

**THE RELATIONSHIP BETWEEN ORGANISATIONAL RESOURCES AND
ORGANISATIONAL PERFORMANCE IN A NATIONAL GOVERNMENT
DEPARTMENT**

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ABSTRACT

Organisational performance in the public sector has emerged as a critical topic in the post-1994 era in South Africa. This could ostensibly be attributed to the inability of the majority of public organisations in the country to deliver a satisfactory standard of service to the public. An intense controversy has also emerged the world over on the selection of performance measures that are appropriate for use in public organisations. This debate is actuated by the existence of a multiplicity of performance measurement indices as well as frameworks that can be applied to manage performance in organisations. The existence of these multiple measurement mechanisms tends to confound the entire process of managing organisational performance. Another unresolved controversy pertains to the extent to which various organisational resources impact on organisational performance.

The purpose of this study was to examine the relationship between organisational performance and three organisational resources; specifically, the human factor, organisational systems and organisational processes. A quantitative design was adopted in which a survey questionnaire was administered to 272 managers and employees of a South African National Government Department. Respondents were selected using a blend of purposive sampling and convenience sampling approaches. Data were analysed using the Statistical Packages for the Social Sciences (SPSS version 20.0). Reliabilities were measured using Cronbach's alpha coefficient. Exploratory factor analysis was used to identify the human factors, organisational systems and organisational processes. Spearman's rank correlation and multiple linear regression analyses were used to investigate the relationship between organisational performance and the sub-elements under each of the three organisational resources. The respective impacts of each of the three factors on organisational performance were compared using the mean-score ranking technique. Performance of the National Government Department was measured using the four performance yardsticks of the Balanced Scorecard; namely, customer satisfaction, financial performance, innovation and learning, and internal processes.

The findings of the study revealed that performance of the National Government Department was highest in four strategic areas; which are the promotion of good corporate ethics and values, client satisfaction, service quality and relations with external organisations. However, performance shortfalls were observed in four key areas; namely, organisational speed, attrition of

manpower, overloading of employees and the overburdening of divisions with high workloads. Correlation analysis showed that there were positive relationships between organisational performance and the five human factor components; life satisfaction, quality of work life, ability utilisation, creativity and autonomy. Regression analysis indicated that there were significant and predictive relationships between organisational performance and three human factor elements; namely, quality of work life, ability utilisation and life satisfaction. Among the five human factor elements, life satisfaction exerted the greatest impact on organisational performance. Significant, positive and predictive associations were further found between organisational performance and three organisational system factors; quality, innovation and inter-organisational systems, with quality exerting the greatest impact on organisational performance. Additionally, significant, positive and predictive relationships were observed between organisational performance and the four organisational process factors identified in the study; namely, organisational structure, organisational change, team processes and organisational change. Amongst these, team processes exerted the greatest influence on organisational performance. Overall, the human factor applied the greatest impact on organisational performance, followed by organisational processes, with organisational systems having the least impact. Based on these findings, recommendations were made and implications for further studies were suggested.

The findings of the study provide empirical confirmation of the effectiveness of the Balanced Scorecard as a tool for the measurement and management of performance in public sector organisations. In addition, managers in different public organisations may enhance the performance of their organisations by optimising the sub-elements of the three organisational resources examined in this study.

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LIST OF ABBREVIATIONS

ABBREVIATION	FULL TITLE
AB	Ability Utilisation
BSC	Balanced Scorecard
CSR	Corporate Social Responsibility
IOS	Inter- organisational systems
KMO	Kaiser-Meyer-Olkin
LS	Life Satisfaction
OP	Organisational Performance
QWL	Quality Of Work Life
PSS	Public Sector Scorecard
PM	Performance Management
PO	Person Organisation Fit

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

The subject of organisational performance has been investigated by a number of researchers from different viewpoints (Tait & Nienaber, 2010:271). Artkinson and McRindell (1997:20) suggest that the failure to first define performance results in the failure to measure or manage it. Organisational performance comprises the actual output or results of an organisation as measured against its intended outputs (or goals and objectives) (Short, Ketchen, Palmer, & Hult, 2007:147). Mankins and Steele (2005:65) argue that many organisations in developing and emerging economies do not perform to the expected standard.

Janssen (2000:287) underscores that organisational performance is influenced by the nature and quality of both inputs and processes used in the organisation's transformation process. When an organisation performs below the expected standard, the problem can be traced back to either one or more of the input resources, systems and/or the processes used to transform these resources into outputs (Gerhart, 2005:175). This implies that solving the performance problem may entail implementing substantive and appropriate modifications to the identified problematic inputs, systems or processes and ensuring that an appropriate internal fit or alignment exists between them in order to facilitate improved performance.

There have been intense debates on the criteria that can be used to measure performance (Short *et al.*, 2007:148). Wery and Waco (2004:154) posit that performance indicators are often misunderstood, over-promoted, and accordingly misused to the extent that rhetoric has outdistanced practice by far in this area. However, Pycraft, Singh, Phihlela, Slack, Chambers, and Johnston (2010:567) contend that there are four types of performance standards that are commonly used to measure performance in general, namely:

- historical standards, which compare current performance against past performance;
- target performance standards, which compare current performance against some desired level of performance;

- competitor performance standards, which compare current performance against competitors' performance;
- absolute performance standards, which compare current performance against its theoretically perfect state.

Kaplan and Norton (1992:14) describe the Balanced Scorecard (BSC) as a more appropriate strategic planning and performance management tool that can be used extensively in business and industry, government, and not-for-profit organisations worldwide to align business activities to the vision and strategy of the organisation, improve internal and external communications, and monitor organisation performance against strategic goals. Several management and organisational researchers (Kloot & Martin, 2000:231; Johnsen, 2000:3; Brignall & Modell, 2000: 281) endorse the efficacy of using the BSC as a tool for the measurement of performance in public organisations. According to Kaplan and Norton (1992:13), the BSC uses the following four perspectives to measure organisational performance:

- The Innovation and Learning Perspective: It measures employee training and corporate cultural attitudes related to both individual and corporate self-improvement such as the organisation's ability to innovate, improve, and learn.
- The Business Process Perspective: This perspective refers to internal business processes. It measures how processes, decisions, and actions which occur throughout the organisation are contributing to the attainment of organisational goals.
- The Customer Perspective: It looks at how the organisation is able to meet the needs of its internal (employees) and external (the general public and other strategic constituencies) customers. The needs of customers fall into 4 categories: time, quality, performance and service, and cost.
- The Financial Perspective: Measures the financial performance of the organisation.

Organisational performance is a multi-dimensional construct that may be influenced by various factors (Wery & Waco, 2004:155). Several divergent perspectives are available which attempt to account for organisational performance. Although there are many factors that may influence the ultimate performance of the organisation, it emerges that the human factor perspective, the systems perspective and the organisational processes perspective of organisational performance

are some of the most recognised but widely debated views on this matter (Callahan & Gilbert, 2003:6).

The human factor perspective is an emergent perspective in both the improvement of individual and organisational performance through the attainment of performance standards (Hornbaek, 2006:35). Callahan and Gilbert (2003:7) opine that the human factor viewpoint evolved from the Human Relations or Behavioural approach to management which concentrates on the human side of the organisation with a particular emphasis on personal adjustment of individuals within the organisation. Proponents of the Human Factor alternative perspective to management argue that all successes and challenges in performance can be linked to the nature and quality of the human input in the organisation's transformation process (Hutter, 2006:5). Gerhart (2005:175) defines a human factor as a cognitive property of an individual and stresses that the human factor approach addresses the cognitive basis for human actions. The concept refers to a spectrum of personality characteristics and other dimensions of human performance that enable organisations to function and remain functional over time. It further postulates that no organisation can sustain itself without people who believe strongly in the ideals of their organisation and affirm them. In addition, the people must be reliable, disciplined, committed and have appropriate qualifications (Chapanis, 2005:3). Hutter (2006:4) also adds that this standard is called human factor competence and that if the people in the organisation do not meet it, organisational performance is most likely to be poor.

As perceived by a number of management scientists (Ericksen & Dyer, 2005:907; Katou & Budhwar 2007:1223; Watson, Maxwell, & Farquharson, 2007:31) most successes or problems in organisations can be traced back to the level of competency of human input. Guthrie, Liu, Flood, and McCurtain (2008:3) state that this is because many organisations recognise that people are the true agents in business and that all assets and structures, whether tangible or intangible, are the result of human actions. This view also forms the basis for the human factor approach. The approach postulates that somewhere in the whole transformation process, there is someone who has contributed to the problem (Paul & Anatharaman, 2003:1246). For example, if an organisation performs poorly because of financial mismanagement, the problem can still be traced back to individuals or groups who are involved in the financial mismanagement. Whenever organisational systems or processes cause any dysfunctionalities in the organisation,

the fact remains that the systems or processes were implemented by people (Guthrie *et al.*, 2008:4). As such, since there is a human input in all organisational systems and processes, it is the human factor and not necessarily the systems or processes they implement that influence performance levels of organisations (Chapanis, 2005:3). Watson *et al.* (2007:31) further suggest that the organisation's employees must have adequate competencies. Therefore, to improve organisational performance the most basic solution may be to adjust the human factor competence of the employees in the organisation.

Pearce and Robinson (2009:79) maintain that human resources constitute some of the most important and influential inputs into the organisation's transformation process if prescribed performance standards are to be achieved. Ireland, Hoskisson, and Hitt (2009:13) suggest that many organisations locally and internationally invest astronomical amounts of money in attracting and placing human talent. Nevertheless, even after attracting and placing this talent, these organisations still experience systemic problems which trigger poor results (David, 2009:47). Since many organisations that have very capable human resources continue to perform miserably, Mankins and Steele (2005:66) admit that there are other intervening factors which exert a more powerful influence on organisational performance. Artkinson and Mcrindell (1997:20) contend that in many cases, variations in organisational performance have been associated with personal factors when in fact they were actually caused in part or entirely by systemic factors.

Porter (1996:61) stresses that every organisation's success is built upon the participation of its people. As such, organisational performance may be improved by adjusting various people-related variables that ultimately influence their behaviour and outputs in any organisation. On the other hand, the impact of organisational systems and processes on organisational performance cannot be underestimated (Putu, Mimba, Van-Heden & Tillema, 2007:16) and should receive adequate attention with the intention of improving organisational performance.

The systems perspective postulates that organisational problems such as those related to performance may be solved by diagnosing them within a framework of inputs, transformation processes, and outputs in the light of feedback (Mwita, 2000:33). Pycraft *et al.* (2010:568) further posit that in all investigations pertaining to the underperformance of organisations, the

point of departure should be the organisation's transformation process. De Jong and Hartog (2007:41) also point out that the organisation's transformation process may be perceived as a model that describes operations in terms of their input resources, transforming processes, and outputs of goods and services, and the impact of the whole process. Organisations may therefore be viewed as systems which exist to transform input resources into output goods and services (Guthrie *et al.*, 2008:4).

Mwita (2000:10) defines a system as an association of interrelated and interdependent parts comprising a unified whole. For instance, a pile of sand is not a system because if one removes a sand particle one will still have a pile of sand. However, a functioning car is a system. If one removes the carburettor, one will no longer have a working car. Such is the angle adopted by the systems view of the organisation. The organisation is viewed as a whole, and as part of a larger environment. The idea is that any part of an organisation's activities affects all the other parts. Performance problems can therefore be diagnosed, not by examining what appear to be separate pieces of the organisation, but by recognising larger patterns of interactions (Behn, 2003:2). In other words, while the human factor perspective focuses on the individual as the major influencing factor to organisational performance, the systems viewpoint focuses on the circumstances in which that individual has had to perform. Boston (1996:65) further acknowledges that the systems perspective recognises the various parts of the organisation, and in particular, the interrelations of the parts, such as the coordination of central offices with other departments, and between management and employees, among others. This suggests that the systems perspective places emphasis on matters of on-going organisation and feedback.

Another perspective to organisational performance proposes that the level of performance is determined by the nature and quality of organisational processes (Hernes, 2007:9). Kirby (2005:33) defines a process as a series of actions, changes or functions that bring about a result. Pearce and Robinson (2009:14) define organisational processes as a collection of related, structured activities or tasks that produce a specific service or product (i.e. serve a particular goal). Mwita (2000:11) identifies this approach as the process-based view of the organisation and it has become instrumental in addressing performance problems in organisations.

Boyne, Martin and Walker (2009:7) propose that the organisational processes approach addresses issues related to the formal structure, technical requirements of the organisation and the general sets of principles as the major determinants of organisational performance. It emphasises organisational practices that include formal relations among an organisation's departments, its structural elements such as division of labour, hierarchical authority, rules and decisions that would maximise economic rewards in an organisation (Putu *et al.*, 2007:17). For example, the manager's role in the hierarchy may influence organisational performance (Hernes, 2007:6). Likewise, policies and rules enacted and enforced within organisations can have a bearing on the actual performance of the organisation (Garvin, 1998:16). There are organisations that continue to post poor results despite having impeccably credentialed human talent supported by powerful organisational systems (Koskinen, 2011:42). In such circumstances one may then have to investigate the relationship between the processes that are in place in that organisation and performance of that organisation (Rynes, 2007:987).

In the light of this background, it emerges that the human factor concept, the systems perspective, and the process-based view of the organisation are some of the dominant contemporary approaches that attempt to account for the level of organisational performance. Interestingly, proponents of each of these views are not in agreement with each other on which approach is most accurate, relevant, and most influential in various cases where the issue of organisational performance has been considered (Mankins & Steele 2005:65). In agreement, Ireland *et al.* (2009:9) admit that there is no consensus on which one of these three core elements is most important, and which one is more effective when dealing with performance problems. Further to that, in the context of South Africa, an immediate assessment is that the issue of organisational performance as measured through service delivery is such a source of frustration within the public sector, despite considerable initiatives to address it. Therefore, the most useful approach would be to look at the problem with a mind that is completely open to any possibilities.

As defined by Prahalad and Hamel (1994:6), management is a process by which resources are used to achieve certain ends. People who work within the organisation are an important resource. At the same time, these people work within organisational systems under the direction of laid-down organisational processes. There is a natural symbiotic relationship between these three

variables. Ireland *et al.* (2009:27) propose that most efforts related to corporate performance management are aimed at triggering changes in any one of these three core elements in order to stimulate improved organisational performance. Most improvements can rely eventually upon one or more people choosing to change the way they carry out their work for their organisation, or the provision of an appropriate structural fit or alignment between these people, systems and processes (Guthrie *et al.*, 2008:5). By investigating the profound relationships existing between the behavioural aspects of the people in an organisation, the systems in place, the processes used in the implementation of organisational programmes and organisational performance, the research seeks to establish ways of using these fundamental aspects to improve organisational performance.

In light of this background, this study addresses the issue of organisational performance by investigating the links between organisational performance and various aspects associated with the human factor, organisational systems, and organisational processes within the public sector. Using management and employees in the National Government Department as a target population, the research will seek to establish ways of aligning the individuals, systems, and processes in the organisation to organisational goals so as to improve organisational performance.

1.2 PROBLEM STATEMENT

Carrim (2009:4) proposes that the underperformance of the public sector in South Africa continues unabated despite several interventions that have been put in place to turn around these organisations. Very few of the interventions and strategies designed to improve performance in the public sector are achieving either the desired outcomes or results that are commensurate with their targets (Okanya, 2007:15). The Local Government Research Centre (2009:6) also argues that this situation has to be corrected because it has the potential to cripple the entire South African economy and the societies they serve, as well as other stakeholders and international relations.

Nilsson (2010:83) argues that the public sector organisations in South Africa are a classic example of institutions which have failed to weather the storm of underperformance and are renowned for their poor performance in most disciplines of their operations. Van der Heijden and

Mlandi (2005:20) point to the fact that since the democratic landscape changed in 1994, there has been a strong public policy emphasis on both the quality and quantity of service delivery. Although significant progress has been made in many areas, there is a growing sense of frustration within the public sector that too little has been achieved, resulting in a wide range of initiatives – all focused on improving service delivery. Unfortunately, only a few have enjoyed widespread or sustainable success (Julyan, 2011:33). Nilsson (2010:83) further concedes that this frustration has in turn resulted in a wide range of initiatives and programmes all aimed at addressing the question of service delivery.

All questions relating to performance are based on the premise that government should be able to do its job better, and in so doing make the quality of life better for South Africans. Therefore the term ‘service delivery’ could be equated with organisational performance based on the assumption that the better the performance of the government, the more likely it is that service delivery will match expectations (Carrim, 2009:3). Van der Heijden and Mlandi (2005:22) add that government ministries in South Africa have become havens for poor service delivery, internal wrangles, red tape and bureaucracy, financial mismanagement, corruption, poor accountability and corporate governance, a lack of responsiveness to issues raised by stakeholders, and non-existence of feasible economic development strategies and implementation plans. This lack of success suggests that the nature of the problem is yet to be well understood. Until the reasons why something is not working properly are known, the likelihood of finding the most appropriate solution is slim.

Many studies have been conducted on the specific subject of the organisational performance within the public sector (Hornbaek, 2006:37). However, there is very little evidence that any such studies have been carried out that have precisely been narrowed down to the specific subject of the dimensional relationships and linkages between human factor perspectives, organisational systems, organisational processes and underperformance of public sector organisations in South Africa. Mararike (1998:22) suggests that there is a need for more research on such subjects within the scope of African government organisations.

Therefore, using the recurring unsatisfactory performance in most South African public organisations as a nominal anchor, this research was a ground-breaking study as it seeks to occupy this empty space. It will constitute an important source of knowledge and information on

issues pertaining to the influence of the human factor, organisational systems and organisational processes on the performance of public organisations. The fact that very little previous research has been carried out on this topic in a South African context provides a fundamental impetus and motivation for carrying out this research.

1.3 OBJECTIVES OF THE STUDY

The following objectives have been formulated for the study:

1.3.1 Primary objective

The main purpose of this study is to evaluate the relationship between three organisational resources; namely, the human factor, organisational systems and organisational processes and organisational performance in a South African National Government Department.

1.3.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives have been formulated for the study:

- To conduct a literature review on organisational performance
- To conduct a literature review on the relationship between the human factor and organisational performance
- To carry out a literature review on the relationship between organisational systems and organisational performance
- To conduct a literature review on the nature of the relationship between organisational processes and organisational performance

1.3.3 Empirical objectives

The following empirical objectives have been developed to attain the primary objective:

- To use the BSC to measure the performance of a National Government Department

- To examine the relationship between the human factor and organisational performance
- To examine the relationship between organisational systems and organisational performance
- To examine the relationship between organisational processes and organisational performance
- To determine the extent to which each factor influences organisational performance, relative to other factors

1.4 OPERATIONAL DEFINITIONS

The following are the definitions of the variables, concepts and terms that are applicable to the current study:

Organisation: This is an identifiable group of people who contribute their efforts towards the attainment of goals.

The human factor: It is a management approach which concentrates on the human side of the organisation with a particular emphasis on personal adjustment of individuals within the organisation.

Organisational systems: These are components within the organisation, each of which has unique properties, capabilities and mutually reciprocal relationships, and are typically divided into inputs, transformation processes, outputs and feedback.

Organisational processes: These are a series of steps or procedures designed to produce a product or service that the organisation delivers to its customers or clients.

Organisational performance: This is the ability of an organisation to fulfill its mission through sound management, strong governance and a persistent rededication to achieving results.

Performance management: This is a process by which organisations align their resources, systems and employees to strategic objectives and priorities in order to ensure that their goals are being met in an effective and efficient manner.

Balanced scorecard: This is arguably the best known performance management tool that can be employed in organisations to monitor the execution of activities and to keep track of the results of these actions.

Quality of work life: These are conditions under which an individual works and it involves promoting a work environment conducive to the satisfaction of employees' needs.

Ability utilisation: This is an individual's opportunity to do something in the organisation that makes use of his/her abilities.

Life satisfaction: This is an individual's emotional reaction to life in general. It consists of elements such as time at work, spare time and time after work as well as an individual's appraisal of the quality of his or her life.

Creativity: This is the degree to which an individual is able to use his or her own initiative, innovativeness and methods in the tasks allocated to him or her.

Autonomy: It refers to the level of freedom and discretion an individual enjoys in his or her job as well as an individual's ability to independently make decisions regarding the tasks allocated to him or her.

Innovation: This is the creation of better or more effective products, processes, services, technologies, or new ways of doing things, as well as the flow of technology and information among the members of an organisation.

Inter-organisational systems: These are information and communication technologies that enable the sharing of automated information between different organisations.

Quality management systems: These pertain to organisational actions designed to ensure consistency or quality in approach, process and output.

Organisational structure: This is the hierarchy of the organisation and how the components of this hierarchy work together to achieve the objectives and goals of the organisation.

Organisational change: These are processes in which the working methods or aims or aims of an organisation are altered, for example in order to develop and deal with new situations.

Team processes: They refer to the incidence of joint actions by a group of people, in which each individual subordinates his or her individual interests to those of the group.

Leadership: This is the extent to which authorities are able to inspire and motivate their subordinates towards the attainment of a common goal.

1.5 RESEARCH DESIGN

The study adopted a quantitative research design. Creswell (2009:81) argues that in quantitative research the aim of the researcher is to determine the relationship between one variable (an independent variable) and another (a dependent or outcome variable) in a population. The quantitative dimension of this study is premised on the fact that the study sought to establish the relationship between organisational performance (dependent variable) and three independent variables (human factors, systems, and processes).

Quantitative designs may either be descriptive or experimental in nature, where a descriptive study establishes only associations between variables and an experiment establishes causality (Neuman, 2011:16). As such, the research study was descriptive in nature as it sought to establish the relationship between variables. Quantitative research using the survey method was used for the empirical portion of the study.

1.5.1 Literature review

Babbie (2007:61) emphasises that it is important to carry out secondary data analysis since this will mitigate the shortcomings of the procedure, restrict data collection to what is really of material value to the study at hand, verify data, and avoid reactivity when both quantitative and qualitative data can be used. The research therefore involved a study of various literature sources related to diverse aspects such as measurement of performance, the human factor personality characteristics, organisational systems, and organisational processes in relation to organisational

performance. This data was sourced from journal articles, textbooks, magazines, newspapers, and the Internet.

1.5.2 Empirical study

The empirical portion of this study comprises the following methodology dimensions:

1.5.2.1 Target population

The research was conducted among employees in a South African National Government Department. The 2010 South African National Budget indicates that the whole ministry currently carries a combined management and staff complement of 1140 people. This combined total management and staff complement (1140) constituted the population.

1.5.2.2 Sampling frame

The sampling frame comprised a list of management and employees in the specific National Government Department. The human resource database of the department was used as the sampling frame from where the sample was drawn.

1.5.2.3 Sampling technique

Two non-probability sampling techniques, namely purposive sampling and convenience sampling were used in this research. These techniques are appropriate for this study because they facilitate the selection of respondents by the researcher on the basis of availability and accessibility as well as the respondent's suitability for the study (Collis & Hussey, 2009:48). Creswell (2009:93) adds that these techniques are also inexpensive, minimise the use of time and are very useful in situations where it may be difficult to achieve the required number of respondents. These conditions are applicable to the current research.

1.5.2.4 Sample size

Available historical information was used to determine sample size. Previous studies on matters related to organisational performance under almost similar population sizes and carried out by researchers such as Ericksen and Dyer (2005:913), Katou and Budhwar (2007:1238), Watson *et*

al. (2007:44) suggest that 300 respondents are representative enough. Therefore, the size of the sample was set at $n=300$ respondents.

1.5.2.5 Method of data collection and the measuring instrument

The instrument that was used to collect data from respondents is a structured questionnaire. It was designed to fulfil the objectives of the research and was pre-tested in order to correct all flaws and to iron out any problems. Cooper and Schindler (2008:296) prescribe that 15 respondents can be used in the pre-testing. The questionnaire was composed of Likert scale questions. According to Blanche, Durrheim and Painter (2006:488), scaled questions are useful for measuring attitudes and personality as they capture subtle graduations of opinion or perception. The questionnaire was divided into five sections that will elicit information pertaining to respondents' biographical information, performance of the organisation (based on the four perspectives of the BSC), human factor aspects, organisational systems, and organisational processes in relation to the performance of their organisation.

1.5.2.6 Reliability and validity

Bryman and Bell (2007:98) define reliability as the extent to which a test or procedure produces similar results under constant conditions and validity as the degree to which an instrument measures what it is supposed to measure. Cronbach's alpha was used to determine the reliability of the questionnaire. Blanche *et al.* (2006:489) maintain that questionnaire scales with an alpha value greater than 0.70 are considered to be reliable (internally consistent). Since this is a novel research with no previous instrument developed, pre-testing was followed by the pilot testing of 50 questionnaires to establish the reliability of the instrument. Content, construct, convergent and predictive validities were assessed by an evaluation of the questionnaire by experts in the field, through Spearman's correlations coefficients, regression analysis and Cronbach's alpha.

1.5.2.7 Statistical analysis

Various descriptive statistics, such as the mean, median mode, standard deviations, and frequency tables were used to provide simple summaries about the sample and other collected data. Inferential statistics, such as correlation tests and regression analysis were used to reach conclusions that extend beyond the immediate data alone so that generalisations can be made

from a sample to a population. Computerised statistical packages such as MS Excel and Statistical Package for the Social Sciences (SPSS, version 20.0) were used in the analysis of data.

1.6 ETHICAL CONSIDERATIONS

In carrying out this research, the researcher adhered to various ethical considerations. First, permission to carry out the study was requested from the authorities at the National Government Department. Second, respondents' right to anonymity, confidentiality and non-participation were also observed. Third, all prospective research participants were fully informed about the procedures and risks involved in research and must give their consent to participate. Fourth, all respondents were protected from any circumstance which was likely to cause them any form of discomfort and physical or emotional harm.

1.7 CHAPTER CLASSIFICATION

CHAPTER 2: Literature review: Organisational performance

This is a review of literature that pertains to the broad subject of organisational performance. Issues that include factors which influence organisational performance, measurement of organisational performance, and various theories that attempt to provide explanations to explain issues related to organisational performance were discussed.

CHAPTER 3: Literature review: The human factor perspective and organisational performance

In this chapter, literature related to the human factor perspective is discussed. The emphasis in this chapter provides a description of the human factor perspective, emerging developments pertaining to this concept, and its applications and implications in relation to objectives of the study.

CHAPTER 4: Literature review: Organisational systems and processes and organisational performance

This chapter is a discussion of secondary data which provide an exposé of the systems' perspectives as well as the processes viewpoint. This chapter seeks to dig into the various aspects

of the systems' viewpoint as well as the processes viewpoint and how these are related to or influence organisational performance.

CHAPTER 5: Research design and methodology

The research design and method of research employed in the study are discussed in this chapter. In addition, the sampling technique, method of data collection, data analysis and statistical techniques utilised in the research study are also be outlined.

CHAPTER 6: Results and findings

In this chapter the findings of the research are presented, interpreted and analysed.

CHAPTER 7: Conclusions and recommendations

This chapter presents the conclusions where the meanings of the results are discussed, and the recommendations examine the way forward, based on the objectives of the research study. The limitations and implications for further study are also highlighted.

CHAPTER TWO

ORGANISATIONAL PERFORMANCE

2.1 INTRODUCTION

In recent times, the world has been gradually transformed into a global village (Zane, Kane & Marcus, 2004:415). Organisations can no longer succeed without being networked to other organisations and institutions in the global village. On one hand, globalisation has created manifold opportunities for organisations. On the other hand, the existing global economic climate is characterised by numerous risks, uncertainties and volatilities that compel organisations to seek for innovative strategies that will ensure optimum performance (Flint & Van Fleet, 2005:12). Through the generation and implementation of innovative strategies, many organisations have managed to maintain their super-performance, which has enabled them to sustain their competitive advantage and to survive during times of economic turbulence. Notably, numerous organisations have either imploded or atrophied because their performance was so miserable that they could not withstand the pressure (Acquaah & Yasai-Ardekani, 2008:348). These underperforming organisations are compelled to develop change strategies that could enable them to transform into high-performance organisations with the view to surviving and delivering high quality goods and services to their customers and clients (Molefe, Roodt & Schurink, 2011:699).

King (2007:900) opines that there is a direct correlation between competitive advantage and organisational performance. Gresty (2010:48) also adds that these two fundamentals can be examined as resulting from, and being associated with, a long list of contributing factors that include operational efficiencies, mergers, acquisitions, levels of diversification, organisational structures, top management team composition and style and human resource management. Manipulation of the political and social influences intruding upon the market, conformity to various interpretations of socially responsible behaviours, and international or cross-cultural activities of expansion and adaptation also play a leading role in influencing both competitive advantage and organisational performance (Robbins & Sanghi, 2007:54).

The subject of organisational performance can be addressed from either the private sector dimension or from the angle of the public sector. Modell (2001:451) underscores that

institutional aspects of organisational performance in the public sector are attracting widespread research interest. Based on this fact, the current chapter aims to discuss literature pertaining to the construct of organisational performance, firstly from a broader perspective, before narrowing it down to the domain of South Africa's public sector.

The history of organisational performance management (PM) is the point of departure in this chapter. This is because it is important to understand the historical aspects of a subject or phenomenon before delving into its contemporary issues. This discussion is buttressed by an exposé of the various frameworks of PM in order to bring clarity to its evolution. These frameworks serve to clarify issues surrounding the actual measurement of organisational performance. The subsequent section explores literature related to the benefits of organisational PM. This discussion is important as it clarifies the reasons why the subject of PM continues to gain prominence in organisations and within industries. The debate surrounding the dynamic and topical issue of challenges associated with the implementation of PM will take center stage in the next section. Having exhausted the fundamental theoretical pillars pertaining to organisational PM, the chapter then concludes by discussing literature pertaining to the subject of organisational performance in the specific context of the South African public sector. By so doing, the discussion migrates from the general or broad to the specific subject. The precise discussion of the performance of the South African public sector is important since the study was conducted in an organisation in the same sector. The discussion therefore reveals important insights that dovetail into the main research of this empirical study.

2.2 THE EVOLUTION OF ORGANISATIONAL PERFORMANCE MANAGEMENT

Tait and Nienaber (2010:272) suggest that the subject of organisational performance can best be handled holistically through the entire PM framework. Analysis without context can be meaningless. As such, prior to discussing specific issues and examples of performance measurement in the public sector, it is important to place current regimes of management into a wider historical context (Adcroft & Willis, 2005:387). First, there is a fundamental difference between organisational performance and organisational PM. The definition of organisational performance is a surprisingly open question with few studies using consistent definitions and measures. Several researchers (Wery & Waco, 2004:155; Short *et al.*, 2007:147; Pycraft *et al.*,

2010:567) define organisational performance in terms of actual output or results of an organisation as measured against its intended outputs (or goals and objectives). On the other hand, organisational PM is defined by Neely (2002:13) as the process of quantifying the efficiency and effectiveness of action. Adcroft and Willis (2005:390) also define PM as the process of creating a work environment or setting in which people are enabled to perform to the best of their abilities. It includes activities that ensure that goals are consistently being met in an effective and efficient manner (Neely 2002:14). PM can focus on the performance of an organisation, a department, employee, or even the processes to build a product or service, as well as many other areas (Zineldin, 2006:72). The preceding discussion implies that organisational performance and PM are intertwined. PM is a tool that is meant to enhance organisational performance. Therefore, PM acts as a conduit through which the overall concept of organisational performance may be understood.

Scholarly work on the subject of organisational PM is extensive and diverse. Researchers such as Neely (2002:53), Chand and Katou (2007:576) and Schalm (2008:8) concentrate on the performance of the private sector. Others (Greatbanks & Tapp, 2007:846; Zineldin, 2006:60) opt to narrow down their studies to specific organisations within the private sector. Some studies sought to find correlations between organisational performance and various factors (Modell, 2001:437; King, 2007:889; Holman, 2010:5; Muijs, 2011:45). A notable feature in these studies is that they all had a common objective, namely to find ways of improving organisational performance.

Organisations have been practicing PM for over a century. Williams (2003:644) highlights that records in the USA indicate that as far back as 1900 the New York Council were already analysing data and setting targets to report historical activity and forecast future performance. Neely, Kennerly and Adams (2007:146) identify the Du Point brothers as the originators of modern PM. The authors point out that the three brothers started an explosives company in 1903 and managed it through the extensive application of basic PM systems. In 1943, the International City Management Association produced a publication on measuring the performance of municipalities (Ridley & Simon, 1943:21). However, concern for measuring the performance of public organisations began to increase with the interest in programme budgeting in the 1960s and programme evaluation in the 1970s (Henrich 2005:715). These developments compelled the

Urban Institute in the United Kingdom to publish materials that promoted the use of performance measures and provided instruction on how to develop and use them (Neely *et al.*, 2007:147). In support, Armstrong and Baron (2005:26) contend that the term 'PM' only became common in the 1970s. Today, performance is appraised the world over: in academia, the arts, business, entertainment, government, news, politics, schools, science, sports, and war, among others (Serrat, 2010:1). In the context of government, it has subsequently become an established aspect of public sector management with journals producing special editions on the subject (Ferlie & Steane, 2002:1461).

In their pursuit of enhanced performance, organisations in the public sector approach PM issues from diverse angles and for a wide variety of reasons. A recent development in the public sector has been the progressive establishment of a new industry which is concerned with collecting, reporting, and appraising organisational performance (Qahtani, 2012:14). Halachmi (2011:37) points out that the elaborate dichotomy between public sector organisations and commercial enterprises is that in the public sector, the profit motive does not exist, the potential for income generation is almost negligible and there is no standard bottom line against which performance can ultimately be measured. Fryer, Antony, and Ogden (2009:479) emphasise the fact that the majority of public sector organisations generate most of their income from the fiscus and are accountable to several strategic constituencies such as the taxpayer and government. Consequently it was once, and not that recently, considered impossible to measure performance in the public sector (Macpherson, 2001:15). This probably explains why more recently, the language of performance has been associated with the establishment of standards to be achieved, and the audit of organisational systems to ensure conformance, signifying a paradigm shift from traditional measures of performance.

Most traditional approaches to performance were mainly based on financial measures. Richard, Devinney, Yip and Johnson (2009:733) state that sales, gross margins, net profit margins, profit before interest and tax, profit before tax, profit after tax, inventory turnover, return on investment, return on capital employed, return on assets, return on equity, earnings per share, and sales per employee are all well-established examples of financial measurements of performance outcomes for organisations. However, the overemphasis placed on financial measures of performance triggered an outcry from a number of groundbreaking researches by leading

scholars during the 1990s (Lynch & Cross, 1991:22; Kaplan & Norton, 1996:2). Two divergent perspectives subsequently emerged. The first school of thought called for the immediate elimination of financial measures from all PM frameworks because although financial measures worked well for the industrial era, they were out of sync with the skills and competencies required in the contemporary era (Muijs, 2011:52). There was an increased awareness that the assumptions underlying many traditional financial measures of performance are inadequate in today's operating environment, and that financial of performance alone cannot guide an organisation to market dominance (Lynch & Cross, 1991:23). The second perspective stressed that the solution was not to obliterate financial measures of performance but to use them in tandem with other measures of performance to create a synthesis of a better PM system (Lynch & Cross, 1991:23). For instance, Balanced Scorecard (BSC) developers Kaplan and Norton (1996:7) strongly advocated for the adoption of non-financial performance indicators such as customer service and satisfaction, product quality, productivity, learning and innovation as well. In a key, earlier study, Waggoner, Neely and Kennerly (1999:59) identified four factors that influence the evolution and change of performance management systems and frameworks, namely:

- internal influences, such as power relationships and dominant coalition interests
- external influences such as legislation and market volatility
- process issues such as manner of implementation and management of political processes
- transformational issues such as the degree of top level support

The four factors are illustrated in Figure 2.1.

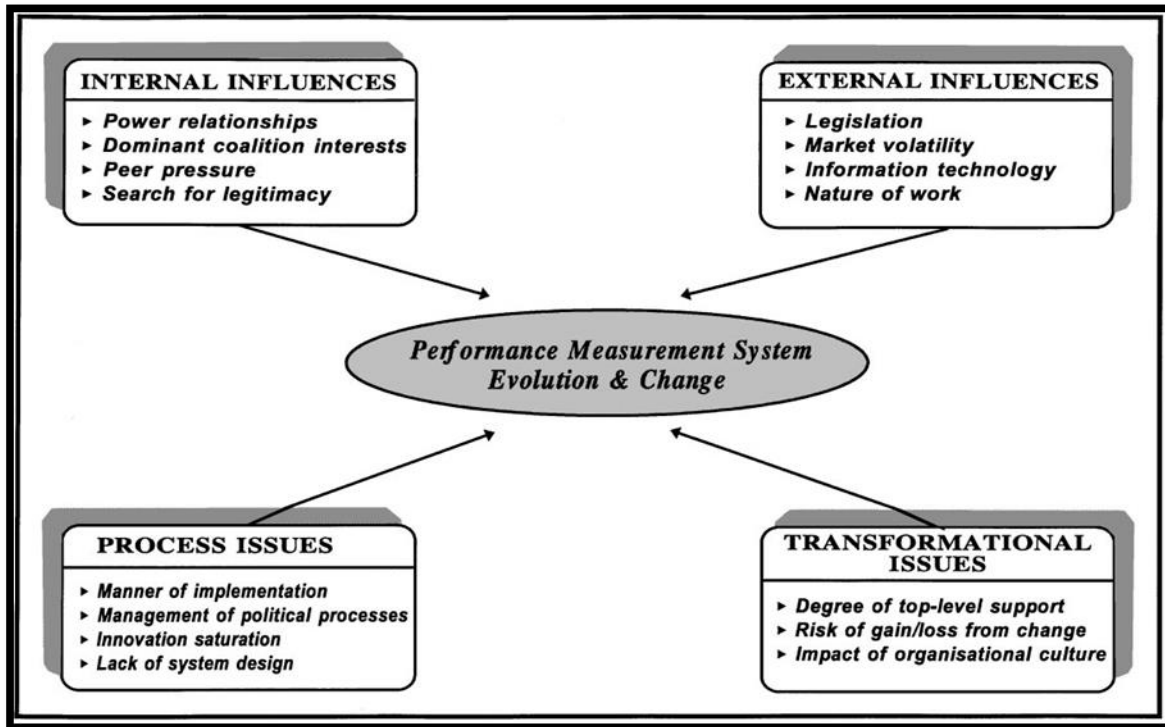


Figure 2.1: Factors Influencing Performance Measurement Systems

(Source: Waggoner *et al.*, 1999:59)

It is possible that these factors also impacted on the development of most of the performance frameworks that are in use today. However, there is a need for more research to be conducted on the matter as there could be other factors that also influence further developments in this subject. This explains why an authoritative study by Waggoner *et al.* (1999:60) also identified possible areas of further research in related areas such as the need to conduct comparative analyses of different types of measures overtime and in different settings, and the need to conduct in-depth case studies that employ techniques such as measurement –mapping across several industries and across several countries.

2.3 PERFORMANCE MANAGEMENT (PM) FRAMEWORKS

In an attempt to provide a broad picture of an organisation's activity through its measures, authors such as Brignall and Modell (2000:283) and Kloot and Martin (2000:241) proposed a multi-dimensional approach to performance measurement, reflecting the interests of a broader range of stakeholder interests as a means of widening the conception of performance from

financial performance measures. In response to these insights, a number of authors have proposed frameworks such as the Performance Measurement Matrix, (Keegan, Eiler & Jones, 1989:45), the Results and Determinants Framework (Fitzgerald, Johnson, Brignall, Silvestro & Voss 1991:44) the Performance Pyramid (Lynch & Cross, 1991:23), and the Balanced Scorecard (BSC) (Kaplan & Norton, 1996: 28). Although the actual number of PM frameworks that have been developed is beyond the scope of the current study, Rouse and Putterill (2003:794) as well as Pun and White (2005:53) emphasise that there is no single framework that suits all organisations. The current section discusses a number of these frameworks.

2.3.1 The Du Pont Powder Company's Pyramid of Financial Ratios

The DuPont Pyramid of Financial Ratios (Figure 2.2) is a popular traditional framework used to assess the performance of a company based on its financial condition. Despite the fact that it is mainly an accounting system, it is widely regarded as the pioneering system of performance management (Neely, Mills, Platts, Richards, Gregory, Bourne & Kennerley, 2000:1122). It integrates the income statement and balance sheet into a dual summary measure of profitability, namely the Return of Assets (ROA) and the Return of Equity ROE. The pyramid has a clear hierarchical structure in which measures are linked at different levels of the organisation.

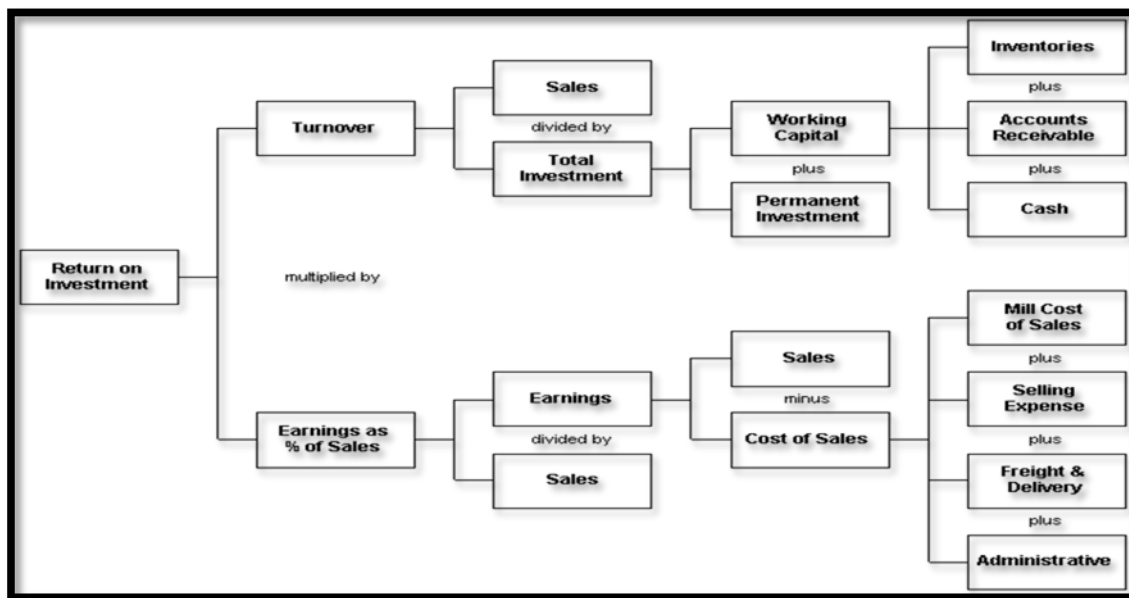


Figure 2.2: The Pyramid of Financial Ratios

(Source: Zane *et al.*, 2004: 459)

Bourne, Neely, Mills and Platts (2003:246) argue that traditional accounting-based performance measures such as the DuPont Pyramid have been characterised as being financially based, internally focused, backward looking and more concerned with local departmental performance than with the overall health or performance of the enterprise. Most conventional systems tended to encourage short-term rather than long-term decision making, were inappropriate for manufacturing set ups, and were causing a lot of damage to business and the economies of different countries (Zane *et al.*, 2004:459). In addition, it can also be readily observed that the Du Pont Pyramid is completely inapplicable in not-for-profit or public organisations. Performance in these organisations cannot be determined by financial ratios only, but through other measures such as goal accomplishment, resource acquisition, and stakeholder satisfaction, among others (Bourne *et al.*, 2003:40). This probably explains why there was a great emphasis on the development of other performance management frameworks in the 1980s and 1990s.

2.3.2 The Performance Measurement Matrix

The performance measurement matrix was presented by Keegan *et al.* (1989:45). The authors basically suggest that performance measures should be developed from strategy. A notable strength of this matrix is that it combines different categories of business performance, financial and non-financial, as well as internal and external factors. However, the framework has a drawback in that connections between these measures within the matrix are not well-packaged and the matrix does not clarify the links between the different dimensions of business performance (Neely *et al.*, 2007:158). The performance measurement matrix is illustrated diagrammatically in Figure 2.3.

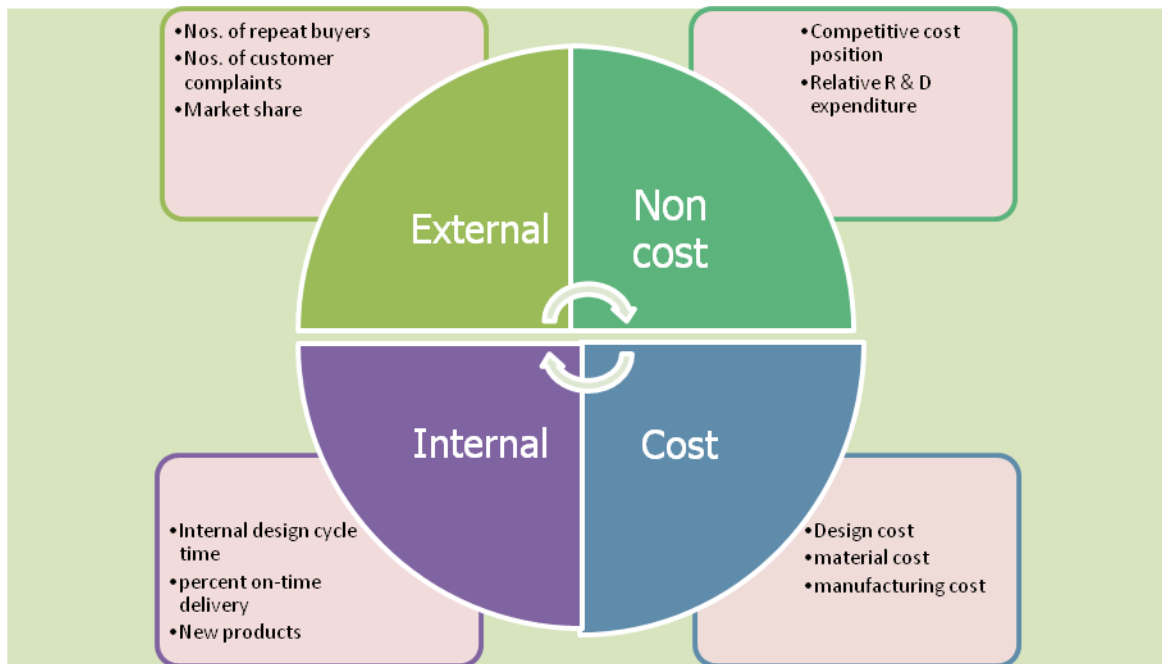


Figure 2.3: Performance Measurement Matrix

(Source: Neely, Adams & Crow, 2001:11)

2.3.3 The Performance Prism

The Performance Prism (Figure 2.4) was developed by Neely *et al.* (2001:6). It was developed to create and enhance stakeholder value. Neely *et al.* (2007:151) described the performance pyramid as “stakeholder-centric”. The priority consideration in the framework are the needs of the stakeholders, both internal and external, and their contribution to the organisation, regardless of the fact that some stakeholders are more important than others. The framework integrates five related organisational dimensions which merit a clear focus, namely:

- stakeholder satisfaction: Who are our stakeholders and what do they want and need?
- stakeholder contribution: What do we want and need from our stakeholders?
- strategies: What strategies do we need to put in place to satisfy these sets of wants and needs?
- processes: What processes do we need to put in place to satisfy these sets of wants and needs?

- capabilities: What capabilities – bundles of people, practices, technology and infrastructure – do we need to put in place to allow us to operate our processes more effectively and efficiently?

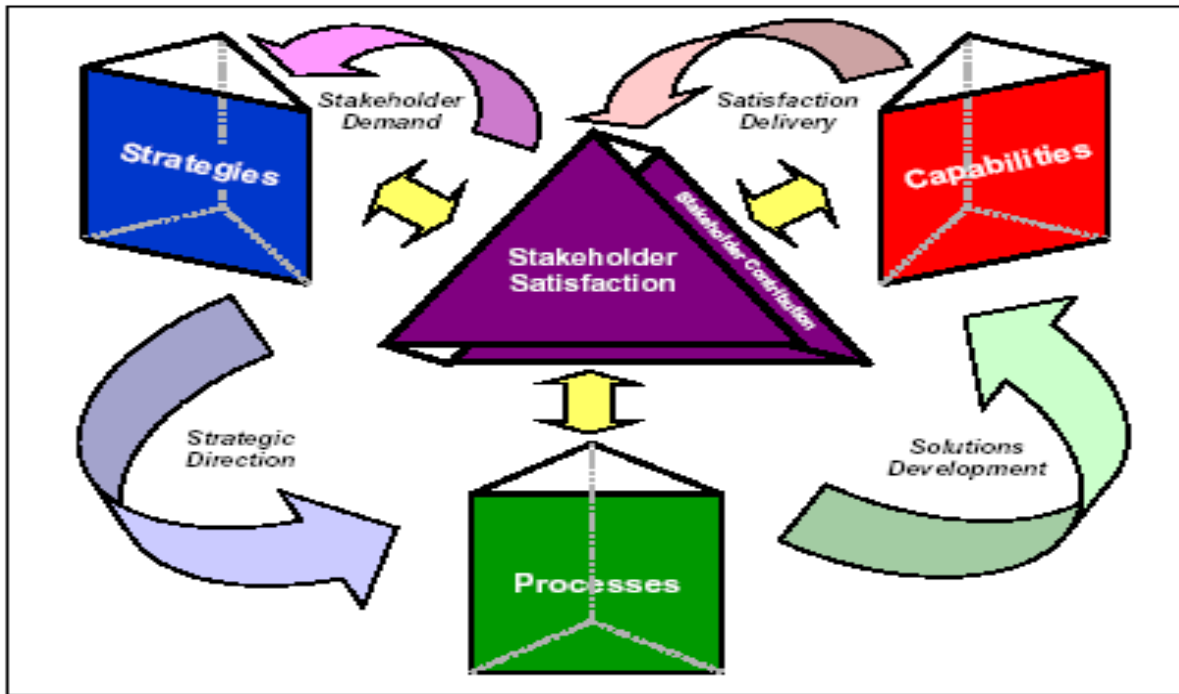


Figure 2.4: The Performance Prism

(Source: Neely & Kennerly, 2000:56)

The Performance Prism has got strengths which distinguish it from other frameworks. The framework ensures that the organisation's strategic direction is considered first before performance measures are selected (Tangen, 2004:734). The approach also considers other stakeholders whose input was previously marginalised or disregarded. However, a shortcoming of the framework is that it does not specify how measures are to be selected or how the framework may link in with other performance frameworks that the organisation may already be employing (Gresty, 2010:21).

2.3.4 The Results and Determinants Framework

The Results and Determinants Framework was developed by Fitzgerald *et al.* (1991:42). It proposes the use of two measures of performance, namely, results and determinants. Results are linked to financial performance and competitiveness while determinants are linked to quality,

flexibility, resource utilisation and innovation. As disclosed by Neely (2002:15), the appeal of the framework lies in that the distinction it presents highlights the fact that the results obtained are a function of past business performance with regard to specific requirements. This is because the framework takes results as lagging indicators and determinants as leading indicators. The framework is illustrated in Figure 2.5.

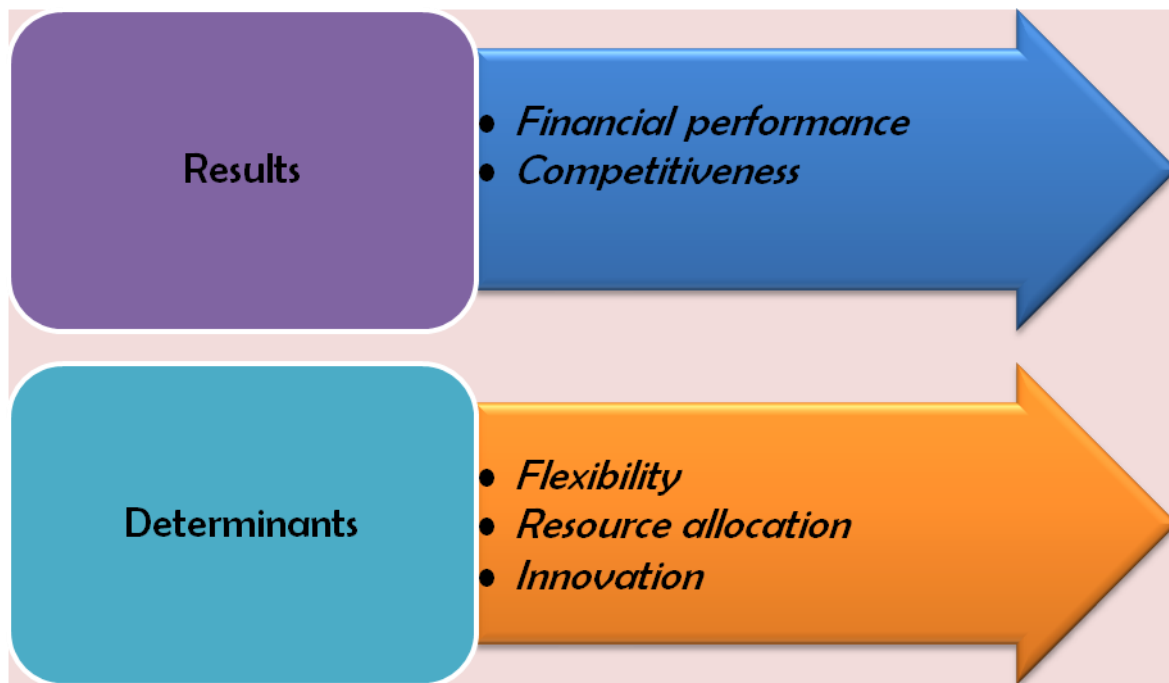


Figure 2.5: The Results and Determinants Framework

(Source: Fitzgerald *et al.*, 1991:42)

2.3.5 The Performance Pyramid

Lynch and Cross (1991:32) were the architects of this interesting framework. It is also known as the SMART (Strategic Measurement and Reporting Technique) Pyramid (Gresty, 2010:19). Unlike other frameworks which tend to be overly hierarchical in orientation, the Performance Pyramid encourages management to pay particular attention to the horizontal flows of materials and information (i.e. the business processes) within the organisation as well. It accommodates both internal and external measures and shows how they precipitate through the entire organisation, thereby facilitating the attainment of goals (Neely *et al.*, 2007:146). The Performance Pyramid is illustrated in Figure 2.6.

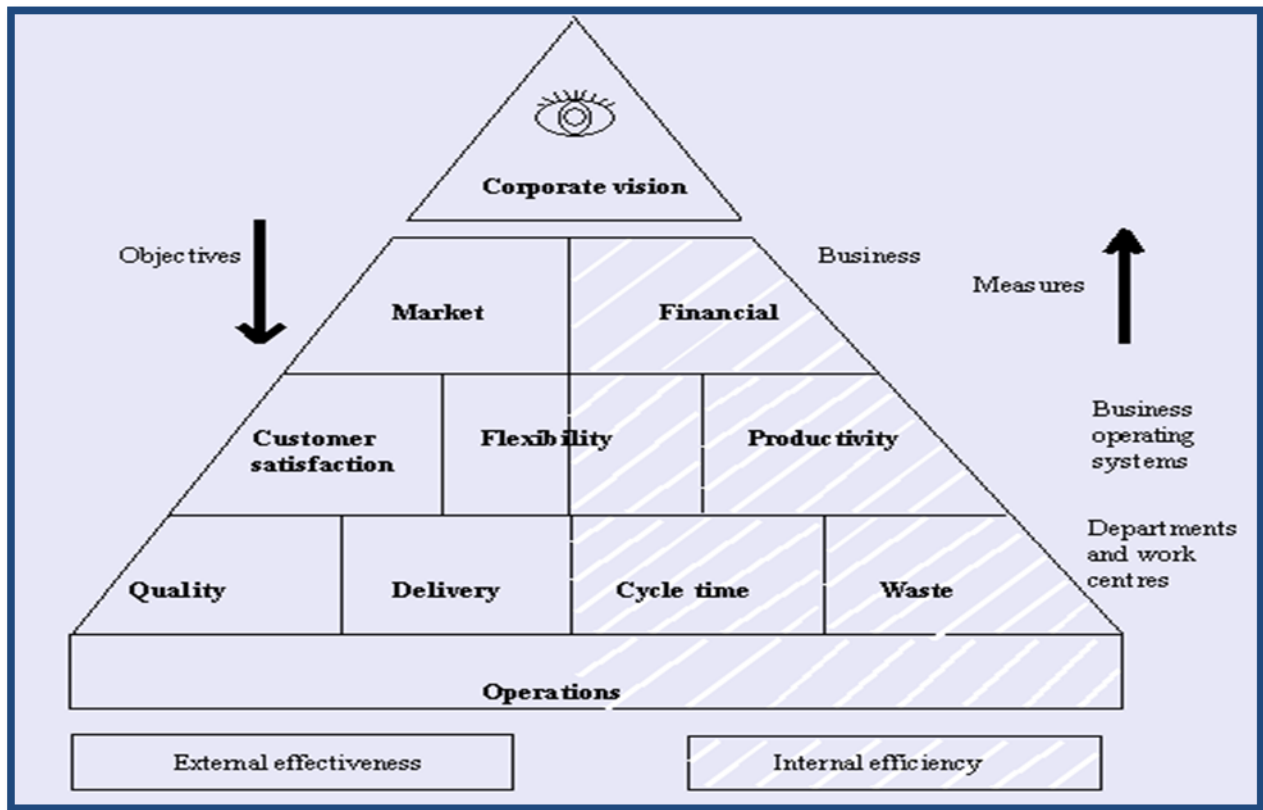


Figure 2.6: The Performance Pyramid

(Source: Lynch & Cross, 1991:32)

Tangen (2004:735) describes this pyramid as a classic model of PM that is strategically oriented because it allows objectives to flow evenly to lower levels of the organisation while maintaining the vision of top management. However, one inherent weakness of this framework is that it uses broad and abstract terms whose definitions still are vulnerable to different interpretation, thereby making application of the framework difficult (Gresty, 2010:19).

2.3.6 The Input-Process-Output-Outcome Framework

This framework was an initiative of Brown (1996:13). The framework distinguishes between inputs, processes, output, and outcome measures. The process of measuring performance is parallel to the process of baking a cake. Inputs were represented by elements such as the volume of flour, quantity of sugar, among others while the oven heat intensity and the overall time it takes to bake the cake. The eventual quality of the cake represents the output measures and the extent to which those who eat the cake are satisfied and is taken as a reflection of the outcome measures. Figure 2.7 is a representation of this framework.

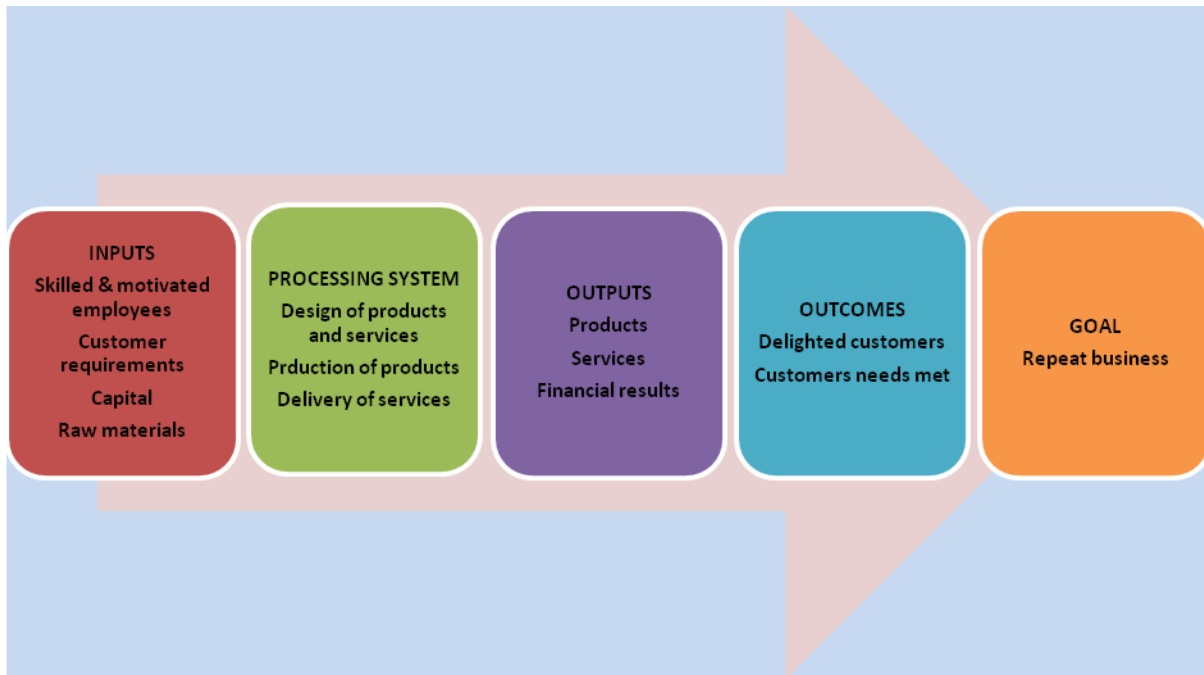


Figure 2.7: Input-Process-Output-Outcome Framework

(Source: Brown, 1996:13)

The implicit conceptual appeal of the Input-Process-Output-Outcome framework coupled with its ability to provide useful explanations of the differences between input, process, output, and outcome measures of performance make it a very handy tool for the measurement of performance (Neely *et al.* 2000:1125). It is also applicable to public organisations since the four dimensions it employs are all part of public organisations.

2.3.7 The Business Excellence Framework

This framework was developed by the European Foundation for Quality Management (Ritchie & Dale, 2000:241). It distinguishes between two performance factors, namely enablers and results. The framework postulates that results are the product of enablers, which are the crowbars that management can work on (Neely *et al.*, 2000:1124). The framework further identifies leadership, which translates into people, policy and strategy, and partnerships and resources are enablers which can be processed into future results. The Business Excellence Model is illustrated in Figure 2.8.

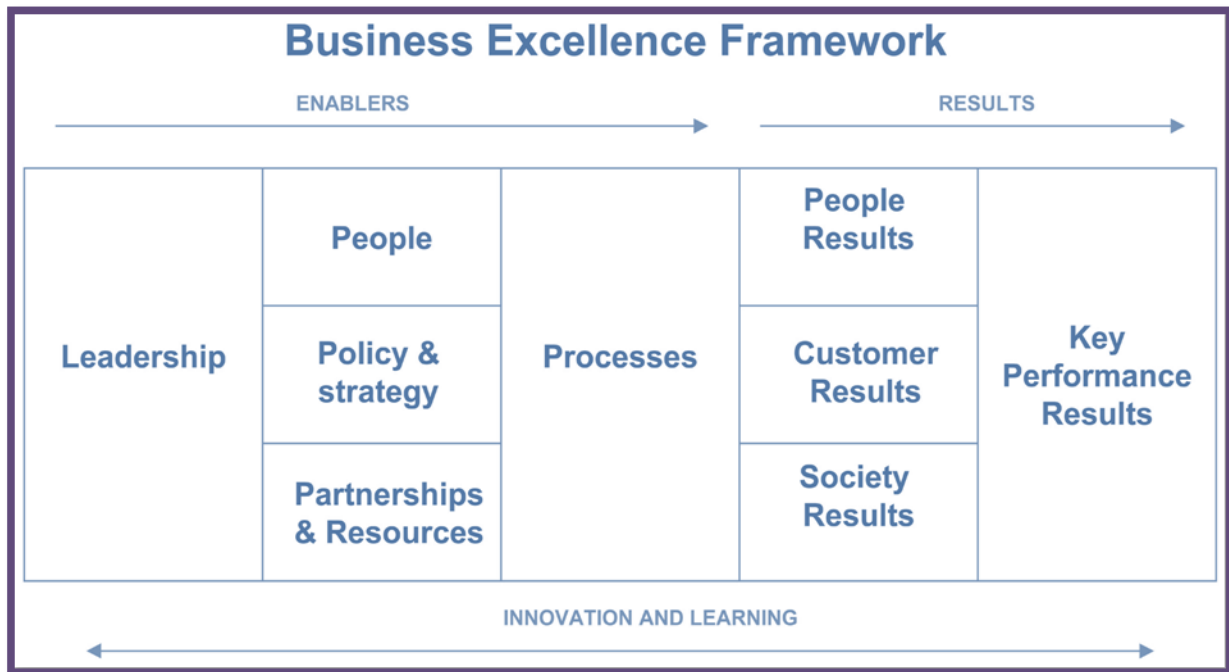


Figure 2.8: Business Excellence Model

(Source: Neely *et al.*, 2000:1124)

The Business Excellence framework has a shortcoming in that it is difficult to implement. The terms used in the framework are susceptible to diverse interpretations and many measures of performance can be developed out of each of the headings (Neely *et al.*, 2000:1125). Therefore, the reliability of this framework is low and extreme care should be exercised in using it.

2.3.8 The CSIRO Organisational Performance Management System (OPM)

The OPM approach to PM was developed in the late 1990s by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) - the national government body for scientific research in Australia. Chennel, Dransfield, Field, Fisher, Saunders and Shaw (2000:1) suggest that the system is applicable to both small to medium enterprises (SMEs) and large organisations. Dransfield, Fisher and Vogel (1999:101) point out that the OPM system is based on three principles, namely alignment, process thinking and practicability, as described below:

- **Alignment**-This addresses a wide range of issues that are primarily associated with planning and deployment: ensuring constancy of purpose, clear job descriptions and

clarity about what constitutes a job done well, focusing improvements in areas of priority and others.

- **Process thinking**- This addresses the management system itself, that is, the design and operation of organisational processes to deploy strategic intent and to create and add value for stakeholders. Process thinking is concerned with understanding the influences on, and drivers of, performance in all processes, without the constraints imposed by vertical organisational structures.
- **Practicability**- This facilitates the translation of alignment and process thinking into a measurement system, thereby ensuring that principle has been translated into practice through the identification of various measurements that have to be collected.

One distinguishing feature of the OPM system from other frameworks is that in the OPM system success is assessed in terms of the additional value that the enterprise provides to stakeholders beyond that available elsewhere (Dransfield *et al.*, 1999:3). These measures are therefore interpreted as being based on the investment of money, labour, resources, support and other factors that the stakeholder groups make in an enterprise, as compared with an alternative investment (Chennel *et al.*, 2000:5). In the OPM system, measures of success are perceptual and are divided into tactical measures (key performance indicators which reflect what the organisation needs to do or produce to deliver value), and operational measures (which relate to the basic processes that deliver products and services to external customers and stakeholders). The methodology has proved effective both in assessing how an enterprise uses data and information in support of managing its business, and as a means to creating an effective performance measurement system (Dransfield *et al.*, 1999:4).

2.3.9 Value mapping

This is a second generation PM approach that was developed in the early 21st century by the Business Excellence International (BEI) Ltd., a British company that specialises in creating value solutions for organisations. The model helps to identify, measure, communicate, improve and report the activities and assets of an organisation that increase stakeholder and organisational value (Jack , 2008:3). It identifies the most important needs of stakeholders and uses them to create measures of value outcomes. It facilitates the development of integrated strategies and

activities that create value, the value drivers and performance measures. The approach is premised on the need for organisations to create value for their stakeholders. It therefore drives and helps to structure the reporting of value to all of the organisation's strategic constituencies. To attain this, the framework uses pictorial maps to combine and illustrate the most useful performance measures in the organisation (Jack, 2008:2). The Value Mapping approach is illustrated in Figure 2.9.

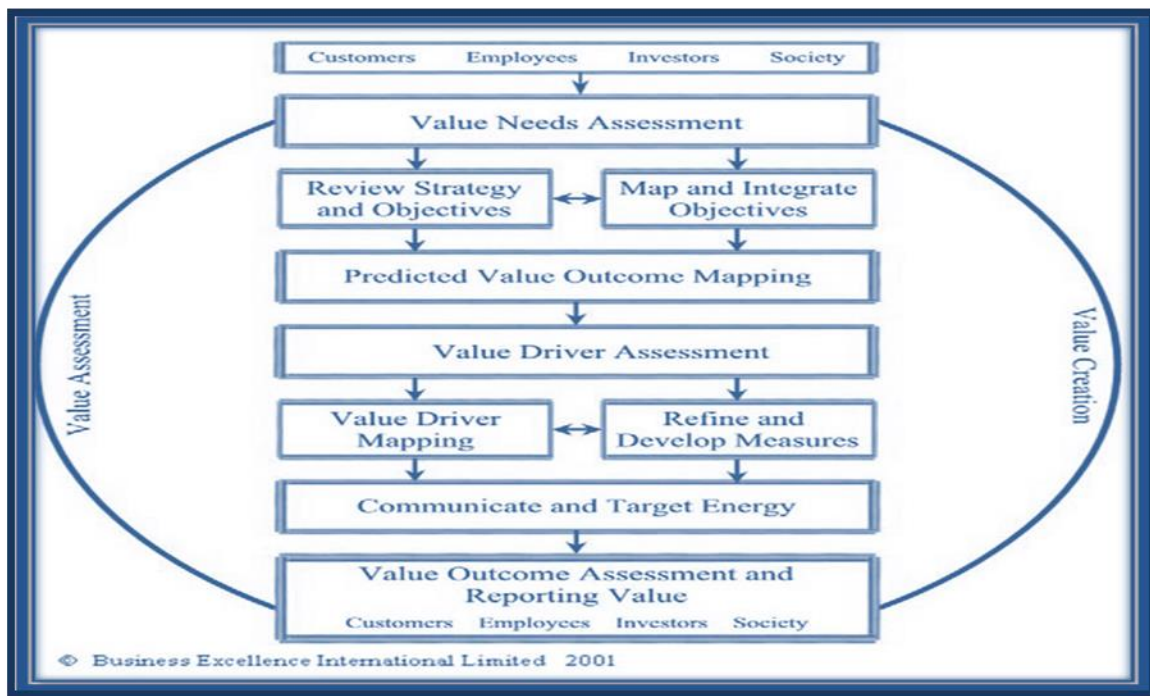


Figure 2.9: Value Mapping Approach

(Source: Jack, 2008:8)

Jack (2008:4) demonstrates that the strength of the Value Mapping approach is that it avoids many of the weaknesses of existing frameworks. What has been called the performance measurement revolution subjects organisations to numerous performance measures that have been introduced for measurement's sake but they do not add value to the organisation. Historical trends indicate that some dogmas behind revolutions have lead individuals and groups to blindly follow without considering whether the course of action is useful at all and what the end direction will be (Hastings, 2011:1). This denotes that for performance management to be effective there must be careful consideration of its possible impact and consequences.

2.3.10 The Balanced Scorecard (BSC)

Developed by Kaplan and Norton (1996:2) of the Harvard Business School, the BSC (Figure 2.10) has gained prominence as a PM framework of choice for many management scientists and practitioners. Several authors (Neely *et al.*, 2007:145; Richard *et al.*, 2009:719; Serrat, 2010: 4) endorse the BSC as a first grade or state-of-the-art PM system. The BSC has been made popular by the marketing exploits of many outstanding consultancy companies. To date, the phrase “Balanced Scorecard” has become well established in management jargon. Development of the BSC was triggered by the long-standing debate regarding financial and non-financial measures of performance. Instead of dropping financial measures, Kaplan and Norton (1996:2) argued that this problem can be overcome if a firm adopts a balanced set of measures. They then came up with the BSC, an approach that allows managers to answer four fundamental questions namely:

- How do we look to our shareholders (financial perspective)?
- What must we excel at (internal business perspective)?
- How do our customers see us (the customer perspective)?
- How can we continue to improve and create value (innovation and learning perspective)?

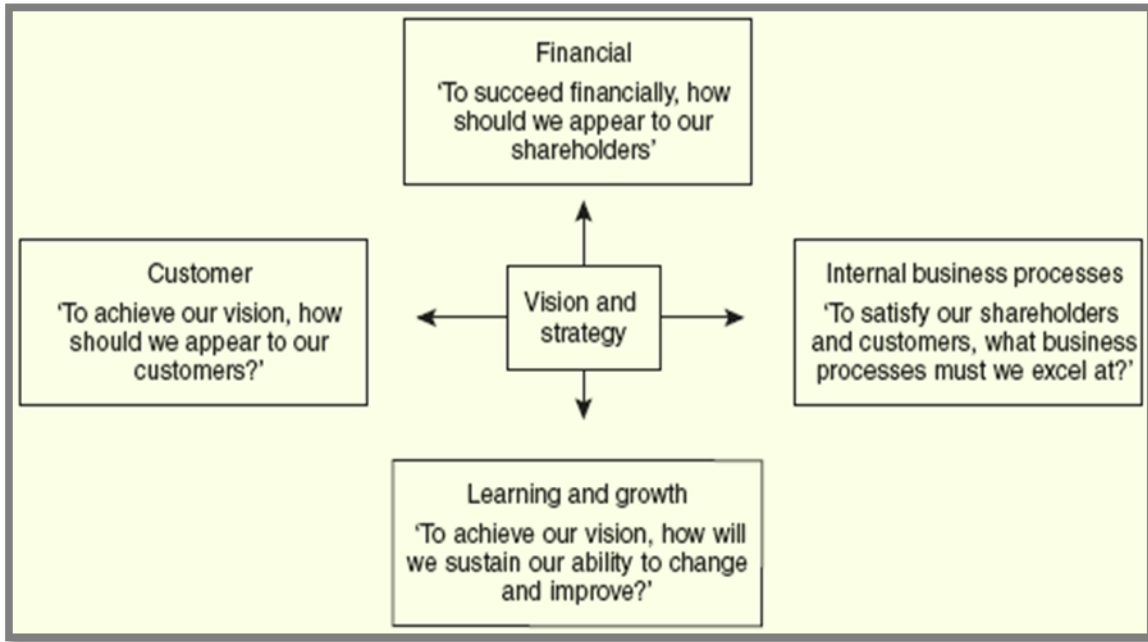


Figure 2.10: Basic Balanced Scorecard

(Source: Kaplan & Norton, 1996:4)

In essence, the basic BSC has remained unchanged. But be that as it may, Kaplan and Norton (2007:5) admit that the framework has somewhat evolved, with modern BSC designs notably having a number of features that clearly differentiate them from earlier examples. From the first one there have been the second, third, and more recently the fourth generations of BSC design. The latest versions of the BSC have linked the whole framework to strategy, and factored in certain measures that were not previously embedded in the original version: namely community and environment (including climatic change), information technology portfolio management, brand value management and the value gap (the difference between the current value of the company and the share price of the company) (Serrat, 2010:6). Moxham and Boaden (2007:829) indicate that the strength of the BSC exists in its ability to integrate different levels of business performance as well as the use of financial and non-financial, internal and external measures. The authors further acknowledge that the BSC is also adaptable to the global dynamics as witnessed in the development of its latest transcriptions.

Despite its global acceptance in organisations, the BSC is not without critics. Chang (2006:766) provides a critique of the BSC in the health service and suggests that it is used more as an

information system than a strategic PM tool. Greatbanks and Tapp (2007:848) detail the unsuccessful use of a modified BSC in an Australian City Council. Many public sector organisations struggle with the BSC because they have not invested sufficient time and effort in customising it to meet their needs (Jarrar & Schiuma, 2007:6; Schalm, 2008:9). Although Kaplan and Norton (2007:8) assert that the BSC is applicable to all types of organisations as it facilitates the capture of financial and non-financial aspects of organisational performance and can therefore accommodate the more social and qualitative objectives of not-for-profit organisations, Moxham and Boaden (2007:829) draw attention to the fact that there seems to be a dearth of empirical research which critically investigates the effectiveness of the scorecard or other formal performance measurement efforts in the public sector. Nevertheless, other frameworks for PM continue to be developed which are based on the BSC, and are specifically tailored to meet the needs of the public sector (DeWaal & Kerklaan, 2010:405). The next section covers the Public Sector Scorecard (PSS) which is a classic example of these contemporary frameworks.

2.3.11 Public Sector Scorecard (PSS)

The Public Sector Scorecard (PSS) (Figure 2.11) is a tool for quality management, service redesign and performance. It is an integrated framework that was adapted from the BSC, based on the premise that the BSC in its raw format could not be easily applied in public sector organisations. Moullin and Soady (2008:6) argue that by using the PSS, organisations can ensure that their strategies, processes, organisational culture and performance measures are all consistent with the outcomes that matter to service users and other key stakeholders. Moullin (2009:28) reveals that the PSS has seven perspectives divided into three groups, namely capabilities, processes, and outcomes. The framework is then further divided into three outcome perspectives, namely:

- the strategic perspective- which reflects key performance outcomes required by the relevant organisation
- the outcomes that matter most to service users and other key strategic constituencies
- the financial outcomes such as the attainment of value for money or securing of funding



Figure 2.11: The Public Sector Scorecard

(Source: Moullin, 2009:7)

Use of the PSS yields several advantages to the organisation. First, it offers an excellent way of ensuring that service improvement and PM focus on the outcomes that matter to service users, patients and other key stakeholders, as well as the processes that deliver those outcomes, and the organisational culture and capability to ensure that these are delivered and to support their staff (Moullin 2009:31). It also ensures the most important aspect of performance measurement: the creation of a management culture in which managers and staff focus on improving services, rather than a culture of blame (Moullin & Soudy, 2008:7). Furthermore, by including the learning phase into the programme, the PSS ensures that performance measures are used as a learning tool that provides an insight into how well organisations perform in meeting their objectives (Brooks, 2007:19). As such, the PSS is a framework that ensures that PM can be conducted in the public sector with minimum setbacks. However, application of the PSS has been mainly restricted to the public sector organisations in Western countries. This is because it is a fairly new concept to developing countries relative to developed countries (Mwita, 2000:21). This implies that there is room for further research focused on whether the PSS can be adapted for use in the South African public sector, and how this can best be implemented.

2.4 EVALUATION OF PERFORMANCE MANAGEMENT FRAMEWORKS

Meyer (2002:16) advocates that there are three components of a performance model which are considered to be most important, namely the balance that exists between the performance indicators used, the extent to which the model is aligned to company strategies, and the dynamism (flexibility) of the model. The frameworks are listed in Table 2.1 where an evaluation of the models is made, based on the afore-mentioned three desirable characteristics as well as based on three additional properties, namely: individual evaluations, look back, and look ahead. The characteristics of the frameworks are described using three symbols: “+” denotes that the frameworks meets that standard while “-” means that the property is not provided, and “Φ” implies that the standard is met to some degree or the user is free to modify (Oztaysi & Ucal, 2009:5).

Table 2.1: Evaluation of PM Frameworks

Models/ Frameworks	Focus of the model	Evaluation Scale					
		Individual Evaluation	Look Back	Look Ahead	Balanced Performance	Alignment with	Flexibility/ Dynamism
Traditional performance measurement	Financial ratio	-	+	-	-	-	-
Performance Pyramid	Identification of the performance improvement areas	-	-	-	+	-	-
Performance Prism	Considers the perspectives: Shareholder satisfaction, strategies, processes, capabilities	+	+	Φ	Φ	+	Φ
SMART Pyramid	Performance indicators for different levels of the company	-	+	-	Φ	Φ	+
Performance Prism	Considers the perspectives: Shareholder satisfaction, strategies, processes, capabilities	+	+	Φ	Φ	+	Φ
Performance measurement matrix	Groups the corporate performance indicators as financial, non-financial, exterior, and interior	-	+	-	-	-	Φ
Balanced Scorecard	Defines a corporate performance system with financial, customer, process and learning, and growth perspectives	+	+	+	+	+	+

(Source: Oztaysi &Ucal, 2009:5)

It is interesting to note that the BSC is the only framework that satisfies all the 6 items on the evaluation scale. This implies that the BSC is a very effective performance measurement tool and further explains why it is very successful and popular in various organisations and institutions worldwide. Forlan and Browne (2005:667) also made a comparative evaluation (Table 2.2) of the various frameworks of performance management.

Table 2.2: Comparison of PM Frameworks

Framework	Researcher	Framework typology	Dimensions of measurement	Does it suggest other formal measurement processes
Performance measurement matrix	Keegan, Eiler, & Jones (1989)	Structural	Cost, non-cost, internal environment, external environment	No
Results and determinants Framework	Fitzgerald, Johnson, Brignall, Silvestro & Voss (1991)	Structural	Results (financial performance, competitiveness); determinants (quality, flexibility, resource utilisation, innovation)	No
Performance measurement system models	Lockamy III (1991)	Structural	Cost, quality, lead time, delivery	Yes
Performance pyramid	Lynch & Cross (1991)	Structural	Vision, market, financial, customer satisfaction, flexibility, productivity, quality, delivery cycle, waste	No
Balanced scorecard	Kaplan & Norton (1992)	Structural	Financial, internal business, customer perspective, innovation and learning	No
The Input-Process- Output-Outcome Framework	Brown (1996)	Structural	Inputs, process, outputs, outcomes	No
Performance prism	Neely, Gregory & Platts (1995)	Structural	Stakeholder satisfaction, strategies, processes, capabilities, stakeholder contribution	No
Business Excellence Framework	EFQM,	Structural	Enablers, results	No

(Source: Forlan & Browne, 2005:665)

2.5 THE IMPORTANCE OF PERFORMANCE MANAGEMENT

A survey of literature reveals that the subject regarding the importance of organisational performance has generated a lot of interest and debate for a long time, with researchers providing diverse perspectives. Maani and Fan (2008:2) state that the role of PM is often misunderstood such that managers are so consumed with lengthy data gathering and mindless micro-management such that they lose sight of broader organisational objectives and strategy. Serrat (2010:1) submits that PM is important because one cannot improve what one cannot measure, which signifies that one has to measure performance before one manages it. Lemieux-Charles, McGuire, Champagne, Barnsley, Cole and Sicotee (2003:766) also stress that PM is a kind of monitoring that shows where change is required and which will in turn produce the desired behaviour that produces improved performance. This denotes that PM is extremely important to the attainment of both strategic as well as the operational objectives of the organisation. Brown (2005:470) highlights that there are at least 17 different reasons, for introducing PM, namely:

- to provide information on organisational effectiveness
- to provide information on employees' effectiveness
- to improve organisational effectiveness
- to improve employees' effectiveness
- to provide information on organisational efficiency
- to provide information on employees' efficiency
- to improve organisational efficiency
- to improve employees' efficiency
- to focus employees' attention on areas deemed to be of greatest priority
- to improve employees' levels of motivation
- to link employees' pay with perceptions of their performance,

- to improve the quality of employees' training and development
- to raise levels of employee accountability
- to align employees' objectives with those of the organisation as a whole
- to improve customer service
- to facilitate the implementation of an organisation's mission and/or strategy
- to act as a lever of change in developing a more performance-oriented culture

It is interesting to note that some of the reasons mentioned by Brown (2005:470) are either abstract or obscure, or are in conflict with each other. Consistently, Jensen and Meckling (2009:52) propose that performance is an amalgam of dimensions, some of which may conflict. For instance, the organisational/employee effectiveness/efficiency paradigm mentioned by Brown remains unclear. Some researchers (Brignall & Modell, 2000:284; King, 2007:892; Van de Wall, 2008:333) use the terms efficiency and effectiveness interchangeably. In addition, the difference between the organisational and employee dimensions to effectiveness also remains unexplained. Some scholars (Chand & Katou, 2007: 577; Fryer, Antony & Ogden, 2009: 479) claim that employee effectiveness/efficiency and organisational effectiveness/efficiency are both sides of the same coin as they are both intended to lead to the same result- improved organisational performance. Brown's (2005:470) list therefore unintentionally provides an indication of the levels of confusion surrounding the subjects. A more objective, more recent and better streamlined alternative list of the reasons for implementing PM is provided by Halachmi (2011:25) who gives the following reasons:

- to demonstrate the results of programme activities
- to show how these results support programmatic and organisational goals
- to determine what works and what does not
- to promote accountability and justify resource allocation

- to enhance the ability of managers to communicate with stakeholders
- to develop and strengthen partnerships among programmes and organisations with similar goals and objectives
- to motivate and provide tangible feedback to employees
- to meet the requirements of related laws

In another matrix proposed by Behn (2003:588), which dovetails with Halachmi's proposition, the separate reasons for engaging in PM are to evaluate, control, budget, motivate, promote, celebrate, learn and improve. This matrix (Table 2.3) is premised on the fact that PM must have a purpose- it can never be an end in itself.

Table 2.3: Eight Reasons to Measure Performance

Purpose	The questions that the performance measure can help to answer
Evaluate	How well is my organisation performing?
Control	How can I ensure that my subordinates are doing the right thing?
Budget	On what programmes, people, projects, or programmes should my agency spend the public's money?
Motivate	How can I motivate line staff, middle managers, non-profit and for-profit collaborators, stakeholders, and citizens to do the things necessary to improve performance?
Promote	How can I convince political superiors, legislators, stakeholders, journalists, and citizens that my organisation is doing a good job?
Celebrate	What accomplishments are worthy of the important organisational ritual of celebrating success?
Learn	Why is what working or not working?
Improve	What exactly should who do differently to improve performance?

(Source: Behn, 2003:588)

Meyer (2002:3) defines seven purposes of PM, namely, look back, look ahead, roll up, cascade down, compare, motivate, and compensate (Figure 2.12). These seven purposes occur at different levels of the organisation.

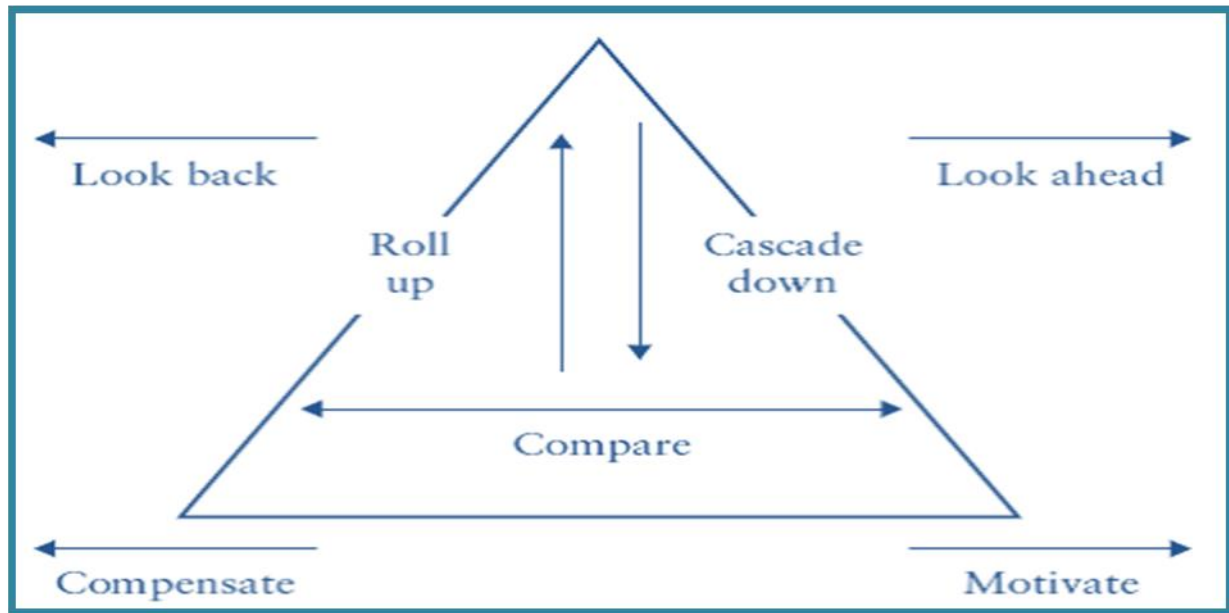


Figure 2.12: The Seven Purposes of PM

(Source: Meyer, 2002:3)

At the upper echelons of the organisation are “Look back” and “Look ahead”. This demonstrates that PM enables the organisation to consider historical aspects as well as to prepare for future performance. “Motivate” and “Compensate” are at the lower levels of the organisation. This means that every individual has the prerogative of evaluating his/her personal performance and to make compensation where gaps may be found (Meyer, 2002:2). In more complex organisations, measures can also roll up from the bottom to the top of the organisation, cascade down from top to bottom, and facilitate performance comparisons across business and functional units (Oztaysi & Ucal, 2009:3).

There is an array of potential benefits that can be gained from good PM. Holman (2010:8) advises that PM is the foundation of any organisation that has a vision and knows where they want to be in the near and long term future. When implemented properly, PM has rewards or payoffs in such areas as measurement of organisational outcomes, gauging client satisfaction, getting a

correct picture of the quantity of work performed and the introduction of efficiency measures and the development of moral codes to distinguish between right and wrong (Grizzle, 2002:364). Shulver, Lawrie, Barney and Kalff (2007:4) also reveal that there are many benefits of generating new and additional resources, clearer understandings of economic chains, wealth creation and as both the creatures and creators of a material environment in which opportunities lie. These benefits are in the translation of the company's strategy and mission statement into specific goals and measures which allow for, amongst other things, products to market sooner and innovative products tailored to customer's needs.

Holman (2010:8) acknowledges that if there are organisational benefits at the strategic level, there are also benefits further down the organisation's food chain because the average quality of decisions made daily will be vastly higher than before. Furthermore, Macpherson (2001:14) affirms that PM matters because it allows government to go beyond a zero tolerance for waste, fraud and abuse, to create a government that is better equipped to deliver efficiently, economically, and effectively on its promises to the people. When that happens, the company's performance will show it. Spitzer (2007:13) also found that improved PM provides a basis for better informed decisions for both control and improvement. The process of performance setting is a predominant and important aspect of an organisation's management as it determines the level of learning experienced by the organisation (Yeo, 2003:200). An example occurs when an analysis of existing formalised financial performance measures is able to highlight areas where learning is taking place. Serrat (2010:7) sums it up clearly when he points out that PM is a major determinant of sustainable competitive advantage for any organisation. The existence of a wide-range of organisation-wide benefits for the organisation demonstrates that PM is pivotal to the attainment of strategic organisational goals and ultimately, the longevity of the organisation and that without it, an organisation is bound to be a failure.

2.6 PERFORMANCE MEASUREMENT CHALLENGES

Several challenges arise as organisations strive to measure their performance, and if left unresolved can render the whole PM process fruitless (Yeo, 2003:202). It is therefore important for one to understand these challenges beforehand and then factor in some possible solutions to ensure the effectiveness of the entire process. The first of such challenges focuses on conflicting

definitions of some aspects of the construct. There seems to be a lack of clarity in the theoretical definition of performance and the absence of methodological consistency in the formulation of the constructs used (Richard *et al.*, 2009:719). For example, performance management and performance measurement are different concepts, even though many scholars use them synonymously (Van de Walle 2008:331). As outlined by Radnor and Barnes (2007:391) a clear difference between these two concepts is that performance measurement is a historical concept (looks at past events) whereas PM is a futuristic concept (provides data about the future). In the same vein, there is a difference between performance measures and performance indicators. Generally, many scholars prefer to use quantifiable indicators of performance because directly quantifiable measures are grossly inadequate. However, Chenhall and Langfield- Smith (2007: 270) argue that the distinction between the two is imprecise and, in practice, indicators are often taken as being synonymous with concrete measures of performance. It is therefore important for one to understand the structural differences between these concepts to ensure their correct and contextual application.

Another challenge in PM relates to the adaptability of a PM system (Chang, 2006:767). As mentioned earlier, the current global climate is both challenging and dynamic. Internal and external conditions and contexts change rapidly, thereby subjecting people, systems and organisations to manifold pressures. The world is awash with examples of entities that have sunk into the abyss because they failed to adjust to the changing times (Muijs, 2011:56). PM systems are not immune to these pressures. As suggested by Fryer *et al.* (2009:481), a performance measurement system is of no use if it is not able to adjust itself to changes in today's competitive environment. In their raw format, the previously discussed frameworks, namely the Performance Pyramid, the Performance Measurement Matrix, the Results and Determinants Framework and the Balanced Scorecard are ineffective in current situations. This challenge is exacerbated by the fact that organisations by their nature are complex systems, a matter which is of central difficulty in measuring the performance of all organisations (Armstrong, 2010:22). Organisations are complex in so far as they are collections of visible and invisible, tangible and intangible elements and performance itself is determined by a multitude of dynamics of different internal and external factors and conditions (Adcroft & Willis, 2005:389). Therefore, all PM systems and frameworks must be subjected to rigorous continuous modifications to harmonise them with recent developments at a global level, otherwise they will become irrelevant (Walker, 2002:67).

Scores of public organisations tend to import private sector PM practices. There has been an interest of transforming the public sector by learning from business (Murphy, Elliott, Goldring & Porter, 2006:13). Researchers such as Heinrich (2005:713), Chang (2006:766) and Schalm (2008: 9) manifest a lot of skepticism on the effectiveness of such private sector management principles when directly applied to the public sector. Earlier work by Ferlie and Steane (2002:1462) provides a more in-depth explanation of the issue, and concludes that the adoption of private sector practices has, to many intents and purposes, blurred the distinction between public and private sectors where the government's role has become much more of a facilitator of services compared to the frontline provider of services. On the other hand, Muijs (2011:55) posits that in most cases underperformance of the public sector is a product of overall public sector management and the solution to these problems is the creation of frameworks which mimic the private sector. As such, the adoption of private sector PM practices by the public sector denotes that there are certain core functions of management applicable across all organisational contexts and that certain management techniques can be transferred across contexts – in this case, from the private to the public sector (Murphy *et al.*, 2006:13). In support of this principle, authoritative management leader Drucker (1995:7) states that benchmarking is premised on the assumption that what one organisation does, any organisation can do as well. This rationale is followed through in a process based on measuring existing performance, then comparing that performance with either an industry or market leader or some desired performance in the future, and analysing the causes of differences in performance before implementing management actions to bridge the gap, often through emulation (Muijs, 2011:56).

Use of private sector performance standards by the public sector cascades down to an even more daunting challenge pertaining to the quality of performance indicators. Zineldin (2006:64) upholds that devising indicators of good quality is a hard task. In agreement, Peng, Pike and Roos (2007:344) reiterate that due to the multi-faceted nature of the public sector, the assumption is that it is more challenging to develop measures in these organisations. Furthermore, Van de Walle (2008:331) establishes the dilemmas of defining indicators in the public sector and concludes that the problems are not technical, but conceptual, that is “what is the role of the public sector and what good performance is although he acknowledges that there are still problems with data quality”.

The issue of measurement of performance also presents the debate pertaining to what should be measured. While traditional models of performance have emphasised financial indicators of performance, a plethora of other indicators have either been developed or suggested (Callahan & Gilbert, 2003:6). There is no universal agreement on which indicators are appropriate for a particular situation. For instance, in a study conducted by Richard *et al.* (2009:720), 213 papers that focused on organisational performance were identified, making up 29% of the total published in several journals that were used in the research. Interestingly, overall, across the 213 papers identified as including a performance variable, 207 different measures of performance were used. Such a diversity of approaches tends to complicate the whole subject of PM. According to Stevens, Stokes, and O'Mahony (2006:89) there are four types of performance indicators namely:

- output (how much is being produced)
- welfare (the value to the final users)
- performance (how the services are being produced)
- composite indicators that combine the other three

In addition, Macpherson (2001:16) defines another three classes of indicators namely:

- the “facts of life” - if we don't raise or earn this money, we will be forced out of business
- “planning, prediction and budget numbers” which are used to drive continuous improvement
- improvement - used for comparison and to drive continuous improvement
- “arbitrary numerical targets” - generally used to judge staff (he advises that this last category tends to be arbitrary and meaningless, and urges people to avoid using it).

The mere existence of this wide range of performance indicators compels potential users to have the prerogative of selecting those that are appropriate to their contexts, which is not an easy process. Lemieux-Charles *et al.* (2003:766) insist that the proliferation of PM indicators has not brought about an improvement in the quality of the indicators themselves. This implies that PM

is useful in so far as it can tell an organisation where it stands in its effort to achieve goals, but it is less useful in explaining what it should do differently (Winter, 2003: 993).

Another upstream challenge that is linked to performance indicators pertains to conflict of interest in organisations. Radnor and Barnes (2007:387) contend that there is a potential for conflict in the use of performance measures. The authors maintain that potential conflict among various constituencies as they try to promote self-interested measures of performance is resolved through the use of power (Wu, 2010:163). Furthermore, a consensus on measures to be used in PM is achieved through a process of bargaining among constituencies or their representatives in the dominant coalition (Chapanis, 2005:4). Therefore, performance measures found in an organisation tend to reflect the interests of those who comprise the dominant coalition within the firm. This implies that minority groups or those that are deemed powerless have no significant input in the process. This raises a further question of representativeness and ultimately, validity and reliability of performance indicators (Ehie, 2010:149).

Fear is also a significant factor that triggers hesitation from employees who have to develop performance indicators. Macpherson (2001:17) observes that some employees tend to fear that by developing indicators, they are actually providing whoever they account to (managers, trustees, taxpayers) with stones to be thrown at them. The author refers to cases where authorities have used performance indicators as an arsenal to subdue their subordinates, and where published measures or indicators have led to the unilateral imposition of inappropriate quotas and targets. In addition, some managers do not even consult employees when coming up with performance indicators. In her analysis of organisational practices, Viljoen (2009:42) laments that in many organisations, talent is seldom or never allowed to contribute their unique tacit knowledge and diverse insights which would, if encouraged, assist in contributing effectively toward organisational decision making and problem solving. Worse still, some individuals may tamper with published performance indicators as they attempt to deal with fluctuations brought about by the variation that is naturally inadvertent in every process while others fear that they will be criticised should it happen that the performance measures they used were ineffective (Stevens *et al.*, 2006: 91). Most public organisations are also generally risk averse which makes it very difficult for them to be venturesome in developing first-time indicators (Macpherson, 2001:17)

Chenhall and Langfield-Smith (2007:271) also draw attention to the following potential problems that may develop from the use of performance measures by an organisation:

- tunnel vision- undue focus on performance measures to the detriment of other areas
- sub-optimisation - undue focus on some objectives will leave others not achieved
- myopia- short-sightedness leading to the neglect of longer-term objectives
- measure fixation - implies behaviour and activities in order to achieve specific performance indicators which may not be effective
- misrepresentation –a tendency to indulge in creative reporting in order to suggest that a performance measure result is acceptable
- misinterpretation - involves the failure to recognise the complexity of the environment in which the organisation operates
- gaming- where there is a deliberate distortion of the measure in order to secure some strategic advantage
- ossification - by definition means 'a hardening', refers to an unwillingness to change the performance measure scheme once it has been set up

If left unattended the multiple problems related to the issue of PM can derail the organisation's operations and set it on a negative trajectory (Prahalad & Hamel, 1994:27). It is therefore imperative for management to pay particular attention to whether there are likely to be problems in using performance measures as targets for the organisation and its managers. It is also important for management to assess whether the use of performance measures will help to provide accountability of the organisation and its employees to the stakeholder, and to be aware of strategies that may be put in place to improve organisational performance (Reiss, 2007:166).

2.7 ORGANISATIONAL PERFORMANCE IN THE SOUTH AFRICAN PUBLIC SECTOR

PM in the specific context of South Africa's public sector has received significant attention from a number of researchers (van der Walddt, 2004:20; Minnaar, 2006:28; Molefe *et al.*, 2011:699). PM is important since it has a high potential influence on organisational performance. Putu *et al.* (2007:192) suggest that outstanding organisational performance signifies that a public sector organisation is both effective and efficient in supplying public goods and services. Mulder (2007:16) recognises that public sector performance is driven, in part, by organisational capacity, which is understood as existing in basic areas such as strategic leadership, human resources, financial resources, infrastructure, programming and process management, and inter-institutional collaboration. In this regard, an important question that needs to be answered relates to whether public sector organisations in South Africa can be classified as organisations that perform well. Molefe *et al.* (2011:700) refer to organisations that perform satisfactorily as high performance organisations (HPOs). To answer this question, one needs to explore the characteristics of high performance organisations.

In drawing attention to the characteristics of a high performance organisation, Meyer and Botha (2004:29) emphasise that it is one that has developed the capacity to achieve a three-dimensional target, namely by being the provider of choice (creating enthusiastic loyal customers); employer of choice (people want to work for this organisation) and investor of choice (realising profits when customers are treated well). Such organisations also have a culture in which importance is placed on performance and human capital (Rothwell & Sullivan, 2005:34). De Waal and Kerklaan (2010:180) add that a high performance organisation is also characterised by super- and sustained financial performance. The same scholar also points to the adaptability of that organisation to changing scenarios as well as the ability to promptly react to these changes. In addition, the work systems promoted in these organisations emphasise the participation of employees in problem-solving and decision-making (Boxall & Purcell, 2008:53). A cursory comparison of South Africa's public organisations and the aforementioned characteristics makes it difficult for one to classify these organisations as high performance organisations (Molefe *et al.*, 2011:702). Therefore, a lot of work has to be done to achieve that level of performance in this sector.

According to Putu *et al.* (2007:194), the public sector in developing countries such as South Africa has the following dominant characteristics which may influence public sector decision making, control, accountability and ultimately, organisational performance:

- a low institutional capacity: where institutional capacity can be defined as the organisation's ability to identify problems, to develop and evaluate policy alternatives, and to operate the government's programmes
- a limited involvement of stakeholders in comparison to developed countries
- a high level of corruption, where corruption can be defined as the abuse of public power for private gain
- a high level of informality

The White paper on the transformation of the Public Service, (Department of Public Service and Administration, 1995:17) also highlights that efforts to improve the public service performance in South Africa have been hampered by a number of negative legacies that were inherited in the South African public service in 1994. These legacies are listed in Table 2.4.

Table 2.4: Inherited problems in the South African public service

<ul style="list-style-type: none">• lack of race, gender, and disability representation
<ul style="list-style-type: none">• lack of accountability and transparency
<ul style="list-style-type: none">• lack of popular legitimacy
<ul style="list-style-type: none">• absence of effective management information
<ul style="list-style-type: none">• lack of a professional ethos and work ethic
<ul style="list-style-type: none">• conflicting labour relations
<ul style="list-style-type: none">• lack of service delivery because the public service was more concerned with the application of rules
<ul style="list-style-type: none">• centralised control and top-down management
<ul style="list-style-type: none">• low productivity if judged in terms of the ability to deliver services that meet the needs of the people
<ul style="list-style-type: none">• poorly paid and unmotivated staff

(Source: Department of Public Service and Administration, 1995:17)

Schwella (2001: 383) also researched the performance of the South African public sector and identified a cocktail of challenges (Table 2.5) that affect individual government organisations.

Table 2.5: Summary of challenges facing public sector organisations in South Africa

<ul style="list-style-type: none">• New policies being set at the national level without due consideration to the implications for the provinces
<ul style="list-style-type: none">• An absence of performance monitoring
<ul style="list-style-type: none">• Regulations inhibit rather than encourage excellence
<ul style="list-style-type: none">• Regulations limit the efficient use of resources
<ul style="list-style-type: none">• Confusion in the direction given by national government
<ul style="list-style-type: none">• A lack of support of provincial departments by national departments
<ul style="list-style-type: none">• High levels of centralisation in departments inhibit service delivery
<ul style="list-style-type: none">• A lack of flexibility to respond to local conditions
<ul style="list-style-type: none">• A lack of focus for improving service delivery
<ul style="list-style-type: none">• Political interference
<ul style="list-style-type: none">• A lack of strategic direction from department heads
<ul style="list-style-type: none">• Weak and poorly implemented strategic planning
<ul style="list-style-type: none">• Insufficient coordination and communication of strategic plans
<ul style="list-style-type: none">• Key activities marginalized
<ul style="list-style-type: none">• A lack of appropriately skilled staff members
<ul style="list-style-type: none">• A lack of discipline and the prevalence of misconduct

(Source: Schwella, 2001:383)

A noteworthy fact from the preceding discussion is that public sector organisations in South Africa face substantial challenges in delivering their mandate. There is therefore a need to

initiate and effectively implement strategies and policies aimed at turning around these organisations so that they may be able to meet their service delivery obligations.

To transition public organisations into high performance organisations, the South African government embraced serious reforms to their public sector. Most of the reforms have the objective of enhancing organisational performance through improvements in governance (United Nations, 2003:28). Heady (2001:9) and Eikenberry and Kluver (2004:133) posit that examples of transformations that have been implemented with the object of improving performance in the public sector of most developing countries include:

- Decentralisation- especially, in countries with a large population or geographic area, decentralisation is crucial to improve public sector performance, particularly the delivery of basic public goods and services.
- Marketisation- this aspect includes such changes as the introduction of contract management, public-private partnerships, privatisation, benchmarking or other types of performance comparisons, internal markets for administrative services, and contract competition.
- Implementation of anti-corruption programmes.
- Reforms, in several developing countries, that include the introduction of direct elections, for choosing, for instance, the heads of local governments such as mayors and councillors.

Schwella (2001:383) also adds that the following policies and initiatives were put in place in South Africa to ensure that the entire public sector was transformed:

- the constitution and public administration: these provided the basic guiding principles and values that govern public administration.
- Project Batho Pele: this was an idea initiated in 1997 and premised on the White Paper on Transforming Public Service Delivery. The *White Paper on the Transformation of the Public Service* is a document that provides a specific rationale on how public

administration can be transformed in South Africa by describing how public service organisations can be transformed into a “coherent, representative, competent, and democratic instrument for implementing government policy and meeting the needs of the South African public” (Department of Public Service and Administration, 1995: 85). The Batho Pele Project provided a code of conduct which stipulates that public organisations must put people first by acting in a manner that is fair and without bias, since citizens expect a high level of service delivery while their right to access information should also be respected (Draai, 2008:6).

- the Code of Conduct for Public Servants provides instructions on the behaviour of public employees and the relationships between employees and executive branches, the public, and between employees themselves.

It is also noteworthy to suggest that in order to transform the South African public sector from its current miserable performance to a high performance sector there is an urgent need to ensure that PM becomes central to efforts for a more efficient, effective and accountable sector of the economy. The tools of PM and public expectations for their usefulness have been growing in sophistication but are easily accessible (Heinrich, 2005:712). Such instruments are available for prudent utilisation so that performance can improve in every organisation in South Africa’s public sector.

2.8 CONCLUSION

Organisational performance is a broad, interesting and widely researched topic. It is also a very important aspect of every organisation as it ensures that organisational goals are achieved. It is the goal of every organisation to perform well above the prescribed standards and to be identified as a brand organisation or as ‘world- class’. To ensure that this status is attained, organisations address issues related to their performance through the process of PM. Organisations that perform well are those that are able to manage their performance.

The subject of PM has withstood the test of time, having been established over a century ago and managing to develop through various phases until it has attained the level of sophistication that characterises it today. PM has become a daily activity in contemporary organisations in both the

both private sector and the public sector. Wide spectrums of PM frameworks have been developed, all aimed at measuring and improving organisational performance. Although no single framework is better than others, the BSC has stood out as undoubtedly the more influential tool of PM. Recent adaptations of the BSC have a diverse range of applications in both the private as well as the public sector. Its application in South Africa's public sector organisations offers interesting insights. This is because most organisations in this sector are renowned for their perennial underperformance as testified by the entrenched poor standards of service delivery.

The benefits of PM are manifold, commencing from the strategic level and cascading down to organisational functions. This underlines the importance of PM to organisations. However, implementation of PM programmes remains a daunting task. The process is susceptible to numerous challenges that still have to be overcome. The challenge therefore remains on management and employees in organisations to be vigilant and proactive when implementing such programmes, lest success always eludes them.

The central theme in this study is organisational performance. This chapter discussed a diversity of scholarly literature that establishes both the theoretical and practical underpinnings behind organisational performance. The next chapter will examine the foundations of the relationship between the human factor and organisational performance.

CHAPTER THREE

THE HUMAN FACTOR AND ORGANISATIONAL PERFORMANCE

3.1 INTRODUCTION

The relationship between the human factor and organisational performance has received widespread research attention and scholarly debate. This is justifiable, judging by the level of importance that is placed on people within an organisation as both the architects as well as implementers of organisational strategies and policies (Koys, 2001:101). It is widely accepted that the success of an organisation hinges on its ability to attract, motivate and retain the right talent that is needed to meet organisational goals (Combs, Liu, Hall & Ketchen, 2006:506). Most organisations have adopted the goals of efficiency, effectiveness, and competitiveness (Armstrong, 2005:63). The goals can only be attained if these organisations possess the right people who have an appropriate set of attitudes and skills (Kassahun, 2005:30).

Despite the general acknowledgement of the importance of human resources in organisations, there are several topical sub-issues that still attract controversy within the same subject and therefore require more empirical research. One such debate pertains to how key human resource practices that lead to high organisational performance can either be identified or measured. Hesketh and Fleetwood (2006:678) point to the fact that contributions from governments, professional bodies, consulting houses and other stakeholders have failed to reach a conclusion. These authors also mention the possible existence of a causal connection but stress that complexities in this causality cannot be easily captured using the common statistical approaches, thereby exacerbating the existing confusion.

Another issue that has attracted debate is the material value of the contribution of the human factor on organisational performance (Guest, Michie, Conway & Sheehan, 2003:291). Unless this material value is established, the subject may be perceived as trivia by some individuals and groups. It is therefore very common for most human resource practitioners to exhibit a desire to demonstrate the value of what they do to the organisation (Savaneviciene & Stankeviciute, 2010:426). Research supports this practice. For instance, Kassahun (2005:30) opines that although other factors of production such as capital and machinery, among others, are essential for organisational resources, they are not able to produce the desired outcomes if people with the

right attitudes and skills are not available to utilise them. Therefore, the human factor appears to be arguably the most important resource since it is people who make use of all the other resources (Combs *et al.*, 2006:509).

The human factor approach to organisational management is a diverse and multi-disciplinary field that involves knowledge about human abilities, human limitations, and other human characteristics that are relevant to design (Macey, Schneider, Barbera & Young, 2009:74). It is that field which is involved in conducting research regarding human psychological, social, physical, and biological characteristics, maintaining the information obtained from that research, and working to apply that information with respect to the design, operation, or use of products or systems for optimising human performance, health, safety, and/or habitability (Stramler, 1993:127). It is from these theoretical underpinnings that the current chapter initiates a discussion of the literature that attempts to explain the fundamental relationships between the human factor and organisational performance.

The current chapter discusses the human side of the organisation. This human side is composed of aspects such as job satisfaction, employee commitment, gender, diversity, leadership style, work-life balance, person-organisation fit, and organisational culture among others (Sahu, 2007:51). The chapter discusses, from a literature perspective, how each one of these aspects and more, influences organisational performance. It is envisaged that at the end of the chapter, the reader will have a clear understanding of the underlying structural relationships between the human factor and organisational performance.

3.2 ORGANISATIONAL COMMITMENT

One of the key pillars of the human factor approach postulates that an organisation can only prosper when its people are committed to that organisation (Macey *et al.*, 2009:29). This fact provides sufficient impetus to discuss the relationship between employee commitment and organisational performance. Employee commitment itself is a popular subject in research and most employers frequently highlight their desire for their organisations to employ more committed people in order to enhance organisational performance (Tay, 2009:1135).

Organisational commitment may be conceptualised from different angles (Tay, 2009:1135). As a result, one may safely conclude that there is no universally accepted definition. Mishra (2005:

90) defines organisational commitments as the emotional attachment and involvement of employees with their organisation that mediates the effect that certain personal, job and work factors have on specific outcomes: i.e. as a state within the individual that provides the means whereby these factors impact on various outcomes. Meyer, Srinivas, Jaydeep and Laryssa (2007:189) posit that organisational commitment may be perceived in terms of exchange considerations. Luchak and Gellatly (2007:789) argue that organisational commitment is more concerned with the extent to which members comply with organisational directives. These authors identify issues such as moral involvement, calculative involvement, and alienative alignment. This suggests that members are to be perceived as committed to the organisation if they implement instructions that emanate either from management or from policies within the organisation, and vice versa.

According to Mishra (2005:89) the two main forms of organisational commitment are attitudinal commitment and behavioural commitment. Among the two, attitudinal commitment is the one that has received more attention in research (Baruch & Winkelmann-Gleed, 2002: 337). The major focus of attitudinal commitment lies on the processes through which organisational members come to consider their relationship with their organisation (Jaramillo, Mulki & Marshall, 2005:711). This implies that organisational attitudinal commitment is a cognitive process by which members' goals and values are in harmony with those of the organisation. Attitudinal commitment may be defined as the relative strength of an individual's identification with and involvement in a particular organisation (Gellatly, Meyer & Luchak, 2006:333). Three constituent factors of attitudinal commitment are identified (Tay, 2009:1135) namely:

- a strong belief in and acceptance of the organisation's goals and values
- a willingness to exert considerable effort on behalf of the organisation
- a strong desire to maintain membership in an organisation

A summary of this view is that organisational commitment may be perceived in terms of the existence of a bond between a member and the organisation to which he/she is affiliated (Baruch & Winkelmann-Gleed, 2002:339). For a bond to be attitudinal commitment, it has to reflect an individual's identification. In behavioural commitment, the locus of attention shifts to how the

member overtly manifests his/her commitment to the organisation though such manifestations may be through actions that include extra attendance, tenure and performance (Iqbal, 2010:22). The member is willing to perform certain extra roles and accept certain sacrifices so that the entire organisation can benefit (Gautam, Dick, Wagner, Upadhyay & Davis, 2005:308).

Evidence from research (Chughtai & Zafar, 2006:39; Iqbal, 2010:16) suggests that higher organisational commitment leads to higher performance at both individual and organisational levels. Committed employees perform better in a wide assortment of jobs than those who are less committed (Savaneviciene & Stankeviciute, 2010:427). In addition, turnover of those who are more committed is negligible, even when alternative employment opportunities are available (Okanya, 2007:27). Organisational commitment is now regarded as a more accurate predictor of turnover than individual differences in job satisfaction (Dushon & Plowman, 2005:809). It has also been suggested that the level of employee commitment can be an important indicator of overall organisational effectiveness, especially if it is a goal of the management to employ individuals who identify with and are involved in the organisation (Mishra, 2005:90).

Chen and Francesco (2003:490) conducted research on the relationship between the three components of commitment and employee performance in China. This study was motivated by Meyer and Allen's (1997:12) groundbreaking three-component conceptualisation of organisational commitment. The three components are affective commitment, continuance commitment and normative commitment. The first component, effective commitment, refers to the extent to which a member is emotionally attached to and identifies with and is willing to become involved in the organisation (Tayyab, 2007:2). The second component, continuance commitment refers to commitment based on the employee's perceived opportunity costs should he/she make a decision to leave the organisation (Tsai & Huang, 2008:566). The third component, normative commitment, refers to the extent to which an employee feels obligated to remain with the organisation (Tayyab, 2007:3). The findings of the study indicate that normative commitment, unlike the other two components of commitment, has no main effect on performance (Meyer, Stanley, Herscovitch & Topolnytsky, 2002:20)

Farndale, Hope-Hailey and Kelliher (2009:5) explored the relationship between the perception of employees from four organisations in the UK on performance management and their commitment to the organisation. In addition the study sought to examine the mechanisms by which these perceptions translate into employee attitudes and behaviours. Results of the study indicate that the interconnection between the experiences of employees with regard to performance management practices and their level of commitment is strongly mediated by related perceptions of organisational justice (Farndale *et al.*, 2009: 9). Organisational justice refers to a wide range of employee behaviours and underscores the importance of the ideals of justice and fairness as a requirement for organisations to function effectively (Gratton & Truss, 2003:75). In addition, results of the study also show that a relationship is mediated by the level of employee trust in the organisation. Organisational trust may be defined as a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviours of another (Purcell *et al.*, 2003:45). These results imply that it is important for one to observe the actual experiences of performance management practices and outcomes at employee level, and to consider the organisational context, in order for one to understand their effect on performance (Walumba, Wang, Lawler & Shi, 2004:515).

Studies focusing on organisational commitment have unearthed several challenges associated with the subject (Tsai & Huang, 2008:565). Firstly, there is scant evidence of the development of theories about organisational commitment (Farndale *et al.*, 2009:5). This can be attributed to the fact that there is little information that is available to assist in doing so as most studies have not approached the topic in a systematic and comprehensive manner. Secondly, the abject non-availability of cross validation investigations into the appropriate theories of organisational commitment denotes that the external validity of most studies is treated with skepticism (Mishra, 2005:90). Moreover, very little is known about the consequences of commitment for individuals as well as their organisations and this emanates from the widespread treatment of employee commitment as a dependent variable (Wasti, 2005:301).

3.3 LIFE SATISFACTION

Life satisfaction has emerged as a significant factor in organisational behaviour (Schmitter, 2003:9). As defined by Diener and Diener (2002:654) life satisfaction is the cognitive component of subjective wellbeing. Subjective wellbeing may be perceived as an individual's evaluation

about his or her quality of life (Ye, Yu & Li, 2012:549). Life satisfaction measures the overall wellbeing resulting from one's appraisal of life in general (Graves, Ohlott & Ruderman, 2007:50). It is an individual's conscious, cognitive appraisal of the quality of his or her life (Headey & Wearing, 2002:51). Diener, Suh, Lucas and Smith (2001:276) allude to the fact that life satisfaction is an enduring indicator about an individual's successful adjustment to changes in life. Sung-Mook and Effy (2004:548) describe it as an emotional reaction of an individual to the life consisting of work time, spare time and time after work as well as expressing an individual's satisfaction about life. The aforementioned definitions imply that life satisfaction overarches into all dimensions of an individual's life.

The literature that addresses the subject of life satisfaction is in abundance. Lent, Taveira, Sheu and Singley (2009:194) primarily attributed life satisfaction to personality factors, but also highlighted that it may be determined by genetic and social-cognitive apparatuses such as goal-directed activity, self-efficacy, outcome expectations and environmental support and resources as well. In support, the findings of a study conducted by Abolghasemi and Varaniyab (2010:748) show that both resilience as well as perceived positive stress are positively related to life satisfaction. This suggests that an increase of resilience as well as a decrease of stress leads to increased life satisfaction as it enables an individual to feel better and to develop resources for coping with life (Horgan & Mohalu, 2006:414). Demographic, environmental and interpersonal correlates of life satisfaction also have an influence in shaping an individual's life satisfaction (Koohsar & Bonab, 2011:956). Schmitter (2003:9) adds that factors such as taking pleasure in life, finding life meaningful, consistency at the matter of reaching goals, positive individual identity, feeling well physically, economical security and social relationships are also important life-satisfaction indicators. Therefore, life satisfaction is a complex and multi-dimensional construct.

It is interesting to note that in certain contexts, life satisfaction may be higher in males than in females. Bastug and Duman (2010:4892) found that life satisfaction was higher in males than in females in an environment where males were more involved in physical activities than females. This implies then that greater involvement in physical activity enhances an individual's life satisfaction. Ozer and Saçke (2011:517) also found that procrastinators have a lower life satisfaction than non-procrastinators while individuals with intellectual difficulties have a lower

life satisfaction than those who do not (Lucas-Carrasco & Salvador-Carulla, 2012:1106). Palmer, Donaldson and Stough (2002:1093) stress that individuals who have a high life satisfaction level are able to motivate themselves when they encounter misfortunes, do not allow adversity and negative developments to prevent them from thinking, are always assisting others and are seldom pessimistic. Therefore, organisations may benefit by nurturing high levels of life satisfaction among their human resources (Rode, 2005:1205)

On the socio-cognitive front, research has provided evidence that attachment security leads to a higher job and life satisfaction (Sumer & Knight, 2001:659; Nickerson & Nagle, 2005:233). Conversely, individuals who have avoidant attachment show a lower life satisfaction and are prone to mental health problems (Kirkpatrick & Shaver, 2002:269). Guney, Kalafat and Boysan, (2010:1213) found a negative correlation between life satisfaction and psychological conditions such as depression, anxiety and hopelessness. This suggests that life satisfaction is a dimension of mental health and has an impact on an individual's satisfaction with life (Duffy & Richard, 2006:548). Zhang and Howell (2011:1263) compared the relationships between personality traits, time perspectives and life satisfaction. In their study, it was concluded that there is a positive association between these three constructs. This implies that an individual's disposition and their life satisfaction may be attributed to their personal as well as social experiences to time (Dahl, Nesheim & Olsen, 2009:11).

Studies conducted by Arrindell, Heesink and Feij (2001:8171) and Ye *et al.* (2012:548) reported that there is a close relationship between life satisfaction and self-esteem. While self-esteem is a predictor of life satisfaction across both genders, there is no evidence of significant effects of life satisfaction on self-esteem. This denotes that although individuals who have a high self-esteem may be regarded as possessing high life satisfaction, some individuals who are satisfied with life may not necessarily show evidence of a high self-esteem (Ye *et al.*, 2012:548).

There are three conventional paradigms that address the relationship between life satisfaction and job satisfaction, namely (1) the spillover model, which maintains that there is a positive correlation between job satisfaction and life satisfaction; (2) the compensatory model, which maintains that the two constructs are negatively related; and (3) the segmentation model, which sustains that there is no correlation between the two factors (Bamundo & Kopelman, 2000:107).

However, most contemporary research tends to consistently support the spillover model (Ilies, Wilson & Wagner, 2009:94).

Zhao, Qu and Ghiselli (2011:49) concluded that work which interferes with both family as well as family roles have a negative association with an individual's job satisfaction and life satisfaction. This suggests that individuals who have a positive perception of their jobs will evaluate their quality of life better and are likely to be more satisfied with their life in general. Ghiselli, La Lopa and Bai (2001:29) also found low life satisfaction scores to be significantly correlated to high inter-role conflict and low job satisfaction.

3.4 GENDER

The subject of the influence of gender on organisational performance offers diverse perspectives, in contrast to the claim by Lin and Hsu (2008:3) that the topic has received limited attention. A groundbreaking study on the influence of gender on organisational performance was made by Kalleberg and Leicht (1991:136). The results of the study indicate that there is no difference between men and women in key areas such as organisational performance, entrepreneurial capability and self-confidence in business. These results are interesting because they contradict the widely held belief that women have a disadvantage to men in articulating areas such as entrepreneurship and organisational performance (Kravitz, 2003:148). Haslam and Ryan (2008:531) also found that there exists no gender differences in leadership abilities that are essential to enhancing organisational performance, notwithstanding the fact that the share price performance of companies that appointed men to their boards of directors were relatively more stable, both before and after the appointment, than in companies where the board appointee was a woman. However, Ryan and Haslam (2007:50) also noted that women are more likely to be appointed in leadership positions of organisational entities that are experiencing periods of crises. Consequently, some people erroneously link the poor performance of such organisations to their feminine leadership, even though the facts on the ground suggest otherwise (Haslam & Ryan, 2008:530).

Another issue that has attracted phenomenal scholarly interest is the gender diversity-organisational performance paradigm (Svyantek & Bott, 2004:300). Lin and Hsu (2008:16) argue that organisational context is the major determining factor of the impact of gender

diversity on organisational performance. This signifies that the influence of gender diversity on organisational performance is determined by contingent factors such as training, organisational size, and growth strategy, among others (Guy & Newman, 2004:289).

Results of some empirical studies point to the fact that there is a positive correlation between gender diversity and organisational performance. As proposed by McMillan-Capehart (2003:45) diversity originating from race and gender can be a source of competitive advantage for the firm, based on the resource-based view. Ali, Metz and Kulik (2008:3) concur that gender diversity provides competitive advantage to the organisation. However, these results can be contested since other studies conducted on the same issue came up with divergent results. For example, a review of nine diversity studies published between 1989 and 2003 and carried out by Svyantek and Bott (2004:300) on the gender-performance paradigm, interestingly reveals that in four studies there was no relationship between the variables; two found a positive relationship while negative effects were found in two and one found a non-linear relationship. In addition, Frink *et al.* (2003:142) conducted two studies on the relationship between gender diversity and performance in which they measured performance in a different way in either study. The results of the study indicate that maximisation of diversity optimises the organisation's performance. A conceptual framework of the relationship between gender diversity and organisational performance is illustrated in Figure 3.1.

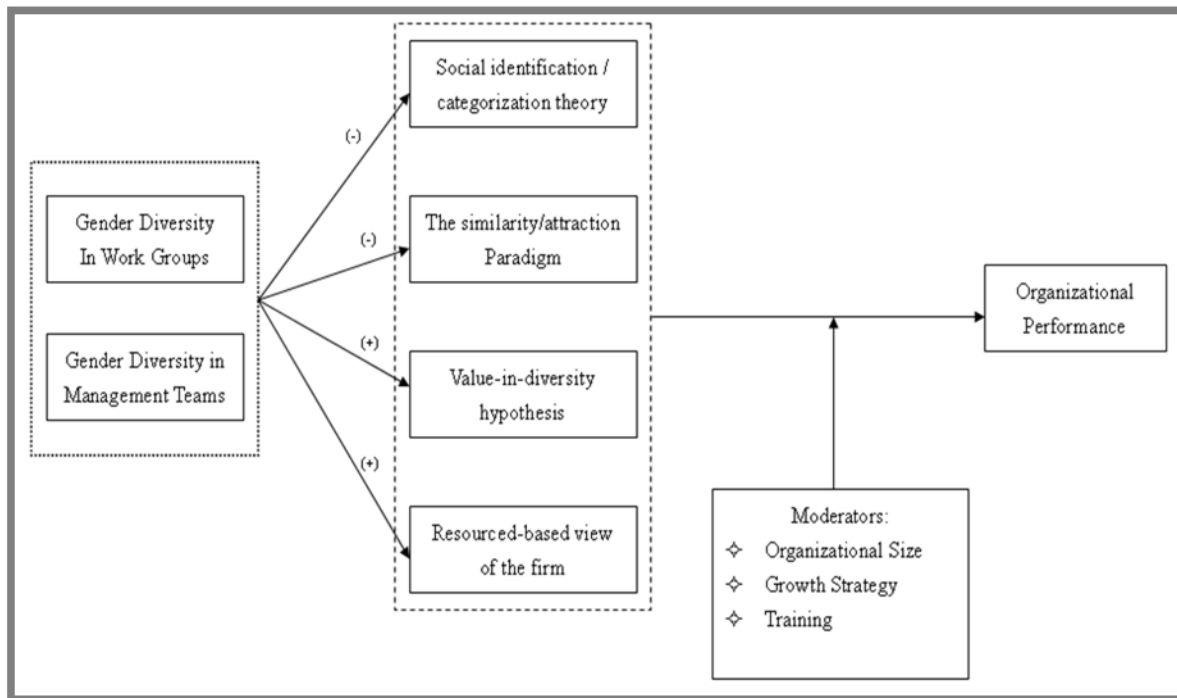


Figure 3.1: Gender Diversity and Organisational Performance

(Source: Lin & Hsu, 2008:17)

3.5 QUALITY OF WORK LIFE

The construct of quality of work life is not without many numerous definitions. Quality of work life is a comprehensive construct that includes an individual's job-related well-being and the extent to which work experiences are rewarding, fulfilling, and devoid of stress and other negative personal consequences (Shamir & Solomon, 2005:460). Saklani (2004:121) defined quality of work life as the quality of human experience as they interact in employee-organisation relationships. As defined by Walker (2002:72), quality of work life involves promoting a work environment conducive to the satisfaction of employees' needs. It involves the opportunity to make decisions about their jobs and the design of their workplaces (Cascio, 2003:6). Quality of work life may also be conceptualised in terms of need satisfaction (Efraty & Sirgy, 2001:36). In support, Sirgy, Efraty, Siegel and Lee (2001:242) define quality of work life as employee satisfaction with a variety of needs through resources, activities, and outcomes stemming from participation in the workplace. The authors propose seven dimensions of needs, which are associated with quality of work life, namely:

- health and safety needs (protection from ill health and injury at work and outside of work, and enhancement of good health)
- economic and family needs (pay, job security, and other family needs)
- social needs (collegiality at work and leisure time off work)
- esteem needs (recognition and appreciation of work within and outside the organisation)
- actualisation needs (realisation of one's potential within the organisation and as a professional)
- knowledge needs (learning to enhance job and professional skill and life satisfaction)
- aesthetic needs (creativity at work as well as personal creativity and general aesthetics)

Koonmee *et al.* (2010:23) highlight that when it was introduced in the workplace in the late 1950s, the concept of quality of work life mostly emphasised work design and work improvement. These authors further stress that a contemporary view is that quality of work life also includes other sub-concepts that influence job satisfaction and productivity. Examples of such sub-concepts include reward systems, physical work environment, employee involvement, rights and esteem needs (Cummings & Worley, 2005:22).

Research has established that there are deep-rooted structural relationships between quality of work life and other constructs. Greenhaus, Bedeian and Mossholder (2004:200) advocate that quality of work life is related to employee satisfaction and work-related behaviours. These authors maintain that when employees enjoy working in an organisation, their job satisfaction as well as their commitment to the organisation improves. It has also been noted that a healthy quality of work life improves an individual's societal experiences in terms of family and peer relations in addition to motivating individuals to fulfill their responsibilities and obligations in societal contexts (Bagtasos, 2011:5). This implies that a higher quality of work life correlates with lower work-to-family interference. An empirical examination conducted by Chiu *et al.* (2007:322) revealed that there is a significant correlation between work ability and quality of work life. Job satisfaction is also an indicator for quality of work life (Noor & Abdullar, 2012:741). This implies that a satisfied individual is willing to participate and this results in an

improvement on his/her quality of work life. A high quality of work life leads to higher satisfaction with life (Feldt, Kinnunen, & Maunao, 2000:463). Estryn-Behar *et al.* (2004:4) also concluded that quality of work life was considerably correlated with job satisfaction factors such as physical working environment, psychological support at work, time to devote to sport and lifestyle.

In terms of importance to the organisation, organisations that are able to offer good quality of work life to their employees have a good image and are likely to experience low employee attrition rates (Noor & Abdullah, 2012:742). Cascio (2003:35) argues that employees who work in organisations where quality of work life exists will like their organisations and feel that their work fulfills their needs. Koonmee *et al.* (2010:24) found that quality of work life has a positive impact on the three employee job-related outcomes: job satisfaction, organisational commitment, and team spirit. Consistently, a study conducted by Lee, Singhapakdi and Sirgy (2007:278) revealed that quality of work life has a positive impact on job satisfaction, organisational commitment, and camaraderie. These studies indicate why it is important for managers to thoroughly understand quality of work life in order to increase organisational performance.

3.6 DIVERSITY

Diversity is the inclusion of a variety of individuals who differ in race, gender, or culture in a group or organisation (Schumacher, 2010:5). Variety includes aspects such as uniqueness (an observable distinction from other people), which allows for fresh ways of evaluating problems, the ability to disagree in a constructive manner, and the application of novel strategies to tackle consistent challenges. Williamson, Parker, and Turner (2007:570) state that diversity has become a crucial reality in contemporary organisations such that human resource managers and executives have to contend with it on a daily basis. This probably explains why diversity studies have been co-opted into management programmes at most institutions of higher learning and why one's ability to manage diversity has become a prerequisite attribute for most management and professional jobs (Haslam & Reicher, 2007:125).

The relationship between diversity and organisational performance is well established in research. The most notable element in most of these studies is the emergence of two diametrically opposite perspectives, which has been termed the diversity-performance paradox.

On one hand, scores of researchers have concluded that enhanced diversity stimulates improved performance. For instance, the widely acknowledged, tried, and tested resource-based view of the firm (Barney, 1991:103) suggests a positive diversity-performance relationship. In support, results of a study conducted by Ferlie, Hartley and Martin (2003:10) contend that diversity yields economic benefits to the organisation. Conclusions reached by Bassett-Jones (2005:172) also support the view that diversity tends to boost diversification, an important point of emphasis for a firm to attain competitive advantages. However, the widely accepted Social Theory (Tajfel, 1978:70) offers a different viewpoint, postulating that the relationship between diversity and performance is predominantly a negative one. Pitts and Jarry (2005:21) attest that a high level of ethnic diversity potentially leads to process-oriented difficulties in the workplace and can negatively affect work-related outcomes. Ample evidence is also available which suggests that diversity can have a negative effect on the function of work groups and top management teams (Welbourne & Ferrante, 2007:527).

It is also interesting to note that several studies conducted on the diversity-performance relationship produced mixed results. Kwak (2003:6) found that diversity can either improve or be detrimental to organisational performance, depending on variables such as organisational culture, the strategies in place, and human resource practices. These results are consistent with the conclusion of Dwyer *et al.* (2003:1012) that the influence of diversity on outcomes may depend on contingency variables. Furthermore, empirical research by researchers (Jackson, Joshi & Erhardt, 2003:826; Svyantek & Bott, 2004:315) also produced inconsistent results suggesting that diversity can be either helpful or detrimental for organisations. In another study conducted by Richard *et al.* (2003:117) it was found that in cases where innovation was a core part of the organisation's strategy, racial diversity had the effect of improving organisational performance. However, organisational performance decreased whenever innovation received less emphasis. De Dreu, Bechthold and Nijstad (2009:25) recapitulate as they stress that research seems to support that diversity leads to differing performance outcomes.

It is noteworthy to throw a spotlight on the fact that there is a consensus in the literature discussed in this section that diversity has an influence on organisational performance, but there is no general agreement as to how it does so. Such is the paradoxical nature of the relationship

between diversity and organisational performance. This implies that the generalisation of most diversity-performance relationship studies may be contested.

3.7 CREATIVITY

Creativity has been recognised as the basis for innovation and has many benefits which include improved communication, promotion of learning and development of new ideas and solutions (McFadzean, 1998:309). In an era of global competition, creativity produces fresh ideas which are the most valuable raw materials (Cocks, 1990:49). Contemporary organisations heavily depend on creativity for their competitive advantage (Martins & Martins, 2002:57). Clegg and Birch (1998:23) advocate that creativity, which is considered by most to be of critical importance, provides the single greatest prospect for any organisation to improve its performance. Because ideas are conceived by individuals within an organisation, it implies that by allowing individuals within an organisation the freedom to unleash their creative abilities, the organisation may enhance its chances of succeeding and creating a competitive edge (Kinzl *et al.*, 2004:211). Creativity leads to better performance and greater productivity will eventually translate into higher job satisfaction. Gyskiewicz, Taylor and Fleenor (1995:59) posit that if one is in a job compatible with one's creative style, job satisfaction will be high.

It is widely accepted that creativity has a positive impact on organisational performance (Hogan 2003:91). Ash, Dineen and Noe (2002:725) argue that organisations in which creativity is not promoted are likely to experience two unfortunate trajectories, namely a lack of innovation resulting from myopic opinions, and the desire to maintain the status quo despite environmental signals that change is needed. In agreement, Beffort and Hatrup (2003:28) dwell on the fact that a dysfunctional homogeneity may become entrenched in an organisation where low levels of creativity exist, leading to conformity and a lack of innovation. The authors maintain that such homogeneity can lead to inflexibility and resistance to change in later stages of the organisation's life cycle. This can therefore lead to a decrease in organisational performance. Billsberry *et al.* (2005:3) also contend that low levels of creativity in organisations are not desirable because they would lead to organisational cloning and the recruitment of 'right types' who would cause the organisation to occupy an increasingly narrow ecological niche. This can also deter the organisation's progress.

3.8 JOB SATISFACTION

Job satisfaction is another critical constituent element of the human factor (Ellickson & Logsdon, 2001:173). This provides an impetus to discuss the relationship between job satisfaction and organisational performance. To accurately capture the dynamics of the job satisfaction-organisational performance paradigm, it is necessary to understand the concept of job satisfaction from its basic principles (Irving & Montes, 2009:432). A correct comprehension of the concept of job satisfaction facilitates a better understanding of the synergy that may or may not exist between job satisfaction and other constructs and concepts such as organisational performance, among various others.

According to Islam and Siengthai (2009:4), job satisfaction may be perceived as a positive emotional state resulting from the appraisal of one's job or job experiences. In his earlier widely acknowledged study, Lockie (1969:310) defined job satisfaction as "a function of the perceived relationship between what one wants from one's job and what one perceives it as offering". Sempane, Rieger and Roodt (2002:25) also define job satisfaction as the individual's perception and evaluation of the job. These authors further point out that in most cases; the person-environment fit paradigm has been widely recognised as the most appropriate explanation for job satisfaction. This denotes that an employee's job satisfaction is likely to be higher when their job environment is such that it fulfils their needs, values, or personal characteristics, while the opposite is also true (Fong & Shaffer, 2003:559). However, Ellickson and Logsdon (2001:176) make a distinct departure from being preoccupied with the theoretical approaches used to examine job satisfaction and they observe that environmental factors and personal characteristics are the two most influential variables that determine of the level of job satisfaction. This implies that work-related factors and individual attributes and characteristics are the two major antecedents of job satisfaction (Homburg & Stock, 2005:393).

It is well known that employee intrinsic motivation has an impact on organisational performance and research has shown that motivated employees tend to perform better (Islam, 2002:64). It is also worthwhile to note that most of the studies on the relationship between job satisfaction and performance are focused on the satisfaction and performance of individual employees. What makes this micro-inclination towards the job satisfaction performance relationship by most

researchers difficult to understand is the fact that it has already been established in research that it is organisational performance rather than individual performance that reflects the way employees experience their work (Schneider *et al.*, 2003:848). It may therefore be maintained that organisational productivity and efficiency is attained by satisfying the employees and being sensitive to both their physiological and socio-emotional needs in a holistic manner (Cole & Cole, 2005:3). However, it is logical to assume that total organisational performance is a summation of the performances of all the individuals in the organisation. This may entail that the side that one may take on the individual performance- organisational performance debate is of no great effect as there is symbiosis between the two concepts.

A study conducted by Peterson and Luthans (2006:157) reports that there a positive correlation between the job attitudes of individuals and their performance. A meta-analysis conducted by Judge *et al.* (2001:405) found a positive relationship between individual job satisfaction and factors such as motivation, job involvement, organisational citizenship, and job performance. The same study claims that job satisfaction is negatively related to absenteeism, turnover, and perceived stress. A meta-analysis is a study that statistically integrates the results of several studies that examine a set of related research hypotheses (Cole & Cole, 2005:3). In another meta-analysis conducted by Harter, Schmidt, and Hayes (2002:264) it was found that there is a positive relationship between employee satisfaction and the productivity, profit, turnover, employee accidents, and customer satisfaction in nearly 8000 business units in 36 organisations across the five continents of the world.

Schneider *et al.* (2003:846) carried out an explorative survey of the relationships between employee satisfaction and several financial performance and market performance indicators such as the return on assets (ROA), earnings per share (EPS), based on data collected in 35 organisations over a period of 8 years. Results of the study indicate that there is a positive correlation between attitudes concerning satisfaction with security, satisfaction with compensation, and overall job satisfaction with both ROA and EPS. This signifies that job satisfaction has a direct influence on the organisations's financial and market performance.

Corporate Leadership Council (2003:11) conducted a job satisfaction survey of over 40 percent of the companies that were listed in the top 100 of Fortune 500 companies. The results of the survey are consistent with those of other studies on the same topical issue. The study concluded

that employee satisfaction, behaviour, and turnover predict the following year's profitability, and that these are even more strongly correlated with customer satisfaction. After conducting a survey of multinational companies, Price Waterhouse Coopers (2010:2) reports that job satisfaction and decreased personnel turnover were found to be major contributors of long-term shareholder return. Commenting on this profound relationship, Wright, Gardner, Moynihan and Allen (2005:425) state the following observations:

- Unhappy employees are less productive and more likely to have higher absence rates.
- Satisfied employees are more productive, innovative, and loyal.
- Increases in job satisfaction lead to increases in employee morale, which lead to increased employee productivity.
- Employee satisfaction leads to higher customer retention.

Zohir (2007:7) found that financial benefits and social welfare, security and leave provisions were some of the factors that have a positive impact on the quality of work life of employees. Such benefits have an impact on a firm's performance. The author points to the fact that even non-financial benefits also have a positive influence on quality of work life and ultimately firm performance. Examples of these non-financial benefits include cafeteria, working hours, transport facilities, leave conditions, job-related training, family life, living accommodation by employer, and company health and safety policy (Jiang, 2012:231). Employee satisfaction can also be derived from these benefits, leading to higher organisational performance. Poor workplace environment manifested through poorly designed workstations, unsuitable furniture, insufficient ventilation, poor lighting, high noise levels, and inadequate safety precautions can also lead to a decrease in productivity leading to poor organisational performance (Chandrasekar, 2011:2).

In the narrow context of public organisations, Kim (2005:246) suggests that good public servants are those who exhibit qualities such as high job satisfaction, high organisational commitment, high morale and strong organisational loyalty. Employees who meet these criteria are likely to contribute to enhanced organisational performance (Kim, 2005:248). This implies then that public organisations whose employees have these inherent characteristic traits will perform

better than others. It also hints at the importance of people in organisations, since people are the promoters of excellent organisational performance (Jiang, 2012:231).

The results obtained in the studies discussed so far have been subjected to criticism. A study by Zohar and Luria (2005:621) reports that while some firms with the strongest financial performances often have employees indicating high levels of employee satisfaction, employees in companies that have a miserable financial record may also report high levels of job satisfaction. These results trigger a lot of questions regarding the relationship between job satisfaction and corporate financial performance. In addition, there are questions regarding the use of customer satisfaction as an explanation of the link between job satisfaction and organisational performance (Irving & Montes, 2009:433). For instance, organisations must construct their own models because it is not proper to rely on one variable, namely customer satisfaction, in understanding the relationship between employee satisfaction, customer satisfaction, and financial performance (Wright *et al.*, 2005:414). Moreover, the definitions of employee satisfaction vary from organisation to organisation, and even within different departments or portfolios within the same department (Peterson & Luthans, 2006:161). This further makes the generalisation of studies on this topic questionable. The Corporate Leadership Council (2003:4) also contends that employee attitudes alone cannot influence job satisfaction. Instead, their behaviour also has to be taken into consideration. It is a fact that the issue of employee behaviour as a determinant factor of organisational performance has been disregarded in the past (Randal, 2007:47). The issue of contrasting results further exacerbates the debate on the generalisation of job satisfaction-organisational performance research. For instance, contrary to established conclusions, Islam and Siengthai (2009:13) confirm that quality of life issues have a negative but not significant relationship with organisational performance. This being the case, it may be advisable to consider the issue of context when analysing the results of studies on this topic.

3.9 ABILITY UTILISATION

Hartline and Ferrell (1996:53) argue that ability utilisation is a form of employee empowerment, and that it has a positive influence on the attitudes and behaviour of employees. In a study conducted by SQW Consulting (2010:4), it was also found that ability utilisation helps the

organisation to recruit and retain staff, to benefit from enhanced motivation and improved business performance. In the context of this study, this factor appears to be a significant contributor to job satisfaction. Clark (2001:223) suggests that if a job is interesting and provides the opportunity of an individual to utilise his/her skills, the individual is bound to enjoy the job and the likelihood of the individual leaving the organisation is significantly reduced.

The influence of ability utilisation on organisational performance can also be discovered from its relationship with various employee-related variables. Billsberry *et al.* (2005:3) point to the fact that the fit between a person's ability to utilise his skill is associated with behavioural and affective outcomes, such as greater organisational commitment, better job performance and longer tenure. From this perspective, it can be perceived that the influence of ability utilisation on job satisfaction provides useful discernment into the relationship between this factor and organisation performance (Zhang, 2007:83). According to Nelson and Billsberry (2007:4), studies of the impact of ability utilisation fit on individuals exhibit significant correlations between ability utilisation and greater levels of job satisfaction, organisational commitment, organisational citizenship behaviours, and tenure. The author adds that it is also a known fact that people want to work in organisations where they believe their skills and abilities will be useful and that, in most cases, organisations opt to recruit people who have higher abilities in terms of skill and knowledge. Yen and Ok (2011:8) found that there is a positive relationship between ability utilisation and organisational effectiveness. Kitapçı and Elci (2007:144) also endorse the existence of a positive relationship between ability utilisation and organisational commitment, which further influences overall organisational performance. Tepeci (2001:194) conducted a study on the relationship between ability utilisation, employee job satisfaction, intent to quit, and willingness to recommend the organisation beyond that explained by organisational culture and individual values. Results of the study show that ability utilisation is a significant predictor of organisational performance.

3.10 PERSON-ORGANISATION (P-O) FIT

The concept of person-organisation (P-O) fit offers an interesting and insightful dimension to the relationship between the human factor and organisational performance (Brown, 2005:468). P-O fit may be defined as the congruence between the norms and values of organisations and the values of persons (Katapçı & Elci, 2007:144). This definition places importance on the existence

of coherence between personal and organisation beliefs or individual and company goals. Karakurum (2005:8) also comprehensively defined P-O fit as the compatibility between people and organisations that occurs when either people or the organisation itself provide what the other party needs, or, when they share similar fundamental characteristic or both, in the model. In this way, both the supplementary and complementary perspectives are incorporated into definition. The underpinning idea behind the P-O fit pertains to the interaction between people and the organisations they work for, based on the needs of either party. It is an employee-organisation interface. According to Bright (2007:363) P-O captures the existence of congruity between the characteristics of individuals (i.e. goals, skills, and values) and the characteristics of organisations (i.e. goals, values, resources, and culture). There are two ways in which harmony or congruence between individuals and organisations may be achieved. These are supplementary congruence and complementary congruence. In supplementary congruence, the characteristics of individuals are similar to those of the organisation, whereas in complementary congruence, there is one or more missing element/s between the characteristics of individuals and those of organisations (Bright, 2007:363). Billsberry *et al.* (2005:3) discovered five major domains influencing employee's sense of fit, namely:

- the people they work with
- the requirements of the job
- organisational level matters
- conditions of employment
- work/life balance

The relationship between P-O fit and organisational performance is well established in research. A meta-analysis by Kristof-Brown, Zimmerman and Johnson (2005:281) examined an individual's fit to the organisation, jobs, vocations, teams, and supervisors. The study cited 172 studies and is distinguished as having brought more attention to the subject of P-O fit. Results of the study demonstrate that individuals who do not fit their organisations tend to resign from their organisations. In support, Griffeth and Hom (2001) state that high organisational turnover may

be a direct antecedent of an incompatibility between the employee's personality characteristics and the working environment. Where a person-environment fit exists, the individual is likely to stay on the job for a long period of time (Schumm, Bell & Resnick, 2001:153).

Bright (2007:361) investigated the relationship between public service motivation (PSM) and the job performance of public employees. PSM usually refers to aspects such as service ethic, calling, and altruistic intentions that motivate individuals to serve the public interest. The study was motivated by the fact that previous studies on the relationship between PSM and the performance of public employees had come up with opposing findings. Examples of studies whose results are at variance with each other were conducted by Brown (2005:468) and Kristof-Brown *et al.* (2005:281). The author hypothesised that person-organisation fit (P-O fit) was the missing link that may explain these inconsistent findings. Results of the study indicate that P-O fit, rather than PSM, is the factor that has a direct significant influence on the job performance of public employees. There is therefore congruence between the results of that study and those obtained in the study by Kristof-Brown *et al.* (2005:281).

The approaches discussed in this section show that there are contrasting views on the relationship between P-O fit and organisational performance. The discussion has shown that the P-O fit is a positive attribute that is to be promoted. However, the P-O fit also presents dangers to the organisation and should be promoted carefully, if it is to be beneficial to the organisation.

3.11 WORK-LIFE BALANCE

The opportunity to balance work and life (work-life balance practice) may be one area that may influence the attitudes of employees. This topic has been researched by Schutte and Eaton (2004:12) and Beauregard, Lesley and Henry (2009:9). Work-life balance practice refers to aspects that include organisational support for the care of dependants, flexible working hours, family or personal leave (Estes & Michael, 2005:6). Schutte and Eaton (2004:12) attest that the mechanisms by which the provision of work-life practices affects both employee behaviour and organisational performance remain unclear and under-researched. Research conducted by Premeaux, Adkins and Mossholder (2007:720) also found no effects of work-life practices on organisational performance. Beauregard and Henry (2009:11) also argue that the provision of work-life practices does not necessarily entail an increase in organisational performance, and add

that there is scant evidence of research that investigates the link between work-life practice and organisational performance.

Nevertheless the little available literature on this matter helps to shed some light on the topic. For example, in terms of job attitudes, Wayne, Musisca, and Fleeson (2004:123) found that job satisfaction and organisational commitment was lower in employees who reported high levels of both work-to-life and life-to-work conflict. This obviously has repercussions for both employee as well as organisational performance. Beauregard and Henry (2009:12) also suggest that the availability of work-life balance practices produces positive work-related attitudes in employees and the availability of various organisational resources, inclusive of flexible working hours, has been linked to job satisfaction. Figure 3.2 encapsulates the proposed relationships that exist between the provision of work-life balance practices and organisational performance.

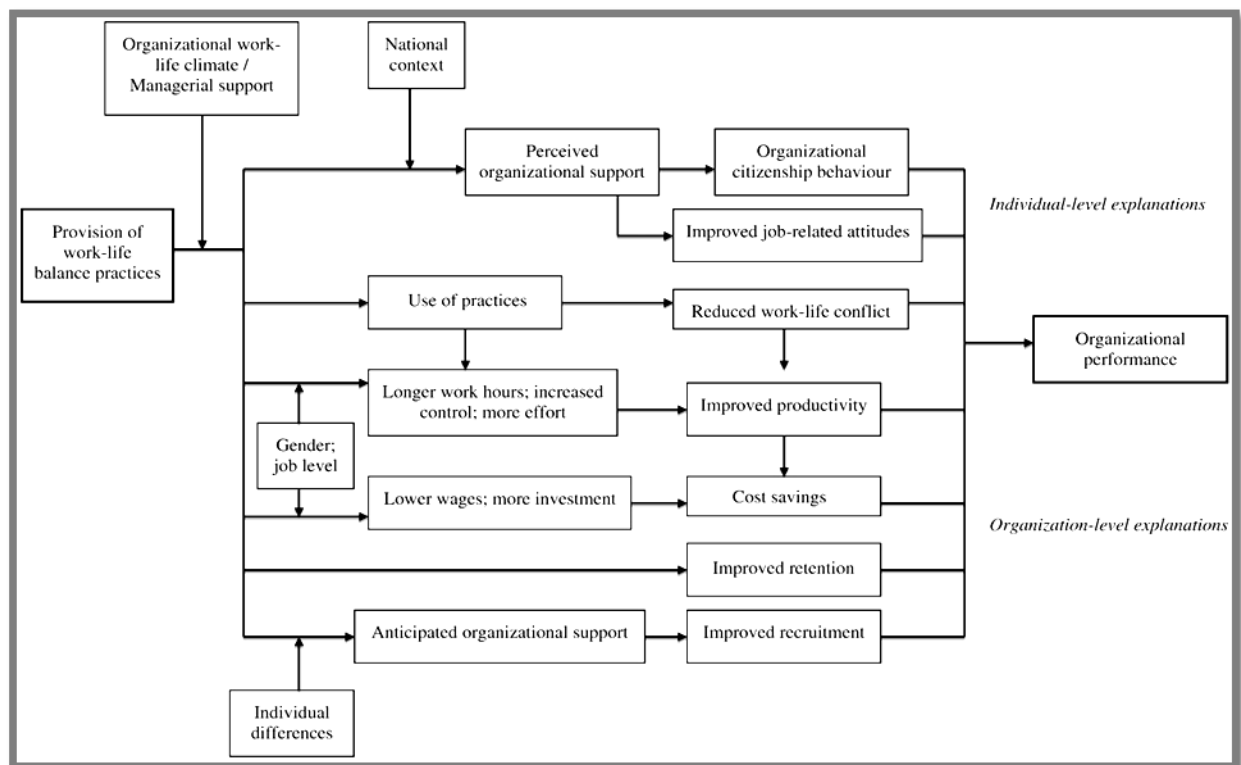


Figure 3.2: Work-life Balance Practices and Organisational Performance

(Source: Beauregard & Henry, 2009:10)

A consideration of work life balance has implications for organisations. As captured by Beauregard and Henry (2009:12), if management is unsupportive of employees' efforts to balance work and personal responsibilities, and workers anticipate career penalties should they make use of the available practices, organisations may find that perceptions of organisational support are not enhanced and outcomes such as improved citizenship behaviour and organisational performance are therefore not realised. This ultimately means that work-life balance is an important human component that can determine the overall effectiveness and survival of the organisation.

3.12 AUTONOMY

The autonomy of employees is a crucial element of the human dimension of any organisation (Cieri & Kramar, 2005:22). Jobs with a high degree of autonomy engender a sense of responsibility which contributes to high levels of job satisfaction and motivation (Parker & Wall, 1998:9). Research in various organisational settings has shown that while there was an increase in the level of job satisfaction of employees when they were given more autonomy in the workplace to determine their routines, there was also a corresponding stronger need for frequent communication and adjustment (Brunetto & Farr-Wharton, 2004:52). The degree to which a job provides substantial freedom, independence and discretion of the employee in his/her job influences the level of job satisfaction that the employee experiences (Cieri & Kramar, 2005:31).

Traditionally, the belief in psychology was that it is improper to give too much autonomy to employees as this makes it difficult to control them (Cieri & Kramar, 2005:23). However, emergent perspectives stress that employee autonomy is positive as it can play an important role in organising, motivating, and directing human activity (Jiang & Li, 2008: 365). The findings of a study conducted by Rangriz and Mehrabi (2010:50) confirm that there is a significant correlation between employee autonomy and the performance of employees. The positive relationship between these variables is consistent with Goleman, Bayatzis and McKee's (2002:51) assertion that employees who have a greater autonomy in their duties have a higher motivation and are more productive, which also leads to enhanced organisational performance.

3.13 ORGANISATIONAL CULTURE

As defined by Rashid, Sambasivan and Johari (2002:410), organisational or corporate culture may be defined as the set of values, beliefs, and behaviour patterns that form the core identity of organisations, and help in shaping the behaviour of employees. These authors further posit that by doing this, corporate culture brings the selection mechanisms that make it assume the role of a cognitive map that influences the way in which context is defined. It is a pattern of beliefs, symbols, rituals, myths, and practices that have evolved over time in an organisation (Lee & Yu, 2004:346). This entails that corporate culture describes how things are done within the organisation. For instance, one is actually observing the culture of the organisation when one uses such words as ‘hardworking, friendly, professional, and ethical’ as one describes the general behaviour of people in an organisation. According to Montana and Charnov (2008:28), organisational culture and corporate culture may be used interchangeably despite the slight variations in meanings. The difference lies in that, while all corporations are organisations, not all organisations are corporations. For example, organisations such as religious institutions, not-for-profit groups, and government agencies are not corporations. However, if used appropriately, the interchangeability of the two concepts may not produce problems.

Lee and Yu (2004:343) specify that organisations should work toward attaining a healthy organisational culture in order to enhance organisational performance. These authors suggest that a healthy organisational culture has the following characteristics:

- acceptance and appreciation of diversity
- regard for and fair treatment of each employee as well as respect for each employee’s contribution to the company
- employee pride and enthusiasm for the organisation and the work performed
- equal opportunity for each employee to realize their full potential within the company
- strong communication with all employees regarding policies and company issues
- strong company leaders with a strong sense of direction and purpose

- ability to compete in industry innovation and customer service, as well as price
- lower than average turnover rates (perpetuated by a healthy culture)
- investment in learning, training, and employee knowledge

Research on organisational culture reveals that culture influences employee behaviour and attitudes (Stewart, 2010:11). This presupposes that culture may also influence organisational performance. In support of this notion, Sadri and Lees (2001:854) assert that positive corporate cultures furnish the organisation with a variety of benefits, a development that ultimately leads to competitive advantage, whereas resistance to change characterises most organisations that have negative cultures. This may freeze the organisation into its status quo, even in situations that merit strategic or structural changes. Robbins and Sanghi (2007:82) also maintain that organisations with the participative culture outperform those with other cultural types.

Bititci *et al.* (2006:1325) conducted a study which was aimed at modeling the dynamic relationship between organisational culture, management style, and organisational performance management. In this study it was found that organisational culture and management style are interdependent variables in the lifestyle of a performance management system. This denotes that these three variables evolve in parallel with each other and that when a performance management system is implemented successfully through culture change, a more participative and consultative style of management may emerge, and the correct use of performance management systems may also lead to the emergence of an achievement culture (Bititci *et al.*, 2006:1339). In addition to providing guidance towards the management styles that would be appropriate when implementing performance management systems in different cultural settings, the results of the study also imply that the readiness of an organisation to implement performance management systems can be achieved more when a better understanding of management styles and organisational culture exists (Bititci *et al.*, 2006:1342)

Rashid, Sambasivan and Johari (2002:708) did research on the association between corporate culture, organisational commitment and organisational performance. The results of the study indicate that a relationship between corporate culture and organisational commitment exists and

that corporate culture and organisational commitment both have an impact on organisational performance. This signifies that management has the role of developing the correct culture-commitment mix within the organisation in order to enhance performance. The interconnection between corporate culture, organisational commitment, and financial performance is encapsulated graphically in Figure 3.5.

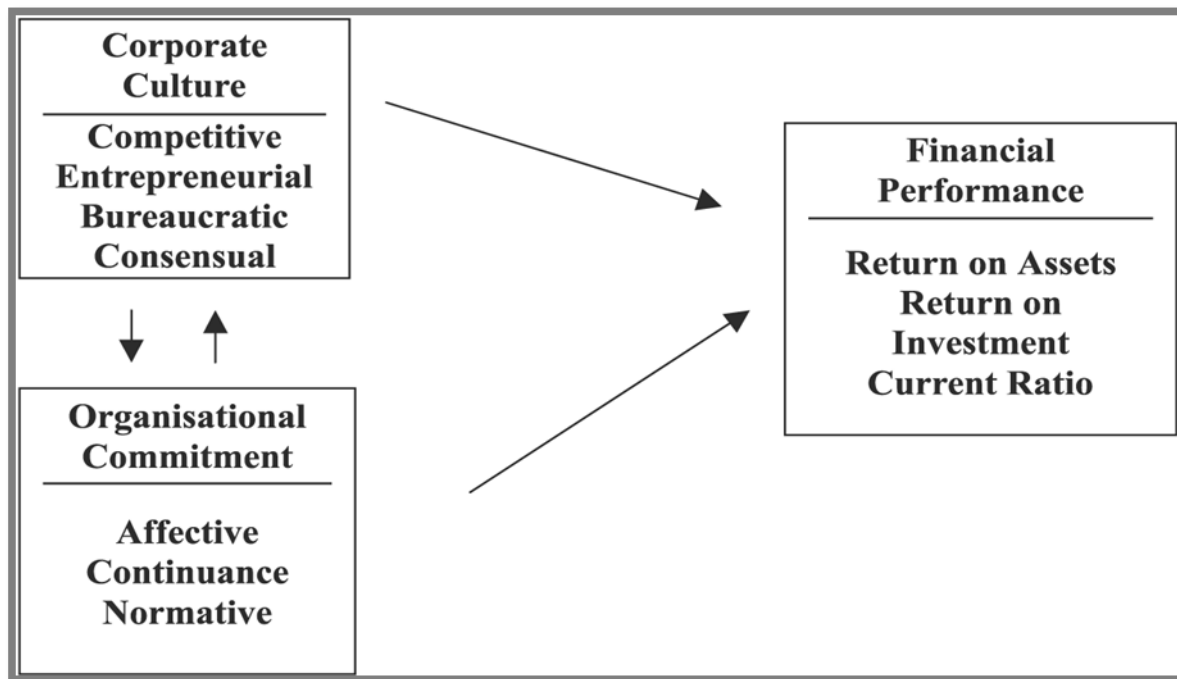


Figure 3.3: Corporate Culture and Organisational Performance

(Source: Rashid *et al.*, 2002:717)

Evidence from research seems to suggest that there is a positive relationship between corporate culture and the financial performance of a firm. For instance, the results of a study carried out by Saa-Pere and Garcia-Falcon (2002:123) indicate that those organisations that gave a major emphasis on all critical constituencies of management (e.g. customers, shareholders and employees) and leadership from managers at all levels, had a better performance than those that did not possess those cultural traits. The study further suggests that corporate culture was becoming an important determinant of either success or failure of organisations. These results are consistent with those obtained in a study conducted by Lok, Westwood and Crawford (2005:490), which endorse the existence of a correlation between organisational culture and the

financial performance of an organisation. Furthermore, the study found that cultural dimensions may be the differentiating feature between financially effective organisations and those that are financially ineffective.

Lee and Yu (2004:340) investigated the possible relationships between organisational culture and performance among Singaporean companies specifically in three different industries – high-tech manufacturing, hospitals, and insurance. The study had two objectives, namely, to investigate whether it is possible to operationalise the culture construct along distinct, repeatable dimensions and to determine the extent to which culture influences organisational performance. Results of the study indicate that the culture construct can indeed be operationalised along distinct repeatable dimensions. Results obtained on the second objective of the study were dyadic. The study found correlations between cultural values and organisational performance in a few firms. For instance, although there were correlations between these two variables in insurance firms, there were no significant correlations within hospitals. These mixed results do not give sufficient evidence to provide a definite pattern that can be generalised to other samples. However, these results imply that since cultural values vary across industries and contexts, valid results may only be obtained when research on the relationship between culture and performance takes cognisance of this fact.

Despite the availability of a wide array of research studies that attempt to understand the dynamic relationship between organisational culture and performance, Lok *et al.* (2005:496) attest that recent studies seem to suggest that this relationship is not well understood. Various controversies linked to culture have ensued. Parker (2000:12) points out that although it is a widely accepted fact that organisations are cultural phenomena, it is also true that cultural assumptions can inadvertently stifle dissent within the organisation, and lead to the promotion and entrenchment of management propaganda and dogmas. The author further points to the long-standing debate about the cultural and structural (or informal and formal) conceptualisations of organisations. This debate is yet to be resolved.

The fact that complex organisations tend to have several overlapping and intertwined cultures and sub-cultures existing within the same organisation is well established in research (Schein, 2005:67). There is therefore a problem in that most neat typologies of cultural forms presented in most studies disregard this fact. Using figurative language referring to a plant root to represent

culture, Schein (2005:68) draws attention the fact that organisations are the offspring of culture rather than vice versa. This addresses the controversy pertaining to which of these two is the product of the other. The author's assertion implies that organisations are a product of culture. The mixed results obtained in most studies that sought to investigate the culture-performance link act as ample evidence of the controversy surrounding this topic. These results show that culture and performance seem to have a mutually reciprocating relationship. However, the issue is moderated by industry type and size of organisation, among other varied contexts.

3.14 WORKPLACE ENVIRONMENT

Chandrasekar (2011:16) conducted a study on working environment and its impact on organisational performance in public sector organisations in India. Results of the study show that factors such as interpersonal relationships' control over the environment, shift, emotional factors, job assignment, job assignment, overtime duty, and extended work can influence the attitude of employees. In addition, physical aspects of the workplace such as office space, furniture and storage of materials also shape the attitudes of employees. Job factors such as interesting work, the opportunity to develop special abilities, adequate information, enough authority, sufficient help equipment, teamwork and competent supervision, among others, were identified as factors that can motivate employees' performance to attain or even exceed the expected targets. Earlier research by Mohammad (2006:215) also supports the notion that an improved workplace increases employee motivation and productivity. A follow-up study conducted by Estes and Wang (2008:221), in which over 2000 office workers were surveyed, found that 90 percent of the respondents perceived that an improved workplace design and layout could result in improved overall employee performance, which will result in improved performance of the organisation.

3.15 OTHER HUMAN FACTOR ISSUES

Okanya (2007:98) examined the interconnection between training, employee satisfaction, and organisation performance in a complex public organisation in Uganda. In this study, training is defined as the systematic acquisition and development of the knowledge, skills, and attitudes required by employees to adequately perform a task or job or to improve performance in the job environment. This aspect is important to this study because employee qualifications and the

propensity of employees to further develop their skills and knowledge constitute a critical component of the human factor concept. According to the findings of the study, training has a positive impact on organisational performance. In addition, the study also showed that employees who feel that they are valued by the organisation are motivated to perform better, a finding that reinforces the psychological contract argument for training. This implies that on the overall, organisational performance may improve in situations where employees feel that they are given an opportunity to develop their skills and knowledge (Tharenou *et al.*, 2007:251).

Ali, Metz and Kuluk (2008:6) carried out an explorative investigation of the interrelationship between corporate social responsibility (CSR), organisational commitment and organisational performance in Pakistan. The findings of the study show that there is a highly positive relationship between CSR and employee organisational commitment, CSR and organisational performance, and organisational commitment and organisational performance. The results of the study depict that employee organisational commitment may be improved when organisations become involved in activities such as identifying needs of the community and fulfilling them, working for better environment, involving in employee welfare, producing quality products for customers and complying with government rules and regulations, and other philanthropic activities. Such social activities have the effect of enhancing employee organisational commitment and organisational performance. The results are also consistent with those obtained by Stawiski, Deal and Gentry (2010:23) who argue that the more employees are influenced by CSR actions, the higher will be their organisational commitment, and this will consequently enhance their productivity. These results have implications for the organisation. If most of the employees are highly committed to the organisation and performing well, the organisation itself will inadvertently improve accordingly.

In a quantitative study in which 300 Turkish firms were surveyed, Erdil, Kitapci and Timurlenk (2010:30) investigated the effects of core employees on organisational capabilities and firm performance. The study focused on three major organisational capabilities, namely managerial, technical capabilities and output-based capabilities and overall firm performance. In the study, managerial capabilities are defined as possessing the ability to create a strategic vision and identity for the company, communicate these throughout the organisation, and encourage the workforce to achieve them (Lopez-Cabrales, Vale & Herrero, 2006:92). Examples of managerial

capabilities include reinforcement of organisational culture, strategic vision, obtaining employee potential, and flexible design. Song, Benedetto and Nason (2007:22) posit that technical capabilities relate to manufacturing processes, technology, new product development, production facilities in the industry. As such, technical capabilities make an immense contribution to the transformation of inputs into outputs. Technological aspects of the creation, production, and development of products and services are all linked to technical capabilities. Output-based capabilities are the physical or intangible assets that provide value to the customer (Lopez-Cabrales *et al.*, 2006:94). Examples are quality orientation, customer loyalty and product diversity. The study found that there is a strong link between the characteristics of core employees, organisational capabilities, and firm performance. The results of the research also have implications for organisations. Core employees play a pivotal role in influencing organisational capabilities and firm performance. This being the case, one of the strategies through which performance outcomes may be achieved is for organisations to focus on valuable employees (Samuel & Chipunza, 2009:411).

Kim, MacDuffie and Pil (2010:371) conducted empirical research on employee voice and organisational performance in the global automotive industry. The study was premised on the assumption that both employees as well as the organisation will benefit immensely when employees are given greater influence over how they perform their work, such as by encouraging their participation in decision making. This also is an important element in the human factor theory. Employee voice may be perceived as how employees raise concerns, express interests, solve problems, and contribute to and participate in workplace decision-making (Kim *et al.*, 2010:373). Employee voice may occur either directly between employees and management (e.g. through employee involvement programmes), or indirectly through employee representatives. The results of the study indicate that team voice improves organisational performance. There was also a positive relationship between employee representatives' voice and productivity in cases where the interaction with direct voice was involved. A negative interaction between team voice as well as representative voice and organisational performance was also found, implying that the contribution of team voice in the enhancement of organisational performance decreases when organisations have strong employee representation. Notwithstanding this, it is always good to have strong team voice as it boosts organisational performance, and high levels of both team as

well as representative voice produces better productivity when compared to a combination of low team and low representative voice (Tay, 2009:4).

Results of the study by Kim *et al.* (2010: 388) are in agreement with those obtained in a study by Right Management (2011:1) who found that employee engagement is powerfully linked to a range of organisational success factors such as higher financial performance, higher customer satisfaction and higher employee retention, among others. However, despite the validity of its results, generalisation of the study may be questioned on the basis that survey questions about teams were answered by management, rather than by employees. The best scenario would have been to elicit the views of employees and their representatives regarding the involvement of employees and then to compare their views with those of management (Kassahun, 2005:29). In addition, the results of this study are at variance with assumptions made by many advocates of direct voice and with those who support representative voice in the sense that neither type of voice on its own can be a consistent predictor of organisational performance (Kim *et al.*, 2010:388).

Baguma and Matagi (2002:152) focused their study on the effects of employee retrenchment on organisational performance and quality of work life in the Ugandan Public Service. The research sought to measure the perceptions of employees about retrenchment, individual and organisational performance and quality of working life. The results of the study reveal that there were positive perceptions regarding retrenchment including reducing the number of employees, removing redundant employees, poor performers, firing excess staff, and establishing effective management structure for service delivery. Conversely, there were negative perceptions that included premature layoff/retirement of work force, creation of poverty to those affected and random dismissal of employees for various reasons. Positive effects of retrenchment on individual performance included improved performance, punctuality, reduced absenteeism, reduced tardiness, reduction in the number of employees having two, or more jobs and reduction in alcohol abuse, employee efficiency and effectiveness, employee responsibility, and employee accountability, loyalty and discipline. These results imply that retrenchment of employees may in some cases improve performance and reduce performance in other cases, depending on context.

Research conducted by the internationally acclaimed consultancy firm Lloyd Morgan (2011:1) focused on how organisational performance and employee retention may be enhanced through

employee engagement. The study found that employee engagement is a useful tool in the enhancement of organisational performance and a driver of employee retention. These results are illustrated in Figure 3.7.

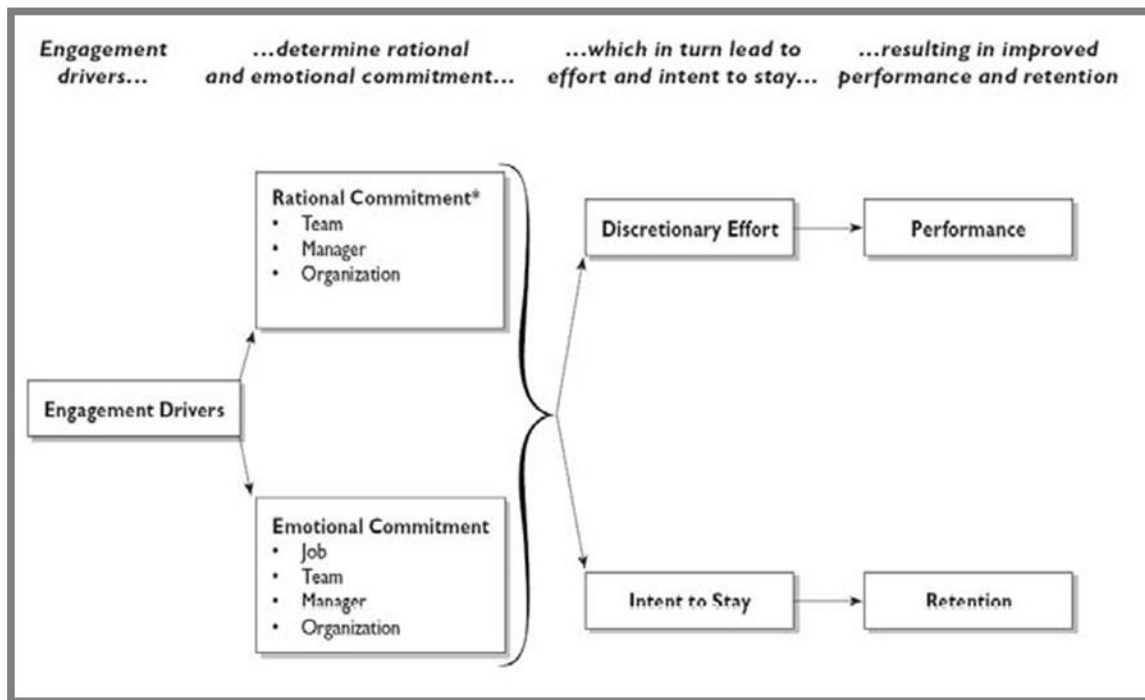


Figure 3.4: Driving Performance and Retention through Employee Engagement

(Source: Lloyd Morgan, 2011:4)

A study by Ton and Huckman (2008:56) investigated the impact of employee turnover on organisational performance using turnover data collected from 268 outlets over a period of 48 months in a major retail chain store in the USA. The rationale for conducting the study was that although the subject of turnover has received considerable attention for researchers and academics, there is a gap in research which focuses on the consequences of turnover (Mohammad, 2006:220). In addition the research was motivated by conflicting views concerning the consequences of labour turnover. The results of the study reveal that there is substantial evidence pertaining to the negative consequences of turnover on firms. However, evidence of the offsetting effects of this phenomenon on the organisation was also observed. For instance, the economic view on turnover claims that turnover is a reflection of desirable and beneficial components of worker mobility, such as the improvement of a person-organisation fit over time

(Lee, 2011:8). The efforts of workers may be at their peak when the workers join the organisation and then decrease over time. The existence of these conflicting perspectives entail that staff turnover must be viewed as a contingent phenomenon rather than as a monolithic concept (Lee, 2011:11).

In the study by Lee (2011:4), three measures, namely customer service, profit margin and process conformance were used to measure performance. Results of the study show that increased employee turnover is associated with a decrease in all of the three measures of performance used in this study. However, one moderating aspect to this relationship is the nature of management. The negative effect of turnover on performance tends to be more pronounced at those stores where managers choose a low process-conformance approach (Young, McManus & Canale, 2005:24).

Health-related issues of employees have an influence on their individual performance and hence on organisational performance. According to Lee (2011:2), employee stress is one of the issues that significantly influence organisational performance. The author states that initiatives such as the learning organisation, process re-engineering, diversity training, collaborative team work, and the high performance organisation are all impacted by the way people are affected by stress. This is because stress has serious negative consequences on an individual's intellectual and interpersonal abilities. Consequently, all aspects of problem solving, decision making, innovation, and safety are affected. For example, with their thinking impaired, people are at greater risk of causing serious mistakes and accidents in addition to being unable to make wise decisions and to create process improvements, resulting in decreased organisational performance.

Kenexa High Performance Institute (2011:1) draws attention to the issue of employee confidence as a factor that influences organisational performance. To measure employee confidence, one needs to ask employees about their perception of the organisation. These measures are in four dimensions which ultimately have a bearing on organisational performance. The four dimensions are: internal, external, personal and organisational, and their effects, are illustrated in Figure 3.8.



Figure 3.5: Four Dimensions of Employee Confidence

(Source: Kenexa High Performance Institute, 2011:4)

Employee confidence is essential to the success of an organisation. When employees feel confident, they do their jobs better and stay loyal to their organisation for a longer period. At organisational level, the benefits include effective management and business process, financial success, competitiveness, high customer or client service, and high demanded for products or service (Kenexa High Performance Institute, 2011:1). This implies that for optimal performance, it is important for organisations to nurture a high degree of employee confidence in their employees.

3.16 CONCLUSION

The human factor is a complex organisational concept. Its complexity stems from the diversity of viewpoints that are linked to its relationship with organisational performance. In this chapter, the human factor was broken into its constituent parts. Literature pertaining to the relationship between each of these constituent parts was then discussed. It is interesting to note that most of the results from these studies were either inconclusive or mixed. It is from such results that one is compelled to attach the 'complex' label to the human factor. Notwithstanding this fact, most

studies cited affirmed either in clear terms or figuratively the human factor is a critical component to the attainment of excellent organisational performance.

There is a high probability that the impact of the human factor on organisational performance will continue to dominate organisational and research charts in the foreseeable future. The widely respected McKinsey Consultant Company (Kassahun, 2005:30) concluded that in the next 20 years the most important resources of enterprises will be talented staff that are astute and experienced in the markets, such as technical scholars who possess a global vision and flexible operation capability. This logical conclusion pointed to the importance of people as the drivers of organisational success, albeit from a futuristic perspective. This being the case, attraction, motivation, and retention of talent may indeed prove to be one of the most vital organisational goals of all time, if excellent performance is to be sustained.

The objective of this chapter was to discuss literature on the impact of the human factor on organisational performance. This goal has been attained. However, more questions still need to be answered that may be linked to the relationship between the human factor and organisational performance. For instance, one may question the notion that the human factor may be the most important determinant of organisational performance, and point to other factors such as organisational systems or organisational practices as intervening determinants of organisational performance. Coupled with this proposition is the fact that some organisations that possess tried and tested talent still continue in the unfortunate trajectory of failure. Such cases attest to the fact that there are other factors that influence performance levels in organisations, apart from the human factor. This being the case, one cannot therefore underestimate the influence of intervening variables such as organisational systems and organisational practices on organisational performance. In a bid to answer these pertinent questions, the next chapter will discuss literature on the influence of two factors namely organisational systems and organisational practices on organisational performance.

CHAPTER FOUR

ORGANISATIONAL SYSTEMS AND PROCESSES AND ORGANISATIONAL PERFORMANCE

4.1 INTRODUCTION

The purpose of this chapter is to extensively discuss literature that discusses the impact of both organisational systems as well as organisational processes on organisational performance. Since organisations are complex entities, leading or managing them is challenging, particularly when one intends to enhance their performance. Improvements in performance can only be achieved by understanding both the internal and external dynamics of the organisation (Lin, 2000:131). In doing so, it has to be appreciated that there is no single universally accepted perspective that captures the entire stream of organisational life and behaviour (Gruchman, 2009:3). However, the systems and processes perspectives offer interesting insights that make the subject of organisational performance more comprehensible. Mele (2005:93) posits that organisations are vehicles through which work is coordinated to produce outputs in a stable way across space and time. Langley (2007:276) adds that the process of producing outputs is also conducted through various organisational systems and processes, which suggests that more systems and process thinking is required in organisational studies.

It is worth noting here that both organisational systems and organisational processes are discussed concurrently in this chapter. The reason is that there exists a strong and inseparable bond between organisational systems and organisational processes (Sapru, 2008:276). For instance, Gruchman (2009:4) defines an organisation as a system of processes and activities, enabled by resources and capabilities. An aspect that stands out in this definition is that an organisation is a 'system of processes'. Both systems and processes help to make up an organisation and are structurally intertwined (Hoyle, 2009:3). In addition, other systemic elements in the organisation, such as communication systems, management systems and innovation systems, among others, can be examined from a process perspective as well (Langley & Tsoukas, 2010:11). This implies that all organisational systems are implemented or activated through processes, or that there is a process dimension to every system. Some researchers (Fullan, 2009:12; Pickel, 2006:19) commonly prefer to use the phrase 'systems and processes'

rather than using these two concepts separately. These facts therefore create an opportunity for a combined discussion and subsequent analysis of these two fundamental concepts.

The first section of chapter four will discuss organisational systems. The discussion will start with the elementary concepts before moving on to more complex aspects of organisational systems. However, in doing so, the emphasis of discussing the impact of organisational systems on organisational performance is maintained. The subsequent sections will then adopt the same posture but with regard to the dynamic relationship between organisational processes and organisational performance.

4.2 ORGANISATIONAL SYSTEMS AND ORGANISATIONAL PERFORMANCE

4.2.1 The nature of systems

It may be difficult to discuss the concept of organisational systems and their related effects without defining the word 'system'. Despite its common usage, it is interesting to note that no consensus has clearly emerged on how a system should be defined and examined. Morrin (2008:11) suggests that a system is anything that is unitary enough to deserve a name or anything that is not chaos. Snooks (2008:13) states that a system is composed of regularly interacting or interrelating groups of activities. Harley, Allen and Sargent (2007:607) defined a system as elements in a standing relationship. Hinrichsen and Pritchard (2005:2) add that a system is a group of interacting, interrelated, and interdependent components that form a complex and unified whole. Reduced to everyday language, a system may be perceived as any structure that exhibits order, pattern and purpose (Skyttner, 1996:17). This implies then that over time, a system may be regarded as a constant. A widely acknowledged and more scientific definition of a system is given by Ackoff (1981:5) who postulates that a system is a set of two or more elements that satisfies the following three conditions:

- the behaviour of each element has an effect on the behaviour of the whole
- the behaviour of the elements and their effects on the whole are interdependent
- regardless of how subgroups of the elements are formed, all have an effect on the behaviour of the whole but none has an independent effect on it.

Systems are everywhere (Hoyle, 2009:3). The world is a system of interdependent and interconnected sub-systems that form a whole unit and within any one system is an infrastructure that is analogous across systems, irrespective of physical appearance (Morrin, 2008:9). Fullan (2009:13) identifies a department in any organisation, the circulatory system in the human body, the relationship between animals and vegetation in nature and an automobile as examples of systems. Ecological systems and human social systems are living systems; human-made systems such as cars and washing machines are non-living systems. Most systems thinkers focus their attention on living systems, especially human social systems. However, many systems thinkers are also interested in how human social systems affect the larger ecological systems in our planet (Fullan, 2009:13). Leggat, Bartram and Stanton (2011:282) suggest that a system can be said to consist of the following four parts:

- **objects:** these are the parts, elements, or variables within the system. These may be physical or abstract or both, depending on the nature of the system.
- **attributes:** these are the qualities or properties of the system and its objects.
- **internal relationships** among the objects of a system.
- **systems exist in an environment.**

The above composition of a system seems to imply that a system is a set of things that affect one another within an environment and form a larger pattern that is different from any of the parts (Fullan, 2009:13). There are four basic types of systems (Refer to Table 4.1) depending on whether the parts and the whole can display choice, and therefore, be purposeful (Zacharatos, Barling & Iverson, 2005:79).

Table 4.1: The Four Basic Types of a System

Type of System Model	Parts	Whole	Example
Mechanistic	No choice	No choice	Machines
Animate	No choice	Choice	Persons
Social	Choice	Choice	Corporations
Ecological	Choice	No Choice	Nature

(Source: Zacharatos *et al.*, 2005:79)

Zacharatos *et al.* (2005:79) further provide the following descriptions of the four types of systems:

- **Mechanistic Systems:** These are systems that have no purposes of their own, but their essential parts enable the functioning of the entire system. An example is a clock.
- **Animate Systems:** These are purposeful systems whose parts have purposes of their own. The fundamental purpose of such systems is survival. For example, heart of a human being has no purpose of its own, but it enables the human being to function by facilitating the flow of blood around the whole body.
- **Social Systems:** Social systems are those that have purposes of their own and are part of one or more larger systems that may have purposes of their own and that may contain other social systems. For example, a local government is a social system which is a subset of a provincial government which in turn is part of a national government.
- **Ecological Systems:** Mechanistic, animate, and social systems are all constituent elements of ecological systems. However, ecological systems have no purpose of their own, but they serve the purposes of their animate and social parts through the provision of inputs as well as serving as a receptacle for their waste as well as their useful products. A common example of an ecological system is the environment.

Smith (2010:1) also underscores that systems have the following five fundamental characteristics:

- Every system has a purpose within a larger system: for example, the purpose of a university faculty is to produce graduates for the university. In turn, the purpose of a university is to produce graduates for a country.
- All of a system's parts must be present for the system to carry out its purpose optimally: for example, the university faculty system in a university consists of people, equipment, and processes. Should any one of these components be removed, then the system will begin to malfunction.
- A system's parts must be arranged in a specific way for the system to carry out its purpose: for example, if one rearranged the hierarchical relationships in the university faculty so that a head of department reported to a junior lecturer, the faculty would likely have trouble carrying out its purpose.
- Systems change in response to feedback. Feedback is information that returns to its original transmitter such that it influences that transmitter's subsequent actions. For example: suppose that a person turns too sharply while driving his/her car around a sharp curve. Visual cues (the driver may see a mailbox rushing toward them) would tell the driver that they were turning too sharply. These cues constitute feedback that prompts the driver to change what s/he is doing (e.g. to turn the steering wheel in the other direction somewhat) so s/he can put his/her car back on course. Any system that disregards the feedback from its environment will eventually reach a limit. For example if the driver of a vehicle disregards the feedback from the environment, the result will be an accident.
- Systems maintain their stability by making adjustments based on feedback. For example, our body temperature generally is around 37 degrees Celsius. If a person gets too hot, they produce sweat, which cools them.

Systems may be arranged in a continuum that ranges from very simple to very complex (Hinrichsen & Pritchard, 2005:02). Numerous types of systems such as biological systems (e.g. the heart), mechanical systems (e.g. A thermostat), human/mechanical systems (e.g. riding a bicycle), ecological systems (e.g. predator/prey), and social systems (e.g. groups, supply and demand, friendship) may be identified (Hoyle, 2009:4). Complex systems (e.g. social systems), comprise many subsystems which are arranged in hierarchies, and combined in such a way as to achieve the overall goal of the overall system (Morin, 2008:8). Every subsystem has its own

boundaries and includes various inputs, processes, outputs and outcomes meant to accomplish the overall goal for the subsystem. For example, a pile of sand is not a system because if one removes a sand particle, the result still remains a pile of sand. However, a functioning car is a system because if one removes a single part such as the engine, what remains is no longer a working car (Hinrichsen & Pritchard, 2005:02).

4.2.2 Systems theory

Systems theory (systems' perspective) is one outstanding breakthrough that facilitates the understanding of the complex world of systems. The theory was originally proposed by Hungarian biologist Ludwig von Bertalanffy in 1928 (von Bertalanffy, 1968:7). He proposed that a system is characterised by the interactions of its components and the non-linearity of those interactions and that nothing can be understood in isolation but must be seen as part of a system. Systems theory is defined by Midgley (2003:6) as the trans-disciplinary study of the abstract organisation of phenomena, independent of their substance, type, or spatial or temporal scale of existence. It investigates both the principles common to all complex entities, and the (usually mathematical) models which can be used to describe them.

In the systems' perspective, Molleman and Broekhuis (2002:272) identify several system characteristics such as wholeness and interdependence (the whole is more than the sum of all parts), correlations, perceiving causes, chain of influence, hierarchy, supra-systems and subsystems, self-regulation and control, goal-oriented, interchange with the environment, inputs/outputs, the need for balance/homeostasis, change and adaptability (morphogenesis) and equifinality (i.e. there are various ways to achieve goals). Communication in this perspective can be seen as an integrated process – not as an isolated event (Molleman & Broekhuis, 2002:272). These aspects are illustrated in Figure 4.2.

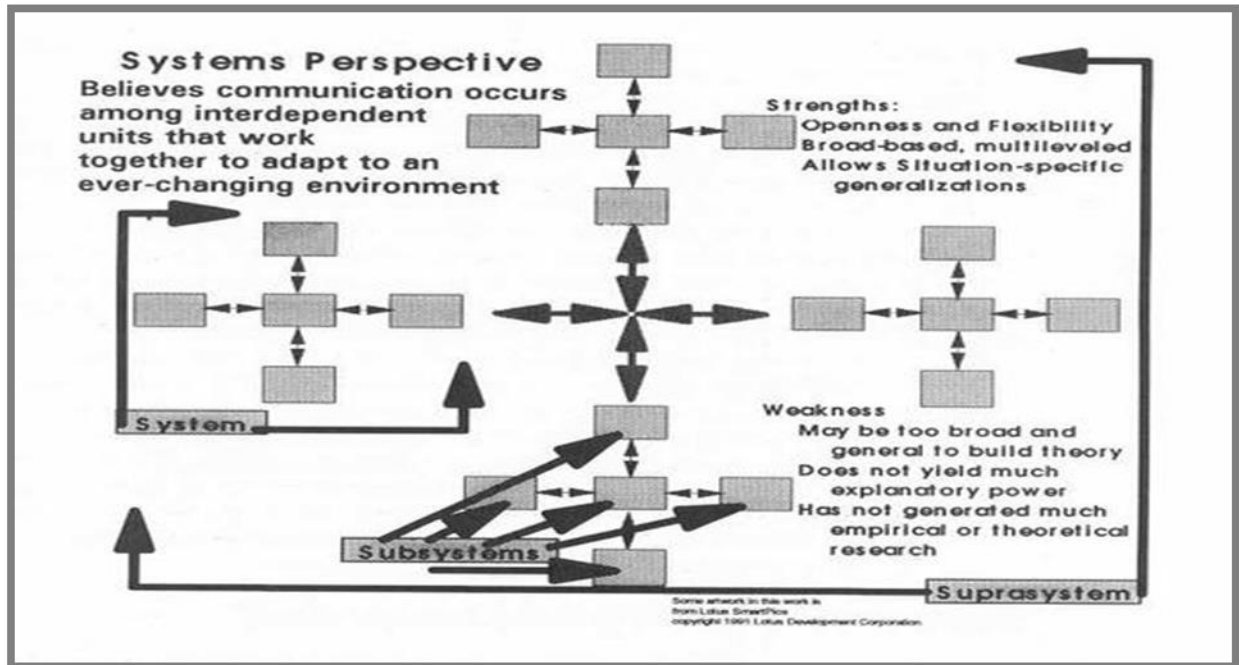


Figure 4.1: Systems' Perspective

(Source: Infante, Rancer & Womack, 1997:12)

The application of systems' theory is called systems analysis and systems' thinking is one of the dominant tools in systems analysis (La Cour *et al.*, 2007:930). Systems thinking may be perceived as a way of helping a person to view the world, including its organisations, from a broad perspective that includes structures, patterns and events, rather than just the events themselves (Hargreaves, 2011:686). This broad view helps one to identify the real causes of issues and know where to work to address them (La Cour *et al.*, 2007:930). For example, the overall behaviour of a system depends on its entire structure rather than the sum of its various parts (Gharajedaghi, 2006:14). This illustrates that the structure is the key determinant of its various behaviours, which in turn determine the various events. It is therefore important for one to respond to the broader scheme of things instead of responding to events (Hargreaves 2011:686).

4.2.3 Organisations as systems

It is generally recognised that organisations are dynamic and complex social systems, which means that reducing the parts from the whole has the effect of reducing the overall effectiveness of organisations (Snooks, 2008:13). From an organisational perspective, a system may be

perceived as the organised collection of men, machines and material required to accomplish a specific purpose and tied together by communication links (Skyttner, 1996:19). Molleman and Broekhuis (2002:274) suggest that from a systems perspective, organisations are taken to be collections of human and physical capital that exchange and process information, transform physical objects, and make decisions for the purpose of achieving some set of objectives related to their external environment. Using this perspective as a reference point, leaders can find ways of enhancing existing processes in the organisation, and identifying the need for additional processes of environmental analysis to maintain the organisation's ability to survive (La Cour *et al.*, 2007:931).

Elster (2007:22) advocates that at a higher level, the systems perspective enables people to think about the strategic environment, how processes that achieve strategic goals may be developed, and that the systems paradigm should be viewed as a tool that leaders can use to design their organisation's capability to perform the following organisational processes:

- analyse tactical and strategic environments
- develop and enact strategies in response to environmental demands
- sustain an adaptive and productive organisational culture

These three types of organisational processes are useful in enabling an organisation to achieve its strategic objectives in competitive environments. Furthermore, Bunge (2004:33) draws attention to the fact that one erroneous view that is held by many people in organisations is that one can break up the system and only have to deal with its parts or with various topics apart from other topics. However, through the systems theory, one is reminded that if one breaks up an elephant, one does not come up with several little elephants (Bunge, 2004:33). This demonstrates that if one breaks an organisation apart, the outcome will be virtually different from the initial organisation.

There is an optimum size (boundary) for every system and should this boundary be broken, the system will automatically adjust itself in order to achieve more stability (Reiss, 2007:177). For instance, an organisation may keep on growing until the reality of the system intervenes, at

which point the system intervenes. People within the organisation often see the events only, rather than the behaviours that caused them. That explains why people use myopic strategies to fix events, often only inviting more complex problems (Reiss, 2007:177). Pickel (2006:63) also acknowledges that there is a circular relationship that exists between an overall system and its parts. For example, an organisation may face recurring problems that seem to cycle through the organisation. With the passing of time, members of the organisation may come to recognise the pattern of events in the cycle, rather than the cycle itself (Young *et al.*, 2005:23).

4.2.4 Organisations as open systems

In organisational analysis, the fundamental systems-interactive paradigm involves the continual stages of input, throughput (processing) and output, which demonstrate the concept of openness and/or closedness (Hargreaves, 2011:687). A closed system is one that does not interact with its environment, that is, it does not take in information and therefore is likely to vanish (Ackoff, 2009:1). An open system is one that receives information which it uses to interact with its environment (Gharajedaghi, 2006:12). Such openness enhances the organisation's likelihood to survive and prosper. Contemporary organisations exist in highly competitive and unpredictable global environments where competition for resources, markets, labour, and innovation is stiff (Sher & Lee, 2004:939). This signifies that the organisation as a system may be considered as a subsystem of a larger environmental system. As suggested by Snooks (2008:14), the following are some of the categorisations of organisational environments:

- The technological sector: this refers to the development of new production techniques and methods, innovation in materials and products, and general trends in research and science relevant to the organisation.
- The economic sector: pertains to factors such as stock markets, rate of inflation, foreign trade balance, state budgets, interest rates, unemployment and economic growth rates.
- Customers: includes direct sales or companies that acquire another firm's customers through outputs for resale.
- The socio-cultural sector: involves the social values of the general population, the work ethic, and demographic trends.

- The competition: these are competitive tactics between firms in an industry or business.
- The regulatory sector: relates to state legislation and regulations, city or community policies, and political developments at all levels of government.

Charlton and Andras (2003:3) emphasise that every organisation is a man-made system which has a dynamic interplay with its environment which is composed of customers/clients, competitors, labour organisations, suppliers, government, and many other agencies. Pickel (2006:66) also maintains that successful organisations develop characteristics and perform processes that allow them to adapt to constraints, threats and opportunities. This presupposes that organisations acquire certain abilities from the environment. Hargreaves (2011:687) asserts that these abilities can be attained through activities such as joint ventures, improvement of human and physical capital, and obtaining the information needed to transform that capability into desired outputs such as physical goods, services, or a focused set of monetary or operational actions. Transformation processes in organisations are cyclical in nature (Reiss, 2007:179). This points to the fact that they are a predictable, ordered set of processes that might be determined by a budget cycle, a sales cycle, or a growing season. These well-ordered processes create the resistance to disorganisation (negative entropy). Negative entropy maintains the reliability of transformation processes in spite of changes in environmental conditions (Elster, 2007:22).

4.2.5 Systems theory and organisational management

The systems perspective can be a useful way of visualising organisational management (Charlton & Andras, 2003:1). Mulej and Zenko (2004:27) state that the overall system framework is characterised by inputs, processes, outputs and outcomes. Examples of inputs include raw materials, money, technology and people (Hoyle, 2009:4). In order for these inputs to be transformed into outputs (e.g. products or services) and outcomes (e.g. enhanced quality of life or productivity for customers/clients) they have to undergo the managerial functions of planning, organisation, motivation and control in order to meet the organisation's goals (Sher & Lee, 2004:933). While it is true that these managerial functions can be carried out with or without the systems concept, the general contention is that the activities themselves can be better accomplished in light of systems concepts (Mulej & Zenko, 2004:27). Therefore, in most cases, the systems perspective is embedded in the heart of organisational management. There can be a

definite change in emphasis for the entire managerial process if the functions are performed in light of the system as a whole rather than as separate entities (Trappl, 2004:8).

Rosi and Mulej (2006:1177) argue that the systems perspective provides a framework for thinking about internal and external environmental factors as an integrated whole, besides enabling the recognition of the proper place and function of subsystems. The systems within which organisational leaders must operate are complex (Morin, 2008:7). However, management through systems concepts fosters a way of thinking which helps to dissolve some of the complexity as well as helping the manager recognise the nature of the complex problems and thereby operate within the perceived environment (Liu, 2003:640; Rosi & Mulej, 2006:1177).

Charlton and Andras (2003:1) argue that the nature of management may be conceptualised from a perspective of systems theory as the process by which an organisation generates a global representation of its own processes. The function of management is a product of the interaction between a management system and its environment (Reiss, 2007:178). Bunge (2004:34) asserts that this is a consequence of the way that management systems will tend to adapt to survive and grow in whatever specific context in which they are operating - this can lead to very different management functions in different environments.

The effect of the systems theory in management is that it helps managers to look at organisations from a new and broader perspective that enables them to interpret patterns and events in their organisations (Trappl, 2004:5). Historically, it was typical for managers to take one part and entirely focus on it before moving all attention to another part (Lin, 2000:130). The problem with this approach was that there was no integration of departments such that some departments could function well and yet they could not integrate with others, thereby negatively affecting the entire organisation (Hay, 2003:27).

Smith (2010:3) maintains that contemporary managers are recognising the interrelations between various parts of the organisation. This entails that such aspects as ongoing organisation and feedback, coordination of central offices with other departments, engineering with manufacturing and supervisors with workers, among others, are gaining more emphasis. Nowadays managers tend to diagnose problems by recognising larger patterns of interactions rather than by examining what appear to be separate pieces of the organisation (Smith, 2010:3). Morin (2008:16) also

suggests that managers of today maintain perspective by focusing on the outcomes they want from their organisations in addition to focusing on structures that provoke behaviours that determine events (being proactive) rather than reacting to events as was always done in the past. This is the essence of the systems perspective (Li, Kumar & Lim, 2002:551)

4.2.6 Drawbacks of the systems perspective

The systems perspective should be understood in line with its shortcomings and criticisms (Hay, 2003:91). Korn (2011:25) advocates that viewing parts of the world as related properties or objects is called the systemic view, systems perspective or the view of complexity and hierarchy. The systemic view has resulted in an immense production of speculative intellectual output (Korn 2011:25). In his historical narrative of the systems view, Jackson (2000:26) asserts that when most early thinkers were faced with the immensely complex and diverse situations which they could not explain through conventional science, they developed a vast variety of mostly speculative views like “emancipation”, “critical systems thinking”, “autopoiesis” and models like “viable systems” and a kind of design method called “soft systems methodology”. All these views could not be defined properly and it was difficult to relate them to experience (Jackson, 2000:26).

Although the systemic view has continuously generated a huge volume of interesting ideas, papers, books, conferences and courses, the idea is seen in terms of fragmented topics like information systems, systems engineering, soft/hard methods, systems dynamics, chaos and complexity theories and other ideas like cybernetics (Lane, 2008:4). In resonance, Korn (2011:25) reveals that the systemic view has largely remained fragmented, speculative and is a subject of wide-ranging discussion that does not have comprehensive, fundamental principles which would transcend the discipline boundaries, which presupposes that the entire systems idea is still incomplete or is still at least isolated.

Korn (2011:25) stresses that conventional science was traditionally regarded as a readily available viable alternative to the systems approach. Conventional science uses inductive generalisations and generation of quantitative models such as mathematics to explain various observable phenomena (Ackoff, 2009:3). However both the systemic view and the conventional view have inherent shortcomings as exhibited through their inability to deal with qualitative

phenomena, the difficulty experienced in applying them to experience because they cannot be sufficiently expressed in concrete terms, and they do not form an integral part of a comprehensive design methodology of scenarios (Hay, 2003:16). This has led to the emergence of the concept of ‘systems science’ as a viable option to both the systemic view and conventional science (Gharajedaghi, 2006:43). Based on existing branches of knowledge such as linguistics, mathematics, logics, and network theory, systems science is a comprehensive semi-quantitative method for modelling parts of the world in static and dynamic states and can be an integral part of the methodology of design of systems and products (Korn, 2011:25).

Pickel (2007:391) holds that the systems approach needs rethinking as it is clouded with several challenges, of which the issue of fundamentally contestable complex inequalities remains a major one. This is because the systems theory in its basic, unrefined nature does not provide the tools for capturing complex intersecting systems, a standard criticism by postmodern theorists. The old systems theory fails to take into account other important theories such as the cause and effect (small cause, large effect, also referred to in mathematical terms as non-linearity), the system-environment distinction, the non-saturation by a system of the territory that the system inhabits, and the potentially non-nested nature of systems (Liu, 2003:641; Pickel, 2005:438). Within systems thinking, there is a strong tendency to think by analogy, which can create misconceptions and errors as well as insights, in addition to making the systems theory more abstract and a mere reinvention of old ideas with a new vocabulary (De Bruin, 2009:69).

4.2.7 The impact of organisational systems on organisational performance

It has been pointed out in the preceding section that one of the drawbacks of the systems approach is that it is not that robust and can only be understood in light of its fragmented topics. In organisations, systems can only be discussed within the context of fragmented subsystems such as, *inter alia*, information systems, inter-organisational systems, and innovation systems (Polack, 2009:104). This suggests that the overall effect of organisational systems on organisational performance may only be perceived as an aggregate of these sub-systems (Helou & Caddy, 2006:78). This being the case, a number of these subsystems will now be discussed.

4.2.7.1 Information systems and organisational performance

An information system may be defined as the entire infrastructure, organisation, personnel and components that collect, process, store, transmit, display, disseminate, and act on information (Hoganson 2001:314). Polack (2009:102) defines an information system as a combination of people, hardware, software, communication devices, network and data resources that processes (can be storing, retrieving, transforming information) data and information for a specific purpose. It is a combination of hardware, software, infrastructure and trained personnel organised to facilitate planning, control, coordination, and decision making in an organisation (O'Leary & O'Leary, 2008:5). According to Polack (2009:103) there are four main types of information systems (Refer to Figure 4.4) namely; Transaction Processing Systems, Management Information Systems, Decision Support Systems, and Executive Information Systems.

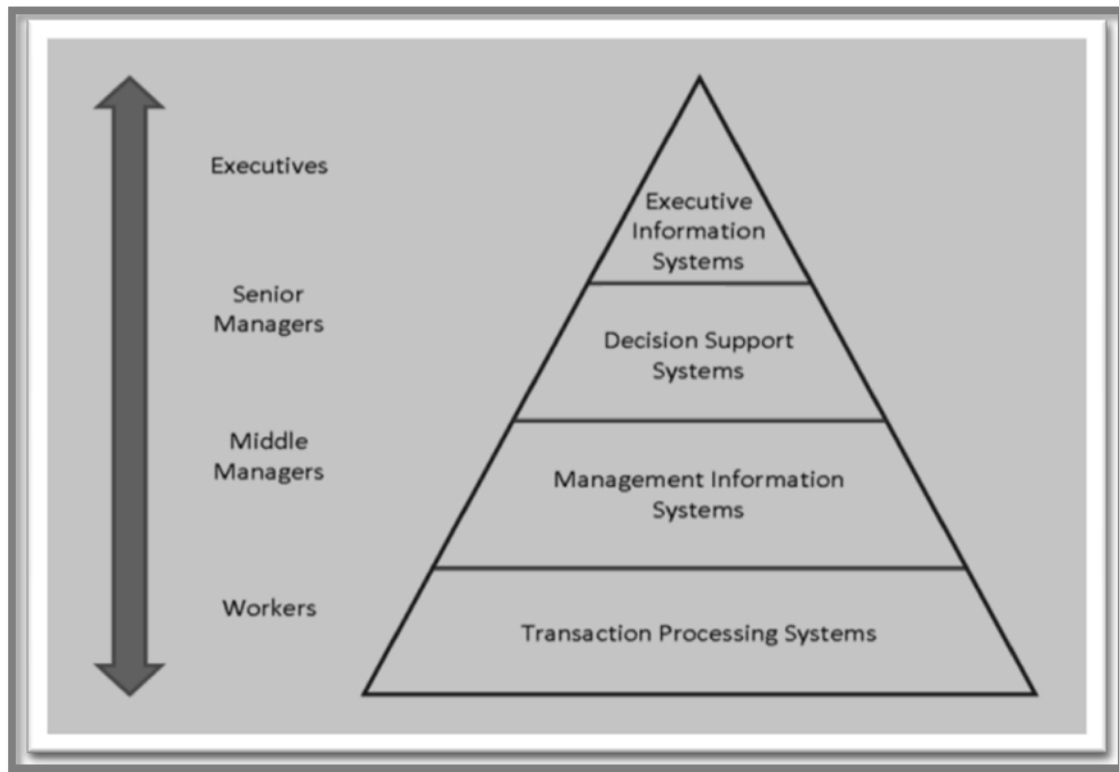


Figure 4.2: Main Types of Information Systems

(Source: O'Leary & O'Leary, 2008:6)

The Transaction Processing System is one whose function is to collect as well as to store information about transactions and to control certain aspects pertaining to transactions, where a transaction may be perceived as an event of interest to the organisation, an example being a sale at a supermarket (Gorla, Somers & Wong, 2010:209). Management Information Systems are designed to assist senior managers' decision making by providing them with information, models, or analysis tools (Choe, 2004:62). A Decision Support System typically condenses and converts Transaction Processing System data into information for monitoring performance and managing an organisation while Executive Support Systems are those that provide top-level executives with information in a readily accessible, interactive format (Nicolaou, 2000:92). Other types of information systems include, but are not limited to Office Automation Systems, which enable individuals to process personal and organisational data, perform calculations, and create documents, such as word processing, spreadsheets, file managers, personal calendars, presentation packages, and Expert Systems, which are based on artificial intelligence and tend to mimic human expertise in various fields (Elbashir, Collier & Davern, 2008:137).

Previous research on the impact of information systems on organisational performance offers interesting insights (Nicolaou, 2000:93). For example, Sooklal, Papadopoulos and Ojiako (2011:1270) state that companies are still investing heavily in information systems to achieve competitive advantage. Riolli and Savicki (2003:227) add that information systems play a vital role in facilitating organisational resilience. Organisation resilience is usually taken to be a systemic property and refers to the ability of organisations to survive and thrive in difficult or volatile economic times (Subramani, 2004:45). However, one challenge related to this matter relates to the harmonisation of both individual and organisational factors that are related to the concept of resilience. As a solution, Riolli and Savicki (2003:229) propose a model for the integration of individual and organisational factors leading to organisational resilience in the information system context. The results of the study reveal that where robust information systems are available, an organisation can be resilient to the extent that it remains highly productive during perilous times.

In their information systems payoff study, Elbashir *et al.* (2008:135) measured the effects of business intelligence (BI) systems on organisational performance. The research was a follow up to a case study conducted by Hesford and Antia (2006:15). BI systems refer to an important class of information systems for data analysis and reporting that provide managers at various levels of the organisation with timely, relevant, and easy-to-use information, which enable them to make better decisions (Hannula & Pirttimaki, 2003:593). This definition denotes that BI systems are a subset of Management Information Systems. The findings of the study indicate that a positive and significant relationship exists between BI systems performance and organisation performance. The results are also in line with prior studies conducted by Subramani (2004:45) and Chiasson and Davidson (2005:591) which suggest that superior BI systems performance enhances organisational performance.

Gorla *et al.* (2010:207) examined the organisational impact of information system quality, information quality and service quality. The study found that organisational performance is positively influenced by all the three factors that were considered. An earlier study by Ruiz-Mercader, Meroño-Cerdán and Sabater-Sánchez (2006:16) focused on the impact of information systems and knowledge management on organisational performance in small businesses. The study's hypothesis that information systems have a positive effect on organisational learning in

small businesses was proved to be correct, a factor which leads to sustainable competitive advantages for the organisation. Bharadwaj (2000:169) conducted an empirical investigation on the relationship between information system capability and firm performance. A positive relationship was also found between the two variables. This implies that the more capable the firm's information systems, the better the firm's performance and vice versa. Choe (2004:61) also observed that there is a positive correlation between the provision of management accounting information and production performance improvement. Information systems also play a crucial role in facilitating improved buyer-supplier relationships (Kim, Ryoo & Jung, 2011:667). Researchers such as Brynjolfsson and Hitt (2000:23), Peppard and Ward (2000:167) found that information systems have an effect in areas such as organisational change, improved interactions with various stakeholders such as customers and suppliers, productivity, and innovation. These findings are indicative of the fact that information systems are important in improving the performance of the organisation in various areas.

4.2.7.2 Inter-organisational systems and organisational performance

Adoption of inter- organisational systems (IOS) has become very important for organisations to remain competitive in this era of globalisation (Kurnia & Johnston, 2000:295). Adoption of IOS by an organisation involves interactions with external stakeholders such as partners and third parties and compels the organisation to make significant changes to the organisation's structure, culture, business relationships and working practices over time and space (Kurnia & Johnston, 2000:296). This implies that IOS are understood in the context of many parties. IOS are value chains that extend beyond traditional enterprise boundaries (Choe, 2008:445). It is therefore necessary to identify these parties and to explore and take into consideration their power and interests if implementation is to be successful (Boonstra & de Vries, 2010:190).

Kim *et al.* (2011:667) examined IOS visibility in buyer supplier relationships in 51 matched pairs of intermediate producers of telecommunication equipment components and their immediate suppliers in South Korea. IOS visibility refers to the extent to which the supplier's information is visible to the buyer through areas such as order completion status, backorder status, production schedules, current production capacity, and demand planning information (Kim *et al.*, 2011:667). The results of the study indicate that IOS visibility is an important predictor of supply chain performance from the supplier's perspective. These results are in sync

with Rai, Patnayakuni and Seth (2006:241) who emphasise the importance of digitally integrating the supply chain to gain increased visibility and in turn improve supply chain performance.

Choe (2004:61) examined the interconnections between inter-organisational relationships and the flow of information through value chains. Four types of inter-organisational relationships suggested in the study were, traditional links for coordination, strategic alliances, electronic links for coordination, and virtual organisations.. Results of the study show that IOS functions as a control mechanism in these four types of relationships by determining the amount of information exchanged between organisations. These findings have implications for organisational performance because the higher the amount of useful information exchanged, the higher the productivity, and vice versa (Choe, 2004:61). The findings are also consistent with previous research by Vaccaro, Parente and Veloso (2010:1076), who also observed that there is a positive relationship between knowledge management tools, inter-organisational relationships, innovation and firm performance.

Boonstra and de Vries (2008:190) found several attractive benefits emanating from the adoption of IOS, ranging from close links between the value chains of the organisations, which potentially leads to lower transaction costs and a quicker delivery of goods and services, flexibility, improvement in services and closer partnerships. In their earlier study Boonstra and de Vries (2005:485) examined IOS from a power and interest perspective. Although the findings of the study support that IOS adoption yields benefits such as enhanced cost effectiveness, speed, and flexibility, easier creation of distribution channels, transformation and expansion, and the overall improvement of the current way of doing business, they also reveal that an IOS can be a threat to an organisation. This happens when, for instance, the organisation fears the risk of becoming more dependent on IOS partners, to be compelled to more competitive markets where there are lower profits but higher pressures. The IOS may also alter the balance of power in inter-organisational relationships, can raise both the entry and exit barriers in addition to shifting the competitive position of industry participants (Boonstra & de Vries, 2008:193; Maghrabi & Gargeya, 2012:6). These contentions denote that while IOS adoption may indeed present opportunities for some organisations, it could also be a threat for other potential IOS users. The later issue is further compounded by the number of stakeholders involved, since an IOS can only

function with at least two participating organisations. Potential issues emanating from the multiplicity of stakeholders using an IOS include cultural differences, mutually exclusive expectations, and a heterogeneous organisational environment (Boonstra & de Vries, 2005:486). This implies that it is important for organisations involved in the use of an IOS to understand the critical factors as well as the barriers involved in the process of developing, implementing and utilisation of the IOS if the potential benefits resulting from its use are to be realised.

4.2.7.3 High performance work systems and organisational performance

Leggat *et al.* (2011:281) conducted a study on the gap between policy and reform of high performance work systems (HPWSs) in the Australian sector. In this context, researchers such as Guthrie (2001:180) and Barraud-Didier and Guerrero (2002:42) have presented mounting evidence of the existence of a positive relationship between HPWSs and organisational performance in both the public and private sector. While there may be various definitions for HPWSs, Gollan (2005:21) shows that the common thread may be that HPWSs are systems of managerial practices that increase the empowerment of employees and enhance the skills and incentives that enable and motivate them to take advantage of this greater empowerment. Zacharatos, Barling, and Iverson (2005:79) also underscore that HPWSs are composed of a group of separate but interconnected human resources practices that play the role of recruiting, selecting, developing, motivating, and retaining employees. HPWSs are created when management creates workplace conditions that inspire employees towards the attainment of organisational goals (Whitener, 2001:517). This brings about enhanced organisational performance through improved employee knowledge, skills, abilities, and commitment through the provision of information and discretion that is necessary to exploit these abilities and commitment in completing their jobs. This implies that employees are motivated to achieve organisational goals through effective human resources management that fosters increased information flows and devolution of decision-making power, leading to increased organisational performance (Zacharatos *et al.*, 2005:79).

Boxall and Macky (2007:261) conducted a commentary study on high-performance work systems and organisational performance. The study was intended to bridge theory and practice. The findings of the study reaffirmed the fact that the topic of HPWSs is actually part of a larger agenda concerned with how human resources management can be used to improve performance

in all kinds of organisations with various kinds of workers. The direct and indirect impact of HPWS on organisational performance is encapsulated in Table 4.2.

Table 4.2: HPWSs- Key Direct and Indirect Drivers of Workplace Performance

<p>HPWSs: direct drivers of workplace performance</p>	<ol style="list-style-type: none"> 1. <i>Technology</i> – Greater adoption of new technology in those industries or work processes where it is a significant performance enabler, including better IT 2. <i>Work reorganisation</i> – More empowering styles of working in those jobs where job enrichment or greater worker involvement in problem solving and decision-making will make better use of human potential and thus improve work quality or customer satisfaction 3. <i>Employee selection and skill</i> – Careful selection of employees for job-match and for learning potential plus enhanced skill development to take advantage of new technology and/or working a more empowered way 4. <i>Performance and commitment incentives</i> – Enhanced incentives to work smarter and to reduce employee turnover (e.g. financial incentives, stronger vocational or career development, family friendly employment practices)
<p>HPWSs: indirect drivers of workplace performance</p>	<ol style="list-style-type: none"> 1. <i>Management planning and measurement</i> – Improved systems to plan and measure workplace performance, including data gathering on employee attitudes, and ensuring the accounting system properly recognises the investments in human resources that drive performance improvements 2. <i>Management capability and support</i> – Improved investments in management development at all levels and in support for the enabling role of front-line managers 3. <i>More cooperative labour relations</i> – A more consultative ‘partnership’ style of labour relations with unions and/or with employee representatives chosen by the workforce

(Source: Boxall & Mackay, 2007:265)

4.2.7.4 Innovation systems and organisational performance

The word innovation has developed to become part of the language in both the public as well as the private sector (Ramstad, 2005:550). Innovation is conceived as an individual and collective learning process that aims to find new ways of solving problems (Alegrea & Chiva, 2008:315). An innovation system is composed of a set of structural elements: actors in the whole supply chain, networks, institutions (regulations, norms, cognition) and, in some approaches, technology (Jacobsson & Bergek, 2011:43). A system of innovation perspective has emerged which postulates that the innovation and diffusion process is both a collective and an individual act (Liao & Wu, 2010:1097). According to Kotelnikov (2011:1), an innovation system is composed of five interrelated principal elements (Refer to Figure 4.5), namely: leadership and management, strategic alignment, metrics, organisation and people, process and culture.

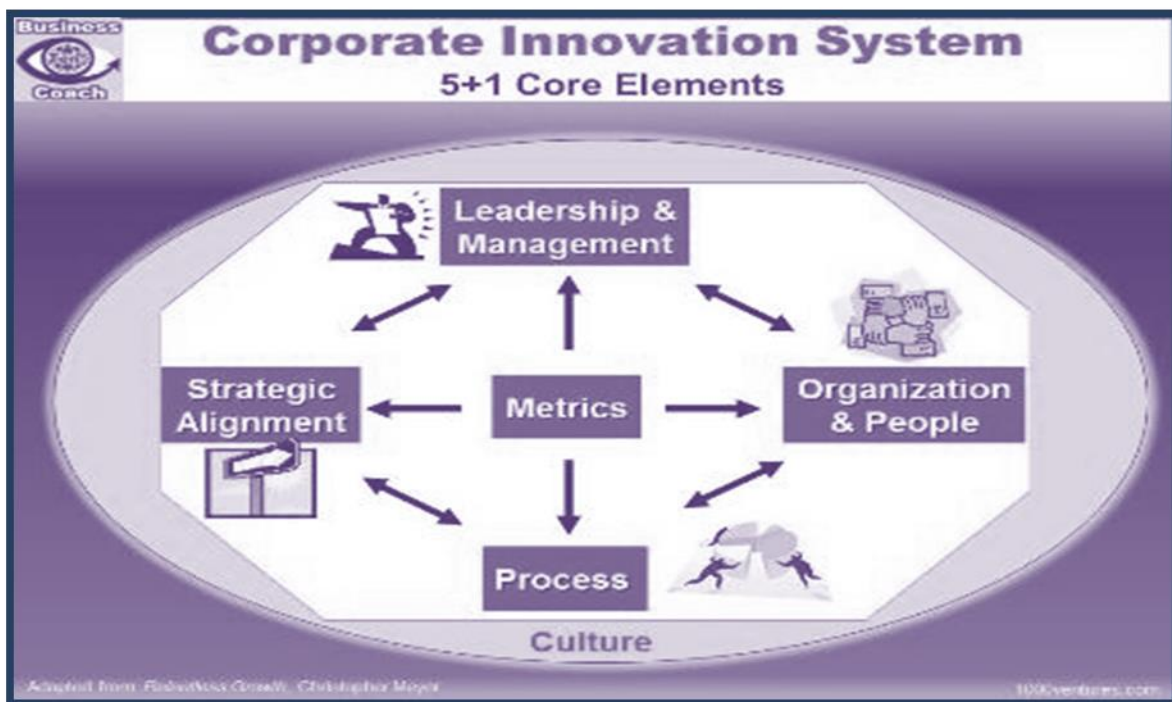


Figure 4.3: Components of an Innovation System

(Source: Kotelnikov, 2011:1)

The concept of innovation has attracted widespread research attention the world over (Mazzanti, Pini & Tortia, 2006:123). A study conducted by Ramstad (2009:110) examined the expansion of

innovation systems and policy from an organisational perspective. The study was conducted in organisations in four front runner countries in organisational innovation activities, namely Germany, Norway, Sweden and Finland. Motivation for the study was derived from the fact that most previous studies on innovation systems and policies tended to focus on scientific and technological innovation while disregarding organisational innovation (Mazzanti & Tortia, 2006:123). The results of the study by Ramstad (2009:110) show that the existence of a broader innovation strategy that encourages individuals and organisations to initiate the next generation of knowledge creation, technologies, business models and dynamic management systems, and that this would enhance both organisational performance as well as economic growth at national level (innovation-driven growth approach). These findings are in line with the findings of Ramstad (2005:550) and Sanidas (2005:25) which also demonstrates that all types of innovations at organisational level can impact independently on productivity and economic growth.

Under proper leadership, innovation systems are positively related to strategic fit and the three dimensions of business performance, namely economic performance, relationships (process) performance and product performance (Carmeli, Gelbard & Gefen, 2010:346). Evangelista and Vezzani (2010:1255) define fit as the degree to which the needs, demands, goals, objectives and/or structure of one component are consistent with the needs, demands, goals, objectives, and/or structure of another component. Carmeli *et al.* (2010:339) conceptualised strategic fit in terms of change and adaptation, which suggests that innovation systems can significantly enhance the firm's performance by enabling it to adapt to its environment and thereby enabling it to survive. Earlier research by Mazzanti and Tortia (2006:123) analysed the relationship between organisational innovation, industrial relations and economic performance at the firm level in the Italian food industry. Findings of the research confirm that firm performance is a significant driving factor of innovation and that firms experimenting with higher organisational innovation systems and practices are more likely to perform better overall. Empirical evidence also supports the idea that the presence of innovation systems in the organisation also has a positive influence on organisational learning (Jiménez-Jiménez & Sanz-Valle, 2011:409), organisational performance through transformational leadership (García-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez, 2012:299), knowledge management and organisational learning (Liao & Wu, 2010:1096), and the economic performance of an organisation (Evangelista &

Vezzani,2010:1253; Bowen, Rostami & Steel, 2010:1179). These findings imply that innovation systems are a vital tool that enables organisations to improve their performance.

4.2.7.5 Organisational structure and organisational performance

Organisational structures are systemic in nature (Newbert, 2008:748). This aspect provides room for the examination of organisational structures to be conducted under the auspices of organisational systems. According to Nahm, Vonderembse, and Koufteros (2003:283), organisational structure is the way that responsibility and power are allocated, and work procedures are carried out among organisational members. It includes the nature of formalisation, layers of hierarchy, level of horizontal integration, centralisation of authority (locus of decision-making), and patterns of communication. Goldhaber *et al.* (1984:44) defined organisational structure as the network of relationships and roles existing throughout the organisation. Liao (2007:55) defines organisational structure as an organisation's internal pattern of relationships, authority, and communication. Zheng, Yang and McLean (2010:765) define it as an indication of an enduring configuration of tasks and activities. From these definitions, it can be deduced that no organisation exists without an organisational structure and that organisational structures can be manipulated to achieve organisational goals.

Organisational structures may be classified as either mechanistic (inorganic) or organic (Liao, 2007:55). Mechanistic structures are effective when environments have a high degree of certainty, technologies tend to be routine, organisations are designed for large scale operations and employees are regarded as another resource (Nahm *et al.*, 2003:283). In such paradigms, the structures are bound to be vertical, functional and bureaucratic whereas the organic structures are designed to recognise the unpredictable nature of the external environment (Hao, Kasper & Muehlbacher, 2012:51). These structures use non-routine technologies; time is given less importance, while teamwork, face-to-face interactions, learning, innovation, equality, empowerment, lateral relationships, and consensus building are emphasised (Newbert, 2008:748).

Organisational structure is partially influenced by the organisation's external environment to an extent that organisations that are organised to operate in a stable and reliable external environment may fail to cope when that environment changes to become complex and highly

unpredictable (Gullov, 2006:84). Nahm *et al.* (2003:283) reiterate that where the environment is more stable organisational structures are likely to be mechanistic, whereas organisations that operate in highly unstable environments, structures tend to be characterised by decentralised decision-making, a reliance on less formal rules and policies, and leaner hierarchies. It may be appreciated then that organisational structures may be examined from a number of sub-dimensions; there are five most common dimensions as listed and briefly defined in Table 4.3.

Table 4.3: Five Sub- dimensions of Organisational Structure

Dimensions	Definitions
Nature of formalization (O/NF)	The degree to which workers are provided with rules and procedures that deprive
Number of layers in hierarchy (O/NL)	Inorganic: deprive Organic: encourage The degree to which an organisation has many versus few levels of management
Level of horizontal integration (O/HI)	Inorganic: many Organic: few The degree to which departments and workers are functionally specialized versus
Locus of decision-making (O/LD)	Inorganic: low & Organic: high The degree to which decisions are made high versus low in the organisational hierarchy
Level of communication (O/LC)	Inorganic: slow, difficult, Organic: fast, easy, and abundant and limited The degree to which vertical and horizontal communications are slow, difficult, and limited versus fast, easy, and abundant versus

In the coding, O/. . . stands for items in organisational structure.

(Source: Nahm *et al.*, 2003:285)

The impact of organisational structure on organisational performance has been discussed extensively in literature. Most of the literature seems to suggest that a profound relationship exists between structure and organisational performance. For instance, Schminke, Ambrose and Cropanzano (2000:300) opine that a decentralised organisational structure is conducive to the enhancement of both organisational effectiveness and performance. Zheng *et al.* (2010:763) also

point out that decentralised structures encourage more effective communication in addition to increasing employee satisfaction and motivation, and they attribute this to the fact that in less centralised environments, the free flow of lateral and vertical communication is encouraged. Other areas where a decentralised structure has a positive impact include decision-making and responsiveness to market conditions and encouraging the adoption of innovation and higher levels of creativity (Schiminke *et al.*, 2000:300). However, high centralisation also stifles interactions among organisational members (Gold, Malhotra & Segars, 2001:209), reduces the opportunity for individual growth and advancement (Zheng *et al.*, 2010:764) and inhibits innovative solutions to problems (Schiminke *et al.*, 2000:300).

Liao (2007:55) also stresses that decentralisation increases the possibilities for individuals to experiment and carry out proposals that may produce higher levels of performance while Gullov (2006:82) adds that formalisation permits flexibility if the firm orients it toward the coordination of the members of the organisation. All these aspects naturally have either a direct or indirect bearing on organisational performance.

Koufteros *et al.* (2007:468) empirically examined the relationships amongst a set of organisational culture and structure variables, and how they are related to the practice of production, and firm performance. The study concludes that the effects of organisational structure on performance may not be direct. For example, organisational structure may have an impact on information processing and organisational practices, which would in turn have a determining impact on performance. This presupposes then, that it would be important for one to consider some important variables that perform a mediatory role in the relationship between structure and organisational performance.

Germain, Claycomb and Droge (2008:557) investigated the moderating effect of demand unpredictability in the relationship between supply process chain variability, organisational structure and performance, where supply chain variability is the level of inconsistency in the flow of goods throughout the firm. In the study, it was found that in the supply chain process, formal control affects supply chain variability leading to improved financial results. However, in unstable demand environments, only cross-functional integration affects supply chain process variability, also resulting in enhanced financial performance (Ethiraj & Levinthal, 2004:159). In

addition, organisational structure provides managers with the mechanisms to mitigate this variability's detrimental impact on financial performance. The results of the study complement previous research conducted by Kim (2006:323), whose empirical test proved that excessive formalisation and centralisation of the supply chain department within a firm may interrupt complete supply chain integration and performance improvement.

A study conducted by Zheng, Yang and McLean (2010:763), which was based on 301 USA-based organisations, examined the possible mediating role of knowledge management in the relationship between organisational culture, structure, strategy, and organisational effectiveness. Knowledge management encompasses the managerial efforts in facilitating activities of acquiring, creating, storing, sharing, diffusing, developing, and deploying knowledge by individuals and groups (Gold *et al.*, 2001:214). The research outcomes suggest that knowledge management partially mediates the impact of organisational structure on organisational effectiveness and performance. These results signify that organisational structure can influence organisational effectiveness and performance in situations where knowledge management is optimised (Ethiraj & Levinthal, 2004:163)

Claver-Cortés, Pertusa-Ortega and Molina-Azorín (2012:993) researched on the performance implications of linking organisational structure to hybrid competitive strategy. In addition, the study analysed the mediating role of competitive strategy in the relationship between organisational structure and firm performance. Hybrid competitive strategies are those that seek to obtain higher performance levels by simultaneously emphasising high differentiation and low-cost levels (Acquaah & Yasai-Ardekani, 2008:346). The findings reveal that there is a positive relationship between hybrid competitive strategy and firm performance. Similarly, organisational complexity and the existence of formalisation impact positively on hybrid competitive strategy, whereas centralisation has a negative influence (Donaldson, 2001:77). These results demonstrate that organisational structure has an indirect rather than a direct influence on performance, and this is exerted through hybrid competitive strategy (Claver-Cortés, Pertusa-Ortega & Molina-Azorín, 2011:997)

The literature discussed in the current section endorses the notion that the type of organisational structure has an impact on organisational performance. It is therefore deemed crucial for

organisation designers to ensure that there is a fit between the organisational structure and other instrumental organisational facets in order to ensure that the organisation is able to achieve its goals.

4.2.7.6 Other systemic dimensions of organisational performance

The impact of organisational systems on organisational performance can also be analysed through various frameworks. Mackinsey's 7S framework is arguably one of the most popular tools for analysing how well an organisation is positioned to achieve its objectives (Fullan, 2009:24). The framework was developed in the early 1980s by consultants working at McKinsey and Company's consulting firm. The basic premise of the model is that there are seven internal aspects of an organisation that need to be aligned if it is to be successful (Peters, 2011:3). According to Snooks (2008:16), the elements are divided into hard elements (which are easier to define or identify and management can directly influence them) and soft elements (which are more difficult to describe, are less tangible and more influenced by culture), as illustrated in Table 4.4.

Table 4.4: Hard and Soft Elements of Mackinsey's 7S Framework

Hard Elements	Soft Elements
Strategy	Shared Values
Structure	Skills
Systems	Style
	Staff

(Source: Elster, 2007:15)

Figure 4.6 illustrates how the hard and soft elements are intertwined.

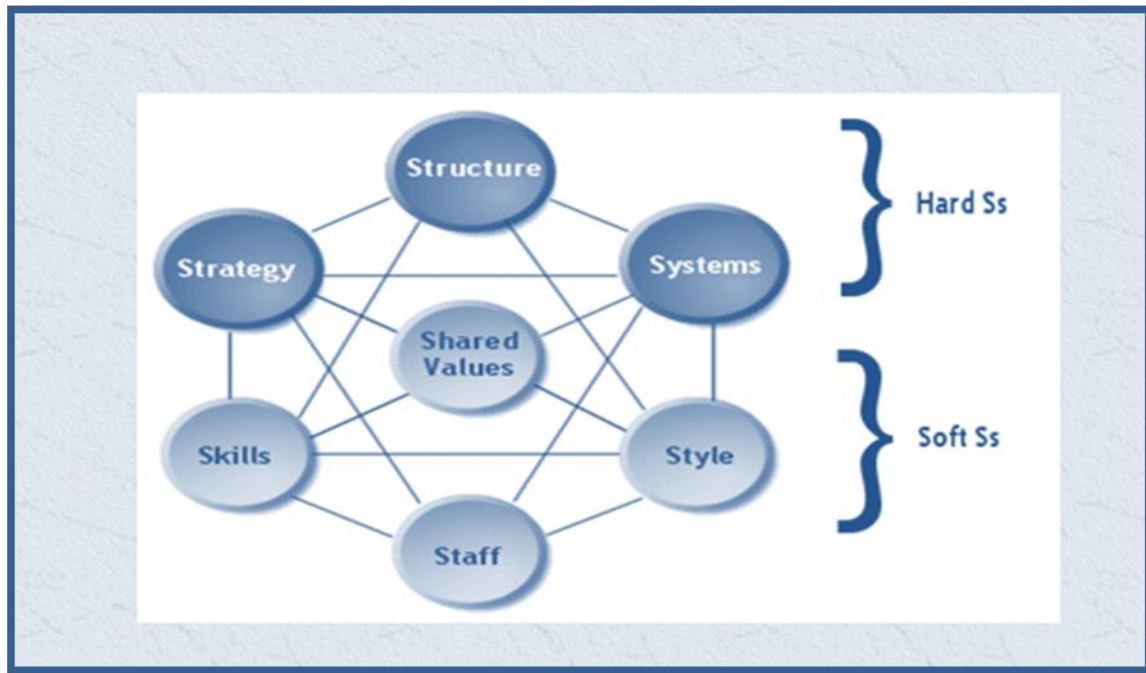


Figure 4.4: Interrelationships between Hard and Soft Elements

(Source: Elster, 2007:15)

Pickel (2006:8) gives the following descriptions of the seven elements of Mackinsey's Framework:

- Strategy: refers to all the activities the organisation does to gain competitive advantage.
- Structure: refers to the way the organisation is structured and who reports to whom.
- Systems: refers to the daily activities and procedures that staff members engage in to get the job done.
- Shared values: are also called "superordinate goals" and refer to the core values of the company that are evidenced in the corporate culture and the general work ethic.
- Style: refers to the organisational culture.
- Staff: refers to the employees and their general capabilities.

- Skills: refers to the actual skills and competencies of the employees working for the company.

The benefits of applying the 7S framework in the organisation include improvements in performance, more effective organisational change management, alignment of departments and processes during a merger or acquisition, and better strategy implementation (Pickel, 2006:9).

It is interesting to note that organisational systems were included among the seven pillars of organisational alignment that are emphasised in the framework. This has implications for the current study. The very inclusion of organisational systems in the framework means that organisational systems are also a major determinant factor for organisational success. Furthermore, when something goes wrong in an organisation, one has to check for any possible misalignments between organisational systems and the other six elements as a problem-solving tool. The main systems that run the organisation, the controls and how they are monitored and evaluated, as well as the internal rules and processes can be subjected to a diagnostic scrutiny and adjusted until there is a proper fit between the problematic element and other elements (Fullan, 2009:25).

Gorla, Somers and Wong (2010:207) analysed the organisational impact of system quality, information quality, and service quality. In the study, the hypothesis that there is a positive relationship between system quality and organisational performance was tested and found to be true. For instance, a system that uses state of the art technology and provides user-friendly interfaces can have a resounding organisational impact in areas such as supplier search and switch costs, product enhancement, market information support, and internal organisational efficiency (Gorla *et al.*, 2010:214). Overall, these results are comparable to those of Prybutok, Zhang and Ryan (2008:143), who indicated that system quality, information quality, and service quality, positively impacts net benefits in an e-government context.

Moore (2010:3111) developed a multi-agent system based on computational organisation theory to analyse the effect of vulnerability on organisational performance. In that study, agents were identified as information-processing units and the vulnerability of an organisation is defined as the ability of the organisation to complete tasks when either the agent or the communication link

fails. The study further demonstrated the usefulness of this framework by comparing the performance of four forms of organisational structures. The results of this study have practical implications for organisations, such as the multi-agent perspective that is proposed in the study can allow researchers to develop, test, and compare theories of the impact of information technology on organisational performance. Organisations are reduced to their core elements, eliminating the type of empirical noise that can make it hard to determine key relationships, and how organisational systems can support organisational performance (Peters, 2011:4).

4.3 ORGANISATIONAL PROCESSES AND ORGANISATIONAL PERFORMANCE

4.3.1 The process-based view of the organisation

Also known as the ‘process perspective’, ‘process philosophy’, ‘process metaphysics’, or the ‘process-based view’, process thinking is a body of ideas directed at conceptualising the organisation as a process (Koskinen, 2011:41). Process thinking addresses questions about temporary evolving phenomena, which implies that the process perspective is a more dynamic approach to organisational and management issues (Langley & Tsoukas, 2010:2). It considers phenomena dynamically in terms of movement, activity, events, change and temporal evolution (Langley, 2007:272). This denotes that the process view involves a consideration of how and why things such as people, organisations, rules and norms, evolve over time and space.

The process perspective on organisations suggests that although change always has primacy, a sense of order can emerge temporarily when distinctions are made between different types of situations (Koskinen, 2011:2). Organisational life is taken to be ever mutating, and yet the existence of organisations as stable frames of human action and sense-making is not assumed (Hernes, 2010:162). Therefore, the process-based view of the organisation emphasises elements such as movement, change and transformation over elements such as stability, permanence and order, implying that organisations are not things made but rather processes in the making (Hernes, 2007:6). The fact that organisations are made up of processes indicates that there is room to positively adjust every stage of the process in order to enhance performance (Robinson, 2006:793)

According to Langley and Tsoukas (2010:2), the process perspective has the following three dimensions:

- It prioritises activity instead of the product, change over persistence, novelty rather than continuity, and expression over determination. This view is termed ‘process vs. substance metaphysics’. In this sense, the core themes of the process view are becoming, change, creativity, disruption, and indeterminism. Therefore, these are the core elements of the process. From a process perspective, an organisation is made up of the interaction processes or experiences among its members and is not necessarily already an accomplished entity (Langley & Tsoukas, 2010:3).
- Explanations of phenomena are given in terms of patterns in events, activities, and choices over time rather than in terms of relationships among dependent and independent variables. In this regard, a process model deals with events rather than variables and addresses the final cause and not efficient causes, where a final cause is an end state whose existence presupposes the occurrence of a series of prior states. In process models, time ordering among the antecedents is pivotal for the outcome. Process theories emphasise ‘necessary’ causality rather than ‘necessary and sufficient’ causality, since the impact of every event commonly depends on what precedes it and what follows it. This view is known as: ‘process vs. variance theorising’ (Langley & Tsoukas, 2010:6).
- This is a deeper conceptualisation of processes in which phenomena such as organisational change is analysed in terms of movement from one state to another, while the substance of the elements is retained. This is in contrast to viewing change in terms of the ongoing micro-processes that contribute to constituting and reproducing. This perspective is known as the ‘narrative vs. logico-scientific thinking’ (Hernes, 2007:10).

Gruchman (2009:1) suggests that in brief; the process-based view rests on the following key concepts:

- Processes are composed of structured, coordinated activities.
- An activity is performed by one or more people.
- An activity is composed of tasks, elementary units of work.

- A task is performed by one person, software transaction or functional module.
- Resident resources provide an execution platform for processes and activities.
- Process and activity execution is driven by capabilities.

Garvin (1998:3) establishes that there are three separate but related categories of organisational processes, namely: (1) work processes, (2) behavioural processes, and (3) change processes (Refer to Table 4.5). The work-processes approach has the goal of completing tasks and is premised on the idea that organisations accomplish their work through linked chains of activities cutting across departments and functional groups (Moffett, McAdam & Parkinson, 2003:14). Work processes are divided into operational processes (e.g. manufacturing, new-product development, and logistics) and administrative processes (e.g. strategic planning, budgeting, and performance management systems) (Garvin, 1998:6). Behavioural processes focus on patterns of behaviour inherent in the organisation that exhibit the characteristics of that organisation with an example being decision making and communication processes (Sher & Lee, 2004:933). Change processes are clearly dynamic and inter-temporal and examples include the organisational life cycle and Darwinian evolution (Škrinjar, Bosilj-Vukšić & Indihar-Štemberger, 2008:738).

Table 4.5: Organisational Processes Framework

	Work Processes	Behavioral Processes	Change Processes
Definition	Sequence of activities that transform inputs into outputs	Widely shared patterns of behavior and ways of acting/interacting	Sequence of events over time
Role	Accomplish the work of the organisation	Infuse and shape the way work is conducted by influencing how individuals and groups behave	Alter the scale, character, and identity of the organisation
Major Categories	Operational and administrative	Individual and interpersonal	Autonomous and induced, incremental and revolutionary
Examples	New product development, order fulfillment and strategic planning	Decision-making, communication, organisational learning	Creation, growth, transformation, decline

(Source: Garvin, 1998:17)

4.3.2 The importance of the process perspective

It is important to understand why the process perspective should be adopted and promoted. First, process knowledge is relevant to practice. By assuming that organisations are static entities, most traditional cross models of management fail to account for the temporal dynamics that characterise most organisations (Gruchman, 2009:4). For instance, the finding that Firm XYZ performed better than firm ABC does not explain how to transition firm ABC to the performance status of XYZ. The process-based view addresses such issues by explaining the processes that firm ABC must engender in order to be like firm XYZ (Meyer, Gaba & Colwell, 2005:467). In addition, action under complexity interacts with its context to generate reactions, with unexpected implications that do not exist in most static models (Langley & Tsoukas, 2010:10).

Rynes (2007:985) proposes that process studies that examine how changes in practices are implemented, and how their influence spreads and interacts with existing organisational contexts offer a move closer towards a better understanding of how to improve them. This enables

organisational leaders to adopt established evidence, based on facts rather than myopic management knowledge in their duties, an aspect that is important especially when one intends to improve performance (Langley, 2007:273). As suggested by Cater and Cater (2009:189) the use of a fact-based approach to management ensures that the strategies that are initiated are more effective and lead to desired outcomes.

Process conceptualisations are also important because it takes the time dimension into account, thereby offering an essential contribution of one's understanding of the world that is not offered by more traditional conceptual models that tend to disregard the element of time completely (Rynes, 2007:985). This is called the principle of 'comparative statics' as it involves the reevaluation of quantitative relationships at successive times to provide a better understanding of various phenomena (Langley, 2007:276). The understanding of comparative statistics itself is crucial in developing strategies for the improvement of organisational performance (Skrinjar, Bosilj-Vukšić & Indihar-Štemberger, 2008:738)

Garvin (1998:2) also contends that processes offer a level of analysis which is both convenient and intermediate because they consist of diverse, interlinked tasks. This brings in the needed integration, which ensures that the realities of work practice are linked categorically to the organisation's overall functioning (Ahn & Chang, 2004:403). A process lens provides fresh insights into managerial behaviour since it emphasises the interconnections that exist among activities, which shows that seemingly unrelated activities are often part of a single, unfolding sequence. This in turn ensures that managerial work becomes more rational and orderly (Garvin, 1998:3).

4.3.3 The impact of organisational processes on organisational performance

Langley and Tsoukas (2010:9) identify organisational learning and knowledge, organisational change, decision-making, communication, trust, and strategy as some of the topics that can be examined from a process perspective.

4.3.3.1 Organisational change processes

Organisational change processes are focused on answering the following question: “How did x get from here to there?” (Garvin,1998:14).Regardless of their focus, change processes are categorised into two broad groups - autonomous and induced (Balogun & Johnson, 2004:523). Autonomous processes are those that have a life of their own, and they proceed because of internal dynamics, i.e. the entity or organism evolves naturally and of its own course (Child, 2005:43). Examples of such processes include an organisation’s mutation through the organisational life cycle and organisational and industry shifts that result from technological changes. Unlike autonomous processes, induced processes do not occur naturally but must be created. All planned change efforts therefore fall into this category (Smith, Morris & Ezzamel, 2005:415).

In their much acclaimed Machiavellian (in the sense of cunning) analysis of the determinants of organisational change, McGuire and Hutchings (2006:192) presented a model (Refer to Figure 4.7) of how power, leaders and teams, rewards and discipline, and roles, norms and values, serve as drivers, enablers or inhibitors of organisational change. The study concludes that Machiavellian thinking provides a valuable guide to the challenges and obstacles in negotiating organisational change and identifies the individual as occupying the central role in determining whether the change intervention will be accepted or rejected.

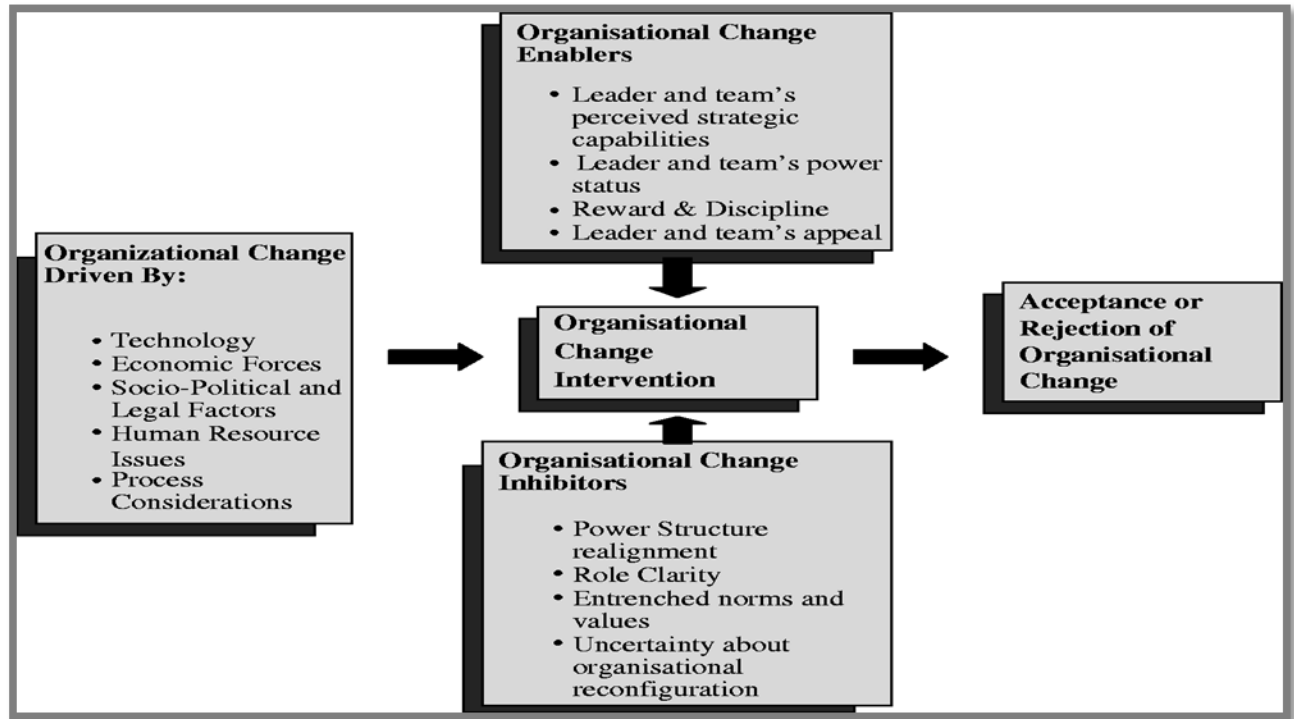


Figure 4.5: Organisational Change Model

(Source: McGuire & Hutchings, 2006:194)

The impact of organisational change on organisational performance is an extensively researched topic. A study by Smith *et al.* (2005:415) analysed the relationship between organisational change, outsourcing and the impact on management accounting. In the study, the following three propositions were made: (i) Change in organisational form may be related to an increased use of outsourcing or subcontracting; (ii) outsourcing is expected to improve organisational flexibility and/or the service of an activity, to lead to cost savings, or to allow the organisation to focus more clearly on its core business; and (iii) outsourcing promotes change in management accounting. The findings of that study found support for all three hypotheses. The results also have implications for organisational performance in the sense that the resultant flexibility and cost savings emanating from the outsourcing and streamlining of management accounting can be considered to be factors that have a stimulus effect on organisational performance (Smith *et al.*, 2005:419).

Sadeghi (2011:1099) conducted a mixed method study on the relationship between the alignments of different typologies of strategies for the five organisational change infrastructure

strategies (structure, technology, culture, human resources, and goals) with a view to improving the performance. When these strategies change, the organisation also changes. Results of the study reveal that the more the alignment among the typologies of organisational change strategies increases, the more their performance improves and the more the alignment among the typologies of organisational change strategies increases in a specific group (low performance organisational group), the more their own performance improves. These findings are consistent with Weisbord's (2003:430) "six places to look for trouble with or without a theory".

Organisational change process must be mediated by organisational learning culture if it is to enhance organisational performance. These were the results obtained in a study by Skerlavaj, Štemberger, Šrinjar and Dimovski (2006:346) which investigated the moderating effect of organisational learning culture in the relationship between organisational change and organisational performance. Organisational learning culture may be perceived as a set of norms and values about the functioning of an organisation (Denison & Spreitzer, 1991:16). The findings of the study have a practical implication for organisational practitioners and researchers: organisational learning culture is very important when trying to improve organisational performance through business process change (Skerlavaj *et al.*, 2006:346).

A study conducted by Ndofo *et al.* (2009:799) examined the impact of the cognitive communities and recent 'top-job' success of new leaders on organisational change and performance. In the study, it was found that leader succession often occurs because a performance decline highlights the need for change within an organisation and that when this need is especially high, successors are likely to be drawn from different cognitive communities than those of the replaced incumbents. As such, successors representing different cognitive communities carry out more change immediately after succession. This rapid change will be most effective when new leaders in organisations have had successful recent 'top-job' experiences. When successors lack recent top-job success, too much change too soon will actually hurt performance. The implication of the study to researchers is that since the mechanisms through which succession events impact on performance are highly complex, it is not enough to know that a succession has taken place and that it influences performance (Yukl, 2006:91). In actual fact, organisational performance is mostly influenced by the change

actions that a new leader undertakes combined with the new leader's capabilities (Ndofor *et al.*, 2009:801).

In addition to the aforementioned studies, literature that also attempts to explain the possible effects of organisational change on organisational performance is amply accessible. Judge and Elenkov (2005:894) found that the organisation's capacity for change influences environmental performance in that the higher the capacity for change, the more the organisation is able to perform in its operational environment. Properly implemented, organisational change also facilitates process improvement, which in turn has a stimulus effect on organisational performance (Lee & Ahn, 2008:270). Nordin (2011:129) also found that an organisation's preparedness for change is explained by factors such as emotional intelligence, organisational commitment and transactional leadership behaviour. This implies that an organisation's ability to change can only be enhanced when the identified factors are optimised. Furthermore, Tsamenyi, Onumah and Tetteh-Kumah (2010:428) observed that organisational changes at various levels of the organisation positively influenced the post-privatisation performance of specific companies in Ghana, while Palcic and Reeves (2010:299) also found that organisational changes had impacted positively on the post-privatisation performance of Ireland's national telecommunications operator, Telecom Éireann.

4.3.3.2 Leadership

The influence of leadership on organisational performance is an interesting subject. First, the very definition of leadership itself is significant. Snowden and Boone (2007:7) adopt the assumption that leadership is all about influence because leadership involves mobilising others for shared aspirations. Sandbakken (2006:2) posits that leadership is all about results. A single word that encapsulates all these definitions is 'inspiration' (Yukl, 2006:11). This signifies that a leader is supposed to motivate subordinates toward the attainment of organisational goals and is one who makes subordinates do something not because they have to do it but rather because they want to do it (Vera & Crossan, 2004:223). This attitude produces desirable results in the organisation.

A number of studies have examined the relationship between leadership style and organisational performance. The overall pattern of results in a study conducted by Puspanathan, Mangaleswaran

and Lin (2006:439) supports the existence of a relationship between leadership styles and organisational performance. Hè (2009:99) looked at the impact of leadership style on task performance and self-efficiency and reached the conclusion that certain leadership styles can influence individual performance, since leadership style also impacts on the beliefs of individuals and their ability to perform a task. Improved individual performance obviously has a positive ripple effect on organisational performance (Puspanathan *et al.*, 2008:13). In a study by Huang (2006:36), the influence of leadership style on the performance and job satisfaction of public sector employees in Sri Lanka was discussed. Results of the study indicate that an increase in participative leadership style stimulated the performance of subordinates. In contrast, an increase in task-oriented leadership triggered a decrease in employee performance. Another study conducted by Fullan (2005:19) made a comparative analysis of leadership style and the performance of schools. The study concluded that leadership style has a significant positive correlation with the performance of both schools as well as enterprises. The results of the aforementioned studies can be summarised by Huang (2006:71), who observes that leadership performance is identical to organisational performance. This statement is extended further by Hè's (2009:120) suggestion that organisational performance can be promoted when organisational leaders manifest different styles of leadership coupled with planned human resource management strategies.

A study by Ogbonna and Harris (2000:771) explains that the relationship between leadership style and organisational performance is mediated by the nature and form of organisational culture. There is a direct link between certain types of organisational cultures such as competitive and innovative cultures and organisational performance, while community and bureaucratic cultures are not directly related to organisational culture. These results are consistent with the findings of Wang (2002:3924), who conducted an explorative study of the relationship between the leadership attributes of CEOs, organisational performance, and organisational culture. Results of the study confirm the existence of a positive relationship between leadership styles and certain forms of organisational cultures. Since organisational culture influences employee attitudes, it is then assumed organisational performance would increase. These propositions are illustrated in Figure 3.3.



Figure 4.6: Leadership Style, Organisational Culture, and Organisational Performance

(Source: Ogbonna & Harris, 2000:771)

Sandbakken (2006:1) posits that in order for results to be created in the dynamic world of today, a new kind of leadership that is radically different from traditional leadership styles is required. Bennett, Harvey, Wise and Woods (2003:8) and Fullan (2005:16) add that the world of today requires leaders who can change the status quo and centers of gravity, keep internal focus, and assist the human elements as well as the organisation itself to adapt to the changing times and to excel while simultaneously maintaining customer importance and external perspective. This implies that one's leadership style is instrumental in influencing organisational results. In support of this notion, Wang *et al.* (2010:3924) propose that the leadership style employed in the organisation plays a crucial role in determining the overall performance of that organisation.

Although it is widely accepted that numerous leadership styles exist, one leadership style that has attracted widespread attention from various management scholars is transformational leadership (De Vries, Bakker-Pieper & Oostenveld, 2010:367; Crowell, 2011:208). Consequently, the relationship between transformational leadership has been a subject of discussion in many scholarly articles, some of which will now be discussed.

4.3.3.2.1 Transformational leadership

In transformational leadership, the leader creates and shares a vision for the future, and this gives the followers the impetus to participate in necessary actions and change (Sandbakken, 2006:3). Transformational leaders are those who interact with their subordinates in ways that are seen by the subordinates as being intellectually challenging, inspirational, sensitively considerate and supportive, and expressing a mission that is representative of their collective views (Currie & Lockett, 2007:342). Closer relationships characterised by mutual trust and commitment are also developed between a transformational leader and the followers (Sashkin & Sashkin, 2003:39). The followers of a transformational leader are characterised by high levels of self-confidence, self-efficiency, and self-esteem (Sandbakken, 2006:3). This suggests that the transformational leader is one who elevates followers' needs in line with the leader's own goals and objectives, articulates a positive vision of the future that can be shared with subordinates and among peers, pays high attention to diversity, and intellectually stimulates subordinates to perform beyond what they think is possible for them (Muijs, 2011:51). According to Hancott (2005:28) transformational leadership has the following four basic dimensions:

- **Attributed charisma and idealised influence:** It involves gaining trust, respect, and confidence of others by taking a stand on difficult issues, showing conviction, emphasising the importance of purpose, commitment, values, and representing the ethical consequences of decisions.
- **Inspirational motivation:** This element is related to communicating a vision with fluency and confidence in a positive manner, energising others and increasing their optimism and enthusiasm for the tasks ahead.
- **Individualised consideration:** Transformational leaders deal with subordinates as individuals and understand that each individual has different needs, abilities, and requires personal attention and to feel valued.
- **Intellectual stimulation:** Transformational leaders know that creativity, knowledge creation, and continuous improvement are the only real ways to sustainable competitive

advantage.

Research has established that there is a positive relationship between transformational leadership and performance (Elenkov, 2002:471). Sashkin and Sashkin (2003:34) and Whittington, Goodwin and Murray (2004:599) contend that transformational leadership, which involves both visionary and charismatic elements, is associated with higher performance, both for individuals, groups and organisations across cultures and contexts. Transformational leadership behaviours cascade down through the various organisational levels and have the effect of raising the degree of performance at every level (Damen, van Knippenberg & van Knippenberg, 2008:2594). When employees are subjected to transformational leadership, their consciousness about the importance and value of goals is likely to be enhanced together with the ways that the employees can use to attain these organisational goals (Currie & Lockett, 2007:344). This implies that the leaders and followers will identify with the organisation's goals and work with a common purpose toward their attainment (Hancott, 2005:29).

Huang (2006:71) maintains that transformational leadership has a positive correlation with organisational performance, higher than the exchange leadership. The effects of transformational leadership on both individual performance as well as organisational performance are illustrated in Table 4.6.

Table 4.6: The Impact of Transformational Leadership on Performance

Transformational Leadership	Individual Effects	Organisational Effects
Idealised influence	Increased effort/motivation	Increased productivity
Inspirational motivation	Follower self-confidence	Increase in productivity
Intellectual stimulation	Increase ability to complete tasks	Lower costs
Individualised consideration	Self efficacy and effort through problem solving	Increased customer service, focus, improved quality & innovative products
Work identity	Increased satisfaction, increased follower motivation, greater willingness to put forth effort	Increase in sales, Increase in stock price, Increase/higher corporate goals
Change, innovation and entrepreneurship	Extra effort, higher level of perceived, leader effectiveness, Increase optimism, future-oriented vision theme, Increase learning activities	Educational improvements
Stronger leader and unit identity	Increase in innovative thinking	More R & D activities

(Source: Hancott, 2005:28)

From Table 4.1, it can be deduced that the benefits of transformational leadership on both individual performance and organisational performance are manifold. This signifies that in order to enhance organisational performance, leaders should endeavour to cultivate and practice transformational leadership. However, transformational leadership has its inherent shortcomings. Some of the constraints relate to the difficulty in engendering the charismatic personality in a leader who does not possess these characteristics, the possible failure of transformational leadership in cases where the person organisation fit is non-existent, the complexity of the fit between the leader and the organisational culture, and the likely resistance by subordinates to change (Muijs, 2011:51). Beachum (2004:16) also draws attention to the fact that

transformational leadership exists in an individual. This triggers difficulties when that individual leaves the organisation, or when the leader fails to inspire some of the followers. This denotes that there is a strong likelihood that transformational leadership does not improve the overall leadership of the organisation, and can be a time bomb for the organisation (Damen *et al.*, 2008:2609). These shortcomings tend to limit the supposed universal applicability of transformational leadership. Consequently, and coupled with the fact that leadership styles are not a constant, but rather subject to evolution, other leadership styles have been suggested that tend to do well in areas where transformational leadership has weaknesses (De Vries *et al.*, 2010:372). This leads to distributed leadership.

4.3.3.2.2 Distributed leadership

The recent emergence of distributed leadership was influenced by the shortcoming of traditional views of transformational leadership. In distributed leadership, all members of the organisation espouse leadership in their respective portfolios, that is, transformational leadership qualities can reside in all members of the organisation (Muijs, 2011:51). This allows leadership to stretch across and within an organisation and ensures that organisational members are involved in the practice of leadership. Spillane, Halverson and Diamond (2001:23) describe distributed leadership as an emergent property of a group or network of individuals in which group members pool their expertise. This is unlike transformational leadership where one individual who is regarded as the hero. This implies that the untapped leadership potential that exists in subordinates can be discovered and developed (Currie & Lockett, 2011:288). Nevertheless, this does not imply that all members lead at the same time in a directionless manner. Instead, it is a form of leadership that brings together both lateral and formal leadership processes in order to generate organisational change and development. It is educational rather than institutional in its focus and is exercised through the liberation of talents within a participatory framework (Fullan, 2005:6). It therefore leads to high levels of both lateral and vertical collaboration, which facilitates the improvement of leadership capacity in the entire organisation.

There has been a suggestion that distributed leadership has the potential to improve organisational performance (Muijs & Harris, 2003:446). However, this suggestion is hampered

by a lack of empirical studies of distributed leadership in action (Bennett *et al.*, 2003:4). Despite this fact, Fry and Matherly (2006:1) suggest that the few studies on distributed leadership, there is a positive correlation between distributed forms of leadership and organisational performance. This could be the reason why most researchers and policy makers have been advocating for the widespread adoption distributed leadership forms (Currie & Lockett, 2011:289).

4.3.3.2.3 Spiritual leadership

Spiritual leadership is another emergent concept that has received considerable attention in recent times. Emerging evidence also suggests that spiritual leadership may lead to a number of beneficial personal outcomes such as improved health and psychological well-being, employee commitment, productivity, and reduced employee absenteeism and turnover (Fry & Matherly, 2005:1). Proponents of the spiritual leadership theory argue that the organisation is a mixture of unique and individual spirits of organisational members who are motivated by the spiritual need to a sense of accomplishment and togetherness in their work (Garcia-Zamor, 2003:358). Bennett *et al.* (2003:6) assert that spiritual leadership may be defined as the values, attitudes, and behaviours that are necessary to intrinsically motivate an individual and others in order for them to have a sense of spiritual survival and well-being through calling and membership. They also suggest that the spiritual leadership involves the following:

- creating a vision in which both leaders as well as followers experience a sense of calling in that life has meaning and makes a difference
- establishing a social or organisational culture that is based on the values of altruistic love, in which organisational members have a sense of membership, feel understood and appreciated, and have genuine care, concern, and appreciation for both self and others.

The qualities of spiritual leadership are presented in Table 4.7.

Table 4.7: Qualities of Spiritual Leadership

Vision	Altruistic Love	Hope/Faith
Broad Appeal to Key Stakeholders	Trust/Loyalty	Endurance
Defines the Destination and Journey	Forgiveness/Acceptance/Gratitude	Perseverance
Reflects High Ideals	Integrity	Do What it Takes
Encourages Hope/Faith	Honesty	Stretch Goals
Establishes Standard of Excellence	Courage	Expectation of reward/victory
	Humility	Excellence
	Kindness	
	Compassion	
	Patience/Meekness/Endurance	

(Source: Institution for Spiritual Leadership, 2011:n.p)

In spiritual leadership, organisational members are motivated and inspired through the use of a mature vision and a culture that is premised on self-sacrifice in order to forge a more and committed productive workforce (Liden, Wayne, Zhao & Henderson, 2008:164). Organisational members develop hope or faith in the organisation's vision, and this keeps the followers positively expectant of the times to come (Duchon & Plowman, 2005:807). Where spiritual leadership exists fears that are commonly associated with worry, anger and jealousy, selfishness, failure, and guilt are eliminated and replaced with a sense of membership characterised by increased consciousness of being understood and appreciated (Fry & Matherly, 2006:2).

The interconnection between spiritual leadership and organisational performance has also been examined. According to Duschon and Plowman (2005:807) spiritual leadership yields higher levels of employee commitment, productivity, and customer satisfaction. These aspects are essential in optimising organisational performance. Dickmann and Stanford-Blair (2008:55) also

affirm that there is a positive interrelationship between spiritual leadership and positive human health and well-being as manifested through ethical behaviour and positive psychology among other traits. As illustrated in Figure 3.4, these results provide more empirical evidence that leader emphasis in spiritual needs in organisations enhances both personal as well as organisational outcomes.



Figure 4.7: The Impact of Spiritual Leadership

(Source: Institution for Spiritual Leadership, 2011:1)

4.3.3.3 Organisational learning processes

Different dimensions adopted by varied authors have resulted in scores of related but semantically different definitions of organisational learning. Skerlavaj *et al.* (2006:348) defines organisational learning as a complex process that refers to the development of new knowledge and has the potential to change behaviour. It pertains to any change in the organisation's models that maintains or improves performance (Alegre & Chiva, 2008:315). Jiménez-Jiménez and Sanz-Valle (2011:409) define organisational learning as the process by which the organisation develops new knowledge and insights from the common experiences of people in the organisation, and has the potential to influence behaviours and improve the firm's capabilities.

Verdú-Jover, Lloréns-Montes and García-Morales (2006:334) also posit that organisational learning is the process by which the organisation increases the knowledge created by individuals in an organised way and transforms this knowledge into part of the organisation's knowledge system. One common feature in the various definitions given is that organisational learning involves changing the behaviour of individuals and the organisation at large.

The output of organisational learning is organisational knowledge (Laforet, 2008:753). Bontis (2002:437) also stresses that organisational learning can be either internally oriented (where knowledge is generated within the organisation) or externally orientated (where knowledge filters into the organisation from outside sources). As such, organisations should achieve an adequate balance between internal and external learning that ensures that there is a fit between their resource configuration and strategic objectives.

Weerd-Nederhof, Pacitti, Da Silva and Pearson (2002:325) state that organisational learning comprises four sub-processes namely:

- **Knowledge acquisition** - the process the company uses for obtaining new information and knowledge
- **Knowledge distribution**- the process by which employees share information within the firm
- **Knowledge interpretation** - which occurs when individuals give meaning and transform information into new common knowledge
- **Organisational memory** - the process of storing the information and knowledge for future use.

Pantnagar Tarai Agri Seeds (2011:n.p.) also postulate that organisational learning has four distinct levels of progression (Refer to Figure 4.8), namely, behavioural, functional, managerial, and leadership, with the last-mentioned being the highest level in the pyramid, while behavioural is the lowest level.

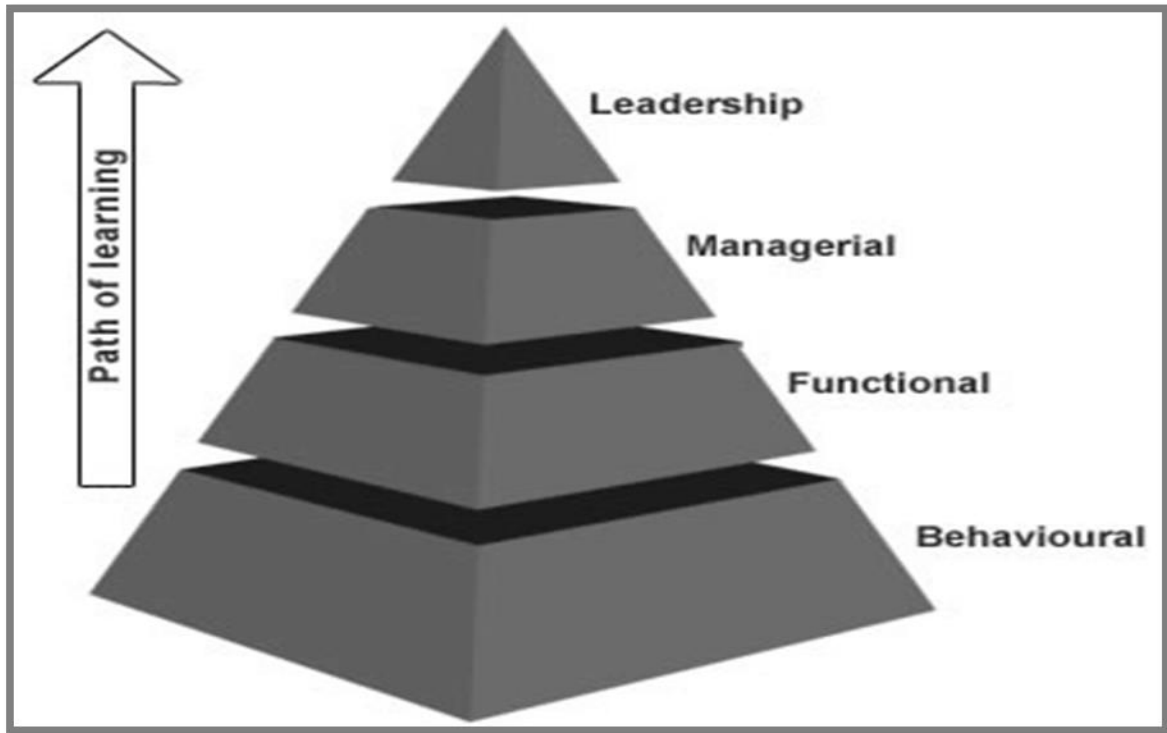


Figure 4.8: Four Levels of Organisational Learning Progression

(Source: Pantnagar Tarai Agri Seeds, 2011:1)

Literature that addresses the relationship between organisational learning and organisational performance is abundantly available. Jiménez-Jiménez and Sanz-Valle (2011:409) and Santos-Vijande, Lopez-Sanchez, and Antonio (2012:1080) categorically state that organisational learning is a basis for gaining a sustainable competitive advantage and a key variable in the enhancement of organisational performance. Garcia-Morales *et al.* (2008:314) stress that organisations that show a greater breadth, depth, and speed of organisational learning have higher performance levels. Organisational learning has also become increasingly accepted in international business literature as a pivotal strategic tool that differentiates organisational performance (Hsu & Pereira, 2008:188). Firms that have developed a strong learning culture are good at creating, acquiring and transferring knowledge, as well as at modifying behaviour to reflect new knowledge and insight (Skerlavaj *et al.*, 2006:348).

Alegre and Chiva (2008:315) empirically assessed the impact of organisational learning capability on product innovation performance. In the study, organisational learning capability is defined through five fundamental mechanisms namely: experimentation, risk taking, interaction

with the external environment, dialogue and participative decision making. A section also analysed the impact of these mechanisms on product innovation performance. The results obtained in the study support the conceptual model and hypotheses that were proposed. This underlines the importance that learning has as a trigger for innovation performance.

The joint effects of process alignment, organisational learning culture and dynamic capability in influencing organisational performance received empirical scrutiny from Hung *et al.* (2011:285). Dynamic capability is the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapid environmental change (Hannah & Lester, 2009:34). Organisational process alignment is the configuration of the various parts in an organisation with the aim of working together in pursuit of organisational goals with the prime intention of enhancing performance and sustaining competitive advantage (Jiang & Li, 2008:365). Zheng, Yang and McLean (2010:763) define organisational learning culture as the condition that exists when an organisation recognises organisational learning as absolutely critical for its business success. The results of the study reveal that both organisational process alignment and organisational learning culture significantly contributed to organisational dynamic capability and ultimately performance.

Santos-Vijande *et al.* (2012:1079) discussed the mediating effects of the relationship between market orientation and organisational learning on organisational performance. The empirical results emanating from the study provide ample evidence on the existing relationship between a firm's learning and market orientation degree and the organisation's economic and non-economic results. Findings of the study indicate that learning orientation stimulates the market-oriented behaviour and that it also positively affects the establishment of long-term relationships with strategic clients. These effects have an ultimate bearing on organisational performance. It is interesting to note that the findings of this study contradict previous research by Farrell (2000:5), who found a negative relationship between learning orientation, market orientation and organisational performance. The differences in the findings in these two studies could be attributed to the fact that the studies were conducted in different contexts. The study by Farrell (2000:5) was conducted among universities in Pakistan whereas the study by Santos-Vijande *et al.* (2012:1079) was conducted among private businesses in Spain.

A study conducted by Jiménez-Jiménez and Sanz-Valle (2011:408) explored the inter-linkage between innovation, organisational learning, and performance using data obtained from at least 451 Spanish firms. The findings show that both innovation and organisational learning positively influence organisational performance. However, the relationship is moderated by factors such as the size and age of the firm, industry, and environmental turbulence.

Verdú-Jover *et al.* (2006:334) analysed the influences of transformational leadership through the dynamic capabilities of organisational learning and innovation, a relationship that had previously received limited research attention. The study was based on data collected from a sample of 168 Spanish firms. The results of the study demonstrate that transformational leadership influences organisational performance positively through organisational learning and innovation, that organisational learning influences organisational performance positively, both directly and indirectly through organisational innovation, and that organisational innovation influences organisational performance positively.

Hung *et al.* (2011:213) tested the impact of Total Quality Management (TQM) and organisational learning on innovation performance in the Taiwanese high-tech industry. Lee and Lim (2009:10) defined TQM as a management approach that focuses on quality and aims at improving organisational effectiveness and flexibility. Primarily, the findings of the study reveal that the TQM organisational learning innovation performance model proposed in the study has goodness-of-fit; indicating that TQM has significant and positive effects on organisational learning, and that TQM and organisational learning have both significant as well as positive effects on innovation performance. The results of this study confirm Prajogo and Sohal's (2003:901) assertion that TQM, organisational learning and innovation performance are positively related.

Organisational learning moderates the relationship that exists between internationalisation and performance, which suggests that expedition of organisational learning is an important factor in ensuring that internationalisation of an organisation's operations is able to boost organisational performance (Hsu & Pereira, 2008:188). Organisational learning also impacts positively on relationship orientation as well as on the improvement of logistics service effectiveness and firm performance (Panayides, 2007:68). This assertion has managerial implications. Organisational managers should not only concentrate on supply chain operational capabilities which are often

quantified in terms of stocks, orders, cycle time , and so on, but should also emphasise the development of intra-organisational learning and relational capabilities (Panayides, 2007:77). With regard to externally oriented learning, Weerawardena, O'Cass and Julian (2006:37) underscore that market focused learning, relative to other learning capabilities plays a key role in the relationships between industry structure, innovation and brand performance. Jiang and Li (2008:365) also found that organisational learning has the effect of enhancing firm performance in strategic alliances, which further suggests that firms in strategic alliances could reap considerable financial benefits by expediting organisational learning.

4.3.3.4 Communications processes

Literature is available that addresses the impact of organisational communication processes on overall organisational performance. Koza and Dant (2007:279) found that the type of communication strategy adopted by organisations influences their financial performance. Sinickas (2001:5) also maintains that communication is a strategic integrating mechanism that promotes cooperative and more effective conflict resolution behaviours, enables firms to interact effectively, and boosts the financial performance of organisations. Another study conducted by Paulraj, Lado and Chen (2008:45) proposes that inter-organisational communication is a relational competency that enhances buyers' and suppliers' performance. This implies that inter-organisational communication is a critical factor in promoting strategic collaboration among firms. The results of the study are in line with several studies that address the role of communication in supply chains. For instance, inter-organisational communication as a critical ingredient in fostering competitive success, facilitates inter-organisational learning and knowledge development is essential for the maintenance of value-enhancing relationships between supply chain partners through nurturing greater confidence, cooperation and trust, and reducing dysfunctional conflict (Takeishi, 2001:420). Furthermore, inter-organisational communication leads to enhanced behavioural transparency and information asymmetry, thereby lowering transaction costs and enhancing transaction value (Paulraj *et al.*, 2008:47). Therefore, it is best that communication be regarded as a strategic tool, that is, in terms of its implications for the relationship in the case of sharing versus withholding information (Kotler, 2004:192).

Rapert, Velliquette and Garretson (2002:301) explored the role of communication in facilitating stakeholder consensus within organisations. In the study, it was found that frequent vertical

communication improves both strategic consensus as well as organisational performance as evidenced by higher levels of net operating income, gross revenues, and substantial growth in net revenues. However, this study was limited in the sense that it emphasised the importance of vertical communications while disregarding the possible influence of lateral communication in facilitating strategic consensus as well. Nevertheless, findings of the study are in harmony with Smircich and Calas's (2007:228) suggestion that there is a positive correlation between effective communication and organisational performance.

In the domain of public administration Garnett, Marlowe and Pandey (2008:266) investigated the role of organisational communication as the mediator of organisational culture's impact on public organisational performance. The primary thrust in the study was the indirect role of communication role in enhancing performance by moderating the effects of organisational culture on performance. The study therefore added another dimension to the relationship between organisational culture and organisational performance. The analysis supports conducted in the study endorse the view that communication acts as a meta-mechanism for shaping and imparting organisational culture, thereby influencing performance. The study also found that particular communication activities such as task orientation, feedback, and upward communication have positive effects on perceived organisational performance in mission-oriented organisations but potentially negative effects on performance in rule-oriented cultures. The findings of the study show that organisational culture impacts positively on organisational performance but these effects are transmitted through communication. Consistently, Alysa (2005:2) and Blalock (2005:4) also maintain that effective business communication works with other organisational factors in a manner that enhances organisational performance.

4.3.3.5 Other organisational processes

In addition to the processes discussed in the preceding sections, literature reveals that several other organisational processes also have an impact on organisational performance. A number of authors (Lin, 2006:438; Andersen, 2001:201; Ehie, 2010:147) point to the positive relationship that exists between organisational decisions and organisational performance. This entails all decisions undertaken by both employees and management which determine the performance of the organisation. It is therefore important that members of the organisation are thoroughly

equipped with appropriate problem-solving and decision-making knowledge and skills as the organisation's long-term survival depends on the application of such abilities.

Literature (Perry & Mankin, 2007:165; Kath, Magley & Marmet, 2010:1488) also supports the notion that organisational trust is a significant predictor of organisational performance. Organisational trust may be perceived as positive expectations individuals have about the intent and behaviours of multiple organisational members based on organisational roles, relationships, experiences, and interdependencies (Kath *et al.*, 2010:1488). Organisational trust is associated with desirable organisational outcomes such as increased job satisfaction, productivity, organisational commitment as well as decreased absenteeism and labour turnover that ultimately lead to organisational performance (Perry & Mankin, 2007:165). DeConinck (2010:1349) also found that the relationship between procedural justice and organisational performance is moderated by organisational trust.

In supply chains, the findings of a study conducted by Panayides and Lun (2010:35) support the positive effects of trust and identify trust as antecedents to higher performance in the supply chain. With regard to inter-organisational exchanges, organisational trust is a very important factor for handling conflict between different organisations (Panteli & Sockalingam, 2005:599).

The type of organisational strategies and the manner in which they are implemented are both well documented in literature as factors that influence organisational performance (Armstrong, 2005:21). Organisational strategies come in various forms that influence various levels and functions within an organisation. The results of a study conducted by Chen and Liang (2011:75) indicate that knowledge management strategies have the impact of improving different aspects of organisational performance. These results are in resonance with those obtained in a study carried out by Choi, Poon, and Davis (2008:235) which also indicate a positive relationship between knowledge management strategy and organisational performance. Neill and Rose (2004:3) propose that that strategic complexity is an organisational capability that enables more effective strategy making and produces superior firm performance. A meta-analysis conducted by Kellermanns *et al.* (2011:126) provides empirical support for a positive effect of strategic consensus on organisational performance, and offers ample evidence for the existence of several moderators of that relationship. The significance of this study lies in the fact that it improves

one's understanding of the important strategy process construct and benefits managerial practice by discussing means for enhancing the realisation and implementation of strategies.

Adler's (2011:251) study also found that organisational strategy may influence the design and implementation of performance management systems. Earlier research conducted by Hyvonen (2007:343) examined the interconnection between organisational performance, customer focused strategies, performance measures and information technology. The results of the study are threefold. Firstly, when a firm does not follow a customer-focused strategy, contemporary management accounting systems in combination with advanced information technology are related to high customer performance. Secondly, contemporary performance measures are not helpful to firms with a highly customer-focused strategy in achieving high customer performance. Thirdly, a fit between the customer-focused strategy and financial performance measures improves customer performance.

4.4 CONCLUSION

The purpose of this chapter was to conduct a literature review of organisational systems as well as processes and their impact on organisational performance. Generally, the literature reviewed pointed to a positive relationship between the aforementioned factors. This signifies that organisational performance is bound to improve when both organisational system elements as well as organisational process components are appropriately conceived, designed, implemented, and evaluated. The challenge rests on organisational practitioners to ensure that this is done. The next chapter of the study discusses the research methodology that was employed in the entire research project.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1 INTRODUCTION

The purpose of this chapter is to discuss the research methodology used in the study. Research methodology pertains to the means, techniques, and frames which researchers approach when carrying out an inquiry (Flyvberg, 2006:220). This enables one to better comprehend both the various methods and principles employed in the entire research process. The current chapter will therefore seek to clearly articulate the processes involved in conducting the research. The principal aim of the current study was to examine the relationships between the human factor, organisational systems and processes, and organisational performance. As such, the methodology was designed to cover the following empirical objectives, which were set for the study:

- To use the BSC to measure the performance of a National Government Department
- To examine the relationship between the human factor and organisational performance
- To examine the relationship between organisational systems and organisational performance
- To examine the relationship between organisational processes and organisational performance
- To determine the extent to which each factor influences organisational performance, relative to other factors

To achieve the objectives of the study, a survey was conducted based on the available literature, which formed the theoretical basis to describe the underpinning relationships between the variables under study. The information obtained in the review of related literature was used as a reference point in the construction of a questionnaire, which was then employed in the empirical phase of the research. To achieve the objectives of Chapter Five, critical issues such as sampling procedure, data collection methods and techniques, research design, questionnaire development and administration as well as statistical techniques employed in the study will be discussed.

5.2 RESEARCH DESIGN

Ostlund, Kidd, Wengstrom and Rowa-Dewar (2011:369) describe a research design as the strategy of a study and the plan by which the strategy is to be carried out. The authors further note that the research design guides the researcher in the process of collecting, analysing and interpreting data observations. This suggests that the research design is the blueprint of a study that enables the researcher to come up with solutions to the research problems.

Hopkins (2000:4) states that the major aim in quantitative research is to determine the relationship between one construct (an independent variable) and another (a dependent or outcome variable) in a population. Chai and Xiao (2012:24) further highlight that quantitative research designs may either be descriptive (subjects usually measured once) or experimental (subjects measured before and after a treatment). A descriptive study establishes only associations between variables whereas an experiment establishes causality. This study is descriptive in nature since it is intended to establish the relationship between specific organisational factors (variables).

Quantitative research using the survey method was used for the empirical portion of the study. Chambers and Skinner (2003:44) posit that the survey research method uses questionnaires to obtain data from a sample of respondents selected from a population. The authors further stress that the survey method has the following strengths:

- Systematic- it is based on specific, logical, and formal procedure.
- Impartial- units of the population are chosen without bias.
- Representative- it consists of units which represent the population.
- Theoretical- it is backed by relevant theoretical procedures of, for example, human behaviour and statistical laws of probability.
- Quantitative- it awards numerical values to non-numerical characteristics of human behaviour to draw valid general valid interpretations of these aspects.
- Replicable - it is able to be repeated such that under similar conditions or using the same methods, other researchers can expect similar results. This implies that surveys have strong reliability ratings.

It is noteworthy to mention that the aforementioned characteristics of the survey method were deemed as desirable for the current study as they were directly applicable and ensured that there was a fit or match between the research method and the research problem.

The survey method has its drawbacks that can negatively impact on any study should no measures be taken to address them. For instance, Creswell (2002:46) hints at the strong need to ensure that questions in a survey are clear and not misleading, the possibility that some respondents may not answer questions thoughtfully and honestly, and the fact that the response rate may be too low for any meaningful data. To offset these limitations the researcher used techniques such as proper questionnaire design, convincing the respondents of the sincere intent as well as the importance of the study, and self-administration of the questionnaire. This facilitated better control of the fieldwork.

5.2.1 Sampling design

The framework illustrated in Figure 5.1, designed by the researcher, was used as the premise for the sampling design in the current study.

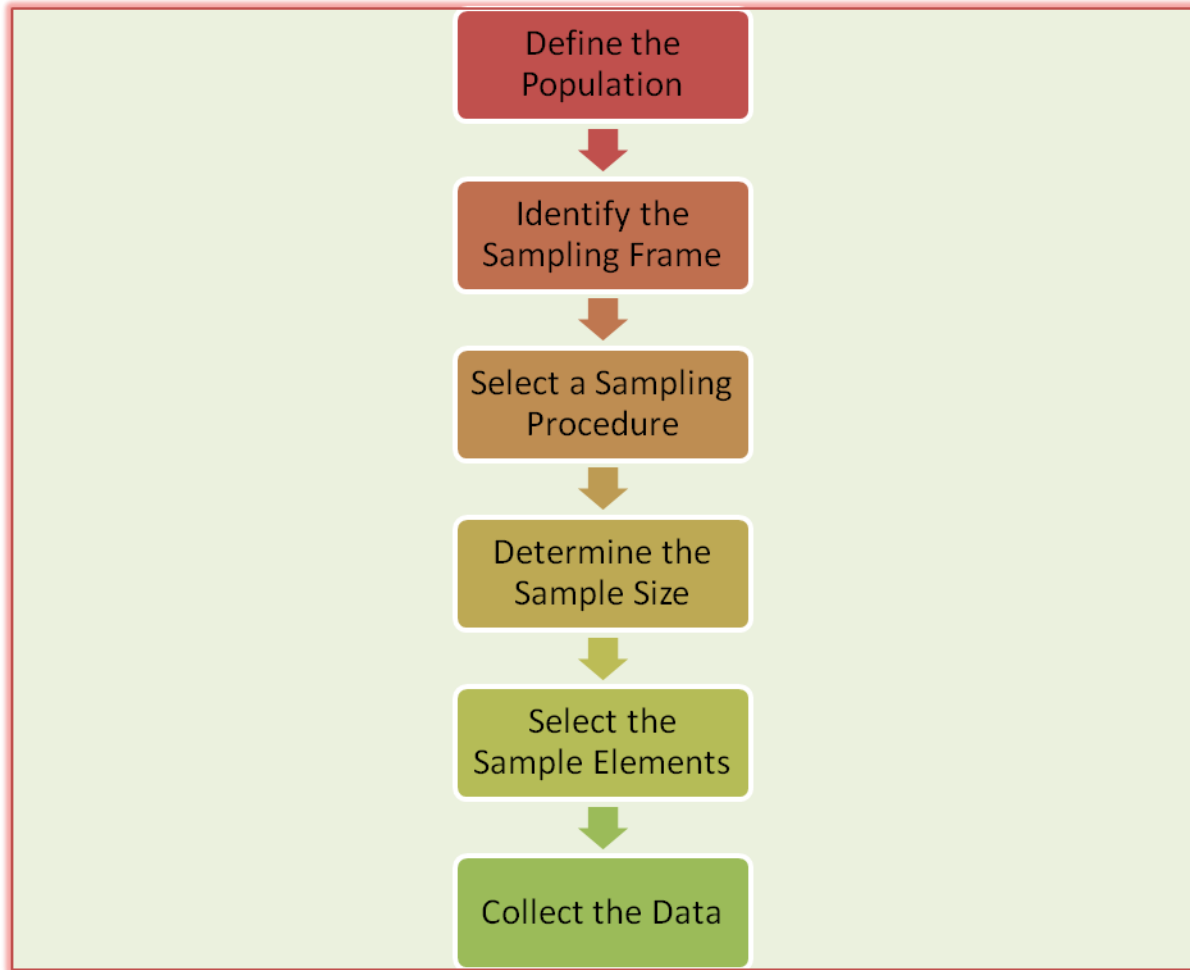


Figure 5.1: Framework for Sampling Design

5.2.1.1 The population

A population in research is taken to be the entire group about which some specific data are required (Boyce, 2002:14). Surujlal (2004:141) highlights that a population may be referred to as the “universe” or “universum”. For the purpose of this study, the universe is made up of the combined management and staff complement in a South African National Government Department.

5.2.1.2 Target population

Use of a well-designed questionnaire on the wrong group of people will yield irrelevant data. It is therefore important to be specific when defining the population; hence the need to narrow it down to a target population. A target population refers to an explicitly defined group of elements

that possess certain characteristics that are of relevance to the study (Boyce, 2002:14). This implies that the population may refer to anyone within the entire group whereas a target population specifies who within that entire group is relevant to the study. In this regard, the target population in this study comprises management and employees in a South African National Government Department based in the Gauteng Province. At the time of the research, the number of the population therefore stood at 1 140 individuals.

5.2.1.3 Sample frame

Turner (2003:3) defines a sampling frame as the set of source materials from which the sample is selected. The definition is important in that it also gives an indication of the purpose of sampling frames, which is to provide a means for choosing the particular members of the target population that are to be asked to participate in the research. Common examples of sample frames include, but are not limited to, lists of registered voters, customer lists and maps (Tustin, Ligthelm, Martins & Van-Wyk, 2005:155). The sampling frame for the current study was a list of Gauteng-based management and employees in a South African National Government Department. This list was obtained from the human resource database of the department.

5.2.1.4 Research sample

Flyvberg (2006:223) suggests that sampling is the practice of selecting from a larger population with the prime intention of producing information about the population as a whole. More precisely, a sample may be perceived as a sub-element of the target population (Turner, 2003:13). In most cases, the results of the survey will match quite closely with those that would have been obtained had the population provided the data (Flyvberg, 2006:223). On the overall, several benefits such as economy of expenditure, greater speed, and greater accuracy are attached to sampling. For the purposes of this study, instead of eliciting responses from all members of management and employees in the National Government Department, only a representative number were chosen and their views were taken as a reflection of the views of the entire population. The criterion used to draw the sample was that the individual had to be based in Gauteng province, was available, and was voluntarily willing to participate in the study, and had been employed by the National Government Department for a period of at least two years. The individual had to be based in Gauteng Province for the purposes of accessibility, which

would facilitate easier administration of questionnaires as well as more effective control and monitoring of the process. The two-year employment period threshold was necessitated by the fact that it is expected that in two years, an employee would have sufficient knowledge about various aspects pertaining to the organisation, such as *inter alia* its mission, history, and its processes, policies and systems (McKay, Avery & Morris, 2008:355). This knowledge was important in the effective completion of the questionnaire.

5.2.1.5 Sampling procedure

For the purposes of this study, two sampling techniques, purposive sampling and convenience sampling were used. In a purposive sample, the sample elements are selected because it is expected that they can serve the research purpose (Sun *et al.*, 2008:161). In convenience sampling, respondents are selected on the premise that they are readily available or easily accessible (Sousa, Zauszniewski & Musil, 2004:131). In the current study, convenience sampling was used with regard to both the availability as well as the accessibility of the different managers and employees in the National Government Department. In the current study, convenience sampling was used as an extension of purposive sampling in the selection of respondents. Use of this combination of sampling techniques ensured that there would be a higher response rate.

5.2.1.6 Sample size

Sample size determination is a sophisticated matter because it is highly dependent on a number of factors such as; *inter alia*, the type of sample, the homogeneity of the population, the time, the money and the personnel available for the study (Surujlal, 2004:144). In the current study, non-probability sampling techniques were used to collect the data. It is noteworthy to mention that no single sample size formula is applicable to non-probability samples (Hair, Bush & Ortinau, 2002:13). This suggests that sample size determination in such studies is a highly subjective process in which the researcher uses their judgment based on previous studies and the availability of resources.

In the current study, historical information was used to determine sample size. Literature is available that examined the issue of organisational performance in public sector organisations. Several authors (Ericksen & Dyer, 2005:913; Katou & Budhwar, 2007:1238; Watson *et al.*, 2007:44) propose that samples of approximately 300 respondents are adequate in representing

the population under similar conditions as those that prevailed in this study. Therefore, the sample size was pegged at $n=300$.

5.2.2 Literature review

A review of related literature was conducted using both national and international sources to examine the underlying dimensions in the relationship between organisational performance and the human factor as well as organisational systems and processes. The literature study involved the use of documents/sources such as journal articles, textbooks, magazines, media reports and the Internet.

The review of related literature made important contributions to the study. First, it enabled the researcher to better understand what had been done before, the strengths and weaknesses of existing studies, and what they might mean (Boote & Beile, 2005:3). The researcher was therefore able to build on the scholarship and research of those who had come before him. This denotes that the current study is of a cumulative nature, that is, it was built on and leans on prior research and scholarship on the topic. Second, the literature study provided the researcher with invaluable insights that were later used in the development of the questionnaire (Notar & Cole, 2010:2). Constructs that were developed and applied in the questionnaire were therefore premised on the insights gained through the literature study.

5.2.3 Questionnaire

The research instrument employed in this study was a structured questionnaire. Bartlett, Kortlik and Higgins (2001:45) describe a structured questionnaire as an instrument that is completed by the respondent. The questionnaire is arguably the most attractive method of quantitative data collection (Tavakol & Dennick, 2011:451). In addition, there is a wide assortment of benefits associated with the use of questionnaires. For instance, a questionnaire encourages frank answers, limits the researcher's bias, makes answers easy to collect, tabulate and analyse, is cheap to administer, requires less time, permits data collection from larger samples, and allows greater respondents' anonymity (Drew, Hardman & Hosp, 2008:19). The questionnaire method was therefore deemed as most appropriate for primary data collection in the current study. The literature study that was discussed in Chapters 1 to 4 contributed to the construction of the questionnaire. The questionnaires consisted of five sections:

Section A sought the respondents' demographic information. The demographics questions consisted of items that sought information pertaining to aspects such as the respondents' gender, age, highest level of professional qualification, number of years served in the organisation, and position occupied.

Section B consisted of 33 questions that sought information on the performance of the organisation. These questions were based on the four perspectives of the BSC namely the Financial Perspective (items B17, B18, B19, B20, B21), the Customer/Stakeholder Perspective (items B1, B2, B3, B4, B6, B7, B8, B25 & B31) the Internal Processes Perspective (items B5, B9, B10, B14, B15, B16, B22, B23, B24, B26, B27, B28, B32, B33), and the Learning and Growth Perspective (items B11, B12, B13, B29, B30) . The different dimensions of the BSC were scored on a five-point Likert Scale with 1 expressing strongly disagree and 5 expressing strongly agree. The respondents were requested to indicate their scores on this range in the scale.

Section C of the questionnaire comprised 26 questions that elicited information on the human factor aspects of the study. The five human factor subscales were quality of work life (items C1, C2, C3, C4, C5, C6, C7, C14), ability utilisation (items, C9, C10, C11, C12, C13), life satisfaction (items C17, C23, C24, C25, C26), creativity (items C8, C16, C18, C19) and autonomy (items C15, C20, C21, C22). The different dimensions of the scale were also placed on a five-point Likert scale with 1 expressing 'very dissatisfied' and 5 expressing 'very satisfied'. The respondents were asked to indicate their scores on this range.

Section D of the questionnaire consisted of 15 questions that elicited information on three organisational systems namely innovation systems (items D1, D2, D3, D4), inter-organisational systems (items D5, D6, D7, D8, D9) and quality systems (items D10, D11, D12, D13, D14, D15). Questions were also placed on a five-point Likert scale with 1 expressing 'strongly agree' and 5 expressing 'strongly disagree'. The respondents were also expected to indicate their scores on this range.

Section E of the questionnaire consisted of 20 questions that sought information on four organisational processes namely organisational structure (items E1, E2, E3, E4, E5, E6), organisational change (items E7, E8, E9), teamwork (items E10, E11, E12, E13, E14) and leadership (E15, E16, E17, E18, E19, E20). Selection of the factors as well as the questions used

in this section was based on the literature review. These questions were placed on a Likert type scale anchored by 1 (strongly agree) and 5 (strongly disagree). The respondents were requested to indicate their scores on this scale.

5.2.3.1 Pre-testing and piloting the questionnaire

The possible wide experience and skill of the one who develops the questionnaire is not sufficient to ensure that the questionnaire is flawless and that its content is valid. This being the case, it is important to ensure that pretesting is done in order to ensure that the questionnaire used in the main survey would validly capture the information sought by the researcher. According to Sudman and Blair (1998:24), a chance exists that some of the questions in the questionnaire may cause problems. Therefore, there is a need for pretesting in order to eliminate these problems (Jasper, 2010:104).

Initially, the questionnaire was reviewed by two experts in the field of organisational research (Radhakrishna, 2007:45). Through their feedback, minor modifications were made and some questions were added to the questionnaire. Fifteen of the draft questionnaires were then pre-tested with a conveniently selected sample of 30 respondents. The researcher was present as the respondents completed the questionnaires. After the questionnaires were completed the researcher took time to get feedback from each respondent. Since the current study was a groundbreaking study as there are no other studies which have tested similar dimensions within the same context, which implies that there is no validated instrument which is already available, it was deemed necessary to pilot the questionnaire. A pilot study was therefore conducted using 50 conveniently selected respondents. The feedback from the respondents in both the pre-test as well as the pilot test revealed that a number of the questions were ambiguous, unclear and that the questionnaire was long and strenuous to complete. Based on the feedback from both the pre-test and the pilot test, the researcher was able to factor in a number of minor revisions to most of the questions. In addition, the process enabled the researcher to eliminate 21 questions from the initial 54 questions in Section B, leaving it with 33 questions in the final questionnaire. From Section C, nine questions were eliminated from the initial 35 questions, which left that section with 26 final questions. From Section D, 13 questions were eliminated from the initial 28, which culminated in 15 questions which were used in that section. However, no questions were

eliminated from Sections A and E, which had 6 and 20 final questions respectively. The eventual questionnaire was simpler and more accurate than the original questionnaire. In addition, the sections in the final questionnaire had acceptable levels of reliabilities (Refer to Chapter Six, Sections 6.5, 6.6 & 6.7).

5.2.3.2 Reliability and validity

Reliability and validity are two standard criteria that one can use to assess whether any measuring instrument is appropriate or not. When the measuring instrument is both reliable as well as valid, people can have confidence in the data gathered through the use of that instrument (Boyce, 2002:43). It is therefore important to highlight the measures that were taken to ensure that the instrument used in the study was reliable and valid.

5.2.3.2.1 Reliability

Reliability may be defined as the degree to which a test or procedure produces similar results under constant conditions (Clark & Harcourt, 2004:64). For a measuring instrument to be considered as reliable, it must have zero random error (Boyce, 2002:44; Iramaneerat, Yudkowsky & Downing, 2008:479). Four forms of reliability measures are available: inter-observer, parallel forms, test-retest, and internal consistency (Gliem & Gliem, 2003:2). In the current study the internal consistency measure of reliability was retained while the other two measures were discarded. Internal consistency was taken as the most appropriate reliability measure for this study because it required a single administration of the measuring instrument and is also widely regarded as the most effective method of reliability tests (Gliem & Gliem, 2003:2). In internal consistency reliability estimation a single measurement instrument is administered to a group of people on one occasion to estimate reliability (Wells & Wollack, 2003:4). This implies that reliability of the instrument is judged by estimating how well the items that reflect the same construct yield similar results (Tavakol & Dennick, 2011:447).

It has to be appreciated that there are several statistical indexes that may be used to measure internal consistency. Examples include the Average Inter-Item correlation, Average Item Total Correlation, Split-Half Reliability, and the Cronbach's alpha (Eberhard *et al.*, 2011:3). For the purposes of this study, the Cronbach's alpha was adopted as the measure of internal consistency

for the measurement scale. According to Wells and Wollack (2003:4), the Cronbach alpha provides a measure of the extent to which the items on a measurement scale or test provide consistent information. Cronbach's alpha is often considered a measure of item homogeneity, that is, large alpha values indicate that the items are tapping a common domain. The scale in Cronbach's reliability test ranges from 0 to 1. Scores that are close to 1 indicate that the instrument has a high reliability, while scores close to 0 indicate that the reliability of the instrument is very low (Wells & Wollack, 2003:4). Most researchers require a reliability of at least 0.7 before they can use the instrument. In this study, the Statistical Package for the Social Sciences (SPSS Version 20.0) was used to test the reliability of the measuring instrument. Once again, Cronbach's alpha test proved to be both appropriate and handy as it provided a summary of inter-correlations that existed among the items (Refer to Chapter Six, Sections 6.5, 6.6 & 6.7).

5.2.3.2.2 Validity

Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests (Clark & Harcourt, 2004:64). This implies that in validity, one intends to assess the degree to which an instrument measures what it is supposed to measure. Many types of validity exist, of which the most popular are content validity and construct validity (Malhotra, 2011:44).

5.2.3.2.2.1 Content validity

Miller (2003:2) contends that content validity, sometimes called rational, logical or face validity of a measurement instrument refers to the degree to which the content of the items reflects the content domain of interest. Content validity answers the question "Is the content about what we say the test is about?" (Malhotra, 2011:45). Construct validity relates to measuring what you intend to measure, that is, how close you are to the truth (Anzman, 2003:4). Surujlal (2004:153) adds that construct validity attempts to assess how well ideas or theories are translated into real measures and that it is during statistical analysis of the data that construct validity is established. In the current study, validity was ascertained by pre-testing the questionnaire with a conveniently selected sample of respondents.

5.2.3.2.2.2 Convergent validity

Convergent validity is the ability of a scale to correlate with other scales that purport to measure the same concept (Agresti & Finlay, 2008:71). Convergent validity is a subtype of construct validity, which is a type of validity that identifies the underlying construct being measured and determines how well the test represents them (Cooper & Schindler, 2008:289). The logic behind convergent validity is that two or more measurements of the same concept using different scales should agree unanimously. Convergent validity can be estimated using correlation coefficients (Borsboom, Mellenbergh & Van Heerden, 2004:1067). In the current study, convergent validity was established by Spearman's correlations analysis and this is depicted in sections 6.8, 6.10 and 6.12 of Chapter Six (Agresti & Finlay, 2008:73). Significant correlations existed among the constructs, which illustrates that convergent validity was within acceptable levels.

5.2.3.2.2.3 Discriminant validity

Discriminant validity is also a subcategory of construct validity and it tests whether concepts or measurements that are supposed to be unrelated are, in fact, unrelated (Cooper & Schindler, 2008:289). A successful evaluation of discriminant validity shows that a test of a concept is not highly correlated with other tests designed to measure theoretically different concepts. Although there is no standard value for discriminant validity, a result less than 0.85 implies that discriminant validity likely exists between the two scales whereas a result greater than 0.85, however, tells us that the two constructs overlap greatly and they are likely to be measuring the same thing (John & Benet-Martinez, 2003:122). In the current study, discriminant validity was measured through Spearman's correlations (Refer to Chapter Six, Sections 6.8, 6.10 & 6.12) which reveal that all correlations did not eclipse the 0.85 threshold, thereby depicting acceptable levels of discriminant validity.

5.2.3.2.2.4 Predictive validity

Predictive validity may be perceived as the effectiveness of one set of test or research results as a predictor of the outcome of future experiments or tests (Roberts, Priest & Traynor, 2006:43). Predictive validity is a type of criterion-related validity, which is the degree to which the predictor is adequate in capturing the relevant aspects of the criterion (Stafford, 2005:21). Predictive validity provides more useful data about the test's value since it replicates the actual

environment in which the test will be used (Cooper & Schindler, 2008:291). A high correlation between the set of scores would provide evidence for predictive validity - it would show that the measure used can correctly predict something that it should theoretically be able to predict (Roberts *et al.*, 2006:44). In the current study, predictive validity was ascertained through regression analysis (Refer to Chapter Six, Section 6.9, 6.11 & 6.13). High associations observed between the dependent and independent variables attest to existence of high predictive validity in the current study.

5.2.3.3 Questionnaire administration

Permission to collect data was obtained from the National Government Department in May 2012. After developing the questionnaires, 500 questionnaires were distributed from the 2nd of July to the 19th of July 2012 to the identified sample of management and employees in the various offices of the National Government Department in the Gauteng Province. The National Government Department's headquarters, located in Pretoria, was selected as the center from which administration of the questionnaires was conducted. Administration of the questionnaire was conducted by the researcher, with the assistance of a staff member appointed by the Director General of the National Government Department. This staff member, who received training prior to the administration of the questionnaires, also established contacts at different divisions within the National Government Department and these were requested to assist in the administration of questionnaires. The training centered on data collection procedures such as the purpose of the study, administration of questionnaires and ethical issues.

A cover letter was attached to the questionnaire to highlight the purpose of the study. In addition, a memorandum encouraging staff members to complete the questionnaire was written by the Director General of the National Government Department and e-mailed to all members of management and staff prior to the commencement of the administration of questionnaires. Before participating in the questionnaire, respondents were requested to sign an informed consent form. Confidentiality of all respondents was ensured. Participation in the study was voluntary and respondents could withdraw at any time during the research without any fear of victimisation.

5.3 MEASUREMENT SCALES USED IN THE STUDY

Measurement scales used in the current study were adapted from validated questionnaires used in previous studies. The purpose of adaptation is to better fit the needs of a new population, location, language, or mode, or any combination of these (Harkness, 2010:6). When developing new studies, it is common practice for researchers to frequently modify questions that have been used in other studies and then use these modified versions.

Section B of the study measured performance of the National Government Department using the four indices of the BSC. Questions used in this section were adapted from Jenkins, Gupta, Mitra and Shaw (1998:777), Ittner, Larcker, and Meyer (2003:725) and, Lau and Sholihin (2005:389). Section C of the questionnaire elicited questions on the human factor. An adapted version of the questionnaire developed and validated by Surujlal, Mafini and Dhurup (2011:145) to suit the South African context was used in this section. Based on that study, five human factor components, namely life satisfaction, quality of work life, creativity, ability utilisation and autonomy were used to represent the human factor in the current study. Section D of the questionnaire elicited information on organisational systems while Section E elicited information on organisational processes. Questions used in these two sections were adapted from Duncan, Gintei and Swayne (1998:11), Taylor (2000: 111), Rosemann and DeBruin (2005:7), and Hung (2006:23). Notably, the original questions were applied in environments different from that used in the current study. Therefore, the process of adaptation entailed modifying these questions so that they could suit the context of the current study. The modifications included substantive adjustments to such aspects as language used, grammar, as well as the level of difficulty in each question.

5.4 STATISTICAL ANALYSIS

The researcher was assisted by a statistician who is an expert in quantitative research. The expert provided assistance in various areas of the study. First, the statistician provided guidance on the applicable research design as well as the design and construction of the data collection instrument. When the data was ready for analysis, the statistician provided guidance on choosing the most appropriate data analysis methods as well as how to use the SPSS software to analyse the data. Furthermore, the statistician also assisted by double-checking to see whether the

interpretations done by the researcher were accurate. After the questionnaires were returned, they were screened to eliminate those that were incomplete as well as those in which the same question was answered throughout, which indicated that some of the respondents had not read the questions. This procedure was immediately followed up with the capturing of the data on a Microsoft Excel computer package. The Excel document was then imported into the SPSS Version 20.0 where it was coded in preparation for data analysis. The data analysis involved several rigorous statistical tests such as reliability tests, correlation analysis, regression analysis, and mean score ranking. A comprehensive diagrammatic representation of the research path adopted for data analysis in the current study is also made in Chapter Six, Figure 6.1.

5.4.1 Descriptive Statistics

Descriptive statistics are techniques that help to state the characteristics or appearance of sample data (Zikmund, Babin, Carr & Griffin, 2013:54). Frequency tables and the mean score ranking technique are the major descriptive statistics employed in this study.

5.4.1.1 Frequency distributions

Frequency distributions such as percentages, graphs, line charts, pie charts, histograms and bar charts were utilised to display research findings. Frequency distributions are used to depict absolute and relative magnitudes, differences, proportions and trends (Zikmund *et al.*, 2013:69). These methods use both horizontal and vertical bars to examine different elements of a given variable (Malhotra, 2011:84). The use of frequency distributions as applied to this study is shown in Section 6.3 of Chapter Six. The use of frequency distributions facilitated the assessment of gender distribution, age of respondents, the number of years under employment, type of employment, educational qualifications, and the current position held.

5.4.2 Exploratory factor analysis

Exploratory factor analysis is a statistical technique used to identify a set of latent (hidden) constructs underlying a battery of measured variables (Norris & Lecavalier, 2009:16). Howell, Breivek and Wilcox (2007:209) also describe exploratory factor analysis as a set of procedures that are used to reduce and summarise and to identify simple patterns and factors underlying relationships between variables. This is achieved by grouping the variables and reducing them to

a small set of factors (Williams, Edwards & Vandenberg, 2003: 911). In agreement, Toni and Tonchia (2001:50) highlight that that exploratory factor analysis is conducted to uncover the underlying dimensions, to eliminate problems of multi-collinearity, and to reduce the number of variables to smaller sets of factors, hence the name factor analysis. Exploratory factor analysis was selected because it is applicable when the researcher does not have an *a priori* hypothesis about the factors or patterns of measured variables (Bandalos & Boehm-Kaufman, 2008:65), which is the case in the current study.

In the current study the dimensions that encapsulate the human factor, organisational systems and organisational processes were determined using exploratory factor analysis. This is illustrated in Sections 6.5, 6.6 and 6.7 respectively. Before employing the procedure, it is necessary to check whether the captured data is suitable for exploratory factor analysis. Two procedures, namely the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity are the most commonly used statistical tools used to check the suitability of data for exploratory factor analysis. The Kaiser-Meyer-Olkin measure of sampling adequacy is an index for comparing the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients (Malhotra, 2011:69). The Bartlett's Test of Sphericity is used to test if that the variables in the population correlation matrix are uncorrelated and the ideal observed significance level is .0000 (Ledesma & Valero-Mora, 2007:3).

In the current study, both the KMO and Bartlett's Tests were adopted to determine the degree of factorability of the data. A commonly used rule is that a high KMO value, which is close to 1, demonstrates that that factor analysis may be useful with a data set such that KMO values between 0.5 and 1.0 are deemed to be desirable (Malhotra, 2010:61). If the KMO value is less than 0.50, the results of the factor analysis would probably not be very useful (Pett, Lackey & Sullivan, 2003:143). In the current study, the KMO value for the human factor was 0.863 (refer to Section 6.5.1). The KMO value for organisational systems was 0.854 (refer to Section 6.6.1) and the KMO value for organisational processes was 0.792 (refer to Section 6.7.1). These values fell within the acceptable range, thereby implying that it was feasible to conduct factor analysis on the captured data. The results of the Bartlett's Tests (Human Factor, $p = 0.000$; Organisational Systems, $p = 0.001$; Organisational Processes, $p = 0.001$) (Refer to Sections 6.5.1; 6.6.1 & 6.7.1, respectively) were also within acceptable ranges, which indicates that exploratory factor analysis was suitable.

Sections 6.5.2, 6.6.2 and 6.7.2 report on the number of factors extracted using exploratory factor analysis approaches, namely eigenvalues and the percentage of variance explained for the human factor, organisational systems and organisational processes, respectively. Factors with eigenvalues greater than 1.0 were extracted while those factors with values less than 1.0 were excluded (Malhotra, 2010:72). This method ensured that the data set was reduced to principal components without losing any important information. It was also useful in determining the minimum number of the main factors that were the possible sources of variation in the data (Colibazzi *et al.*, 2008:1305).

After identifying the factors, the next step was to determine the factor loadings in order to clarify the degree to which the factors could be interpreted. Varimax rotation was applied in order to minimise the number of variables that had high loadings on any factor and to improve the degree to which the factors correlated and to make the interpretation easier (Malhotra & Birks, 2003:139). To determine how strongly correlated a measured variable was with a given factor, the variable was supposed to load values not less than 0.5 on a factor (Ruscio & Roche, 2012:291). Tables 6.9, 6.12 and 6.15 show the rotated factor matrices for the human factor, organisational systems and organisational processes, respectively.

5.4.3 The mean score ranking technique

Generally, the mean is the average, the value obtained by summing all elements in a set and dividing by the number of elements (Dharmendra & Lokesh, 2010:107). The mean, or average value, is the most commonly used measure of central tendency. It is used to estimate the mean when the data have been collected using an interval or ratio scale (Kruger, De vos, Fouche & Venter, 2005:233). In the current study the mean scores of the three factors (human factor, organisational systems and organisational resources) were ranked in order to make a comparison of their impact on organisational performance (Refer to Chapter Six Section 6.14).

5.4.4 Correlation analysis

Correlations are concerned with describing the relationship between variables (Chock 2010:13). A correlation attempts to estimate the extent to which the changes in one variable leads to a change in another variable (Sheskin, 2007:4). In the current study, Spearman's rho correlation

coefficient tests were used to examine the relationships between the variables. Spearman's correlation is defined as a non-parametric measure of the strength of monotone association between two variables (Chowdury, 2009:12). The phrase 'non-parametric' denotes that the correlation measures the association between variables without making any assumption about the nature of the relationship (Corder & Foreman, 2009:101). Spearman's correlation analysis was chosen for the use in the current study because it is much easier to apply to a set of data since the way the data is ranked does not matter, that is, whether it is ascending or descending. The only requirement is that data should be ranked or at least converted into ranks, such that rank 1 can be assigned to the smallest value or the largest value, provided the same is done for both sets of data (Chock, 2010:16).

The main component of correlations are that a coefficient of -1.0 indicates a perfect, negative relationship and a coefficient of +1.0 shows a perfect, positive relationship (Khamis, 2008:157). A coefficient of -1.0 means that variables move in opposite directions but when it is +1.0 it means they both move in the same direction (Balakrishnan & Lai, 2009:22). However if the coefficient is not exactly -1.0 or +1.0, it indicates that there are other variables associated with either of the two variables (Sheskin, 2007:7). In the current study correlation analysis was used to ascertain the relationship between the human factor and organisational performance (Refer to Chapter Six, Section 6.8). In Chapter Six, Section 6.10, correlation analysis was used to establish the relationship between organisational systems and organisational performance. Correlation analysis was further used in Chapter Six, Section 6.12 to ascertain the relationship between organisational systems and organisational performance.

5.4.5 Regression analysis

Multiple regression analysis relates independent and dependent variables in a manner which takes mathematical inter-correlation into account (Malhotra, 2010:44). It is a statistical technique that can achieve the best linear prediction equation (Aldlaigan & Buttle, 2008:317) between independent variables and dependent. In order to estimate the parameters and test the significance, Malhotra (2011:52) explains that regression analysis makes the following assumptions:

- The error term is normally distributed, which means that for each fixed value of X, the distribution of Y is normal.
- The means of all normal distributions of Y, given X lie on a straight line with slope b, the mean of the error term is 0.
- The variance of the error term is constant.
- The error terms are uncorrelated, which implies that the observations have been drawn independently.

In the current study, standard multiple regression analyses were performed to identify the variables that predicted or provided the best explanation for the portion of the total variance in the scores of the dependent variables. The limitation of correlation analysis is that it makes no *a priori* assumption as to whether one variable is dependent on the other(s) and is not concerned with the relationship between variables (Corty, 2007:51). Instead, it gives an estimate as to the degree of association between the variables. In other words, correlation analysis tests for interdependence. However, regression analysis attempts to describe the dependence of a variable on one (or more) explanatory variables; it implicitly assumes that there is a one-way causal effect from the explanatory variable(s) to the response variable, regardless of whether the path of effect is direct or indirect (Malhotra, 2010:44). Therefore, in the current study, regression analysis was used to further refine the results obtained in the correlation tests by ascertaining whether any causal relationships existed between whether the dependent and independent variables. In this order, regression analysis was used to determine whether any causal relationship exists among the human factor dimensions and organisational performance (Refer to Chapter Six, Section 6.9). Regression analysis was also employed to further analyse the relationship between organisational systems and organisational performance, in terms of causality (Refer to Chapter Six, Section 6.11). Regression analysis was further used to examine the relationship between organisational processes and organisational performance (Refer to Chapter Six, Section 6.13).

5.5 CONCLUSION

The purpose of this chapter was to provide a detailed outline of the research methodology that was applied in the current study and to present sufficient motivation for the use of each of the adopted techniques. All topical issues associated with the research methodology, - the research design, the sampling design, and the entire measurement procedures were discussed. A sample

frame was derived from a specific target population and based on the insights gained through an extensive literature review; a research questionnaire was designed and constructed. After pretesting and pilot testing, the questionnaire was then modified and administered to the sample. Thereafter, the data obtained from the respondents was captured, coded and analysed using relevant statistical programmes. The chapter also discussed the measures of reliability employed in this study and presented the outcomes of these tests. The discussion also focused on the statistical analysis that was employed to examine the captured data. These include descriptive statistics, the mean score ranking approach, correlation analyses as well as regression analysis. Having exhausted these methodological aspects, the study now proceeds to Chapter Six, where the collected data will be presented and analysed.

CHAPTER SIX

DATA ANALYSIS AND INTERPRETATION

6.1 INTRODUCTION

The previous chapter discussed all structural and fundamental methodological components relevant to the present study. The current chapter examines the approaches used in dealing with the data that was captured for this study. All the data was accessed from the research questionnaires that were distributed amongst management and staff members at the National Government Department in the Gauteng Province, South Africa. All respondents who participated in the study had to satisfy the criteria that were set for the current study.

The current chapter begins by discussing the framework that was used for analysing and interpreting the data before describing the characteristics of the research participants. This is then followed by an analysis of the results obtained on the performance of the department. Data obtained on the three organisational resources, namely the human factor, organisational systems and organisational processes and their associated dimensions that were considered in the present study will then receive central focus in the succeeding sections. The subsequent sections focus on correlation and regression analysis and are intended to test the existence of the relationships between each of the organisational factors and organisational resources. To test which of the three factors, relative to the others, has the most powerful impact on organisational performance, another section will discuss the summated means of the three factors and their sub-scales, using the ranking technique. Most of the results in the current chapter are presented either through a tabular arrangement or in a diagrammatic format.

6.2 FRAMEWORK FOR DATA ANALYSIS

This section outlines the framework that was developed by the researcher and used for data analysis (illustrated in Figure 6.1). The framework shows the stages used in the analysis and interpretation of the data with regard to the impact of organisational resources on organisational performance.



Figure 6.1: Data Analysis Framework

The framework for data analysis (Figure 6.1) shows that in the current study, a seven-stage approach was adopted for analysing the data. The first stage was the analysis of the demographic characteristics of the respondents. These characteristics were classified into six categories, namely gender, age group, number of years employed, type of employment, highest academic qualification and current position. The analysis threw a spotlight on the profile of the respondents within the descriptive parameters specified in each category.

Stage 2 of the data analysis process focused on measuring the performance of the National Government Department. In this stage, the four performance indicators of the BSC were used to

measure the performance of the National Government Department, in line with the empirical objectives of the current study. In stage 3, the various dimensions or subscales of the three organisational resources, namely the human factor, organisational systems and organisational performance were extracted using exploratory factor analysis and then described. Stage 4 of the data analysis framework entailed using correlation analysis to test the existence of any relationships between each of the three organisational resources and organisational performance. This would then be followed by regression analysis (Stage 5), which was intended to test the strength of any relationships. In stage 6, the mean score ranking technique would be employed to compare the degree of association between each of the three organisational resources and organisational performance. A further examination of the degree of association between the individual subscales of the three organisational resources and organisational performance (Stage 7) would then conclude the data analysis and interpretation process. All the stages in this framework were designed to address the research objectives of the study.

6.3 DEMOGRAPHIC PROFILE OF RESPONDENTS

Section A of the questionnaire elicited information pertaining to the demographic characteristics of respondents. The section addressed the following attributes pertaining to the respondents:

- Gender
- Age group
- Number of years under employment in the National Government Department
- Type of employment
- Highest academic qualification
- Current position

Each of these characteristics will now be discussed.

6.3.1 Respondents' gender

The frequencies and percentages pertaining to the respondents' gender are illustrated in Table 6.1

Table 6.1: Frequencies and Percentages of Respondents' Gender

Variable	Categories	N	n	%
Gender	Males	272	150	55.15
	Females	272	122	44.85

An analysis of the gender of the respondents (Table 6.1) indicates that 55% (n=150) of respondents were male and 45% (n=122) were female. The fact that there was only a 10% difference in the ratio of males to females in the sample suggests that there is gender balance in the National Government Department. This further indicates that the department is operating within the recommendation of the Commission for Gender Equality (2008:3) in that organisations in South Africa should take steps to eliminate all traces of patriarchal domination and gender inequality within them. A study conducted by McKinsey and Company (2007:2) also offers fact-based insights which support the notion that organisations where women are most strongly represented are also the best performers. It appears then, that the gender structure within the National Government Department is likely to play an instrumental role in fostering the department's performance.

6.3.2 Age groups of respondents

For the purposes of data analysis the frequencies and percentages pertaining to the ages of respondents were grouped as illustrated in Table 6.2 and Figure 6.2, respectively.

Table 6.2: Frequencies and Percentages of the Age Groups of Respondents

Variable	Categories	N	n	%
Age group	18-25 years	272	23	8.46
	26-35 years	272	135	49.63
	36-45 years	272	75	27.57
	46-55 years	272	29	10.66
	Over 56 years	272	10	3.68

The age distribution within the National Government Department (Table 6.2; Figure 6.2) is interesting. A majority (58%: n=158) of the respondents were aged 35 and below. Approximately 28% (n=75) were aged between 36 and 45 while approximately 14% (n=39) were aged above 46 years. These results suggest that the National Government Department is dominated by the below 35 years age cohort. Eckford (2005:4) opines that younger people tend to offer intelligence, creative thinking, and a valuable outlook on the world that is seldom introduced into the governance of organisations. The author further adds that young people can enliven the atmosphere of your organisation in addition to working energetically and enthusiastically, thereby enhancing organisational performance. Therefore, it is likely that the National Government Department could benefit immensely and in various ways due to its large contingent of the younger generation.

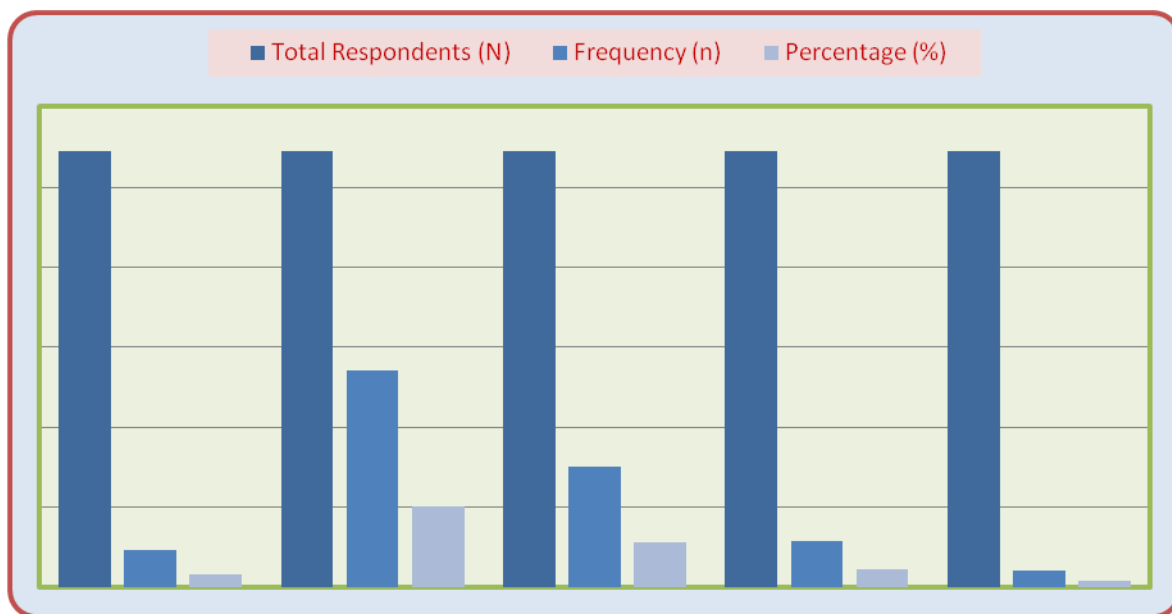


Figure 6.2: Age Groups of Respondents

6.3.3 Number of years employed

The frequencies and percentages pertaining to the number of years each of the respondents had been under the employment of the National Government Department are illustrated in Table 6.3 and Figure 6.3, respectively.

Table 6.3: Frequencies and Percentages on the Number of Years Employed

Variable	Categories	N	n	%
Number of years employed	Less than 2 years	272	111	40.81
	2-5 years	272	89	32.72
	6-9 years	272	39	14.34
	More than 9 years	272	33	12.13

With regard to the number of years employed, approximately 74% (n=200) of the respondents had been employed in the department for a period of five years and less. Approximately 14 % (n= 39) had been employed for periods of between 6 and 9 years while a minority (12 %: n= 33) had been employed for a period of more than nine years. This distribution demonstrates that most of the staff members at the National Government Department are relatively new to the department. The department may also be undergoing a transitional phase in which new and younger individuals are introduced into the department to learn and eventually take over from the experienced older individuals who may be close to retirement. This could be an effective way of ensuring that the organisation will not suffer from a lack of experienced individuals in future times as well as ensuring that organisational change programmes are successfully implemented (Norris, 2001:221).

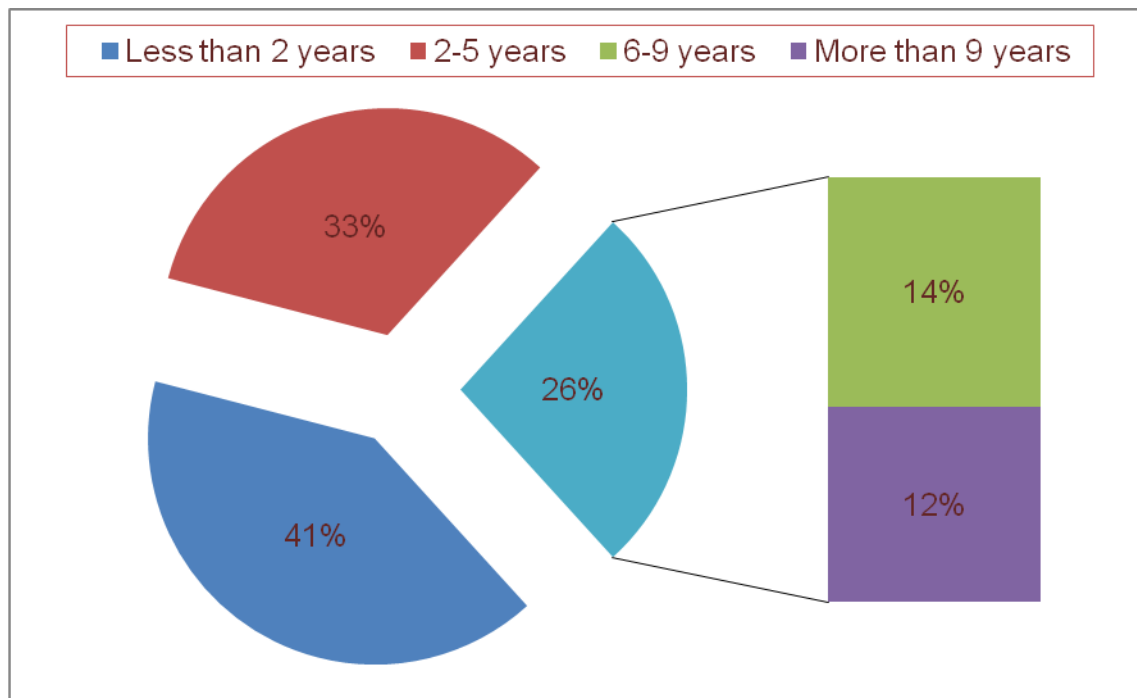


Figure 6.3: Number of Years Employed

6.3.4 Type of employment

The frequencies and percentages regarding the type of employment for the respondents are illustrated in Table 6.4.

Table 6.4: Frequencies and Percentages of the Type of Employment

Variable	Categories	N	n	%
Type of Employment	Permanent	272	223	81.99
	Contract	272	38	13.97
	Part-time	272	11	4.04

On the type of employment, approximately 82% (n=223) of the respondents were under permanent employment within the National Government Department while approximately 14% (n=38) were on contract and around 4% (n=11) were employed part time. Employing people on a permanent basis has motivational implications on employees because it tends to enhance their job security. A higher job security also correlates positively with employee job performance, which in turn influences organisational performance (Senol, 2011:3). Therefore, other factors

being held constant, the fact that a majority of employees in the National Government Department are employed on a permanent basis demonstrates that the department's performance would be expected to be high.

6.3.5 Educational levels of respondents

The frequencies and percentages pertaining to the educational levels of the respondents are illustrated in Table 6.5 and Figure 6.4, in that order.

Table 6.5: Frequencies and Percentages of the Educational Levels of Respondents

Variable	Categories	N	n	%
Highest academic qualification	Matric	272	15	5.51
	Certificate	272	29	10.66
	Diploma	272	69	25.37
	Degree	272	117	43.01
	Postgraduate degree	272	40	14.71
	Other	272	2	0.74

An analysis of the educational levels among the employees at the National Government Department (Figure 6.3) indicates that only 5% (n=15) of the respondents indicated that their highest qualification was matric. Approximately 11% (n=29) respondents were holders of a certificate and approximately 25% (n=69) were holders of a diploma. At least 43% (n=117) of the respondents were holders of a first degree while around 15% (n=40) of the respondents were in possession of a postgraduate degree. An almost insignificant number (0.7%: n=2) of the respondents held ancillary qualifications such as professional courses or short courses. Therefore, the department is composed of significantly qualified employees. As revealed in a study conducted by Rice, Martin and Rathnappulige (2009:77), performance is higher in organisations that have appropriately qualified employees than in those in which employees do not possess the necessary skills and qualifications.

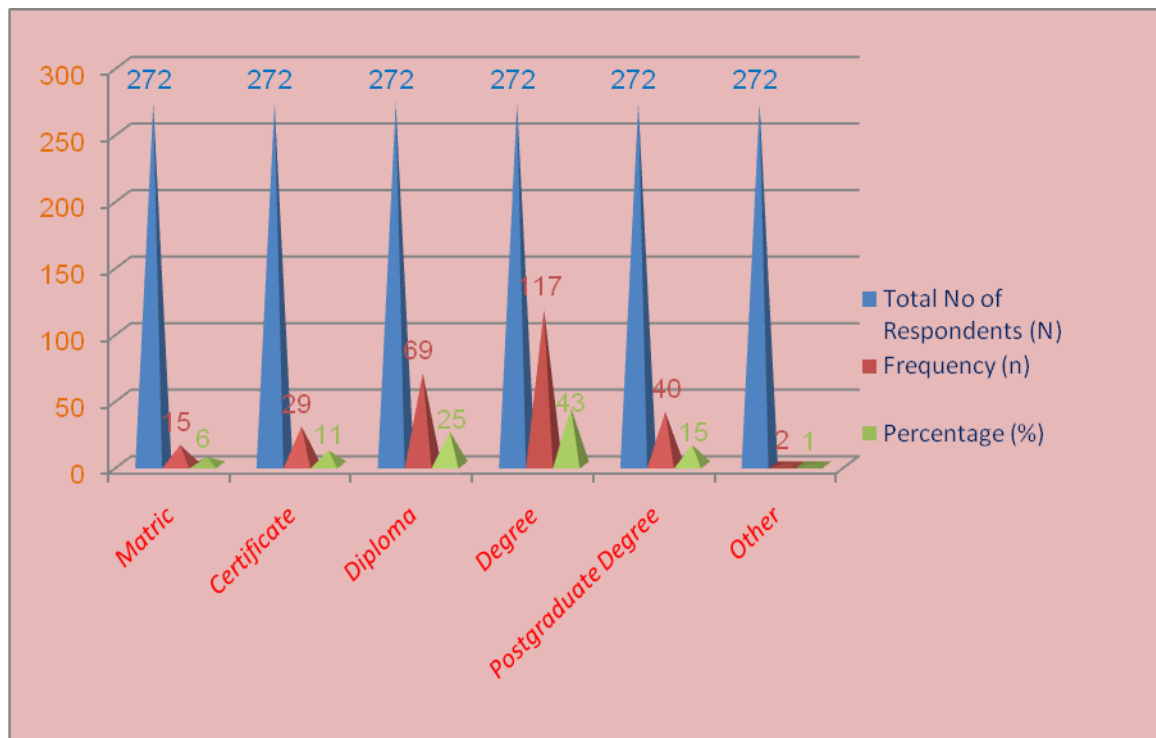


Figure 6.4: Educational Levels of Employees

6.3.6 Positions Occupied by Respondents

The frequencies and percentages pertaining to the different positions occupied by respondents are illustrated in Table 6.6.

Table 6.6: Frequencies and Percentages of Positions Occupied by Respondents

Variable	Categories	N	n	%
Current position	Executive Manager	272	4	1.47
	Senior Manager	272	18	6.62
	Middle Manager	272	24	8.82
	Line Manager	272	48	17.65
	Specialist Staff	272	74	27.21
	Clerical/Admin	272	70	25.74
	Other	272	34	12.50

Among the respondents, four (1.5%) were executive managers, 18 (7%) were senior managers, 24 (9%) were middle managers and 48 (18%) were line managers. Furthermore, 74 (27%) were

specialist staff, 70 (26%) were clerical or administrative staff and 34 (13%) occupied other auxiliary positions such as internships, security and general work. This distribution indicates that with the exception of executive management, most levels in the organisational structure of the National Government Department were represented in the study. This fact has ramifications for the credibility of the findings of the study. It suggests that there was high positional representativeness in the study, which had the effect of reducing sampling bias (Daly & Lumley, 2002:299).

6.4 PERFORMANCE OF THE DEPARTMENT

Section B of the questionnaire was designed to investigate the perceptions of management and staff at the National Government Department regarding the performance of the department. Questions in this section elicited information based on four performance indicators of the BSC, namely:

- Customer satisfaction- (Items B1, B2, B3, B4, B6 B7, B8, B25, B31)
- Financial performance- (Items B19, B20, B21, B17, B18)
- Internal business processes- (Items B5, B9, B10, B14, B15, B16, B22, B23, B24, B26, B27, B28, B32, B33)
- Innovation and learning- (Items B11, B12, B13, B29, B30)

Table 6.7 is a statistical summary of the responses. Descriptive statistics, namely frequencies and percentages were used to analyse the data. In the information presented in tabular form, the numbers 1, 2, 3, 4 and 5 represent strongly agree, agree, neutral, disagree and strongly disagree, respectively. The frequencies are presented both numerically and as percentages. To determine the areas in which the department has a stronger or weaker performance, the frequencies and percentages for all 33 items were placed in a rank order.

Table 6.7: Frequencies and Percentages of Organisational Performance in Rank Order

Item	Description	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
B33	The department promotes good corporate ethics	157(57.7)	48(17.7)	47(17.3)	12(4.4)	8(2.9)
B7	The department offers quality service	155(57.0)	40(14.7)	59(21.7)	13(4.8)	5(1.8)
B1	The department is able to meet client demands	153(56.3)	35(12.8)	58(21.3)	17(6.3)	9(3.3)
B31	The values that are promoted in the department are good	151(55.5)	33(12.1)	66(24.3)	13(4.8)	9(3.3)
B24	The department relates well with other organisations	149(54.8)	46(16.9)	62(22.8)	10(3.7)	5(1.8)
B23	The department has programs that support the community	145(53.3)	54(19.9)	55(20.2)	15(5.5)	3(1.1)
B8	The delivery performance to clients is good	143(52.6)	33(12.1)	69(25.4)	23(8.5)	4(1.5)
B9	Quality skills and expertise are available in the department Quality skills and expertise are available in the department	140(51.5)	53(19.5)	48(17.6)	23(8.5)	8(2.9)
B19	Effective financial control measures are in place	135(49.6)	37(13.6)	68(25.0)	24(8.8)	8(2.9)
B20	The overall financial performance of the department is good	131(48.2)	35(12.9)	90(33.1)	12(4.4)	4(1.5)
B26	The department implements effective strategies	131(48.2)	31(11.4)	81(29.8)	22(8.1)	7(2.6)
B25	I am motivated on my job	129(47.4)	57(21.0)	29(10.7)	35(12.9)	22(8.1)
B27	The policies and procedures in the department are good	129(47.4)	29(10.7)	80(29.4)	25(9.2)	9(3.3)
B11	I have the chance to participate in training and development programmes	127(46.7)	100(36.8)	20(7.4)	16(5.9)	9(3.3)
B32	The culture in the department is effective	125(46.0)	23(8.5)	82(30.1)	31(11.4)	11(4.0)
B13	Innovation is encouraged in the department	122(44.9)	45(16.5)	58(21.3)	30(11.0)	17(6.3)
B14	Communication flows easily throughout the department	118(43.4)	46(16.9)	47(17.3)	43(15.8)	18(6.6)
B2	Most clients are satisfied	116(42.7)	21(7.7)	105(38.6)	25+(9.2)	5(1.8)
B12	The department adopts new technology regularly	114(41.9)	44(16.2)	57(21.0)	45(16.5)	12(4.4)
B6	Feedback from clients is taken seriously	114(41.9)	42(15.4)	75(27.6)	34(12.5)	7(2.6)

B4	The time taken to deliver services is quite acceptable	114(41.9)	21(7.7)	83(30.5)	41(15.1)	13(4.8)
B21	The department is always able to meet its financial goals	112(41.0)	21(7.7)	119(43.8)	19(7.0)	1(0.4)
B28	The level of wastage in the department is low.	106(39.0)	29(10.7)	67(24.6)	47(17.3)	23(8.5)
B30	I have ample opportunities to make independent decisions	100(36.8)	17(6.3)	61(22.4)	63(23.2)	31(11.4)
B17	Resources are managed efficiently	100(36.8)	17(6.3)	95(34.9)	41(15.1)	19(7.0)
B18	The funds that are allocated to the department are sufficient	91(33.5)	27(9.9)	108(39.7)	34(12.5)	12(4.4)
B3	Most clients are loyal to the department	87(32.0)	25(9.2)	133(48.7)	22(8.1)	5(1.8)
B29	There is good teamwork in the department	87(32.0)	15(5.5)	120(44.1)	32(11.8)	18(6.6)
B15	Programs are implemented speedily	83(30.5)	17(6.3)	22(8.1)	90(33.1)	60(22.1)
B5	The number of staff assigned to service client requirements is sufficient	80(29.4)	19(7.0)	15(5.5)	68(25.0)	90(33.1)
B22	The level of corruption in the department is low	74(27.2)	25(9.2)	132(48.5)	26(9.6)	15(5.5)
B16	Divisions are not overloaded with activities	58(21.3)	25(9.2)	68(25.0)	106(39.0)	15(5.5)
B10	The number of staff leaving the department is small	44(16.2)	25(9.2)	51(18.8)	121(44.5)	31(11.4)

An analysis of Table 6.7 yielded two streams of observations related to the performance of the National Government Department. First, the department's performance was highest in five topical areas, namely promotion of good corporate ethics, service quality, ability to meet client demands, promotion of good corporate values and the fostering of good relations with other organisations respectively. Performance was lowest in five areas, namely attrition of staff, workload per each division, corruption, work to employee ratio, and the speed at which departmental programmes are implemented.

Among the 33 items on the questionnaire, promotion of good corporate ethics emerged as the highest performance area in the department. Approximately 75% (n=205) of the respondents either agreed or strongly agreed with the statement that the department promotes good corporate ethics. In a world that is full of ethical breeches by many officials in public organisations

(Brody,2012:5) it is noteworthy to attest that the National Government Department encourages high standards of corporate behaviour. Studies conducted by a number of scholars (Elliot & Thrash, 2001:139; Seijts & Latham, 2005:124) draw attention to the existence of positive relationships between goal attainment and ethical behaviour. For instance, empirical studies have found that performance goals may lead to high instances of unethical behaviour when people fall short of these goals (Murdock & Anderman, 2006:129). It is important then, that every organisation endeavours to consistently promote high ethical conduct among its management and employees. Therefore, the National Government Department's *modus operandi* of promoting corporate ethics is likely to ensure that performance goals are attained in a clean and unquestionable manner.

Service quality scored the second highest points on the performance of the National Government Department. This finding illustrates the importance of service quality in influencing the performance of an organisation and denotes that the National Government Department management and employees perceive that the quality of service offered by it is of a high standard. Approximately 72% (n=195) of the respondents either agreed or strongly agreed with the statement that the department offers quality service. Furthermore, 69% (n=188) of the respondents either agreed or strongly agreed that the department is able to meet client demands. There is mounting pressure on public sector organisations such as the National Government Department to deliver quality services to their clients (Robinson, 2003:248). However, the quality of services provided by most public sector organisations world-wide is below standard (Teicher, Hughes & Dow, 2002:385) as exhibited through their failure to meet the expectations of their clients (Ramseook-Munhurrin, Lukea-Bhiwajee & Naidoo, 2010:43). It is also interesting to note that this finding represents the perceptions of National Government Department's members rather than the views of the public. This being the case, there is a strong need to confirm this result by conducting a follow-up study to examine the perceptions of the National Government Department's clients on the quality of service provided by the department. However, the perceptions of internal stakeholders such as members of the National Government Department may still be regarded as valid insights on the matter. It follows then, that the National Government Department appears to be one of the few public organisations in South Africa that is managing to meet client expectations, at least from an internal perspective.

Promotion of good corporate values came fourth on the performance rankings. Approximately 68% (n=184) of the respondents either agreed or strongly agreed with the statement that the corporate values that are promoted in the department are good. Corporate values are the philosophies or basic principles that direct the internal conduct of an organisation as well as its relationship with its internal and external stakeholders (Zairi & Jarrar, 2000:4). This implies that corporate values are those qualities that an organisation holds as most important in doing its business. Empirical research (Speculand & Chaudhary, 2008:7; Oyisemi, 2006:122) establishes that the corporate values of any organisation ultimately impact on organisational performance. The results of the current study demonstrate that corporate values in the National Government Department are of a superior quality. This then suggests that the performance of the department is likely to be correspondingly high, in line with its value system. This is dependent, though, on whether these values are implemented. Young (2011:4) opines that promotion of an effective value system does not necessarily imply that the promoted values are being implemented. As such, many organisations struggle and even fail to implement their values, leading to corporate failure (Hyde & Williamson, 2000:13). Therefore, although an effective corporate value system is promoted within the National Government Department, implementation of these values remains a separate issue that merits its own examination.

The National Government Department has managed to cultivate convincing relationships with other organisations. This is illustrated by the fact that approximately 72% (n=195) of the respondents either agreed or strongly agreed with the statement that the department relates well with other organisations. Since no single organisation exists in isolation, it is important for every organisation to establish the right kind of relationships with other external organisations (McQuaid, 2010:129). The importance of mutually beneficial exchanges emanating from these inter-organisational partnerships cannot be underestimated. For instance, Radermacher, Karunarathna, Grace and Feldman (2011:551) suggest that well-networked institutions post exceptional performance results, as coined by the popular phrase “*partner or perish*”, which demonstrates that fact. The importance of forming alliances or global partnerships with other organisations has also gained momentum in recent years (Išoraitė, 2009:41). Therefore, the results of the current study express that the National Government Department has performed well in establishing relationships with other organisations. This is likely to culminate in pertinent paybacks for the department, which ultimately enhances organisational performance.

The item labeled the '*number of staff leaving the department is small*' was ranked lowest on the frequency distribution. Approximately 56% (n=152) of the respondents either disagreed or strongly disagreed with the statement that the number of staff leaving the department is small. This suggests that from the perspective of the respondents, the department is facing an unfortunate episode of high staff turnover. High staff turnover is an issue that most South African government organisations have been struggling to combat for several decades (Mdindela, 2009:19). Since the country is facing an acute shortage of critical skills, the employment tenure rate for most skilled people is limited as they are highly marketable (Gillingham, 2008:17). Naturally, the National Government Department has not escaped the overarching effects of this global phenomenon. It is therefore paramount that the department initiates a human resource strategic plan that enables it to effectively select, retain, train and develop employees. Such a strategy is likely to boost both the intrinsic as well as the extrinsic motivation of staff, thereby reducing the rate of attrition within the department (Samuel & Chipunza, 2009:410).

The extent to which the divisions within the department are overloaded with activities attained the second lowest position on the rankings of frequencies and percentages. Approximately 45% (n=121) of the respondents either disagreed or strongly disagreed with the statement that divisions within the department are not overloaded with activities. This finding signifies that the various divisions within the National Government Department are inundated with overbearing workloads. This finding dovetails to the responses given to item B5 where respondents expressed that they were overloaded with work. As such, the overloading of individual employees is a microcosm of the overburdening workload that various divisions within the department have to carry. High divisional workload could be a result of a number of challenges that the organisation faces. It could be that the department has failed to respond to an exponential rise in the number of clients (Ismail & Alsadi, 2010:545). There could also be oversights in the proper allocation of tasks among divisions (Robinson, Feinerman & Frank, 2009:4374). The problem may also stem from other internal structural inefficiencies such as bureaucracies and red-tape (Monsod, 2009:14; Qahtani, 2012:4). In all cases, divisional overload is dysfunctional to the department and has to be minimised.

The prevalence of corruption within the department achieved the third lowest position on the rankings of frequencies and percentages. Approximately 49% (n=132) of the respondents expressed neutrality to the statement that the level of corruption in the department is low. Interestingly, approximately 36% (n=99) of the respondents either agreed or strongly agreed with the statement whereas approximately 15% (n=41) of the respondents either disagreed or strongly disagreed with the statement. These results point to the fact that a majority of respondents were not sure on the levels of corruption within the department. This situation is precarious because it is difficult to come up with appropriate measures to address a phenomenon which the people on the ground are not aware of. Nevertheless, corruption within public organisation is generally endemic. The Department of Public Service and Administration (2002:7) chronicles that corruption in South Africa manifests itself in public service and society through, *inter alia*, bribery, embezzlement, fraud, extortion, abuse of power, favouritism, nepotism, insider trading and conflict of interest. Naturally, an organisation will not prosper if these vices are not curtailed (Wu, 2010:147). The Gauteng Provincial Government (2009:8) also demonstrates the fact that the South African government has adopted a strong exception to corrupt practices and regards the matter very seriously because of the potential damage that this could cause to the country's economy and reputation globally. Therefore, the need exists to establish the actual level of corruption within the National Government Department and to take appropriate measures which ensure that such corporate improprieties are eliminated.

The sufficiency of number of staff assigned to service client requirements attained the fourth lowest position on the rankings of frequencies and percentages. Approximately 58% (n=158) of the respondents either disagreed or disagreed strongly with the statement that the number of staff assigned to service client requirements is sufficient. This denotes that the workload per staff member is overwhelming, as each employee has to deal with a large number of clients. However, the effects of such work overload are well documented in literature. Tahir *et al.* (2012:176) found that the performance of employees is negatively affected by high work overload, which also directly affects customer satisfaction. In agreement, Greenberg, Sikora, Grunberg and Moore (2006:3) concluded that the performance of work teams is wholly or partially mediated through perceptions of personal mastery, work overload and job satisfaction. This is ostensibly because work overload leads to job strain by exhausting the employees' mental and physical resources, thereby leading to the depletion of energy, which renders the employee unable to

perform at optimum abilities (Bakker & Demerouti, 2006:313). It may be suggested then, that overall performance of the employees at the National Government Department could be enhanced if the issue of work overload is addressed holistically.

The speed at which programmes are implemented achieved the fifth lowest position on the rankings of frequencies and percentages. Approximately 55% (n=150) of the respondents either disagreed or strongly disagreed with the statement that programmes are implemented speedily within the department. This suggests that departmental programmes are implemented at a slow pace, which is not satisfactory. Empirical research reinforces that the scheduling and timing of organisational programmes is instrumental in determining the success of that particular programme (University of New Mexico 2011:3). Organisations benefit enormous rewards when strategies are implemented rapidly rather than sluggishly (Bloodgood & Morrow Jr., 2003:1763). Fontannaz and Oosthuizen (2008:9) also posit that the speed at which strategy is executed is a formidable performance indicator. Accelerating organisational speed yields pay offs in such areas as organisational agility (adaptability), overcoming organisational inertia, organisational responsiveness and change implementation, among others (Alzoubi, Al-Otoum & Albatainah, 2011:504). Therefore, the National Government Department stands to realise these benefits should its organisational speed be enhanced.

6.5 THE HUMAN FACTOR

In the current study, the human factor was encapsulated and measured through five factors which influence an individual's level of satisfaction at work: quality of work life (QWL), ability utilisation, life satisfaction (LS), creativity and autonomy,. The factors were identified through exploratory factor analysis. This section describes these factors and how they were identified.

6.5.1 Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity for the human factor

In order to ascertain that the data captured in the current study was suitable for exploratory factor analysis, two statistical tests namely the KMO as well as the Bartlett's Tests were conducted. The results of the KMO and Bartlett's Tests for the human factor are illustrated in Table 6.8.

Table 6.8: KMO and Bartlett's Tests Results for the Human Factor

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.863
Bartlett's Test of Sphericity	Approx. Chi-Square	3292.295
	Df	528
	Sig.	0.00

The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was calculated at 0.863 and a Bartlett's Test of Sphericity at (Sig = 0.000) supported by an approximated Chi-square of 3292.295 at 528 degrees of freedom (df). This result indicated that the data was suitable for factor analysis (refer to Section 5.4.2).

6.5.2 Exploratory factor analysis for the human factor

Exploratory factor analysis yielded five factor dimensions. The rotated factor loading matrix illustrating the resultant factors, eigen values, percentage of variance explained and reliabilities is provided in Table 6.9.

Table 6.9: Rotated Component Matrix: The Human Factor

Factors and variable descriptions: The Human Factor		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Item Code	Factor 1 Quality of Work Life					
C1	My pay	0.762	0.034	0.027	0.091	0.119
C2	The working conditions	0.720	0.101	0.321	0.254	-0.189
C3	The adequacy of facilities for my job	0.712	-0.048	-0.073	0.217	0.103
C4	The competence of my supervisor in making decisions)	0.706	0.301	0.146	0.124	-0.158
C5	The quality of facilities for my job	0.590	0.022	-0.413	0.210	0.140
C6	The pride I get from doing my job	0.746	-0.045	0.308	0.018	0.105
C7	The enjoyment I get from my job	0.667	0.106	-0.011	0.062	0.119

C14	The feedback I get from my boss	0.583	0.154	0.072	0.215	0.162
Factor 2 Ability Utilisation						
C9	The chance to tell people what to do	0.097	0.711	-0.029	0.123	0.141
C10	The chance to do things for other people	0.178	0.658	0.264	0.274	0.137
C11	The chance to use my skills	-0.138	0.647	0.231	0.334	-0.072
C12	The opportunity to apply my knowledge	0.061	0.883	0.031	-0.182	0.144
C13	The chance to develop my abilities	0.238	0.677	0.032	0.261	-0.215
Factor 3 Life satisfaction						
C17	The chance to be somebody in the community	0.357	0.072	0.642	0.164	0.123
C23	The extent to which my life is ideal	-0.062	-0.051	0.736	0.336	0.341
C24	My work life	0.310	-0.007	0.651	0.093	0.114
C25	The quality of my life	-0.014	0.237	0.632	-0.156	-0.015
C26	Getting important things I want in my life	-0.009	0.062	0.663	0.314	-0.073
Factor 4 Creativity						
C8	The chance to learn new methods	0.372	-0.071	0.331	0.657	0.321
C16	The chance to do things differently from time to time	0.437	-0.065	0.204	0.732	-0.026
C18	Being able to do things that don't go against my conscience	0.241	0.279	0.174	0.599	-0.432
C19	Being able to suggest new ideas	0.385	-0.074	0.143	0.547	-0.229
Factor 5 Autonomy						
C15	The chance to work alone on the job	0.245	0.367	-0.277	0.131	0.763
C20	The chance to try my own methods on the job	0.069	-0.112	0.383	0.291	0.624

C21	The freedom to use my own judgment	-0.025	0.248	-0.050	-0.010	0.563
C22	The freedom to think on my own	0.474	-0.118	0.132	0.227	0.677
Eigenvalue		6.155	5.400	1.420	1.198	1.017
% of variance explained		24.731	5.781	20.712	4.872	4.328
Cumulative % of variance explained		24.731	30.512	51.224	56.096	60.424
Reliability (Cronbach alpha)		0.782	0.854	0.787	0.712	0.813
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. ^a a. 5 components extracted						

In analysing the responses of managers and employees of the National Government Department regarding the human factor, five factors namely **quality of work life, ability utilisation, life satisfaction, creativity** and **autonomy** were identified through the exploratory factor analysis procedure. These factors accounted for approximately 60.4% of the variance, which complies with Malhotra and Birks's (2003:72) suggestion that the cumulative percentage of variance extracted by the factors should be at least 60%. In terms of reliabilities, it is noteworthy to attest that all five factors showed acceptable levels of internal consistency, above the recommended 0.7 threshold (Hair *et al.*, 2010:385).

Factor 1, labelled as **quality of work life** consisted of eight items (C1, C2, C3, C4, C5, C6, C7 & C14) that accounted for 24.7% of the variance. The internal consistency for this factor as measured through the Cronbach alpha was 0.872, which was acceptable. Quality of work life is concerned with the conditions under which an individual works and it involves promoting a work environment conducive to the satisfaction of employees' needs (Rethinam & Ismail, 2008:59). As defined by Md-Sidin, Sambasivan and Ismail (2010:61) quality of work life is a comprehensive construct that includes an individual's job-related wellbeing and the extent to which work experiences are rewarding, fulfilling, and devoid of stress and other negative personal consequences. Yavari, Amirtash and Tondnevis (2009:100) mention that quality of work life is meant to capture the extent to which the work environment, job requirements,

supervisory behaviour, and ancillary programmes in an organisation meet the needs of an employee. Quality of work life differs from employee satisfaction in that employee satisfaction is taken to be one of many outcomes of quality of work life (Nurmala, 2010:326). Moreover, the impact of quality of work life overarches to a number of other life domains such as family life, leisure life, social life, financial life, among others. Mubarak, Baba, Low and Quah (2003:578) also noted that quality of work life relates not only to how people can do work better, but also to how work may cause people to be better. In addition, quality of work life in an organisation also concerns the participation of workers in problem solving and decision making. Higher quality of work life also correlates positively with lower work-to-family interference (Md-Sidin *et al.*, 2010:62). It appears then, that quality of work life is an important measure of the wellbeing of employees in an organisation.

Factor 2, labelled as **ability utilisation**, consisted of five items (C9, C10, C11, C12 & C13) and accounted for 5.78% of the total variance explained. The factor attained an acceptable Cronbach alpha of 0.853, which denotes a high level of internal consistency. Ability utilisation is concerned with the individual's opportunity to do something in the organisation that makes use of their skills and abilities (Flood *et al.*, 2008:17). The extent to which people's skills and abilities are utilised in the workplace affects organisational performance, which presents the need to enable employees to make an immediate positive difference to their workplaces by applying the skills and abilities they have acquired in a productive way (Mason, 2005:29). At macro-level, employee skills and abilities usually make the biggest difference to the prosperity of a country when they are used effectively in organisations (Payne, 2008:33). Resultantly, most policy makers are now aware that it is not enough to raise workforce skill and abilities levels alone, but skills must also be *used* effectively and continuously developed if the full benefits in terms of improving productivity and raising living standards are to be realised (Philpott, 2006:161). This suggests that employee skills and abilities are essential, but not adequate by themselves to generate productive workplaces (Tamkin, Cowling & Hunt, 2008:111).

Ensuring that skills and abilities are fully used involves a wider set of changes taking place inside the workplace: changes that concern business strategies, how production and employees are managed, and the nature of organisational culture (Trades Union Congress, 2009:87). Bassi and McMurrer (2006:106) suggest that many employees are overwhelmed by situations to which

they are unable to apply their skills and abilities, mainly because the work environment makes it impossible to be highly productive. It is imperative then, that work organisations provide the right sort of context for people to successfully apply and further develop their skills and abilities (Stirpe, Zarraga & Rigby, 2009:9).

Factor 3, labelled as **life satisfaction** consisted of five items (C17, C23, C24, C25 & C26) which contributed 20.7% of the total variance explained. In terms of internal consistency, the factor attained an acceptable Cronbach alpha value of 0.758. Life satisfaction is concerned with an individual's emotional reaction to life in general. It consists of work time, spare time and time after work as well as an individual's appraisal of the quality of his or her life (Amering & Schmolke, 2009:19). There are several internal and external factors (e.g. demographic, environmental and interpersonal correlates) that are related to an individual's appraisal of their life as a satisfactory or dissatisfactory experience (Diener, Oishi & Lucas, 2003:405). Generally, demographic variables are weaker predictors of an individual's overall life satisfaction than environmental factors such as neighborhood experience (Kim-Prieto *et al.*, 2005:284). Chronic and acute life events have been found to be significant moderating variables of individuals' life satisfaction whereas stronger predictors of life satisfaction involve interpersonal relationship variables (Diener *et al.*, 2003:406). An individual's attachment orientation is a strong predictor of the reported life satisfaction (Koohsar & Bonab, 2011:956). In the work environment, life satisfaction is significantly and positively correlated with employee motivation and productivity (Tkach & Lyubomirsky, 2006:183). Research suggests that there is indeed a positive relationship between employee satisfaction and job performance (Dahl, Nesheim & Olsen, 2009:125). Because employment is a major part of life, life satisfaction (or lack thereof) will be partially derived from a person's place of work (Koohsar & Bonab, 2011:957). Individuals who consider their job to be a calling, as opposed to a job or career, tend to report the highest levels of satisfaction among the employed, which also has a positive impact on performance (Ganguly, 2010:211). Therefore higher levels of life satisfaction among employees in a particular organisation result in the higher overall wellbeing of the organisation (Giannikis & Mihail, 2011:133).

Factor 4, labelled as **creativity**, consisted of four items (C8, C16, C18 & C19) that accounted for 5% of the variance. The factor also attained an acceptable Cronbach alpha value of

0.712. Creativity is concerned with the extent to which the individual is able to use his or her own initiative, innovativeness and methods in the tasks allocated to him or her (Cho & Pucik, 2005:555). It may also be perceived as a product or response that is both a novel and appropriate, useful, correct or valuable response to the task at hand, and it must somehow influence the way business gets done, such as by improving a product or by opening up a new way to approach a process (Falk & Kosfeld, 2006:1612). Creativity enabled through organisational resource allocations is positively associated with organisational performance (Henri, 2006:77). There seems to be a common agreement among management practitioners that those intangible resources such as a firm's capability to promote innovation and creativity are key drivers of competitive advantage (Amabile, 2009:362). Therefore, it is important for organisations to place a premium on employee creativity in order to excel in the unpredictable operational climate of today and tomorrow (Cho & Pucik, 2005:557).

Factor 5, labelled as **autonomy**, consisted of four items (C15, C20, C21 & C22) and contributed to 4% of the variance. The factor also attained a Cronbach alpha value of 0.813, which is above the recommended 0.7, thereby confirming its acceptable reliability. Autonomy is concerned with the level of freedom and discretion an individual enjoys in his or her job as well as an individual's ability to make decisions regarding the tasks allocated to them (Mola-Hosseini & Arsalan, 2009:121). For both individuals and teams, empowerment through autonomy drives employee behaviors as well as attitudes (Seibert, Wang & Courtright, 2011:891). Employees who are allowed to work autonomously are more satisfied and committed at work, and are less likely to experience stress and to think about leaving the organization (Gibbs, 2009:41). Overall, the critical behaviors driven by employee autonomy include organisational performance, innovation and organisational citizenship (Moqali, Hassanpoor & Hassanpoor, 2009:119). A practical implication is that organisations may have to consider recruiting employees who have positive self-evaluation traits to help establish a workforce that is more willing and able to show initiative by working autonomously and to take an active role in improving its own performance (Seibert *et al.*, 2011:984).

6.5.3 Mean scores for the human factor subscales

Table 6.10 is an illustration of the means, medians and standard deviation associated with each of the five factors.

Table 6.10: Factor, Number of Items, Mean and Standard Deviation for the Human Factor Sub-Scales

Factor	Number of items	Summated Mean Scores	Standard Deviation	Mean Score Ranking
Quality of Work Life	8	4.443	0.743	5
Ability Utilisation	5	4.812	0.701	2
Life Satisfaction	5	4.924	0.704	1
Creativity	4	4.693	0.769	3
Autonomy	4	4.520	0.669	4

The summated means for the five human factor subscales indicate that life satisfaction was ranked highest ($\bar{x} = 4.924$), followed by ability utilisation ($\bar{x} = 4.812$), creativity ($\bar{x} = 4.693$), autonomy ($\bar{x} = 4.520$) and quality of work life ($\bar{x} = 4.443$). The mean scores for the five subscales indicate an average scoring between, agree and strongly agree on the Likert Scale. In terms of standard deviation, a large standard deviation generally indicates that the data points are far from the mean and a small standard deviation indicates that they are clustered closely around the mean (Ghahramani, 2000: 438). In the current study, standard deviations for the five factors ranged from 0.669 to 0.769, which implies that there is less uncertainty in results of the current study, that is, the results are trustworthy.

6.6 ORGANISATIONAL SYSTEMS

In the current study, organisational systems were represented and measured through three factors: innovation systems, inter-organisational systems and quality management systems. The factors were identified through exploratory factor analysis. This section discusses how these factors were identified.

6.6.1 Kaiser-Meyer-Olkin (KMO) Bartlett's Test of Sphericity for organisational systems

In order to ascertain that the organisational systems data was suitable for exploratory factor analysis, two statistical tests namely the KMO as well as the Bartlett's Tests were also conducted. The results of the KMO and Bartlett's Tests for organisational systems are illustrated in Table 6.11

Table 6.11: KMO and Bartlett's Tests Results for Organisational Systems

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.854
Bartlett's Test of Sphericity	Approx. Chi-Square	3223.137
	Df	467
	Sig.	0.001

The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was calculated at 0.854 and a Bartlett's Test of Sphericity at (Sig = 0.001) supported by an approximated Chi-square of 3223.137 at 467 degrees of freedom (df). This result indicated that the captured data under organisational systems was suitable for factor analysis (refer to Section 5.4.2).

6.6.2 Exploratory factor analysis for organisational systems

Subsequent exploratory factor analysis yielded three factors. The rotated factor loading matrix illustrating the resultant factors, eigen values, percentage of variance explained and reliabilities is provided in Table 6.12.

Table 6.12: Rotated Component Matrix: Organisational Systems

Item Code	Factors and variable Descriptions: Organisational Systems	Factor 1	Factor 2	Factor 3
Factor 1 Innovation Systems				
D1	The organisation has fostered a culture that expects everyone, at every level, to contribute to the innovation process	0.677	-0.423	0.205
D2	The organisation has built networks, pathways and platforms to promote the flow of innovation internally and externally	0.772	-0.476	0.097
D3	The organisation has adopted a step by step process that facilitates the generation of new ideas	0.779	0.454	0.064

D4	The organisation has created opportunities to learn by building systems that capture key learnings from the innovation process	0.779	-0.362	0.100
Factor 2 Inter-Organisational Systems				
D5	The organisation has good telecommunication infrastructure (e.g. email, Internet)	0.187	0.565	0.437
D6	There exists an open and frequent communication between the organisation and its corporate clients	0.003	0.740	0.291
D7	The organisation trusts that confidential information that is shared with corporate clients will be kept strictly confidential	0.264	0.626	0.259
D8	The organisation and its corporate clients have very similar IT infrastructure	-0.093	0.717	-0.333
D9	There exists an equal sharing of risks, burden, benefits and incentives between the organisation and its corporate clients	0.033	0.662	-0.104
Factor 3 Quality Management Systems				
D10	The organisation performs internal audits of all its processes	0.417	0.083	0.526
D11	The organisation has an employee training programme	0.221	0.103	0.516
D12	The organisation has a service quality manual that is periodically reviewed and updated	0.231	0.255	0.669
D13	The organisation inspects/verifies all work done	0.247	0.152	0.745
D14	The organisation has a documented client complaint process	0.180	0.152	0.702
D15	The organisation has a documented corrective action process	0.239	0.310	0.515
Eigen value		6.612	1.562	1.022
% of variance explained		44.079	10.416	6.814
Cumulative % of variance explained		44.079	54.495	61.308
Reliabilities		0.709	0.809	0.786
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.^a a. 3 components extracted				

In analysing the responses of managers and employees of the National Government Department regarding organisational systems, three factors; namely, **innovation systems**, **inter-organisational systems** and **quality management systems** were identified through the exploratory factor analysis procedure. These factors accounted for approximately 61% of the variance, which complies with Malhotra and Birks's (2003:72) prescription that the cumulative percentage of variance extracted by the factors should be at least 60%. The three factors also showed reliabilities which were above the 0.70 threshold recommended by Hair *et al.* (2010:385). This shows that the scales had high levels of internal consistency.

Factor 1, labelled **innovation systems**, consisted of four items (D1, D2, D3 & D4) that contributed 44% of the total variance explained. This high percentage of variance indicates the significant contribution of innovation systems to organisational systems. Additionally, innovation systems attained a Cronbach alpha of 0.709, which reflects acceptable internal consistency of the scale. Innovation is concerned with the creation of better or more effective products, processes, services, technologies, or new ways of doing things as well as the flow of technology and information among the members of an organisation (Gerwin & Barrowman, 2002:438). The development of innovation in an organisation is based on the factors such as the motivation to innovate, the obstacles against innovation and the number of resources available, among others (Rodriguez, 2002:16). Innovation is widely acclaimed to be the fundamental source of value creation in companies and is an important enabler of competitive advantage (Walker, 2004:23). Organisations with healthy innovation systems usually report stronger financial performance than those without. Conversely, low-innovation organisations often suffer from lack of commitment and organisational resources directly related to innovation. Dauda (2009:3) emphasises that in terms of overall organisational performance, innovative organisations are renowned for their high performance in most disciplines of their operations. In support, Vincent, Bharadwaj and Challagalla (2004:7) substantiate that innovation is significantly and positively related to superior performance. It is therefore imperative for organisations and nations that would like to cope with the changes of the 21st century to employ various strategies that could influence their human resources to innovate at all times (Fasoyin, 2006:13).

Factor 2, labelled **inter-organisational systems**, consisted of five items (D5, D6, D7, D8, D9) and accounted for 10% of the total variance explained. The factor also attained an acceptable Cronbach alpha value of 0.809, which is a signal of high internal consistency. Inter-organisational systems are concerned with systems that allow information to be automated between organisations in order to reach a desired common goal (Kim, Ryoo & Jung, 2011:667). In turn, inter-organisational relationships are formal arrangements that bring together assets (of whatever kind, tangible and intangible) of two or more legally independent organisations with the aim to produce joint added value (of whatever kind, tangible or intangible) (Craighead, Patterson, Roth & Segars, 2006:143). This implies that both inputs and outputs are formally shared by the independent organisations that are involved in the relationship (Nelson, 2006:11). More than ever in history, inter-organisational forms of cooperation are characteristic of today's business world, with relationships cutting across organisational and industry boundaries, as well as national borders (Haag, McCubbrey & Donovan, 2006:26). Inter-organisational systems can be used as a measure of organisational performance, since no organisation can prosper without strategic linkages to other organisations (Heijltjes & Witteloostuijn, 2003:33). The adoption of effective inter-organisational relationships is beneficial to organisations. Some of the benefits include risk reduction, obtaining economies of scale and technology exchanges (Grabher & Powell, 2004:121). Nelson (2006:12) adds that through the employment of inter-organisational systems, organisations can enjoy paybacks in such areas as increased competitiveness, overcoming investment barriers and enhanced global communication. Organisations therefore stand to benefit in different ways by adopting inter-organisational systems.

Factor 4, labelled as **quality management systems** contained six items (D10, D11, D12, D13, D14 & D15) and accounted for 7% of the variance. The factor attained a Cronbach alpha of 0.786, which was acceptable. Quality management systems are concerned with organisational actions designed to ensure consistency or quality in approach, process and output (Lee, 2003:118). Quality has developed into an important part of corporate strategy and only those organisations with an advanced quality system achieve superior organisational performance and remain competitive in the marketplace (Zhang, 2005:168). Hung *et al.* (2011:213) suggest that quality has significant and positive effects on organisational learning, and that both quality and organisational learning have significant as well as positive effects on innovation performance. Prajogo and Sohal (2003:901) also argue that an organisation's performance is also influenced

by the extent to which quality is emphasised in the entire organisation's systems and processes. Lee and Lim (2009:10) also suggest that the adoption of the well-acclaimed Total Quality Management (TQM) concept can enable organisations to enhance quality, with the aim of improving organisational effectiveness and flexibility. The adoption of and adherence to ISO 9000 standards has also gained recognition as a procedure to enhance quality systems, with obvious positive effects on organisational performance (Tserng & Lin, 2004:781). As such, quality and its associated systems remain an important and enduring part of a high performance organisation (Lee, 2003:118).

6.6.3 Mean Scores for organisational systems sub scales

Table 6.13 shows the means, median, standard deviation and mean score ranking of the three factors.

Table 6.13: Factor, Number of Items, Mean and Standard Deviation for the Organisational Systems Sub-Scales

Factor	Number of items	Summated Mean Scores	Standard Deviation	Mean Score Ranking
Innovation Systems	4	3.874	0.830	2
Inter-organisational Systems	5	3.586	0.710	3
Quality Management Systems	6	3.907	0.711	1

On the basis of the **mean** scores computed for each factor (Table 6.13), quality management systems were ranked highest ($\bar{x} = 3.907$), which indicates a strong inclination towards the agree position on the Likert scale. The innovation factor attained the second highest ($\bar{x} = 3.874$). Finally, the inter-organisational systems factor achieved the lowest ($\bar{x} = 3.586$) among the three factors. These findings imply that respondents perceive that quality management systems contribute most to organisational performance within the department, followed by innovation systems, and then inter-organisational systems. It may be noted that the standard deviation figures for all the three factors are below a whole number. This implies that the results of the study in this instance are trustworthy.

6.7 ORGANISATIONAL PROCESSES

In the current study, the organisational processes were measured through four factors: organisational structure, organisational change, team processes and leadership. These four factors were identified through exploratory factor analysis. This section discusses how these factors were identified.

6.7.1 Kaiser-Meyer-Olkin (KMO) Bartlett's Test of Sphericity for organisational processes

In order to assess the suitability of the organisational processes data for exploratory factor analysis, two statistical tests namely the KMO as well as the Bartlett's Tests were conducted. The results of the KMO and Bartlett's Tests for organisational processes are illustrated in Table 6.14.

Table 6.14: KMO and Bartlett's Tests Results for Organisational Processes

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.792
Bartlett's Test of Sphericity	Approx. Chi-Square	3345.162
	Df	509
	Sig.	0.001

The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was calculated at 0.792 and a Bartlett's Test of Sphericity at (Sig = 0.001) supported by an approximated Chi-square of 3345.162 at 509 degrees of freedom (df). This result indicated that the captured data under organisational processes was suitable for factor analysis (refer to Section 5.4.2).

6.7.2 Exploratory factor analysis for organisational processes

Four factors were extracted through the exploratory factor analysis procedure. The rotated factor loading matrix illustrating the resultant factors, eigen values, percentage of variance explained and reliabilities is provided in Table 6.15.

Table 6.15: Rotated Component Matrix: Organisational Processes

Item Code	Factors and variable descriptions: Organisational Processes	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1 Organisational Structure					
E1	The goals of this organisation are clearly stated	0.644	0.151	0.143	0.183
E2	The division of labour of this organisation is flexible	0.533	0.324	0.249	0.067
E3	The division of labour of this organisation is flexible	0.773	0.257	0.206	0.056
E4	The manner in which tasks are divided is a logical one	0.743	0.294	0.258	-0.074
E5	The structure of my work unit is well designed	0.645	0.369	0.239	-0.093
E6	The division of labour in this organisation actually helps it to achieve its goals	0.608	0.250	0.235	0.059
Factor 2 Organisational Change					
E7	There are many changes taking place in this organisation	0.201	0.614	0.049	0.218
E8	Occasionally, I am allowed to change things around my job	-0.073	0.820	0.122	0.042
E9	This organisation has the ability to change	0.049	0.577	0.387	0.324
Factor 3 Team Processes					
E10	I can always talk with workmates if I have a work-related problem	0.277	0.174	0.744	0.048
E11	My relationships with members of my work group are friendly and professional	0.186	-0.261	0.846	-0.037
E12	I have established the relationships that I need to do my work properly	0.244	0.269	0.716	0.242
E13	Other work units are helpful to my work unit whenever assistance is required	0.298	0.224	0.530	0.306
E14	There is no evidence of unresolved conflict in the organisation	0.427	0.308	0.646	0.481
Factor 4 Leadership					

E15	I feel good to be around my leaders	0.271	0.193	0.286	0.756
E16	My leaders enable me to think about old problems in new ways	0.272	0.203	0.185	0.721
E7	I have faith in my leaders	0.351	0.044	0.238	0.812
E18	My leaders give me positive feedback on my work	0.256	0.025	0.209	0.813
E19	My leaders reward me when I do well	0.150	-0.101	0.089	0.780
E20	My leaders give me personal attention when I feel rejected	0.253	-0.012	0.168	0.807
Eigenvalue		4.745	4.517	2.692	1.362
% of variance explained		23.724	22.584	13.460	6.810
Cumulative % of variance explained		23.724	46.308	59.768	66.579
Reliabilities		0.803	0.771	0.782	0.822
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.^a a. 4 components extracted					

In analysing the responses of managers and employees of the National Government Department regarding organisational processes, four factors; namely, **organisational structure, organisational change, team processes** and **leadership** were identified through the exploratory factor analysis procedure. These factors also accounted for approximately 66% of the variance, which is also within Malhotra and Birks's (2003:72) recommendation that the cumulative percentage of variance extracted by the factors should be at least 60%. The four factors also showed reliabilities which were above the 0.70 standard prescribed by Hair *et al.* (2010:385). This denotes that the scales had acceptable levels of internal consistency.

Factor 1, labelled as **organisational structure**, consisted of six items (E1, E2, E3, E4, E5 & E6) and accounted for 24% of the total variance explained. The factor attained a Cronbach alpha of 0.803, which indicates high internal consistency. Organisational structure is concerned with the hierarchy of the organisation and how the components of this hierarchy work together to achieve

the objectives of the organisation (Banai & Reisel, 2007:470). Most of the literature seems to suggest that there exists a profound relationship between structure and organisational performance. For instance, Schminke, Ambrose and Cropanzano (2000:300) argue that a decentralised organisational structure is conducive to the improvement of organisational effectiveness and performance. Decentralised structures also encourage more effective communication in addition to increasing employee satisfaction and motivation (Zheng *et al.*, 2010:763). This could be attributed to the fact that in less centralised environments, the free flow of lateral and vertical communication is encouraged (Shafritz, Ott & Jang, 2005:78). Decentralised organisational structures also have a positive impact on other areas that include decision making, responsiveness to market conditions and encouraging the adoption of innovation and higher levels of creativity (Schminke *et al.*, 2000:300). Conversely, high centralisation stifles interactions among organisational members (Gold, Malhotra & Segars, 2001:209), reduces the opportunity for individual growth and advancement (Zheng *et al.*, 2010:764), and inhibits innovative solutions to problems (Schminke *et al.*, 2000:300). Therefore, managers are encouraged to ensure that they design lean, decentralised organisational structures in order to stimulate performance in their various organisations (Tsai & Huang, 2008:569).

Factor 2, labelled **organisational change**, consisted of three items (E7, E8 & E9) that accounted for 23% of the total variance explained. The factor also had a Cronbach alpha of 0.771, which indicates acceptable reliability. Organisational change is concerned with processes in which the working methods or aims of an organisation are altered, for example in order to develop and deal with new situations (Liu & Perrewé, 2005:263). Literature is accessible that attempts to explain the possible effects of organisational change on organisational performance. For instance, Judge and Elenkov (2005:894) found that the organisation's capacity for change influences an environmental performance in that the higher that capacity, the more the organisation is able to perform in its operational environment. Properly implemented organisational change also facilitates process improvement, which in turn has a stimulus effect on organisational performance (Lee & Ahn, 2008:270). Nordin (2011:129) also found that an organisation's preparedness for change is explained by factors such as emotional intelligence, organisational commitment and transactional leadership behaviour. This suggests that an organisation's ability to change can only be enhanced when the identified factors are optimised (Liu & Perrewé, 2005:263). Tsamenyi, Onumah and Tetteh-Kumah (2010:428) observed that organisational

changes in various levels of the organisation positively influenced the post-privatisation performance of specific companies in Ghana while Palcic and Reeves (2010:299) also found that organisational changes had impacted positively on the post-privatisation performance of Ireland's national telecommunications operator, Telecom Éireann. Organisational change is a fundamental process that should be expedited in order to enhance overall performance of the organisation (Diefenbach, 2005:127).

Factor 3, labelled as **team-processes**, consisted of five items (E10, E11, E12, E13 & E14) that accounted for 13% of the variance. This factor attained a Cronbach alpha of 0.782, which indicates acceptable internal consistency. Team processes are concerned with the prevalence of joint actions by a group of people, in which each individual subordinates his or her individual interests to those of the group (Acuna, Gomez & Juristo, 2009:631). Teams are also formed when individuals with a common taste, preference, liking, and attitude come and work together for a common goal (Bandow, 2001:41). Every employee is dependent on his fellow employees to work together and contribute efficiently to the organisation (Burke *et al.*, 2006:291). It has been observed that the outcome is far better when employees work in a team rather than individually, as every individual can contribute in his/her best possible way (Derby & Larsen, 2006:51). Teamwork is also essential in organisations for better output and a better bonding among employees since tasks are accomplished at a faster pace when they are done by a team rather than an individual (Salas, Sims & Burke, 2005:555). There is usually healthy competition among team members in addition to the improvement of relations among employees as well as the platform for team members to gain from each other (Morgan, 2010:97). Therefore team processes are an essential element for organisational success and must be encouraged if organisational goals are to be accomplished (Salas *et al.*, 2005:566).

Factor 4, labelled as **leadership**, consisted of six items (E15, E16, E17, E18, E19 & E20) that accounted for 7% of the total variance explained. This factor attained a high Cronbach alpha of 0.822 which indicates high reliability. Leadership is concerned with the extent to which authorities are able to inspire and motivate their subordinates towards the attainment of a common goal (Whittington, Goodwin & Murray, 2004:599). Research has established that there is a positive relationship between positive leadership and performance (Elenkov, 2002:471). Leadership, which involves both visionary and charismatic elements, is associated with higher

performance, both for individuals, groups and organisations across cultures and contexts (Sashkin & Sashkin, 2003:34). Leadership behaviours cascade down through the various organisational levels and have the effect of raising the degree of performance at every level. When employees are subjected to supportive leadership, their consciousness about the importance and value of goals is likely to be enhanced together with the ways that the employees can use to attain these organisational goals (Dasborough, Ashkanasy, Tee & Tse, 2009:571). This implies the leaders and followers will identify with the organisation's goals and work with a common purpose toward their attainment (Hancott, 2005:29). Huang (2006:71) maintains that leadership has a positive correlation with organisational performance. Therefore, without proper leadership, organisations are bound to fail (Brown & Treviño, 2006:595).

6.7.4 Mean scores for organisational processes subscales

Table 6.16 provides an indication of the means, medians standard deviation and mean score ranking of each factor.

Table 6.16: Factor, Number of Items, Mean and Standard Deviation for the Organisational Processes Sub-Scales

Factor	Number of items	Summated Mean Scores	Standard Deviation	Mean Score Ranking
Organisational Structure	6	4.535	0.811	2
Organisational Change	3	4.523	0.737	3
Team-processes	5	4.657	0.713	1
Leadership	6	4.274	0.958	4

Table 6.16 indicates that team processes ($\bar{x} = 4.657$) contributed most to organisational performance in the National Government Department, followed by organisational structure ($\bar{x} = 4.535$), organisational change ($\bar{x} = 4.523$), while leadership ($\bar{x} = 4.274$) contributed the least. The fact that the mean scores for the four process factors were between the 'agree' and 'strongly agree' positions on the Likert scale suggests that respondents perceived that the department's performance with regard to these factors was satisfactory. However, in terms of the leadership

factor, a possible explanation for the result could be that the leadership style within the department needs improvement. There could be gaps in areas such as giving personal attention to subordinates, rewarding and giving positive feedback to subordinates, and motivating or inspiring subordinates to excel, which were examined in the study. As suggested by a number of management scientists, (Puspanathan *et al.*, 2008:12; Hè, 2009:120; Wang *et al.*, 2010:3923), leadership styles used by organisational leaders impact strongly on organisational performance. Performance of the National Government Department could therefore be enhanced through positive structural adjustments to the leadership styles used by management in the department. The standard deviation figures which are all below a whole number also depict that there is more certainty within the results of the study.

6.8 CORRELATION ANALYSIS: HUMAN FACTOR AND ORGANISATIONAL PERFORMANCE

In order to establish the relationship between the human factor and organisational performance, the five human factor dimensions were correlated with organisational performance. Spearman's correlation coefficient which assesses the degree that quantitative variables are linearly related in a sample (Maxwell & Moores, 2007:179) was used. These results are reported in Table 6.17.

Table 6.17: Correlations: Human Factor and Organisational Performance

Factors	Quality of Work Life	Ability Utilisation	Life Satisfaction	Creativity	Autonomy	Organisational Performance
Quality of Work Life	1.000					
Ability Utilisation	0.582**	1.000				
Life Satisfaction	0.591**	0.546**	1.000			
Creativity	0.507**	0.568**	0.516**	1.000		
Autonomy	0.556**	0.579**	0.583**	0.565**	1.000	
Organisational Performance	0.611**	0.514**	0.556**	0.462*	0.466*	1.000
N=272 ** Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).						

Table 6.17 reveals that there was a significant positive correlation between quality of work life and organisational performance ($r=0.611$; $p<0.01$). These findings are consistent with previous research where quality of work life was found to have a positive impact on the three employee job-related outcomes: job satisfaction, organisational commitment and team spirit (Koonmee, Singhapakdi, Virakul & Lee, 2010:23). Findings of a previous study conducted by Lee, Singhapakdi and Sirgy (2007:280) also endorse that quality of work life has a positive impact on job satisfaction, organisational commitment, and comradeship among employees. This demonstrates that quality of work life is an instrumental factor in enhancing organisational performance.

A further analysis of the correlation matrix indicated a strong positive relationship between ability utilisation and organisational performance ($r=0.514$ $p<0.01$). This finding illustrates that organisational performance may be enhanced through structural improvements in the use of the abilities of employees. As proposed by Liu and White (2011:52), ability utilisation is a predominant factor in determining job satisfaction. Clark (2001:224) also states that if a job is interesting and provides the opportunity for an individual to utilise their skills, the individual is bound to enjoy the job and the likelihood of the individual leaving the organisation is significantly reduced. Furthermore, SQW Consulting (2010:11) also concluded that ability utilisation facilitates the recruitment and retention of staff, and helps the organisation to benefit from enhanced motivation and improved business performance. It may be concluded therefore, that increased opportunities for the employees of the National Government Department to apply their abilities may result in higher levels of organisational performance within the department.

Life satisfaction and organisational performance were positively correlated ($r=0.556$; $p<0.01$). This finding depicts an increase in life satisfaction that would initiate an increase in organisational performance. Research has provided evidence that a higher life satisfaction is associated with a higher job satisfaction, which motivates employees to exert more effort at work (Sumer & Knight, 2001:659; Nickerson & Nagle, 2005:233). In support, Abolghasemi and Varaniyab (2010:749) found that both resilience as well as perceived positive stress are positively related to life satisfaction. This demonstrates that an increase of resilience as well as a decrease of stress leads to increased life satisfaction as it enables an individual to feel better and to develop resources for coping with life (Palgi & Shmotkin, 2010:579). Such attributes are vital

to the enhancement of individual job satisfaction, which directly influences organisational performance. A moderate correlation ($r=0.462$; $p< 0.05$) was found between creativity and organisational performance. This suggests that an increase in creativity will stimulate an increase in organisational performance. These results are supported by a number of studies (Martins & Martins, 2002:56; Hogan, 2003:24; Lee & Choi, 2003:181) and reveal that organisational creativity is critical for stimulating organisational performance. It may therefore be suggested that in organisational turnaround strategies, the issue of creativity should not escape attention during the diagnosis of performance-related problems.

The autonomy factor and organisational performance were moderately correlated ($r=0.466$; $p< 0.05$). This result illustrates that an increase in autonomy results in the enhancement of organisational performance. The degree to which a job provides substantial freedom, independence and discretion of the employee in his/her job influences the level of job satisfaction that the employee experiences (Brunetto & Farr-Wharton, 2004:522). Giving task autonomy to employees is generally expected to result in higher motivation, satisfaction, and performance (Langfred & Moye, 2003:935). Evidence from a study conducted by Exworthy *et al.* (2010:2) further suggests that an unwillingness to exercise autonomy because of centralising tendencies, risk-averse behaviour and an uncertain policy environment results in decreased organisational performance.

The fact that all of the five human factor sub-dimensions were either moderately or strongly positively correlated with organisational performance signifies that overall, the human factor of the employees of the National Government Department is significantly correlated to organisational performance. When the human side of the organisation is optimised and expedited, organisational performance is likely to be very high. Conversely, when there are problems within the human side of the organisation, organisational performance will diminish.

6.9 REGRESSION ANALYSIS: THE HUMAN FACTOR AND ORGANISATIONAL PERFORMANCE

Since the relationship between the human factor and organisational performance showed positive correlations, regression analysis was conducted. Regression analysis is a statistical technique used to investigate relationships between variables. In the present study the researcher sought to

establish the effect of one variable upon another. The ‘enter’ method of regression analysis was used to ascertain whether any predictive relationships existed among the human factor dimensions and organisational performance. The results are reported in Table 6.18.

Table 6.18: Regression Analysis: Human Factor and Organisational Performance

Independent variable: Human Factor		Dependent variable: Organisational Performance			
	Beta	T	Sig	Collinearity Statistics	
				Tolerance	VIF
Quality of work life	0.351	5.605	0.000*	0.824	1.910
Ability utilisation	0.129	2.027	0.044*	0.611	1.959
Life satisfaction	0.224	3.575	0.000*	0.725	1.904
Creativity	0.086	1.426	0.155	0.665	1.769
Autonomy	0.016	0.259	0.796	0.707	1.971
R= 0.673 Adjusted R ² = 0.453 F=44.006 p<0.05*					

The regression analysis revealed that the five human factor subscales (adjusted R²=0.453) explained approximately 45% of the variance in overall organisational performance of the National Government Department. In terms of evaluating the assumptions of multicollinearity, Field (2005:27) recommends that if the Variance Inflation Factor (VIF) is greater than 10 then collinearity is a cause for concern. Multi-collinearity suggests that several of the independent variables are closely linked in some way, when attempting to study how well individual independent variables contribute to an understanding of the dependent variable. The VIF for the five subscales were acceptable since they ranged between 1.769 and 1.971. This value had the effect of reducing multi-collinearity problems. In terms of tolerance, larger tolerance values of more than 0.5 are more desirable as they are more indicative of lesser problems with multi-collinearity (Denis, 2011:16). Therefore, the tolerance values obtained in the regression analysis of the human factor and organisational performance are within an acceptable range.

The three significant predictors of organisational performance were quality of work life ($p=0.000$; $\beta=0.351$), life satisfaction ($p=0.000$; $\beta=0.224$) and ability utilisation ($p=0.000$; $\beta=0.129$). Autonomy ($p=0.796$; $\beta=0.016$) and creativity ($p=0.155$; $\beta=0.086$) contributed positively towards organisational performance in the department. This being the case, the findings of the current study are congruent with the results of previous studies conducted by Cooke (2000:12) and Mohamad, Lo and La (2009:234) which found that most human factor dimensions are positively correlated with organisational performance. This reinforces the perception that performance of an organisation is likely to be proportionate to the effectiveness of the entire human resource mechanism within that organisation.

6.10 CORRELATION ANALYSIS: ORGANISATIONAL SYSTEMS AND ORGANISATIONAL PERFORMANCE

The relationship between organisational systems and organisational performance was established by using the Spearman's correlation coefficient to correlate the three organisational systems sub-factors, namely innovation, inter-organisational systems and quality systems with organisational performance. These results are reported in Table 6.19.

Table 6.19: Correlation Analysis: Organisational Systems and Organisational Performance

Factors	Innovation	Inter-organisational	Quality	Organisational Performance
Innovation	1.000			
Inter-organisational	0.615**	1.000		
Quality	0.528**	0.644**	1.000	
Organisational Performance	0.613**	0.608**	0.674**	1.000

N=272;** Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Table 6.19 indicates that there were significant correlations between the three systemic dimensions and organisational performance. First, a significant correlation was found between innovation and organisational performance ($r=0.613$; $p<0.01$). This demonstrates that when organisational innovation improves, organisational performance of the National Government

Department is enhanced. These findings are not without empirical support. In a study focusing on the impact of organisational learning and innovation on organisational performance, Jiménez-Jiménez and Sanz-Valle (2011:408) concluded that both variables - organisational learning and innovation - contribute positively to business performance but the relationship is moderated by size and age of the firm, industry and environmental turbulence. Camisón and Villar-López (2012:348) also confirm that organisational innovation favours the development of technological innovation capabilities and that both organisational innovation and technological capabilities for products and processes can lead to superior firm performance. Furthermore, García-Morales, Jiménez-Barrionuevo and Gutiérrez-Gutiérrez (2012:1040) also acknowledge that organisational innovation influences organisational performance positively but the relationship is mediated by leadership style and organisational learning. These findings point to the importance of developing and sustaining a culture of innovation in order to optimize performance of the organisation.

With regard to inter-organisational systems, a significant correlation ($r=0.608$; $p<0.01$) was found between the variable and organisational performance. This finding typifies the fact that effective inter-organisational systems have a positive stimulus effect on organisational performance. It is noteworthy to attest that similar findings were found in previous empirical research. A number of scholars (Ireland, Hitt & Vaidyanath, 2002:430; Choe, 2008:444; Cheung, Myers & Mentzer, 2010:472) stress the importance of inter-organisational networks developed through inter-organisational systems as an instrument for creating value in a dynamic operational climate. Inter-organisational systems generate capacities for the creation of value for strategic partners, which gives competitive advantage to the organisation (Ranaei, Zareei & Alikhani, 2010:20). The findings of a study conducted by Ismail (2010:581) also reveal that adopting inter-organisational systems indirectly improves the operational performance of firms through business process performance but the relationship is influenced by organisational factors. Since adoption of inter-organisational systems yields pertinent advantages to the organisation, it is therefore expedient that organisational leaders consider them as one of their key corporate strategies.

A positive and significant correlation ($r=0.674$; $p<0.01$) was observed between quality systems and organisational performance. This finding implies that quality systems influence

organisational performance proportionally, that is, effective quality systems will lead to enhanced organisational systems whereas ineffective, defective and malfunctioning quality systems lead to a decline in organisational performance. A previous study conducted by Chong and Rundus (2004:155) substantiates that quality systems have a synergistic impact on organisational performance. These results are also affirmed by Onuwa (2008:101), Yeung (2008:490) and Lin *et al.* (2005:355) who support the handiness of quality systems and practices as crucial determinants of organisational performance in various contexts. Macinati (2008:228) identified six factors, namely, management leadership and commitment to quality, quality strategic planning, human resource training, participation and support, organisational coordination among units, supplier quality management and process management as the core areas of the quality management systems that are the best predictors of organisational performance in a public organisation. Should these areas be given adequate attention, performance of a public organisation will increase exponentially. The same parameters could therefore be employed within public organisations with the prime intention of streamlining performance structures.

6.11 REGRESSION ANALYSIS: ORGANISATIONAL SYSTEMS AND ORGANISATIONAL PERFORMANCE

In order to further analyse the relationship between organisational systems and organisational performance, regression analysis was conducted. The results are illustrated in Table 6.20.

Table 6.20: Regression Analysis: Organisational Systems and Organisational Performance

Independent variable: Organisational Systems			Dependent variable: Organisational Performance				
			Beta	T	Sig	Collinearity Statistics	
						Tolerance	VIF
Innovation			0.297	5.621	0.000*	0.792	1.690
Inter-organisational			0.158	2.692	0.008*	0.680	2.082
Quality			0.416	7.655	0.000*	0.657	1.794
R= 0.747	Adjusted R ² = 0.434	F=39.964	p<0.05*				

The regression matrix (Table 6.20) shows that the three organisational systems subscales (adjusted $R^2 = 0.434$) explain approximately 43% of the variance in overall organisational performance in the National Government Department. The VIF values for the three subscales ranged between 1.690 and 2.082, which were quite acceptable, while tolerance values were all beyond the 0.5 threshold. Therefore, multi-collinearity problems associated with the current regression analysis were almost negligible.

Quality systems and innovation had the highest contribution to organisational performance. All three factors, namely, quality systems ($p=0.000$; $\beta=0.416$), innovation ($p=0.008$; $\beta=0.297$) and inter-organisational systems ($p=0.000$; $\beta=0.158$) contributed positively and significantly towards organisational performance in the National Government Department. The findings of the current study are supported by studies conducted by several researchers (Stankard, 2002:71; Preuss, 2003:595; Boxall & Macky, 2007:263) in which systemic components of the organisation were found to be potent predictors of organisational performance. Overall, the impression is that when organisational systems are effective, organisational performance will be high. On the other hand, dysfunctional or defective organisational systems mean trouble for the organisation in terms of its performance.

6.12 CORRELATION ANALYSIS: ORGANISATIONAL PROCESSES AND ORGANISATIONAL PERFORMANCE

In this section, the focus was to establish the relationship between organisational processes and organisational performance. This was conducted by using the Person Correlation Coefficient to measure the correlations between the four organisational process dimensions: organisational structure, organisational change, team processes, leadership and organisational performance. The results are illustrated in Table 6.21.

Table 6.21: Correlation Analysis: Organisational Processes and Organisational Performance

Factors	Organisational Structure	Organisational Change	Organisational Teamwork	Organisational Leadership	Organisational Performance
Organisational Structure	1.000				
Organisational Change	0.574**	1.000			
Organisational Teamwork	0.657**	0.552**	1.000		
Organisational Leadership	0.639**	0.375**	0.596**	1.000	
Organisational Performance	0.678**	0.518**	0.570**	0.519**	1.000

N=272;** Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Table 6.21 indicates that there were significant correlations between all four organisational process dimensions and organisational performance. Organisational structure and organisational performance were significantly and positively correlated ($r=0.678$; $p< 0.01$). This finding demonstrates that effectual organisational structures support enhanced organisational performance whereas impotent structures also yield miserable organisational performance results. Previous studies (Schminke *et al.*, 2000:296; Gold *et al.*, 2001:203; Zheng *et al.*, 2010:1263) attest to the fact that organisational structure influences organisational performance. Findings of an experimental study undertaken by Sorensen and Stanton (2012:70), in which five different organisational structures were compared in terms of performance as well as distributed situational awareness, also show that there is a positive relationship between structure and performance. However, the impact of organisational structure on organisational performance is not direct but an indirect one which comes through hybrid competitive strategies which are those strategies that tend to seek higher performance levels by simultaneously emphasising high differentiation and low-cost levels (Claver-Cortés *et al.*, 2012:993). Therefore it is important to ensure that appropriate structures that promote organisational growth and progress are designed and implemented, which would have a positive ripple effect on organisational performance.

There was a strong positive correlation ($r=-0.518$; $p<0.01$) between organisational change and organisational performance. This signifies that constructive organisational change brings a handsome performance dividend to the organisation. Generally, most organisations are faced with the realization that they need to make strategic organisational changes to keep abreast with environmental developments if they are to sustain acceptable performance levels (Bloodgood & Morrow Jr., 2003:1763). Sadeghi (2011:1099) points out that five infrastructure strategies - goals, human resource, technology, structure and culture - are embedded in organisational change processes and that as these elements change, organisational performance also changes accordingly. Oxtoby, McGuiness and Morgan (2002:318) also found that performance of eleven organisations in the UK automotive supply sector improved after the successful implementation of various change programmes. Performance will be enhanced the most when the magnitude, timing, and direction of strategic changes that a firm makes are consistent with the environmental changes (Zajac *et al.*, 2000:432). It appears therefore, that the performance of an organisation that does not adopt necessary changes will shrink until the organisation itself ceases to exist.

Organisational teamwork was significantly correlated with organisational performance ($r=0.570$; $p<0.01$). Griffin, Patterson and West (2001:538) stress that effective organisational teamwork is an important contributor to an improved performance of the organisation through enhanced employee satisfaction. Effectual organisational teamwork leads to greater cohesion between organisational members, which according to Turman (2003:63), develops in individuals a sense of belonging. Delarue, VanHootehem, Procter and Burridhe (2008:127) also establish that teamwork has a positive impact on all four dimensions of performance, namely, attitudinal, behavioural, operational and financial. When organisational teamwork is combined with structural change, performance can be further enhanced (Manzoor *et al.*, 2011:110). It may be concluded then that teamwork is an indispensable tool in cultivating high levels of organisational performance in any organisation

A significant correlation ($r=0.519$; $p<0.01$) was observed between organisational leadership and organisational performance. This result suggests that organisational performance increases or decreases according to the leadership processes within that organisation. The fact that leadership has a significant impact on organisational performance cannot be disputed. Leadership influences

a host of organisational aspects including, *inter alia*, individual employee performance (Walumbwa *et al.*, 2011:204), attainment of organisational goals (Berson & Avolio, 2004:625) overall strategy implementation (O'Reilly *et al.*, 2010:104), and organisational learning and innovation (Garcia-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez, 2012:1040). Debate may only focus on other proximal issues such as the type of leadership style and implementation modalities. Therefore, the issues of organisational performance and leadership cannot be disentangled from each other.

6.13 REGRESSION ANALYSIS: ORGANISATIONAL PROCESSES AND ORGANISATIONAL PERFORMANCE

Regression analysis was conducted to further analyse the relationship between organisational processes and organisational performance. The results are illustrated in Table 6.22.

Table 6.22: Regression Analysis: Organisational Processes and Organisational Performance

Independent variable: Organisational Processes	Dependent variable: Organisational Performance				
	Beta	T	Sig	Collinearity Statistics	
				Tolerance	VIF
Organisational Structure	0.433	6.510	.000*	0.619	2.367
Organisational Change	0.153	2.784	.006*	0.612	1.634
Organisational Teamwork	0.141	2.256	.025*	0.572	2.121
Organisational Leadership	0.101	1.706	.089*	0.533	1.875
R= 0.711 Adjusted R ² = 0.498 F=68.236 p<0.05*					

An analysis of the regression matrix (Table 6.22) reveals that all organisational processes dimensions (adjusted R² = 0.498) explain approximately 50% of the variance in overall organisational performance in the National Government Department. Notably, VIF values ranged between 1.634 and 2.367, while tolerances were sufficiently high, at least above 0.5. The fact

that these values fell within acceptable limits implies that the multi-collinearity problems, which typically negatively affect the relationship between variables were significantly reduced.

The regression matrix indicates that all four factors, namely, organisational structure ($p=0.000$; $\beta=0.433$), organisational change ($p=0.006$; $\beta=0.153$), organisational teamwork, ($p=0.006$; $\beta=0.141$) and organisational leadership ($p=0.089$; $\beta=0.101$) contributed positively and significantly towards organisational performance in the National Government Department. This finding substantiates the fact that organisational performance increases with improvements in any one or combinations of the process dimensions analysed in the current study. This further extends the findings of previous studies conducted by Janssen (2000:287), Langely and Tsoukas (2010:14) and Gruchman (2009:28), who in varied contexts recognise the existence of a positive relationship between organisational processes and organisational performance.

6.14 A COMPARISON OF THE IMPACT OF THE INDIVIDUAL FACTORS ON ORGANISATIONAL PERFORMANCE

To establish which one of the three factors influences organisational performance the most, the impact of each of the three factors was compared by ranking them in terms of their mean scores. This distribution is shown in Table 6.23.

Table 6.23: Summary of Mean Scores: The Human Factor, Organisational Systems and Organisational Processes

Variable	Number of Items in Scale	No of Sub- scales	Reliability of Scale (α)	Mean	Position in rank order
Human Factor	22	5	0.829	4.486	1
Organisational Systems	15	3	0.705	3.571	3
Organisational Processes	20	4	0.833	4.455	2

An analysis of the mean scores (Table 6.23) reveals that the human factor ($\bar{x} = 4.486$) exerted the greatest impact on organisational performance, followed by organisational processes ($\bar{x} = 4.455$) while organisational systems ($\bar{x} = 3.571$) was ranked third. The mean score values for both the human factor as well as the organisational processes indicates an inclination towards the 'strongly agree' level on the Likert scale used in the study. The mean score value for organisational systems indicates an average scoring between the 'neutral' and 'agree' levels on the Likert scale. These findings also authenticate the existence of a positive connection between organisational performance and each of the three factors, namely, the human factor, organisational systems and organisational processes.

To further refine the results, a comparison of the mean scores of all individual dimensions that fall under the three factors, namely, the human factor, organisational systems and organisational processes was conducted using the ranking technique. This would confirm whether the findings obtained through the analysis of the summary of mean scores for the three factors are valid. This inter-factor analysis of the mean scores for all the sub-scales for the three factors is captured in Table 6.24.

Table 6.24: Inter-factor Mean Score Ranking

Factor	Variable	Number of items	Reliability (α)	Mean	Position in Rank Order
Quality of Work Life	Human Factor	5	0.872	4.443	5
Ability Utilisation	Human Factor	5	0.853	4.812	2
Life Satisfaction	Human Factor	5	0.758	4.924	1
Creativity	Human Factor	4	0.804	4.693	3
Autonomy	Human Factor	3	0.703	4.520	8
Innovation	Organisational Systems	4	0.709	3.874	11
Inter-organisational Systems	Organisational Systems	5	0.809	3.586	12
Quality	Organisational Systems	6	0.786	3.907	10
Organisational Structure	Organisational Processes	6	0.803	4.535	6
Organisational Change	Organisational Processes	3	0.671	4.523	7
Team Processes	Organisational Processes	5	0.782	4.657	4
Leadership	Organisational Processes	6	0.822	4.274	9

A notable result on observing the inter-factor mean score ranking matrix (Table 6.24) is the dominating influence of the human factor on organisational performance. Notably, the highest three factors, namely, life satisfaction ($\bar{x} = 4.924$), ability utilisation, ($\bar{x} = 4.812$) and creativity ($\bar{x} = 4.693$) all fall under the human factor. Quality of work life ($\bar{x} = 4.443$) emerged as the fifth highest ranking factor, which is significant. Although the autonomy factor was listed eighth on the mean score ranking, its mean value of 4.520 still represents an inclination towards the

strongly agree summit on the Likert scale. These findings therefore reinforce the impression that the human factor is the most powerful factor in influencing organisational performance.

Regarding the influence of organisational processes on organisational performance, an analysis of the completed multi-factor mean score ranking template shows that two process factors, team processes ($\bar{x} = 4.657$) and organisational structure ($\bar{x} = 4.535$), occupied the fourth and sixth positions, respectively. The remaining two process factors, organisational change ($\bar{x} = 4.523$) and leadership ($\bar{x} = 4.274$) occupied the seventh and ninth positions, respectively. These findings also seem to substantiate the conception that organisational processes occupy the second position after the human factor in terms of their impact on organisational performance.

The distribution on the multi-factor mean score ranking authenticates the perspective that among the three factors considered in the current study, organisational systems have the least impact on organisational performance. The three organisational system factors, quality ($\bar{x} = 3.907$), innovation ($\bar{x} = 3.874$) and inter-organisational systems ($\bar{x} = 3.586$) occupied the trailing positions of tenth, eleventh and twelfth.

The results obtained in the current study are not without empirical support. Numerous researchers (Swart, 2000:220; Bossidy, Charan & Burck, 2002:22; Breen & Nunes, 2007:6) attest that human resources are the most important and critical resource or asset in any organisation, to the extent that performance is largely dependent on them. Pfeffer (2005:124) stresses the fact that organisational performance would remain low when an organisation has a poor human resource base despite having state-of-the-art systems and processes. Senge (2006:4) states that organisations that will excel in the future are those that develop mechanisms of tapping into their human-related aspects in order to learn at all levels. While acknowledging that systems and processes are important predictors of organisational performance, Kirby (2005:32) advocates that they occupy a position of subservience to the human element. These insights therefore give credence to the view that the human factor appears to be the most potent predictor of organisational performance in organisations.

Although the results of the current study show that among the three organisational resources examined, the human element has a greater impact on organisational performance, there is a need to exercise caution in the matter. Perez-Freije and Enkel (2007:11) contend that human resources

are not necessarily more important than other resources. For instance every position or talent that the organisation may lose, there is a replacement available somewhere (Winter, 2003:992). This suggests that although it is valid that talent may be seem so important that losing them might negatively affect the organisation in the short run, in the long run if the organisation has the right goals and objectives it will get the replacement and its performance will peak. It may be concluded then that the human factor is very important and has a greater impact on organisational performance, yet that does not imply that it is a more important factor than organisational systems and processes (Hrebiniak, 2005:17). Therefore, no single resource is more important than the other.

6.15 PROPOSED CONCEPTUAL FRAMEWORK

When the findings of the current study are integrated and considered as a single predictor of organisational performance, a framework revealing the link between the three organisational resources, namely, the human factor, organisational systems and organisational processes, their associated dimensions and organisational performance can be conceptualised. The framework shows the strength of the correlations that exist between each dimension of the three resources and organisational performance. The framework also reveals the mean scores for the three factors, as a demonstration of the degree of impact that each factor has on organisational performance. The human factor ($\bar{x} = 4.486$) is shown to have the greatest impact on organisational performance, followed by organisational processes ($\bar{x} = 4.455$), while organisational systems ($\bar{x} = 3.571$) is listed last. The conceptual framework is illustrated in Figure 6.8.

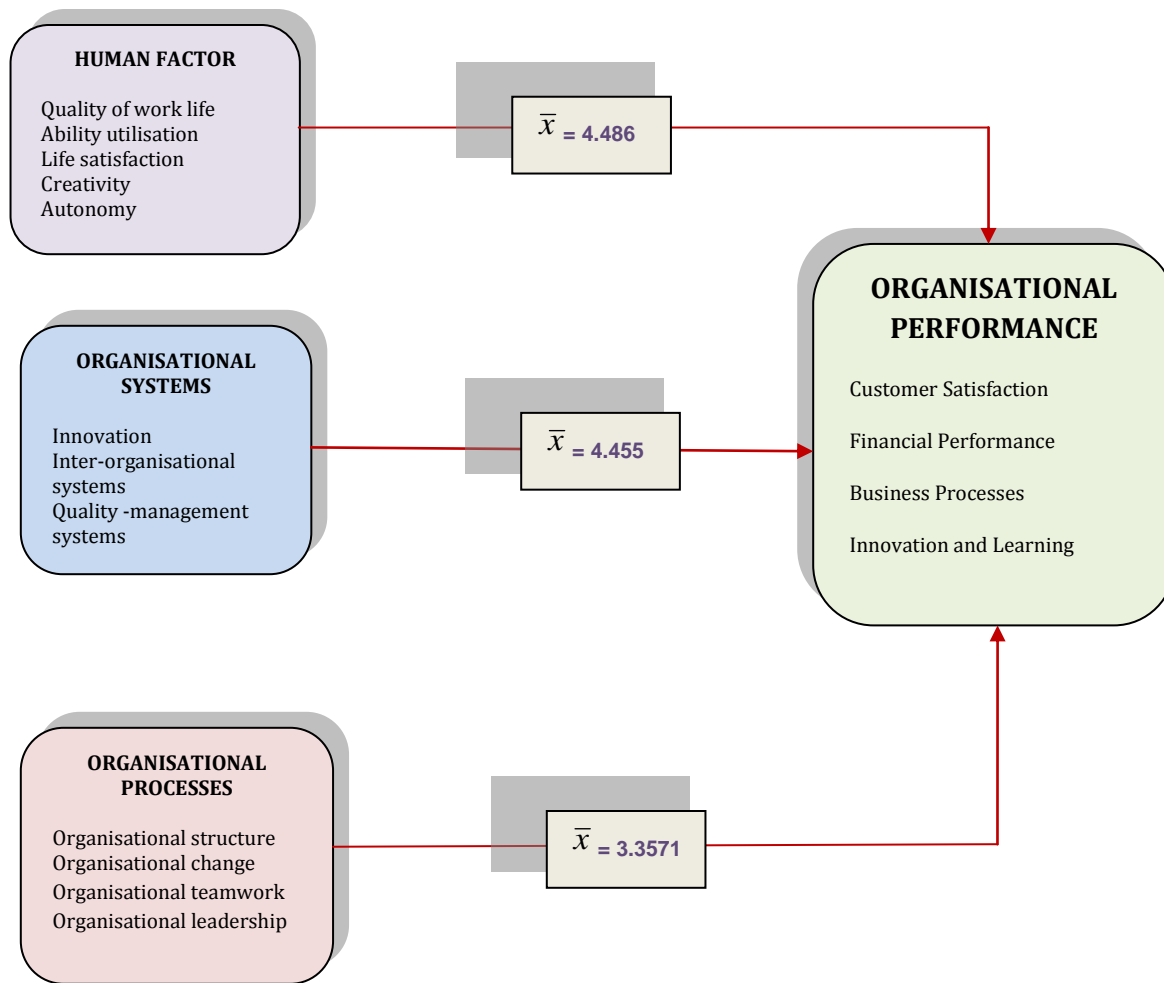


Figure 6.8: Conceptual Framework: The Relationship Between the Human Factor, Organisational Systems, Organisational Processes and Organisational Performance

In addition to being supported by the findings of the current study, the conceptual framework proposed in the current study has ample support from previous empirical research (Priem & Butler, 2001:26, Morgan, Kaleka & Katsikeas, 2004:90; Sirmon, Hitt & Ireland, 2007:273) which also found that there is a significant relationship between organisational resources and organisational capabilities such as organisational performance. A developing body of research by a number of scholars performance (Li, Zhao & Liu, 2006:679; Sanchez, Jimenez, Carnicer & Perez, 2007:721; Lin & Chen, 2007:116; Mohamad, Lo & La, 2009:229) also continues to demonstrate an empirical linkage between human-related elements in an organisation and organisational performance. Several researchers (Gimenez & Ventura, 2002:14; Colotla, Shi &

Gregory, 2003:1184; Wiklund & Shepherd, 2003:1305) also suggested the conceptual perception of a significant relationship between organisational systems and organisational performance. Furthermore, in line with the findings of the current study, Schroeder Bates & Junttila (2002:105) and Ketokivi and Schroeder (2004:181) also found that organisational processes are good predictors of organisational performance. Therefore, the conceptual framework proposed in the current study can be a useful tool for examining relationships between the human factor, organisational systems, organisational processes and organisational performance.

6.16 CONCLUSION

The current chapter discussed analyses and interpretation of the data, giving empirically derived observations in each case. Initially, the demographic profile of the respondents was examined. This was followed by an investigation of the performance of the National Government Department. After that, the statistical characteristics of the three organisational resources under scrutiny in the current study, namely the human factor, organisational systems and organisational processes were examined. This was immediately followed by a combination of correlation and regression analysis between each of the three factors and organisational performance. The final examination was a mean score ranking analysis of the three factors and organisational performance. This was done to determine the impact of each of the three factors on organisational performance, relative to each other.

Taken as a whole, the results show that the performance of the National Government Department is satisfactory in most areas and that there are significant correlations between the three organisational resources considered in this study and organisational performance. Nevertheless, it is necessary to give a more detailed discussion of what then can be concluded from the findings of the study as well as any implications and connotations associated with the findings discussed in the current chapter. This will be discussed in the next chapter, which will focus on the conclusions, recommendation and implications for further research.

CHAPTER SEVEN

CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS AND IMPLICATIONS FOR FURTHER RESEARCH

7.1 INTRODUCTION

The current chapter is the final chapter in the study. It succeeds the analyses and interpretations that were conducted in Chapter 6 and is intended to achieve five aims. First, it seeks to present conclusions to each of the aspects that were examined, based on the objectives of the study. Second, it seeks to recommend strategies that may be adopted and implemented in order to ensure that organisational performance is enhanced, in line with the findings emanating from the study. Third, the chapter acknowledges the limitations of the current study. It is important to acknowledge the limitations of the study because it enables the reader to become conscious of the shortcomings of the study, which adds to the credibility of the findings (Creswell, 2002:19). Fourth, the chapter suggests directions for possible future studies. Finally, the chapter states an overall conclusion in which the contribution of the study to both theory and practice is also emphasised.

7.2 REVIEW OF THE STUDY

The purpose of the study was to examine the relationship between organisational resources and organisational performance. The thesis of the study was divided into seven chapters. Chapter one introduced the study by discussing the background to the study, the problem statement, the research objectives, the research design, ethical considerations as well as operational definitions used in the study. In the second chapter, an extensive review of literature related to the subject of organisational performance was conducted. The chapter focused on topical issues such as factors influencing organisational performance, measurement of organisational performance and various frameworks that have been developed which attempt to account for organisational performance. In the third chapter, the concept of the human factor was discussed in terms of the underpinning theory, emerging developments and practical implications with regard to organisational performance. Chapter four discussed literature related to the impact of organisational systems and processes organisational performance. In the fifth chapter, the research methodology that

was employed in the study was discussed. Analysis and interpretation of the data followed in the sixth chapter. Chapter seven concludes the study by discussing the conclusions drawn from the study, suggesting some recommendations and highlighting the limitations of the study as well as the implications for further research.

7.3 CONCLUSIONS BASED ON THE THEORETICAL OBJECTIVES

In this section, conclusions drawn from the following theoretical objectives, which were set for the study, will be discussed:

- To conduct a literature review on organisational performance
- To conduct a literature review on the relationship between the human factor and organisational performance
- To carry out a literature review on the relationship between organisational systems and organisational performance
- To conduct a literature review on the nature of the relationship between organisational processes and organisational performance

7.3.1 Conclusions based on the literature review on organisational performance

The first theoretical objective focused on conducting a literature review on organisational performance. This literature was discussed in Chapter two of the study. The review acknowledged the importance of excellent organisational performance as one of the fundamental goals in any organisation. The review also showed that organisational performance is measured through the process of performance management (PM). To this extent, a number of performance management frameworks have been developed to measure performance in organisations. Examples include the Performance Measurement Matrix, the Results and Determinants Framework, the Performance Pyramid and the Balanced Scorecard, among others. It was noted that due to the proliferation of a diversity of performance measurement frameworks, the most dominant challenge relates to the selection of performance indicators to use when measuring organisational performance. However, most literature concurred that the Balanced Scorecard was one of the most effective tools for measuring organisational performance. This was based on the

fact that the Balanced Scorecard uses a multi-dimensional approach that takes into account all organisational factors in measuring organisational performance. In addition, it was also demonstrated that organisational performance in the South African public sector was generally unsatisfactory, and is attributable to a constellation of internal, external, historical and current factors that continue to impact on the sector. Therefore, it is concluded that organisational performance is an important factor in an organisation and should be measured by a multi-factorial instrument such as the Balanced Scorecard if objective results are to be obtained.

7.3.2 Conclusions based on the literature review on the relationship between the human factor and organisational performance

The second theoretical objective focused on reviewing literature on the relationship between the human factor and organisational performance. This was discussed in chapter three of the study. It was emphasised that the organisation is in itself, initiated, developed, organised and controlled by people. Without people, there would be no organisation in existence (Hesketh & Fleetwood, 2006:678). In this chapter, it was also discovered that a wide range of human factor elements exists. Examples include employee commitment, life satisfaction, quality of work life, employee satisfaction, creativity, ability utilisation, autonomy, gender, diversity, person-organisation fit and work-life balance, among others. The fact that each human factor element is unique and exerts contextual influences on organisational performance was acknowledged in the literature. However, the general consensus that emerged from the discourse is that ineffective human dimensions in an organisation are detrimental to the wellbeing of the organisation. On the other hand, optimisation of the human factor elements in an organisation has a positive effect on a variety of organisational factors, among them organisational performance (Guest *et al.*, 2003:291). Therefore, the human factor has high material relevance and value to organisational theory and practice and is positively related to organisational performance.

7.3.3 Conclusions based on the literature review on the relationship between organisational systems and organisational performance

The third theoretical objective focused on conducting a literature review on the relationship between organisational systems and organisational performance. This was achieved in chapter four of the study. The reviewed literature clarified the nature of organisational systems, from

their first principles as grounded in the Systems Theory, which substantiates the fact that organisations are systemic in nature (Pickel, 2006:19). In the chapter, various organisational systems such as communication systems, management systems and innovation systems, quality systems and inter-organisational systems were identified and their nature as well as impact on organisational performance was discussed. In most cases, the relationship between each systemic factor and organisational performance depended on contextual factors. However, it was mooted in the majority of the literature that on a general note, organisational systems are positively related to organisational performance. Therefore, based on the literature review, it is concluded that organisations are active open systems whose performance is also dependent on the effectiveness of the organisational systems in place.

7.3.4 The relationship between organisational processes and organisational performance

The fourth theoretical objective focused on conducting a literature review on the relationship between organisational processes and organisational performance. This was also attained in the fourth chapter. Literature reinforced the reasons why the process perspective should be adopted in organisations. The major reason emerged as the fact that the process perspective acknowledges that organisations are complex structures which are dynamic rather than static. This is important because this enables organisational leaders to adopt established evidence-based rather than myopic management knowledge in their duties, an aspect that is important especially when one intends to improve performance (Langley, 2007:273).

Literature also identified a number of organisational processes. These included leadership, teamwork, organisational structure, organisational learning and knowledge, organisational change, decision-making, communication, trust and strategy. It emerged in the literature that every organisational process has a potential, either latent or clearly evident, to positively influence organisational performance. Therefore, based on this literature, it is concluded that organisational processes are an important resource in the organisation and are positively associated with organisational performance.

7.4 CONCLUSIONS BASED ON EMPIRICAL OBJECTIVES

This section discussed conclusions drawn from the following empirical objectives, which were set for the study:

- To use the BSC to measure the performance of a National Government Department
- To examine the relationship between the human factor and organisational performance
- To examine the relationship between organisational systems and organisational performance
- To examine the relationship between organisational processes and organisational performance
- To determine the extent to which each factor influences organisational performance, relative to the other factors

7.4.1 Conclusions on using the BSC to measure performance of a National Government Department

The first empirical objective focused on using the BSC to measure the performance of a National Government Department. Organisational performance at the National Government Department was measured using a 33-item scale that was based on the four performance measures of the BSC, namely customer satisfaction, financial performance, internal business processes and innovation and learning. It emerged from the study that the department's performance is satisfactory in most regards. This is evidenced by the fact that a majority of responses on all items were found between the 'agree' and 'strongly agree' anchor on the scale. In this regard, it can be concluded that management and staff at the National Government Department concurred that the performance of the department was acceptable.

Among the four BSC performance measures used in the study, performance was highest in two aspects, namely customer satisfaction and internal business processes. This was reflected in the high mean scores attained by items associated with customer satisfaction and internal business processes. Promotion of good ethics, provision of quality service, meeting client demands,

promoting good values and relating well with other external organisations, all of which fall under both customer satisfaction and internal business processes emerged as the five highest scoring items on the mean score rank. The conclusion that can be drawn from this finding is that the National Government Department performs satisfactorily in customer satisfaction and internal business processes.

The department continues to register pleasing performance in a multiplicity of other areas measured in the study. These areas include:

- the prudent and efficient management of financial and other resources
- speedy delivery of services to clients
- regular adoption of new technologies
- entrenchment of an innovation culture
- availability of training and development platforms to departmental members
- development of appropriate and effective policies and procedures for the department
- acceptable levels of staff motivation
- establishment of community development programmes
- availability of quality human skills and expertise in the department

The department also records low performance levels in a number of areas. Notably, these areas occupied the lowest positions in the mean scores ranking. These areas include:

- high staff turnover levels
- overloading the divisions with work activities that they are not able to cope with
- sluggish implementation of departmental programmes
- an inadequate numbers assigned to service client requirements

There are three areas in which performance of the department is not clear, therefore making it difficult to draw meaningful conclusions in these areas. The lack of clarity stems from the fact that a majority of respondents answered 'neutral' in their responses to the questions related to these items. These three areas are:

- the level of corruption in the department
- availability of teamwork in the department
- loyalty of clients to the department

7.4.2 Conclusions regarding the relationship between the human factor and organisational performance

The human factor was encapsulated and measured through five factors: quality of work life (QWL), ability utilisation, life satisfaction (LS), creativity and autonomy. These factors were extracted using exploratory factor analysis. The relationship between the human factor and organisational performance was established by conducting Spearman's correlation analysis as well as multiple linear regression analysis to the five human factor subscales and organisational performance. In the correlation analysis, moderate positive correlations were observed between organisational performance and creativity and autonomy. Strong positive correlations were observed between organisational performance and three factors, quality of work life, ability utilisation and life satisfaction. Therefore, it can be concluded that the human factor is positively associated with organisational performance.

In the regression analysis, all five factors contributed to organisational performance. In support, Mattijs & Sanders, Ferry and Marieke (2004:136) concluded that the human factor creates strategic value in both private and public organisations and is positively associated with organisational performance. However, only three factors, - quality of work life, ability utilisation and life satisfaction - emerged as significant predictors of organisational performance. Several researchers (Langfred *et al.*, 2004:385; Bowen & Ostroff, 2004:203; Boselie, Dietz & Boon, 2005:67) also made similar conclusions in separate studies that examined the predictive influence of the human factor on organisational performance. It can be concluded then that not all human factor elements predict organisational performance.

The mean score-ranking technique was applied to measure the strength of each of the five factors relative to each other, with regard to their impact on organisational performance. The means of all five factors were inclined towards the 'agree' position on the scale. It emerged that life satisfaction had the strongest impact on organisational performance, followed by ability utilisation, creativity, autonomy, with quality of work life occupying the lowest position.

7.4.3 Conclusions regarding the relationship between organisational systems and organisational performance

Using exploratory factor analysis, three organisational system factors, namely, innovation systems, inter-organisational systems and quality management systems were identified. Spearman's correlation analysis was then used to determine the relationship between each organisational systems factor and organisational performance. Spearman's correlations showed that there were strong positive correlations between organisational performance and the three organisational systems factors. These findings have support in García-Bernal and Ramírez-Alesón (2010:363) and Ho (2011:113), who also found positive associations between organisational systems and organisational performance. Thus it can be concluded that there is a positive association between organisational systems and organisational performance.

Multiple regression analysis was used to test the existence of predictive relationships between organisational systems and organisational performance. It was observed that all three organisational system factors contributed positively and significantly towards organisational performance, thereby confirming the existence of prediction. Consistently, Lorenz and Valeyre (2005:424) and Tanninen, Puumalainen and Sandström (2010:171) also concluded that there is a significant predictive relationship between organisational systems and organisational performance. It is therefore concluded that organisational systems have a significant and predictive impact on organisational performance.

The mean score ranking technique was employed to compare the impact of each system factor on organisational performance. The mean scores computed for the three factors were leaning towards the 'strongly agree' anchor. Quality management systems came highest in the mean score ranking, followed by innovation, while inter-organisational systems came last.

7.4.4 Conclusions regarding the relationship between organisational processes and organisational performance

Four factors -organisational structure, organisational change, team processes and leadership - were used to represent organisational processes. These factors were identified using exploratory factor analysis. Spearman's correlation was employed to establish the relationship between organisational processes and organisational performance. The results show that there were strong correlations between all four organisational process factors and organisational performance. In agreement, Figueiredo (2003:655) stresses that organisational performance suffers when there are ineffective processes in place. Dimovski and Škerlavaj (2005:56) also suggest that processes are directly linked to both employee and organisational performance. It is therefore concluded that there is a strong positive relationship between organisational processes and organisational performance.

Multiple regression analysis was used to establish the existence of a predictive relationship between organisational processes and organisational performance. It emerged that there were positive and significant relationships between all four process factors and organisational performance. In line with these findings, Tangem (2004:726) and Kandemir and Hult (2005:430) acknowledge the predictive influence of organisational processes on organisational performance. Thus, it is concluded that there exists a significant predictive relationship between organisational processes and organisational performance

The mean score ranking approach was used to determine the strength of each organisational process factor relative to the others. The means of the four factors were all slanting towards the 'strongly agree' position on the scale. Team-processes exerted the highest impact on organisational performance, with organisational structure coming second, organisational change coming third and leadership occupying the least position.

7.4.5 Conclusions regarding the comparison of the impact of the three organisational resources on organisational performance

The mean-score ranking technique was employed to compare the individual impact of the three organisational resources, namely the human factor, organisational systems and organisational processes on organisational performance. The human factor had the greatest impact on

organisational performance, followed by organisational systems, while organisational processes had the least influence. Interestingly, the same pattern was observed when all factors falling under the three organisational resources were ranked in terms of their mean scores. Empirical support for this configuration can be found in a number of studies (Paul & Anatharaman, 2003:1246; Schuler & Jackson, 2007:34; Kroon, Van-De-Voorde & Van Veldhoven, 2009:509) in which the supremacy of human factor elements over other organisational resources is endorsed. This being the case, it is concluded that among the three organisational resources examined in the present study, the human factor has the greatest impact on organisational performance, followed by organisational systems, while organisational processes have the least influence.

7.5 RECOMMENDATIONS

The findings of the study suggest that there are several challenges that need to be addressed by the National Government Department with regard to its performance. It is therefore necessary to suggest recommendations that could be useful in meeting the identified challenges.

7.5.1 Recommendations based on organisational performance in the National Government Department

Since staff turnover is high in the department, it is recommended that an investigation into the causes of this turnover and its effects on the department be launched. This could result in a possible launching of a staff retention strategy. The situation in the National Government Department is slightly complex in the sense that respondents indicated that they have acceptably high levels of motivation at work. Furthermore, the demographics of the respondents indicate that the number of employees who have stayed on their jobs for longer periods of time continues to diminish. This could be an indication of high staff turnover. It is therefore absolutely necessary to adopt a systematic, rather than a haphazard approach to investigating this matter. For instance, there is need to establish whether this turnover is functional or dysfunctional to the department. Turnover can have intrinsic benefits, as incoming workers may be more highly motivated, better educated and more highly skilled than those they replace (Brown, Garino & Martin, 2009:694). Only when these causes of turnover in the department have been established,

and their effects identified, can appropriate solutions be found. Any other approach may lead to the prescription of ineffective and unnecessary strategies, which may eventually prove to be very costly to the department (Mbah & Ikemefuna, 2012:275).

A need exists for the implementation of a work allocation strategy. Currently, inadequate numbers of staff are assigned to service client requirements. This could account for the high work overload being experienced in the divisions. This challenge demands a holistic rather than a piecemeal solution. Common causes of this problem could be high labour turnover in the department, in which attrition could be outstripping recruitment levels, and inadequate resources. The latter may not be the cause in this instance, since it is confirmed that the department is well equipped with state-of-the-art resources such as the latest technology that is available for use. *Prima facie* evidence seems to link the challenge to a lackluster and ineffective human resource planning mechanism in the department, which has left the department devoid of adequate levels of employees to man all workstations and to meet daily work demands. It is therefore recommended that the human resource planning apparatus be revamped. Something is amiss within this mechanism. When implemented properly, human resources planning will provide the knowledge of how many people and what sort of people the department should have in order to meet present and future business requirements (Armstrong, 2010:189). It will holistically encompass all key performance components of human resources management that include; *inter-alia*, creating an employer brand, retention strategy, absence management strategy, flexibility strategy, talent management strategy, recruitment and selection strategy (Thorne & Pellant, 2007:65). Therefore, if this aspect of human resources is overhauled, the challenges related to overload may be reduced significantly.

There is an urgent need to speed up the rate at which departmental programmes are implemented. Accelerating the speed at which departmental programmes are implemented is not a once-off activity, but is a process that may include several components. It is recommended that the department adopts the following strategies, which were suggested by Sullivan (2011:2) and are widely regarded as part of best practice in developing a culture of speed in organisations:

- Recruit fast employees - The department must be able to attract, train and retain appropriate talent in the form of individuals who act, react, think, and learn faster than

others. Slow employees also slow down the implementation of organisational programmes.

- Technology is important – The department should continue on its technology adoption drive. State-of-the-art technology in the form of appropriate hardware and software can enable faster speeds and high quality that enables the organisation to be global, low cost, highly innovative and fast.
- Employ fast managers – ensure that the department is well-endowed with fast managers. It is unfortunate that not all managers and leaders are proficient at making fast and accurate decisions. Managers who are fast decision-makers also understand the process of increasing speed and as a result they are familiar with the most effective tools and approaches for increasing speed in their processes and their employees.
- Departmental processes built for speed – all departmental processes should be constantly assessed for speed. Those that fall behind must be redesigned and new processes must include the essential design components for speed.
- Integrate departmental processes– processes that are interrelated or dependent on each other must be either coordinated or completely integrated. This integration is necessary to ensure smooth and fast handoffs between functions and activities.
- Identify barriers to speed - because even the best-designed processes (just like PCs) can slow down over time there must be processes and tools available to managers to identify current “barriers to speed” and to find the best tools and technologies for increasing speed beyond current levels.
- Reduce the number of approvals - public organisations are well-renowned for their bureaucracy and red-tape, mainly because everything has to be approved. By requiring excessive approvals, organisational speed is slowed down and innovation efforts are frustrated. Where approvals cannot be eliminated, it is important to reduce the time required for them.

- Benchmarking - always compare the department's speed with other external organisations, especially those within the public sector. This will effectively give an accurate indication of areas to improve.
- Distribute reports - ranked reports demonstrating the differentials in speed between different divisions, managers, and processes must be widely distributed to spur competition and best practice sharing.

The findings of this study are significant because they provide empirical evidence that there is a positive association between the three organisational resources, namely the human factor, organisational systems and organisational processes.

7.5.2 Recommendations based on the relationship between the human factor and organisational performance

Since it emerged that all five human factor subscales are positively associated with organisational performance, it is necessary that these individual human factor dimensions be enhanced. An increase in any or more of the human factor elements will have a corresponding positive effect on the performance of the organisation. To increase quality of work life, it is necessary to make improvements on various work related factors such as by ensuring a safe working environment, equitable pay and opportunities for advancement (Zhang & Bartol, 2010:107). As suggested by Sirgy *et al.* (2001:241) it is important to ensure that there is balance of work and family, involvement of employees in decision-making, recognition of employees, minimising role conflicts and availing opportunities to learn new skills in order to enhance the life satisfaction of employees. Ensuring that employees are given more independent responsibilities as well as matching employee skills to the roles allocated to each employee can be implemented to enhance the autonomy and ability utilisation among employees. To increase creativity, it is important to inspire employees to come up with creative solutions to problems in the organisation. In addition, rewards should be given to creative employees, as a way of encouraging more creative dispensations among employees (Shalley, Zhou & Oldham 2004: 933).

7.5.3 Recommendations based on the relationship between organisational systems and organisational performance

It was concluded that there is a significant and predictive relationship between the three organisational systems namely innovation systems, inter-organisational systems, quality management systems and organisational performance. This suggests that organisational performance may be increased by intensifying and escalating these three systemic factors. To augment innovation, it is necessary to hire innovative people that will increase the diversity of the workforce and then encourage them to work in innovation teams that are mandated to come up with novel ideas (Sorensen & Stuart 2006:938). In addition, internal training on innovation can be provided, so that employees are equipped and motivated to innovate. Gerwin and Barrowman (2007:842) also encourage that a separate budget be allocated that is specifically aimed at promoting innovation in the organisation. The key to successfully boost the effectiveness of inter-organisational systems lies in technological readiness (Haag, McCubbrey & Donovan 2006:26). This implies that National Government department may have to conduct technological forecasting on a regular basis as well as to engage experts in technological networks so that the organisation may keep abreast and updated with developments along the information technology frontier. In terms of improvement of quality, it has to be appreciated that there are many ways to enhance quality management systems. However, Total Quality Management (TQM) and ISO 9000 standards have proved to be arguably some of the best systems for managing quality (Thareja 2008:52; Cianfrani & West 2009:7). These could be adopted by the National Government Department.

7.5.4 Recommendations based on the relationship between organisational processes and organisational performance

The study concluded that there is a significant predictive relationship between the four organisational process factors namely organisational structure, organisational change, teamwork and leadership. This implies that organisational performance can be increased by enhancing each of these four process factors. To reinforce the effectiveness of all process factors identified in the study, it is recommended that the National Government Department launches organisational development programmes. The prime purpose of organisational development is to improve the

organisation's capacity to handle its internal and external functioning and relationships (Bradford & Burke, 2005:38). This would include such things as improved interpersonal and group processes, more effective communication, enhanced ability to cope with organisational problems of all kinds, more effective decision processes, more appropriate leadership style, improved skill in dealing with destructive conflict, and higher levels of trust and cooperation among organisational members (de-Kler, 2007:49). According to Western (2010:22) there are many organisational development interventions that are important in streamlining systems and processes range from those intended to improve the effectiveness of individuals through those designed to deal with teams and groups, intergroup relations, as well as the total organisation. Interventions are also available that place emphasis on task issues (what people do), and those that place emphasis on process issues (how people go about doing it).

Business process management (BPM) could also be adopted as a vital tool to update all organisational processes. It has been referred to as a "holistic management" approach to aligning an organisation's business processes with the wants and needs of clients. It promotes business effectiveness and efficiency while striving for innovation, flexibility, and integration with technology (vom Brocke & Rosemann, 2010:11). BPM attempts to improve processes continuously. It can therefore be described as a process optimisation strategy. BPM also enables organisations to be more efficient, more effective and more capable of change than a functionally focused, traditional hierarchical management approach. Adoption of BPM typically leads to higher customer satisfaction, product quality, delivery speed and time-to-market speed (Kohlbacher, 2009:5). By implementing BPM programmes, the efficiency and overall performance of organisations also improves significantly (Vera & Kuntz, 2007:55).

7.6 LIMITATIONS OF THE STUDY

The current study provided a number of useful insights on the impact of organisational resources on organisational performance. However, despite the efforts made by the researcher to ensure that the study is without flaws, there are several constraints that need to be highlighted so that they can be addressed in the future. First, the findings of the study were restricted to a small sample size of 272 respondents who were based in one geographic location, namely Gauteng Province. Therefore, caution should be exercised regarding the generalisation of the findings to

other contexts and regions in the country and beyond (Babbie & Mouton, 2007:169). Second, the use of the convenience sampling technique naturally increased the susceptibility of the study to sampling bias (Whitely & Kite, 2009:48). Third, it was not possible for the researcher to control how the respondents completed the questionnaires. Consequently, respondents completed the questionnaires at their own time and in the absence of the researcher. Greater accuracy could have been achieved if the questionnaire had been completed in the presence of the researcher. This was not possible because the researcher did not have access to the offices and workstations within the National Government Department premises, where entry is restricted and controlled.

7.7 IMPLICATIONS FOR FURTHER RESEARCH

The current study is not without implications for further research. First, the findings of the study may be refined by conducting similar studies along socio-demographic characteristics such as age, gender and educational levels of respondents. The scope of the study could be expanded to include other public organisations as well as other regions within the country. In the current study, data were collected from internal stakeholders namely management and employees from the National Government Department. The results could be more informative if the views of both internal and external stakeholders were included and compared. This presents the need for conducting similar studies using perceptions of other external stakeholders such as the clients.

The current study was conducted using the quantitative methodology. It could be interesting to conduct a similar study using the triangulation method, which integrates both quantitative and qualitative methods. This posture could ensure that there are trade-offs between the strengths and shortcomings of the two methods, thereby boosting the validity of the results (Bogdan & Biklen 2006:11).

The importance of additional factors that influence organisational performance could also be examined. This could lead to the uncovering of any omissions within the dimensions tested in this study. Furthermore, since the current study focused on the organisational resources-performance nexus within a public organisation, comparative investigations could also be conducted in other environments such as with private enterprises and not-for-profit organisations.

In the current study, two paradoxes emerged, which merit further empirical introspection. First, results of the study reveal that although the motivation of departmental members in the National Government Department is sufficiently high, staff turnover is also high, which is unusual. Second, although the findings of the study found that the department scores highly in terms of customer satisfaction, the same findings also reveal that a majority of respondents (59%; n= 160) either disagree or are not sure whether the department's clients are loyal or not. Further studies into these two paradoxical scenarios could provide interesting insights on how an organisation that has supposedly motivated individuals can also record high attrition levels, and how the same organisation could have satisfied clients of which a majority may not be loyal to that organisation. Studies could also be conducted to establish the accurate levels of corruption as well as teamwork in the department, since these could not be established in the study. This could facilitate appropriate action meant to either restrain corruption level in the department by keeping them at a minimum or to enhance the levels of teamwork.

7.8 CONCLUSION

There is a rarity of information on the impact of organisational resources on organisational performance in public organisations in South Africa. This is inopportune and has to be addressed if public organisations are intent on fulfilling their mandate of servicing the needs of the public. The present study shows that the performance of the National Government Department is generally satisfactory in most areas as measured by the Balanced Scorecard. However, performance remains depressed in a number of areas as evidenced through high staff turnover, insufficient manpower resources, the overloading of divisions with work, and the slow implementation of departmental programmes. Corruption levels, loyalty of clientele and the levels of teamwork remain unclear within the department.

The human factor, organisational systems and organisational processes are significant predictors of organisational performance. Among these three, the human factor has the highest impact on organisational performance with organisational processes coming second and organisational systems exerting the least influence.

The current study is important in several ways. On the academic front, the study serves as an important contributor to the existing body of knowledge by constituting a rich literature and

research methodology source. In particular, the study provides a specific conceptualisation of the relationship between organisational resources and organisational performance within the public sector environment. In terms of the levels of impact that the three organisational resources exert on organisational performance, the study contributes to the long-standing debate or controversy regarding which of these three resources is most influential in shaping organisational performance. In this regard, the study has provided an answer, *albeit* within the context of the South African public sector. To managers, the study endorses the use of the Balanced Scorecard as a performance measurement and management tool that is applicable to both the private as well as the public sector organisations. Managers can also enhance organisational performance by positively adjusting the three organisational resources, namely the human factor, organisational systems and organisational processes. This will effectively ensure that organisations are able to achieve their goals.

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APPENDIX 1: QUESTIONNAIRE



Dear DTI Employee

A research project is currently being undertaken on the performance of the DTI. The purpose of the research is to establish the influence of human resources, organisational systems and organisational processes on the performance of the organisation.

It will be greatly appreciated if you could assist by completing the attached questionnaire. It will take you about 15 minutes of your time to do so. Be assured that your responses will be treated in the strictest confidentiality and your name will remain anonymous at all times. Thank you for your time and effort in completing the enclosed questionnaire

Yours sincerely

Chengedzai Mafini (Mr)

Logistics Department

Vaal University of Technology

Cell: +27711703000

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SECTION A: GENERAL INFORMATION

This section seeks some background information about you. It is important to obtain this information as this will have a bearing on the results of the survey. This information will be used for comparative purposes only. Please indicate your answer by crossing (x) the appropriate block or by filling in your answer.

A1. Indicate your gender

Male		Female	
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A2. Please indicate the number of completed years in your current position

Less than 2 years		2-5 years		6-9 years		More than 9 years	
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A3. Please indicate your type of employment

Permanent		Contract		Part-time	

A4. Please indicate your highest academic qualification

Matriculation		Certificate		Diploma		Degree	
Postgraduate degree (M or D)							
Other type of qualification							

A5. Please indicate the age group to which you belong

18 – 25		26 – 35		36 – 45		46 – 55		56+	
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A6. Please indicate your position in the organisation

Executive Manager		Senior Manager		Middle Manager	
Lower/ Line Manager		Specialist Staff		Clerical/Administrative	
Other position (specify)					

A6. Please give the name of the DTI division/branch in which you work for:

SECTION B PERFORMANCE OF THE ORGANISATION

On the following pages you will find statements describing different aspects of your organisation. Please indicate the extent to which you agree or disagree with each of the aspects by crossing (X) the appropriate number on the right hand side of each statement. There are no right or wrong answers and the statements are not meant to trick you. Each person responds in his/her own way. Try not to spend too much time on any one question; go with your first response. Using the scale below, please respond to each statement.

Strongly disagree	Disagree	Not sure	Agree	Strongly Agree
1	2	3	4	5

B1.	The organisation is able to meet client requirements	1	2	3	4	5
B2.	Most clients are satisfied	1	2	3	4	5
B3.	Most clients are loyal to the organisation	1	2	3	4	5
B4.	The time taken to deliver services is quite acceptable	1	2	3	4	5
B5.	The number of personnel assigned to service clients requirements is sufficient	1	2	3	4	5
B6.	Feedback from clients is taken seriously	1	2	3	4	5
B7.	The organisation offers quality service	1	2	3	4	5
B8.	The delivery performance to clients is good	1	2	3	4	5
B9.	Quality skills and expertise are available in the organisation	1	2	3	4	5
B10.	The number of people leaving the organisation is small	1	2	3	4	5
B11.	I have the chance to participate in training and development programs	1	2	3	4	5
B12.	The organisation adopts new technology regularly	1	2	3	4	5
B13.	Innovation is encouraged in the organisation	1	2	3	4	5
B14.	Communication flows easily throughout the organisation	1	2	3	4	5
B15.	Programs are implemented speedily	1	2	3	4	5
B16.	Organisations are not overloaded with activities	1	2	3	4	5
B17.	Resources are managed efficiently	1	2	3	4	5
B18.	The funds that are allocated to the organisation are sufficient	1	2	3	4	5
B19.	Effective financial control measures are in place	1	2	3	4	5
B20.	The overall financial performance of the organisation is good	1	2	3	4	5

B21.	The organisation is always able to meet its financial goals	1	2	3	4	5
B22.	The level of corruption in the organisation is low	1	2	3	4	5
B23.	The organisation has programs that support the community	1	2	3	4	5
B24.	The organisation relates well with other organisations	1	2	3	4	5
B25.	I am motivated with my job	1	2	3	4	5
B26.	The organisation implements effective strategies	1	2	3	4	5
B27.	The policies and procedures in the organisation are effective	1	2	3	4	5
B28.	The level of wastage in the organisation is low	1	2	3	4	5
B29.	There is good teamwork in the organisation	1	2	3	4	5
B30.	I have ample opportunities to participate in decision making	1	2	3	4	5
B31.	The values that are promoted in the organisation are good	1	2	3	4	5
B32.	The culture in the organisation is effective	1	2	3	4	5
B33.	The organisation promotes good ethics	1	2	3	4	5

SECTION C: HUMAN RESOURCE

Please indicate your responses to the statements below using the 1-5 scale given by crossing (X) the appropriate number in the column alongside the question. Please be honest in your response. The 5-point scale is as follows:

Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
1	2	3	4	5

C1.	My pay	1	2	3	4	5
C2.	The working conditions	1	2	3	4	5
C.3	The adequacy of facilities for my job	1	2	3	4	5
C4.	The competence of my supervisor in making decisions	1	2	3	4	5
C5.	The quality of facilities in my organisation	1	2	3	4	5
C6.	The pride I get from doing my job	1	2	3	4	5
C7.	The enjoyment I get from my job	1	2	3	4	5
C8.	The chance to learn new methods	1	2	3	4	5
C9.	The chance to tell people what to do	1	2	3	4	5

C10.	The chance to do things for other people	1	2	3	4	5
C11.	The chance to use my own skills	1	2	3	4	5
C12.	The opportunity to apply my own knowledge	1	2	3	4	5
C13.	The chance to develop my abilities	1	2	3	4	5
C14.	The feedback I get from my boss	1	2	3	4	5
C15.	The chance to work alone on the job	1	2	3	4	5
C16.	The chance to do different things from time to time	1	2	3	4	5
C17.	The chance to be somebody in the community	1	2	3	4	5
C18.	Being able to do things that don't go against my conscience	1	2	3	4	5
C19.	Being able to keep busy all the time	1	2	3	4	5
C20.	The chance to try my own methods on the job	1	2	3	4	5
C21.	The freedom to use my own judgment	1	2	3	4	5
C.22.	The freedom to think on my own	1	2	3	4	5
C23.	The extent to which my life is ideal	1	2	3	4	5
C24.	My work life	1	2	3	4	5
C25.	The quality of my life	1	2	3	4	5
C26.	Getting important things I want in my life	1	2	3	4	5
C27.	The need to change my life	1	2	3	4	5

SECTION D: ORGANISATIONAL SYSTEMS

Please indicate the extent to which you agree or disagree with each of the aspects by crossing (X) the appropriate number on the right hand side of each statement. The 5-point scale is as follows:

Strongly disagree	Disagree	Moderately agree	Agree	Strongly agree
1	2	3	4	5

D1.	The organisation has fostered a culture that expects everyone, at every level, to contribute to the innovation process	1	2	3	4	5
D2.	The organisation has built networks, pathways and platforms that promote the flow of innovation both internally and externally	1	2	3	4	5

D3.	The organisation has adopted a step-by step process that facilitates the generation of new ideas	1	2	3	4	5
D4.	The organisation created opportunities to learn by building systems that capture key learnings From the innovation process	1	2	3	4	5
D5.	The organisation has good telecommunication infrastructure (e.g. email, Internet)	1	2	3	4	5
D6.	There exists an open and frequent communication between the organisation and its corporate clients	1	2	3	4	5
D7.	The organisation trusts that confidential information that is shared with corporate clients will be kept strictly confidential	1	2	3	4	5
D8.	The organisation and its corporate clients have very similar IT infrastructure	1	2	3	4	5
D9.	There exists an equal sharing of risks, burden, benefits and incentives between the organisation and its corporate clients	1	2	3	4	5
D10.	The organisation performs internal audits of all its processes	1	2	3	4	5
D11.	The organisation has an employee training program	1	2	3	4	5
D12.	The organisation has a service quality manual that is periodically reviewed and updated	1	2	3	4	5
D13.	The organisation inspects/verifies all work done	1	2	3	4	5
D14.	The organisation has a documented client complaint process	1	2	3	4	5
D15.	The organisation has a documented corrective action process	1	2	3	4	5

SECTION E: ORGANISATIONAL PROCESSES

Please indicate the extent to which you agree or disagree with each of the aspects by crossing (x) the appropriate number on the right hand side of each statement. The 5-point scale is as follows:

Strongly disagree	Disagree	Moderately agree	Agree	Strongly agree
1	2	3	4	5

E1.	The goals of this organisation are clearly stated	1	2	3	4	5
E2.	The division of labour of this organisation is flexible	1	2	3	4	5
E3.	The division of labour in this organisation is intended to help it achieve its goals	1	2	3	4	5

E4.	The manner in which tasks are divided is a logical one	1	2	3	4	5
E5.	The structure of my work unit is well designed	1	2	3	4	5
E6.	The division of labour in this organisation actually helps it to achieve its goals	1	2	3	4	5
E7.	There are many changes taking place in this organisation	1	2	3	4	5
E8.	Occasionally, I am allowed to change things around my job	1	2	3	4	5
E9.	This organisation has the ability to change	1	2	3	4	5
E10.	I can always talk with workmates if I have a work-related problem	1	2	3	4	5
E11.	My relationships with members of my work group are friendly and professional	1	2	3	4	5
E12.	I have established the relationships that I need to do my work properly	1	2	3	4	5
E13.	Other work units are helpful to my work unit whenever assistance is required	1	2	3	4	5
E14.	There is no evidence of unresolved conflict in the organisation	1	2	3	4	5
E15.	I feel good to be around my leaders	1	2	3	4	5
E16.	My leaders enable me to think about old problems in new ways	1	2	3	4	5
E17.	I have faith in my leaders	1	2	3	4	5
E18.	My leaders give me positive feedback on my work	1	2	3	4	5
E19.	My leaders reward me when I do well	1	2	3	4	5
E20.	My leaders give me personal attention when I feel rejected	1	2	3	4	5

Thank you for your time.

Your views are much appreciated

APPENDIX 2: RESEARCH APPROVAL LETTER



the dti

Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

Private Bag X84, PRETORIA, 0001 • the dti Campus, 77 Meintjies Street, Sunnyside, 0002, Tel: (012) 394 0000
the dti Customer Contact Centre local: 0861 843 384 International: +27 12 394 9500, www.thedti.gov.za

Mr C Mafini
Vaal University of Technology
Private Bag X021
Vanderbijlpark
1900

Dear Mafini

Approval to conduct a research strategy for your PHD dissertation at the dti

I have received your request relating to the above subject and hereby inform you that approval has been granted.

It would be appreciated that Memorandum of Understanding (MoU) be concluded between yourself and **the dti** to ensure confidentiality of information obtained.

Furthermore, we believe that this kind of research will also contribute positively to our Department and would like to request for a copy of the report once you have published the final document.

Yours faithfully

Mr Lionel October
Director-General

Date: 26.04.12

Lefapha la Dikgwebisano le Dintaseteri • Lefapha la Kgwebo le Indasteri • uMnyango wezoHwebo neZimbini • Muhasho wa zwa Mbambadzo na Indasiteri • Department van Handel en Nywerheid • Kgoro ya Kgwebo le Indasteri • Ndzwawulo ya to Mabindzu na Tindastri • LiTiko leTekuhweba netiMboni • ISebe lezoRhwebo noShishino • UmNyango wezokuRhwebelana namaBubulo

Batho Pele - putting people first



APPENDIX 3: LETTER FOR DATA COLLECTION



the dti
Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

Confidential

MEMORANDUM

Reference No: CIRC/01
Enquiries: Marks Thibela
Division: ODG
Room No: Block A, first floor
Tel: 012 394 41102
Fax: 012 394 51102
Email: MThibela@thedti.gov.za

SM&EO CIRCULAR : 01/2012
TO : ALL STAFF
SUBJECT : APPROVAL FOR MR CHENGEDZAI MAFINI TO CONDUCT PHD DISSERTATION RESEARCH AT the dti.

1. The above subject refers.
2. Please be informed that Mr Chenedzai Mafini a doctoral student at the Vaal University of Technology has been granted permission to conduct research as part of PHD dissertation.
3. Part of the requirements is that he has to collect data using questionnaires that will be circulated and completed by number of colleagues within **the dti**.
4. It is therefore requested that you assist him by completing the questionnaires.

Your cooperation in completing these questionnaires will help **the dti** make improvements in our strategic planning process.

Mr Lionel October
Director-General

Date: 26.04.12

APPENDIX 4: CERTIFICATE OF LANGUAGE EDITING

BRENT'S ART AND LANGUAGE SERVICE CC

8 Rembrandt Street, Vanderbijlpark 1911 * Telephone/Fax: 016 – 9325528

e –fax: 086 675 4144 * e-mail: brentboy@lantic.net

CERTIFIED STATEMENT OF EDITING AND TRANSLATION

It is hereby certified that the Doctoral thesis:

THE RELATIONSHIP BETWEEN ORGANISATIONAL RESOURCES AND ORGANISATIONAL PERFORMANCE IN A NATIONAL GOVERNMENT DEPARTMENT

By CHENGEDZAI MAFINI STUDENT NUMBER 210124806

has been edited by me.

Date: 8th July 2013

B.Record BA (HONS), UED, NHDip, M.Tech.

Member of the South African Translators' Institute

Member No. 1002094

BRENT'S ART & LANGUAGE SERVICE CC Registration No. 2000/005438/23