Indicators	4%	14%	20%	42%	13%	7%
The KPIs are linked to department, team and individual responsibilities	2%	9%	17%	48%	17%	8%
The organisation measures the right KPIs	0%	9%	15%	48%	17%	11%

In line with the foregoing, respondents were required to provide their understanding based on the performance measurement variables defined in table 4.5 above. It appears from the table that it is possible to get data to calculate performance indicators. Whilst 31% of the respondents experience problems with performance data, 69% of the respondents are assured of performance data.

On measuring the right key performance indicators (KPIs), 65% agree with the statement. Again, 68% of the respondents are of the view that there are too many KPIs, and again 73% think that the KPIs are linked to the performance framework.

On the other hand, 76% of the interviewed employees are confident that PMS measurement at Tati Nickel Mining Company is appropriate. According to Halachami, (2005) and de Waal (2002), performance measurement is at the heart of performance management as it determines with certainty the level of performance.

Table 4.6 Performance Measurement

Availability of performance data	Measuring correct KPIs	Too many KPIs	Difficult to define KPIs	KPIs Linked to Department, Team and Individuals
4	4	2	5	3
17	18	16	20	12
23	27	27	29	23
60	56	63	59	67
23	25	23	19	23
16	12	11	10	11
143	142	142	142	139

A correlation co-efficient of 0.98 was observed for the variables between availability of performance data, measurement of the correct KPIs, number of KPIs, defining KPIs and linkages of KPIs to subordinate structures, up to the individuals.

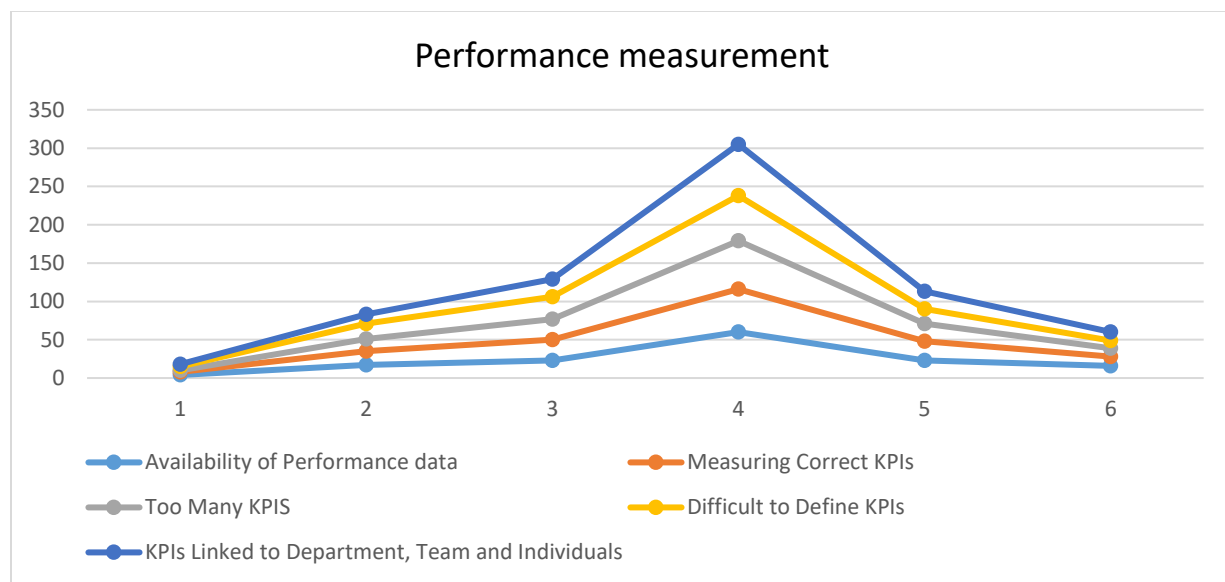


Fig 4.14 Performance Measurement attributes relatedness

4.7 Change management

Change management is another component of PMS which if not adequately addressed, will render any implementation impossible. Many projects the world over fail largely because change management was not undertaken. In view of this importance of change management, the survey also investigated the prominence of change management

during the implementation of PMS. Largely, as it is the case with other components of this study, it has been established that there was a good attempt at change management as shown by the illustration in table 5 below.

All in all, between 12% - 27% of the respondents were in disagreement with a consistent and acceptable change management plan to PMS, whilst 73% - 88% believed that all change management protocols were observed, and continued to be observed during the implementation and sustaining of PMS.

It is therefore safe to say that all the change management interventions must be sustained and improved to ensure success and continued benefit from PMS. This is especially true because of the commitment and believe that PMS will improve the performance of Tati Nickel Mining Company.

Table 4.7 Change Management agreement levels

Change Management Variable	Strongly disagree	Moderately disagree	Disagree	Agree	Moderately agree	Strongly agree
There is positive attitude to PMS by all employees	2%	11%	15%	49%	15%	8%
There is an inherent positive level of performance management culture	0%	6%	13%	51%	21%	9%
The organisation sees enough benefit from PMS	0%	4%	8%	51%	23%	13%
There is sufficient focus on change management process in the implementation of PMS	1%	6%	11%	50%	21%	11%
PMS is given high priority by management	2%	10%	14%	45%	19%	10%
The organisation is in a stable phase	0%	8%	13%	49%	20%	11%
PMS is consistently used even where there is change in management	1%	9%	13%	49%	17%	11%

Table 4.8 Change Management absolute figures

Positive Attitude to PMS	Positive level of performance culture	Seeing PMS benefits	Sufficient focus on Change Management	High priority given to PMS	Organisation in a Stable State	PMS Consistently used even with change in management
0	3	0	1	3	0	2
13	15	9	9	14	11	13
21	21	19	16	20	18	18
68	69	72	70	64	70	70
24	22	29	29	27	28	24
15	12	12	16	15	16	15
141	142	141	141	143	143	142

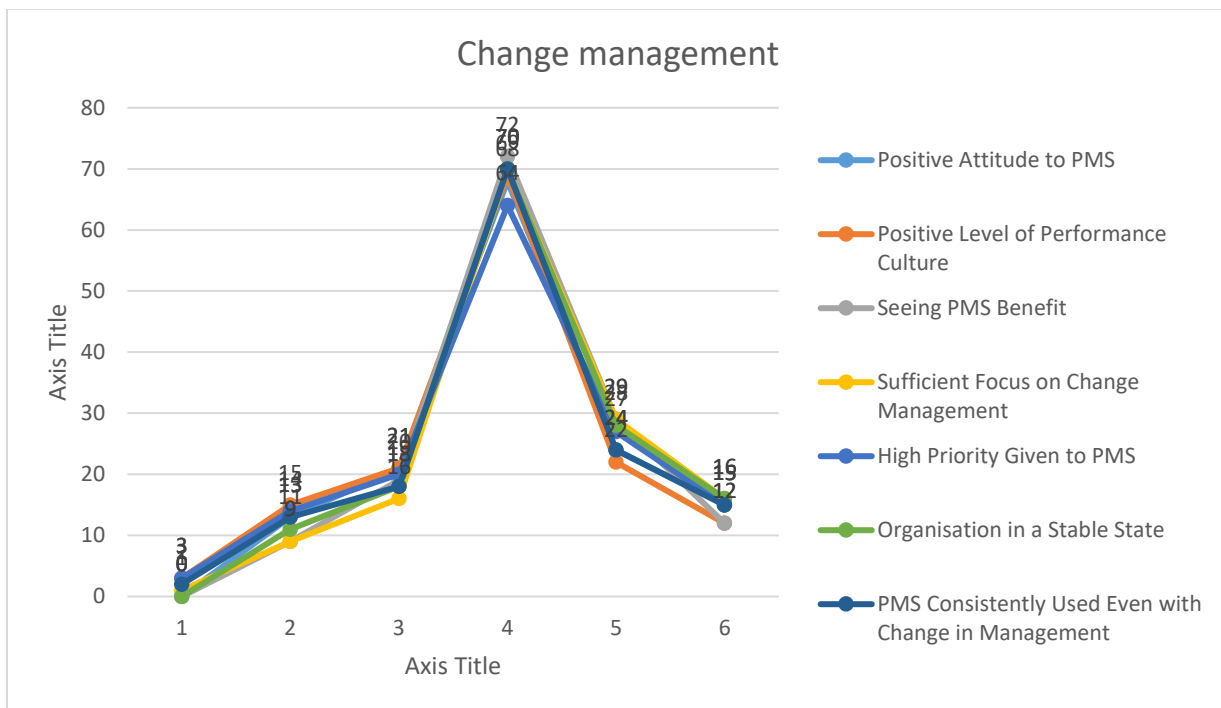


Fig 4.15 Change Management agreement levels

There is a high level of agreement with change management attributes, with respondents who agree standing at over 75% across all variables. Although a slight deviation was observed between some variables, overall there is positive correlation of all the change management attributes, which are also very high at 0.99. As indicated earlier on, Bourne et al (2002), Kaplan and Norton (2001) both highlight the importance of approaching the implementation of PMS from a change management perspective.

4.8 Conclusion

It has been observed from the survey results presented here that the implementation of a PMS at Tati Nickel Mining Company has been a success. It should be recognised, however, that PMS should be applied consistently, and with support of other performance enhancing initiatives as it is not a panacea on its own. Employees must be shown that high performance brings results to the organisation, and that those results are translated into success at the organisational level, which further translate into performance rewards for individuals.

As a weaker link observed in this study, efforts must be made to show how performance and rewards are inter-linked. Despite the outlined successes, there should be a continued review of the PMS process at TNMC as change and performance improvement are a constant to any living organisation. Detailed recommendations based on the data presented and its analysis are presented in the next chapter.

Chapter Five: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Performance management is a managerial tool for managing organisational performance for increased effectiveness. It connects all the resources such as financial capital, physical capital and human capital with the goals and objectives of the people and objectives of the organisation with people and leadership driving the processes for achieving best organisational outcomes.

It requires appropriate planning, managing, measuring, monitoring and rewarding performance in the context of organisation's goals and objectives. With the above view in mind, an attempt has been made in this work to gather and critically examine the valuable inputs from employees selected in the survey and carry out analysis of the qualitative and quantitative data for arriving at the findings, conclusions and recommendations established herein.

Most importantly the study has been able to culminate in an innovation model which demonstrates how a PMS can remain competitive by constantly reviewing its implementation to drive towards higher performance levels to enable sustained organisational growth. It is worth noting that the general aim of the research project is to evaluate effectiveness of the TNMC performance management system on employee productivity, and to propose interventions for strengthening the system based on best practice and experience of other organisations. The study relied heavily on the collection of data through questionnaires from approximately 140 participants, and analysis of the same based on common statistical tools such as regression and correlation.

This chapter provides a brief synopsis of the study, and presents and discusses the research questions, make recommendations out of the research analysis, highlight limitations of the study, and make conclusions based on the overall study objectives,

survey findings and results analysis, and the associated literature and general observations made in the study.

5.2 Summary

This review has attempted to address the issues in relation to the research questions posed in this work. Though extensive, it is not exhaustive as there is wide literature relating to organisational performance management. It is clear from the literature that to be effective performance measurement activities should be designed to (i) manage the right things and (ii) manage them properly. Many tools and frameworks are proposed for each of these attributes of performance management. However, there are clear themes which underpin these activities. These can be summarised as follows:

1. Performance management should be integrated horizontally across the organisation;
2. The performance being managed should reflect the requirements, wants and needs of all of the key stakeholders of the organisation and not just reflect a limited set;
3. Performance management should be integrated vertically linking the strategies and objectives of the organisation to the execution of activities which will enable their achievement;
4. Explicit understanding of linkages across the vertical and horizontal integration (e.g. through success maps) enables consideration of conflicting priorities and trade-offs that need to be made in order to achieve overall objectives;
5. The performance monitoring, review and action planning process should be structured around the strategic performance objectives of the organisation;
6. Processes and systems should be designed to extract and communicate insights rather than performance data;
7. All systems and processes should be aligned with each other, driving behaviour towards the performance objectives;
8. Effort should be dedicated to developing an appropriate culture to engage the organisation's employees and elicit commitment to performance objectives.

From the analysis of the information gathered in the study, it is noted that the relatively high correlation coefficients between variables analysed suggest the following: (a) Clarity and strong linkages between strategic between TNMC strategic and business plans and the performance outputs of individual employees and business units; (b) High levels of engagement and dialogue between supervisors and supervisees and the resultant high sense of performance; (c) Employee awareness of PMS processes at the mine; (d) Perception that PMS is beneficial to employees in their individual right; (e) Strong sense that PMS has an effect on individual productivity, motivation, morale, performance levels and employees welfare; (f) Performance reviews are linked to performance rewards at TNMC; and (g) There is an acceptable performance review framework in the organisation. These observations are in congruent with literature as suggested by Bourne et.al. (2002), Kaplan & Norton (2001), Halachami (2005) and Holloway (1999), among others.

5.3 Research questions

The general aim of the research project was to evaluate effectiveness of the Tati Nickel Mining Company (TNMC) performance management system on employee productivity, and to propose interventions for strengthening the system based on best practice and experience of other organisations. The study also proposed the research questions below which are briefly discussed. The discussion relies heavily on the questionnaire used in the study which investigated four (4) basic themes, being: (a) commitment and Support to PMS; (b) PMS implementation; (c) performance measurement; and (d) change management. The area of PMS implementation further looked into issues of employee participation and awareness about PMS; knowledge and skills on PMS; time allocated to PMS activities; level of alignment of PMS with performance rewards; and the use of ICT in PMS. The following were the research questions:

1. Are there clear linkages between TNMC strategic and business plans and the performance outputs of each individual employee and business units?

2. What is the level of engagement and dialogue between supervisors and supervisees that is supportive of a high work culture?
3. What is the level of employee awareness of PMS processes at TNMC?
4. What is the perceived benefit of a PMS to individual employees?
5. What is the impact of a PMS on individual productivity, motivation, morale, and performance levels and employees welfare?
6. How well are the performance reviews linked to performance rewards at TNMC?
7. What is the commonly used performance review methodology and how effective is it on employee productivity?

5.3.1 Summary discussion of the research questions

Clarity of linkages between TNMC strategic and business plans and the performance outputs of each individual employee and business units: Tati Nickel Mining Company Management has displayed a considerable commitment to performance management system implementation at the mine. There is also commitment from middle management and the entire staff which is a sign that the PMS has been cascaded across the entire organisation. On that basis, it can be concluded that the corporate strategy and business plans are aligned to those of the business units as well as individual employees. From the perspective of PMS implementation as one of the themes of this study, it has also emerged that there is high level of employee participation in the PMS, there is high level of awareness, and that the strategy is aligned to the PMS. As an example, out of the 142 respondents in the survey, 77% agreed with the notion that TNMC strategy is aligned to PMS, whilst over 79% are of the view that PMS cuts across all the levels of the organisation. As observed from literature, performance is an outcome of both organisational and human activities, and positive performance outcomes only arise when the behaviour of employees is aligned with strategy and when employees are motivated (de Waal, 2002).

Level of engagement and dialogue between supervisors and supervisees that is supportive of a high work culture: Once again, the commitment of both the

management and general staff members towards PMS indicates that the parties are supportive of a high work culture. Literature supports this view that PMS leads to high performance levels and improved productivity of an organisation, and that through incentives, the PMS promotes a positive work culture. The survey has shown that there is a positive attitude to the PMS by employees, with a magnitude of 72% of surveyed employees in agreement. In addition, 80% of staff point to an inherent positive level of performance management culture in the organisation. Franco and Bourne (2003) identify corporate culture as a crucial component that encourages team working, ownership of problems and risk-taking or entrepreneurship, as well as orientation towards continuous improvement and use of the PMS. Whilst it is also advisable to take issues of culture and change management seriously, there is also a need for continuous learning, feedback and engagement of all the stakeholders involved in the process.

Level of employee awareness of PMS processes at TNMC: The survey results from the evaluation of the effectiveness of PMS at TNMC show that 72% of staff participate in PMS activities. Further, the results of the survey show that awareness levels of PMS stand at 80%. These statistics are very positive in terms of the research question as they show a very high awareness level at the mine. The success of PMS is dependent on the level of employee awareness. This is supported by literature where, for example, awareness is treated as an important aspect related to communication that can affect the effectiveness of performance management. The change management literature highlights the relevance of verbal and non-verbal communication (e.g. presentations, manuals, conversations, newsletters, reports, etc.) used to clarify all aspects related to the measures, in particular and performance management in general; and to facilitate the buy-in from the people in the organisation (Bourne *et al.* 2002b; Kaplan & Norton, 2001; Goold & Quinn, 1990).

Perceived benefit of PMS to individual employees: Individuals perceive the benefit of PMS in several ways. In this study, PMS perception by respondents can be analysed in terms of commitment and support to the framework, level of general employee participation in the implementation of the PMS system, attitude to PMS and most importantly, employees' subscription to the linkage of PMS and the performance

rewards system. As shown above, there is a high level of commitment of staff to PMS. Again, support to PMS implementation and the attitude displayed by employees has been shown to be very high. To further test this assumption, survey results point out that 83% of the surveyed employees believe that there is a strong link between PMS and the performance reward system. On the other hand, literature on PMS is not conclusive since there is inconsistency in the literature regarding the linkage between incentive compensation and strategic performance measures. In addition, a lack of understanding around the concept of compensation seems to exist, since studies use the words 'incentives', 'rewards' and 'compensation' interchangeably (Theron, 2000; de Waal, 2002). In Botswana, the government has integrated a Performance Based Reward System (PBRs) within the core PMS framework. In the TNMC context, the issue has not been clearly articulated (Botswana Government, 2005).

Impact of PMS on individual productivity, motivation, morale, and performance levels and employees welfare: Due to the limitation experienced in the study, it has not been very clear as to how far PMS has influenced the level of performance and employee welfare. This is because individual performance information was not availed to the researcher. However, it can be deduced from commitment and attitude levels that some semblance of improved motivation and morale was experienced as a result of PMS implementation. It, however, remains true that further exploration in this area is still required.

Level of linkage of performance reviews to performance rewards at TNMC: Whilst the linkage between PMS and the performance reward system has been established by the respondents, linkage of rewards to performance reviews was not ascertained. This limitation is also consistent with the above captured notion that individual performance information was not availed for this study. Again, this is a potential area for further investigation in future.

Commonly used performance review methodology and how effective it is on employee productivity: For the same reasons expressed above, the review methodology, nor its effectiveness at TNMC, was not covered in this study. Despite this,

it is worth noting that the performance review process should focus attention on discussing the issues raised by the performance measures and the actions necessary to meet organisational objectives, rather than trying to interpret what the measures actually say. To address this authors such as Newman (1995), Rasiel and Friga (2001) and Kennerley and Bourne (2003) propose approaches which extend concepts in the Deming cycle (PDCA) process so that it integrates performance measurement into the broader performance management activities by ensuring there is a systematic approach to identifying objectives; collecting, analysing and interpreting data; communicating insights; making decisions; and monitoring performance to ensure that objectives are achieved. Such a systematic approach for performance review can be very effective for determining employee productivity levels, and also for influencing interventions to improve performance.

5.4 Recommendations

It has been observed from the survey results presented here that the implementation of PMS at Tati Nickel Mining Company has been a success. It should be recognised, however, that PMS should be applied consistently, and with support of other performance enhancing initiatives as it is not a panacea on its own. Employees must be shown that high performance brings results to the organisation, and that those results are translated into success at the organisational level, which further translate into performance rewards for individuals (Theron, 2000; Neely, 1998).

As a weaker link observed in this study, efforts must be made to show how performance and rewards are inter-linked. Despite the outlined successes, there should be a continued review of the PMS process at TNMC as change and performance improvement are a constant to any living organisation.

In general, and in accordance with good practice, a number of critical success factors for effective performance management systems are ideally that: (a) There is a need to focus on a limited number of indicators which provide a balanced view of the

performance of the organisation; (b) The set of performance indicators used must provide a balance between high level corporate indicators and those of the lower organisational tiers; (c) A robust, and preferably automated performance management system must be put in place in order to aid efficient and transparent ways of managing performance and rewards; (d) Publication of performance data is encouraged at all levels to promote accountability and transparency (Theron, 2000; Halachami, 2005; de Waal, 2002).

Specifically, it is recommended as follows:

1. That Tati Nickel Mining Company (TNMC) should periodically undertake comprehensive reviews of its Performance Management System, and implement recommendations of such reviews accordingly;
2. TNMC should put in place strategies to incorporate PMS training in its annual performance plans. Kaplan and Norton (2001) support this notion when they posit that efforts should be dedicated to developing an appropriate culture to train the organisation's employees and elicit commitment to performance objectives;
3. Concerted efforts should be made to re-orientate staff on PMS, and to cascade the system across all organisational levels;
4. PMS awareness should be inculcated in all staff meetings and engagement sessions;
5. Leadership commitment and support should be enhanced in order to ensure success of PMS implementation. Commitment and leadership support is seen as integral to PMS success by several authors such as Bourne *et al.* (2002) and Kaplan and Norton (2001).
6. PMS must be clearly linked with the performance based reward systems, and further analysis of how rewards are linked with PMS should be undertaken. Franco and

Bourne (2003) identify rewards are among some of the most important factors affecting the use of PMS, and hence the success of its implementation;

7. The ongoing automation and computerization of the Mine should make performance management integral to the ICT framework. This is supported by the view (Bititci *et al.*, 1997) who argue that information systems are at the heart of the performance management processes, and integrate all the relevant information from all the other performance management systems;
8. The organisation should take advantage of its stable status to introduce various components necessary to improve the implementation and institutionalisation of PMS.

5.5 Limitations

The following limitations were observed in this study:

1. The geographical region selected for the study was confined to the Tati Nickel Mining Company (TNMC) company operations at Phoenix Mine in Francistown.
2. This was done as well as using selected employees from two organisations that would be providing a comparative analysis. Due to the sensitivity of individual performance information, the study was also hampered as such information is normally not granted by its keepers.
3. The sample design was found to be a constraint as certain important employees could not be interviewed either as a result of being excluded or their unavailability at the time of undertaking this work.
4. Detailed statistical analysis could have been done with the availability of more relevant quantitative data.

5. Due to a high degree of confidentiality of individual performance records, getting factual data on the same was a constraint, thus limiting analysis on how PMS has impacted employee performance levels.
6. There were discrepancies found sometimes between top and lower management, as well as other employees in different business units and with differing lengths of career service during interactions in this study, which posed questions of subjectivity in responses.

5.5 Conclusion

Performance management is a managerial tool for managing organisational performance for increased effectiveness. It connects all the resources such as financial capital, physical capital and human capital with the goals and objectives of the people and objectives of the organisation with people and leadership driving the processes for achieving best organisational outcomes. Performance management requires appropriate planning, managing, measuring, monitoring and rewarding performance in the context of organisation's goals and objectives. With the above view, an attempt has been made in this work to gather and critically examine the valuable inputs from Tati Nickel Mining Company (TNMC) and carry out analyses of the qualitative and quantitative data for determining the effectiveness of the PMS system at the mine. To accomplish these task, several research questions have been posited in this study, the analysis of which follow below. Most importantly the study has been able to culminate in findings which demonstrate how the PMS at TNMC has evolved, and recommendations which if implemented, will catapult the organisation towards efficiency and effectiveness in the deployment of PMS.

It has been observed from the survey results presented here that the implementation of PMS at Tati Nickel Mining Company has been a success. It should be recognised, however, that PMS should be applied consistently, and with support of other performance enhancing initiatives as it is not a panacea on its own. Employees must be

shown that high performance brings results to the organisation, and that those results are translated into success at the organisational level, which further translate into performance rewards for individuals. As a weak link observed in this study, efforts must be made to show how performance and rewards are inter-linked. Despite the outlined successes, there should be continued reviews of the PMS process at TNMC as change and performance improvement are a constant to any living organisation.

It is clear from the results presented in chapter 4 that the study has been able to meet its specific objectives. This is so because correlation was determined for all the variables under investigation. Finally, the discussion of the findings has led to the conclusions and recommendations made here-under.

Finally, it should be noted once again that Performance Management Systems have dominated the quest for performance improvement of organisations the world over, and that they have largely been born out of the need for effectiveness, efficiency, high accountability and need for less bureaucracies, especially in public sector organisations. (Halachami, 2005; Holloway, *et al.* 1999).

The significant role of Performance Management Systems is that they would help organisations to identify areas of poor performance and put in place structured ways and interventions to deal with those. It also recognises good performance and the need to reward it for (Theron, 2000).

Literature defines PMS as management of organisations and individuals to achieve defined goals. This definition, though not exhaustive, is a demonstration that performance management is a wide concept, and therefore its scope, activities and practices would differ from one organisation to the other. It is a multi-disciplinary activity that could be practiced at different levels and using a multiplicity of tools and management styles. In the same light, the evaluation of a performance management system can adopt various approaches and utilize different tools both for data collection and its analysis as it has been proven through this study.

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Annex: Survey Instrument

FOR OFFICE USE ONLY: Respondent Code: _____

VOLUNTARY QUESTIONNAIRE FOR A STUDY ON 'AN EVALUATION OF THE EFFECTIVENESS OF PERFORMANCE MANAGEMENT SYSTEM AT TATI NICKEL MINING COMPANY OF BOTSWANA

Graduate School: North-West University (NWU)
Researcher: Dr Bakani Thipe
Supervisor: Prof S I Lubbe

Note to the respondent

- This is a research project the purpose of which is to understand the effectiveness of performance management system (PMS) at Tati Nickel Mining Company (TNMC) of Botswana.
- Your answers will remain anonymous and will not be released to any third parties. Your name will not be kept in any records other than this questionnaire, and when the results of this study are used, there shall be no reference to you by name or such other biographic data that could infer your identity.
- Your participation in this research is voluntary, and whilst you are strongly advised to answer all parts of the questionnaire, you may skip any questions you are not comfortable with.
- Your refusal to participate will not result in any penalty or loss of benefits to which you are otherwise entitled to.
- What you say in this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you as a person.
- The research intends to cause no physical or psychological harm or offense to you as an individual
- The questionnaire will only take 15 minutes of your time.
- The Researcher will abide by all commonly acknowledged ethical codes of research.

The questionnaire has six parts:

Part 1 seeks permission to use your responses for academic research.

Part 2 asks general personal particulars (bio-data) like your age, gender and other work related information.

Parts 3 to 7 ask general and specific questions related to Performance Management Systems with particular reference to Tati Nickel Mining Company (TNMC) of Botswana.

How to complete the questionnaire

1. Please answer the questions as truthfully as you can. Also, please be sure to read and follow the directions for each part. Please let the Researcher know if you have any questions related to this questionnaire.

2. We are only asking you about things that you should feel comfortable telling us about. If you don't feel comfortable answering a question, you can indicate that you do not want to answer it. For those questions that you do answer, your responses will be kept confidential.

3. You can mark each response by making a tick or a cross, or encircling each appropriate response with a PEN (not a pencil), or by filling in the required words or numbers.

Thank you very much for filling in this questionnaire.

Bakani Thipe | Tati Nickel Mining Company (Pty) Ltd | Physical Address: Matsiloje Road, Phoenix Site, | Postal Address: P O Box 1272, Francistown, Botswana | Office: +267 2410701 | Direct: +267 2453110 | Mobile: +267 76239511 | Fax: +267 2418855 | E-mail: bthipe@tatinickel.co.bw | Website: www.tatinickel.co.bw.

Part 1: Permission to use my responses for academic research

I hereby give permission that my responses may be used for research purposes provided that my identity is not revealed in the published records of the research.

Name (Initials and Surname) _____

Address (Postal/Physical):

Contact Numbers: Home: _____ Cell: _____

Fax: _____

Email _____

No.	<p>PART2: GENERAL PERSONAL PARTICULARS</p> <p>Please tell us a little about yourself</p> <p>Please mark only ONE option per question below.</p>
1.	<p>I am within this age group</p> <p><input type="checkbox"/> 21-30 yrs.</p> <p><input type="checkbox"/> 31-40 yrs.</p> <p><input type="checkbox"/> 41-50 yrs.</p> <p><input type="checkbox"/> 51-60yrs</p> <p><input type="checkbox"/> Over 60 yrs.</p>
2.	<p>I am a:</p> <p><input type="checkbox"/> Female</p> <p><input type="checkbox"/> Male</p>
3.	<p>How long have you been working for Tati Nickel Mining Company?</p> <p><input type="checkbox"/> 1-2 years</p> <p><input type="checkbox"/> 3-4 years</p> <p><input type="checkbox"/> 5-6 years</p> <p><input type="checkbox"/> 7-8 years</p> <p><input type="checkbox"/> 9-10 years</p> <p><input type="checkbox"/> More than 10 years</p>
4.	<p>What is your post responsibility?</p> <p><input type="checkbox"/> Support</p> <p><input type="checkbox"/> Technical</p> <p><input type="checkbox"/> Professional</p> <p><input type="checkbox"/> Management</p> <p><input type="checkbox"/> Executive</p> <p><input type="checkbox"/> Other: Please specify: _____</p>
5.	<p>What is your role in PMS?</p> <p><input type="checkbox"/> Beneficiary</p> <p><input type="checkbox"/> Implementer</p> <p><input type="checkbox"/> Manager</p>
6.	<p>What is your salary grade/band?</p> <p><input type="checkbox"/> A</p> <p><input type="checkbox"/> B</p> <p><input type="checkbox"/> C</p> <p><input type="checkbox"/> D</p> <p><input type="checkbox"/> E</p> <p><input type="checkbox"/> F</p>
	<p>PART3: COMMITMENT AND SUPPORT TO PMS</p> <p>Please mark only ONE option per question below</p>
7.	<p>There is full management commitment to PMS at Tati Nickel</p> <p><input type="checkbox"/> Strongly disagree</p> <p><input type="checkbox"/> Moderately disagree</p> <p><input type="checkbox"/> Disagree</p>

	<input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
8.	Management is serious about PSM at TNMC <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
9.	There is commitment from middle management and staff for PMS use and implementation <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
10.	The management accords sufficient time for PMS <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> strongly agree
11.	Management has adopted the right style for PMS <input type="checkbox"/> strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
PART 4: PMS IMPLEMENTATION Please mark only ONE option per question below	
12.	All employees fully participate in PMS interventions <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
13.	All employees are fully aware of PMS <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
14.	There is clear support to PMS objectives among staff <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree

	<input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
15.	Strategy is aligned to PMS implementation <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
16.	PMS cuts across all levels of the organisation <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
17.	There is adequate knowledge and skills with regard to PMS <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
18.	There is sufficient time and effort for the implementation of PMS <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
19.	PMS is used for daily management of the organisation <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
20.	There is a strong link between PMS and the performance reward system <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
21.	There is sufficient capacity and resources for PMS implementation <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree

	<input type="checkbox"/> Strongly agree
22.	<p>There is regular maintenance and updating of the PMS</p> <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
23.	<p>The implementation of PMS has a clear goal</p> <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
24.	<p>There is an organisation member/business unit assigned to take ownership of the PMS</p> <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
25.	<p>There current ICT system fully supports PMS</p> <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
	<p>PART 5: PERFORMANCE MEASUREMENT Please mark only ONE option per question below</p>
26.	<p>There are no difficulties in getting data to calculate performance indicators</p> <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
27.	<p>The organisation measures the right key performance indicators (KPIs)</p> <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
28.	<p>There are too many KPIs defined</p> <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree

	<input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
29.	It is difficult to define Key Performance Indicators <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
30.	The KPIs are linked to department, team and individual responsibilities <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
31.	The organisation measures the right KPIs <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
PART 6: CHANGE MANAGEMENT Please mark only ONE option per question below	
32.	There is positive attitude to PMS by all employees <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
33.	There is an inherent positive level of performance management culture <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
34.	The organisation sees enough benefit from PMS <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
35.	There is sufficient focus on change management process in the implementation of PMS <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree

	<input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
36.	PMS is given high priority by management <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
37.	The organisation is in a stable phase <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
38.	PMS is consistently used even where there is change in management <input type="checkbox"/> Strongly disagree <input type="checkbox"/> Moderately disagree <input type="checkbox"/> Disagree <input type="checkbox"/> Agree <input type="checkbox"/> Moderately agree <input type="checkbox"/> Strongly agree
	PART 7:GENERAL Please mark only ONE option and answer fully as appropriate
39.	Do you think Tati Nickel Mine is successful in implementing PMS? <input type="checkbox"/> Yes <input type="checkbox"/> No
40.	What is it that Tati Nickel Mining Company is doing to successfully implement PMS?
41.	Can TNMC employees become an obstacle or facilitator to the successful implementation of PMS?

42.	What do you recommend business unit managers should do for PMS implementation to be successful?
43.	What complaints have you received from PMS regarding the implementation of PMS?
44.	Do you think PMS is a priority at TNMC? Why?
45.	<p>Have you received adequate training on PMS?</p> <input type="checkbox"/> Yes <input type="checkbox"/> No
46.	How is PMS related to the mine's ABC turn-around strategy?
47.	How has the implementation of PMS affected you as an individual?
48.	<p>Would you recommend PMS to another organisation?</p> <input type="checkbox"/> Yes <input type="checkbox"/> No

THANK YOU