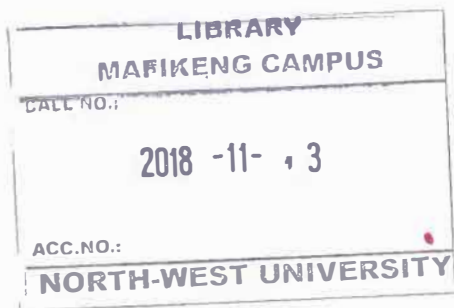


**EMPLOYEES PERCEPTION ON PERFORMANCE INFORMATION MANAGEMENT
SYSTEMS IN THE INDEPENDENT DEVELOPMENT TRUST OF THE NORTH WEST**



S A MATLADI
orcid.org/0000-0001-9922-2284

Thesis submitted for the Master's degree in Business
Management at the Mafikeng Campus of the North-West
University

Promoter: Prof Wedze S. Musvoto (PhD)

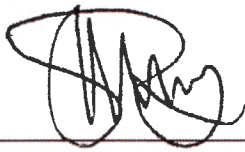
Graduation: October 2017

Student number: 23307846

<http://dspace.nwu.ac.za/>

DECLARATION

I, Suzan **Andile Matladi**, do hereby declare that this dissertation is the result of my investigation and research and that this has not been submitted in part or full for any degree or examination to this or any other University.

A handwritten signature in black ink, appearing to be 'Suzan Andile Matladi', written over a horizontal line.

Signature

14 December 2016

Date

ACKNOWLEDGMENTS

The writing of this dissertation has been one of the most significant academic challenges I have ever had to face. Without the support, patience and guidance of the following people, this study would not have been completed. It is to them that I owe my deepest gratitude:

- I would like to thank God for the wisdom and strength during the term of this research.
- Prof W MUSVOTO, my Academic Dissertation Supervisor, who supported and guided me through the dissertation process.
- My family for their emotional support, especially my children, Keabaka and Kegomoditswe Matladi, my mother Mmamokete Lentswane for words of encouragement, unconditional love and most of all for believing in me.
- Colleagues and friends for the constant words of support and encouragement on my studies.
- Finally, to my research respondents who made it possible for me to collect data through their willingness and co-operation.

ABSTRACT

The aim of this paper is to offer an insight in Performance Information Management systems and its services to the Independent Development trust. Performance Information Management systems is becoming more heavily depended upon service for every operations leading to establishing annual performance goals to define the level of performance to be achieved by each of the program activities. Hence some organisations have been developing their performance information systems for decades. These organisations often use sophisticated electronic systems to extract information from their electronic records such as, administrative, financial, human resource and others to calculate indicator values. Until recently, the actual use of performance information management systems was not very high in many organisations in South Africa. This study analysed employee perceptions on performance information management systems in the Independent Development Trust in the North West Province. The purpose was to determine how performance management information systems are used to measure organisational performance and the factors that influence the perceptions of employees on Performance Information Management systems as well as to establish the level of Information Communication Technology skills.

Both qualitative and quantitative approaches were used. A questionnaire was administered to the 30 employees. The employee's perception was revealed in the analysis. More than eighty (80%) believe that if both leadership and employees participate and work together, the organisation will produce good results.

It is recommended that information sharing, strategic cooperation or alliance, and working together should be encouraged by management. In practice, the wide-spread nature of this phenomenon is evidenced by the information system (IS) for integration purposes, including information systems infrastructure such as data communication tools, network connection, standard data structure, unified coding standards, information systems software such as enterprise-wide information systems and information systems applications centralised data base

management systems, electronic data interchange (EDI), web-based or internet-based information systems are very important.

TABLE OF CONTENTS

DECLARATION.....	i
ACKNOWLEDGMENTS.....	ii
Abstract.....	iii
Definitions.....	ix
Abbreviations	x
CHAPTER 1.....	1
INTRODUCTION AND BACKGROUND OF THE STUDY	1
1.1 Introduction.....	1
1.2 Background of the study	2
1.3 Problem statement.....	4
1.4 Research questions.....	5
1.5 Objectives	6
1.6 Literature review	7
1.7 Research Design.....	10
1.7.1 Research methodology	11
1.7.2 Population	12
1.7.3 Sampling Technics.....	12
1.7.4 Data collection tools.....	13
1.8 Validity and reliability	14
1.9 Ethical consideration.....	14
1.10 Outline of the study.....	15

CHAPTER 2: LITERATURE REVIEW	16
2.1 Introduction.....	16
2.2 Information theory	16
2.2.1 Employees belief.....	18
2.3 Management theory	19
2.4 Participation theory	25
2.4.1 Lack of union support	26
2.4.2 Lack of employees' commitment.....	26
2.5 The Connectivism theory	27
2.6 The Capabilities theory	29
2.6.1 Information Security	29
2.6.2 Network Security	30
2.6.3 Privacy	31
2.6.4 Access Control	31
2.7 Summary	31
CHAPTER 3: RESEACH METHODOLOGY	33
3.1 Introduction.....	33
3.2 Research Methodology and design	33
3.2.1 Research method and design.....	33
3.2.2 Study Population and Sample Size	35
3.2.3 Data Collection	35
3.2.4 Data Analysis	36

Chapter 4: Results and discussion.....	37
4.1 Introduction.....	37
4.2 Section A: Demographic Information.....	37
4.2.1 Response rate	37
4.2.2 Demographic information	38
4.4 Section B: Quantitative data analysis.....	45
4.5 Section C: Qualitative data analysis.....	55
4.5.1 Induction in the institution	56
4.5.2 Technological skills	56
4.5.3 Adequate training within your section	57
4.5.4 Contribution towards annual institutional reporting	58
4.5.5 Employed exclusively according your field.....	58
4.5.6 Employed in a completely different field.....	59
4.6 Section C: Qualitative data analysis.....	59
4.6.1 Importance of performance information management.....	59
4.6.2 Factors influencing performance information management systems in you organisation	60
4.6.3 Challenges you experienced with current performance information management systems	60
4.6.4 Systems have the ability to address organisational challenges	61
4.6.5 Recommendations for improvement of the current performance information management systems.....	61
4.7 Reliability, validity and trustworthiness	62
4.8 Conclusion	62

CHAPTER 5: SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	64
5.1 Introduction.....	64
5.2 Summary	64
5.3 Major findings and conclusions of the study	65
5.5 Suggestions for further research	69
APPENDIX A.....	69
6. Bibliography	81

DEFINITIONS

Keywords: Employee perspective; Performance; Information management systems

Employee - a person is “presumed to be an employee if they are able to establish, in their relationship with a person for whom they work or to whom they render services” (Collins English Dictionary, 2014).

Perspective – “a way of thinking about something, especially one which is influenced by the type of person you are or by your experiences” (American Heritage Dictionary of the English Language, 2016).

Performance - The accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. In a contract, performance is deemed to be the fulfillment of an obligation, in a manner that releases the performer from all liabilities under the contract (Bagraim, Jaga and Meyer 2010:199)

Performance refers to accomplishments, outcomes, and results that individuals,

Information- Data that is (1) accurate and timely, (2) specific and organized for a purpose, (3) presented within a context that gives it meaning and relevance, and (4) can lead to an increase in understanding and decrease in uncertainty (Madden, 2000:343).

Management - "Management is the organisational process that includes strategic planning, setting objectives, managing resources, deploying the human and financial assets needed to achieve objectives, and measuring results. Management also includes recording and storing facts and information for later use or for others within the organization. Management functions are not limited to managers and supervisors. Every member of the organization has some management and reporting functions as part of their job." (Martin et al., 2006:29)

Abbreviations

IDT – Independent Development Trust

PIM – Performance information management

PFMA – Public Finance Management Act

UNDG – United Nations Development Group

NPM – New Performance Management

PM – Performance Management

PI - Performance Information

EDI - electronic data interchange

IS – Information System

CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

The purpose of this study is to investigate employee's perceptions on performance information management systems and its service to the Independent Development Trust of the North West. This is because proper management of performance information systems is fundamental to the survival of any organization. Until recently public entities, especially in South Africa, had never taken serious consideration of the importance of performance information management systems.

The first initiative to implement Performance Information Management Systems in the public sector was in 1970s in Europe where it was implemented by several local government. As it was indicated by (Van Dooren *et al.*, 2010) in South Africa, like other developing countries, performance information management systems was implemented late. It was adopted for the first time as stated on 2011/2012 strategic plan document of the Department of Performance Monitoring and Evaluation, which later merged with Department of Planning Commission Secretariat in the Presidency (Department Planning, Monitoring and Evaluation Strategic Plan 2015-2020). The late implementation, was because of the public sector elevated procedure over outcome. As a result of this late implementation its effect on employees in the public sector has not been seriously assessed. According to the information available from Department of Monitoring and Evaluation website, the delay has also contributed to poor quality of service delivery and lack of accountability as indicated on the Department of Performance Monitoring and Evaluation 2011 report.

According to Akomolafe *et al.* (2012:page 9) performance is the achievement of a given task measured against pre-set known standards of accuracy, completeness, cost, and speed. In contrast, performance is deemed to be the fulfilment of an obligation, in a manner that releases the performer from liabilities under the contract (Ohemeng, 2010:456). Donald (2010), argue that there are extensions associated with standard, evaluation management, analysis, performance evaluation and their uniqueness is that they rely all on information for their accomplishment.

The best usage of knowledge and data is crucial for improving the standard of execution of the organisational goal. Poister et al.(2015) further indicates that the responsibility of Performance Information Management is to ensure that existing education-related data and future based performance are accessible to the organisation in order to help to reach the goal. Organisational human resource personnel and top management use performance information management systems for strengthening policy, planning, and operational management. According to Moynihan et al.(2011) proper planning, budgeting, monitoring and reporting are related to the effectiveness of performance information, and encourages accountability, scope change, for public interest and important to stakeholders in order to track progress for better implementation and improvement.

1.2 Background of the study

According to the Independent Development Trust (IDT) report (2015/2016), in 1990 the Independent Development Trust was established as an independent, grant-making trust. The business of the Independent Development Trust (IDT) spans the development field across the entire South Africa, covering a diverse scope of work. The IDT was listed as Schedule 2 programme implementation agency in 1999, as prescribed by the Public Finance Management Act (PFMA) (Act 1 of 1999). The IDT delivers social infrastructure and social development services that are important for welfare and National development. To ensure that public service delivery is as efficient and economical as possible, the IDT formulates strategic plans, monitor and evaluates to make sure that service been provided to the public are of good quality and affordable. The importance of performance information is to focus on whether the IDT is delivering the service according to the set standard by comparing its outcomes against service delivery plans and budgets, as this will serve as an alert to leaders of the organisation to take corrective measures where needed. Given these crucial demands for performance information, the IDT has endeavoured to prepare clear business processes with respect to performance information management and reporting across the organisations.

Historically, performance management borrows from a number of antecedents: from Taylor, (2009:85). „Scientific Management“, which emphasised methodical and efficient production to “Management by measurement“, which introduced rational measurement cycles“ into the public management lexicon and practice, hitting back at the traditional approach to public

administration that elevated procedure over outcomes (United Nations Development Group (UNDG), 2010:12). Hood (2007:95) suggests that the “popularity” of performance management was buoyed by the rise of the “audit society” thesis, also referred to as the “audit explosion” which, among other things, increased focus on accountability and a growing need to showcase regulatory compliance (Taylor, 2009:853).

In Public organisations the drive behind performance has led to a wide range of creativity and innovative in order to assist to achieve the goal set. (Walker, Damanpour, and Devece, 2011:367). For decades in the public sector, the main aim of the use performance information was to improve organisational performance. (Boyne, 2010: 204). Performance management techniques (PM) are used in many ways, such as managerial practice, in a strategic process. Performance information is utilised to measure performance outcome and to improve performance of the organisation. (Moynihan, 2008:20). At employees’ level, performance management involves defining goal settings, performance targets, and sensitising workers on the importance of achieving the set targets. The assurance of Performance Information Management is based on idea that are clear, goals that are measurable, and when the employees are been rewarded accordingly they will be encouraged to act at the best interest of the organisation (Lee and Jimenez, 2011:168). However, while scholars have begun to address the link between performance management and public organisational performance (Poister, Pasha and Edwards, 2013:625), insufficient research has focused on the question of its micro, employee-level effects. Given the scope of Performance Management reforms in public organisations, understanding how Performance Information Management systems impact the attitudes and behaviours of frontline employees can be viewed as a significant research goal.

Recently, the public management research agenda was not focusing that much on the actual use of performance information management systems (Van de Walle and Van Dooren, 2008:33). However, there have been a lot of changes. Moynihan and Pandey (2010:849) note, that the most pressing challenge for scholarship on performance management is the essence for public employees’ understanding of performance management. They lament that governments have invested substantially in collecting data, yet relatively little is known about what drives self-reported performance information use. Performance information topic is currently receiving academic attention with the research focusing on who is using performance information how it is being utilised and factors influencing its use.

According to the Department of National Treasury (2007:60, different department's institutions and entities differ at stages with regard to developing effective performance information systems. The development of PIMS in some organisation was implemented in decades. The sophisticated electronic system are being used to extract information from organisational records such as human resources, finance, administration and other to PI Database and then calculates indicators. Such information is used for rating, setting targets, scoring techniques, interpret and analyses of performance. The essence of using performance information management systems is to assist organisation to take decisions. This study examines and analyse the perspectives of employees on performance information management in the Independent Development Trust in the North West Province.

1.3 Problem statement

In South Africa, public organisations such as the Independent Development Trust have serious financial constraints and, consequently, it is difficult to deliver quality service to their stakeholders. For this reason there is a need for the national treasury to monitor how well such institutions are meeting their aims and objectives, and which policies and processes are properly working.

According to Clayton and Matsiliza (2015:125), performance information management is crucial to the maximization of resource utilisation in any organisation. The performance information management systems field is arguably one of the fastest changing and dynamic of all the business processes because information technologies are among the most important tools for achieving organisations' key objectives (Foss, Husted, and Michailova, 2010:455). , such as achieving operational excellence, productivity, efficiency, agility, developing new products and services, attaining customer intimacy and service, improving decision making, achieving competitive advantage and ensuring survival (Shibly, 2011:157).

The perceptions of employees towards the adopted information performance strategy are important in ensuring success of the initiative and knowledge sharing in the organisation.

According to Foss, Husted and Michailova (2010:455), the perceptions that employees have of the adopted strategy can motivate or discourage them.

The National Treasury report (2007:6), indicate that Independent Development Trust of the North West province has also implemented performance management information systems. However, the perspective of employees has not yet been determined. As noted earlier, it is important to determine the perspectives of employees as this is crucial to its successful implementation. The problem being investigated in this study, therefore, is to determine the perspectives of employees on the implementation of the performance management system in the Independent Development Trust.

1.4 Research questions

Main research question

Based on the research problem the following main research question was perused in this study:

What are the perceptions of the North West Independent Development Trust employees on the performance management information systems? This research question led to the following four secondary research questions'

- ✚ How is performance management information systems used to measure organisational performance in the Independent Development Trust in the North West Province?
- ✚ What factors are influencing the perceptions of employees on the Performance Information Management systems used in the Independent Development Trust in the North West Province?
- ✚ What are the perceptions of employees on the nature of Information Communication Technology skills available in the Independent Development Trust in the North West Province?
- ✚ What recommendations can be made to improve the perceptions of employees on the Performance Information Management systems in the Independent Development Trust in the North West Province?

1.5 Objectives

Main Objectives

The main objective of the study was to determine the perceptions of the North West Independent Development Trust on employees on the performance management information systems. This led to the following secondary objectives:

Sub objective

-  To determine how performance management information systems are used to measure organisational performance in the Independent Development Trust in the North West Province.
-  To determine factors that influenced the perceptions of employees on the Performance Information Management systems used in the Independent Development Trust in the North West Province.
-  To establish Information Communication Technology skills available in the Independent Development Trust in the North West Province.
-  To make recommendations that can be used to improve the perceptions of employees on the Performance Information Management systems in the Independent Development Trust in the North West Province.

1.6 Literature review

Singh quotes Deshpande (2010) that historically, performance information management systems emanates from the 360 degree feedback approach, which was implemented in the early twenties, (Singh,2012:52) From 1950 employees were only measured based on personality. From 1960 to 1980 focus was mainly on goals, objectives and self-appraisals (Prince and Fleenor, 2007:51).

Performance information management system “is an enterprise level analytical tool with a strong Business Intelligence capability that integrates data from multiple sources, collecting and reporting on a variety of TSA performance”, (Raymond and Marchand:2015).

Deducting from this definition, performance information management systems can be regarded as a tool that can be utilised to achieve different objectives. For example, according to research that was conducted in Russia by the Moscow State University, reported at the 9th NISPACEE Annual Conference, the objective of implementing performance information management systems in public and private sectors is the same. The report further indicates that private companies are based on profit margin but in government bottom line of profit margin does not apply, but both are equal, and have the same objectives, client satisfaction. Government and private sector have equal responsibility to work with stakeholders, customer’s employees and in effort to make sure that their needs and opinion have been give utmost attention.

In the context of the current study, the emphasis is on performance information management system in government. The responsibility of government is to create performance data to be utilised for the improvement of governance, but there is much that is not known about factors associated with the use of information (Moynihan and Pandey, 2010). The use of this data by managers is to implement corrective measure where gaps have been identified, measure achievement and to allocate resource where needed (Kroll, 2015).

The role of performance information is to ensure that both future performances based and educated related data are the utmost existence to help organisation. According Poister, Aristigueta and Hall (2015) organisational human resource personnel and top management utilise

performance information to manage, strengthen and improve policymaking planning, and for budgeting.

Performance information management systems were developing to control behaviour of employees to get specific outcomes. The reward driven approach was not working anymore. Therefore the focus shifted to promoting learning and development to reinforce the working environment as referred by Bhattacharyya (2011). The system changed to Performance Information Management systems in order to ensure that their producing outcome that can be measured against delivery plans and budget and to enable the organization to come up with counteractive measures and to standardise and strengthen the reporting system (Nielsen, 2013). Organisation without information management system will be only guessing whether they are heading the right direction or not. This will result from the fact that organisation management will not have enough source of information that is necessary for decision making purposes. Lender and Karmarkar (2013) also indicated that the reward system based method was not completely phased out but incorporated with the measured performance outcome of the employees.

The use of Performance information Management has broadened through the entire organisational growth and across the developing countries. Question has been posed by academics and practitioners, on what will happen to the information once it has been collected and reported. Provincial Government report stated that Performance data can be used for different reasons (Moynihan & Pandey, 2010). Public service and Politicians can take advantage and use the data by politicising it, to their claim (Moynihan & Pandey, 2010). Dysfunctional management behaviour can be the result of collected performance information also known as gaming or effort substitution (Nielsen, 2013).

Decision making routines is another way for managers to use performance management (Moynihan and Pandey, 2010). Formal rules can be established that require the collection and reporting of performance information to formulate organisational routines that always provide decision makers with performance data, and thus, make their incorporation in management decisions more likely (Moynihan and Pandey, 2010). PIM is becoming more heavily dependent upon service for every day operations leading to establishing annual performance goals defining

the level of performance to be achieved by each of the programme activities in the agency's budget; and performance goal are achieved where proper processes and relevant resources are in place.

According to Otley (2002), there is an increased attention directed to the development, implementation and use of performance information management (PIM) system which can be used to motivate and produce reports on the performance of an organisation. The use of high performance information management systems in organisations were practically designed to motivate performance and improve competencies (Laoi and Toya, 2009). This mechanism is associated with higher labour productivity, lower employee turnover rates, lower injury rates and better safe working environment, safer performance and improved performance of the company (Laoi & Toya, 2009)

The organisation can specify how well it is performing when there is alignment of performance information with aims and objectives. Good implementation of performance information management system assists the organization to identify what processes and policies are working and the reason for them to work (Kroll, 2015). Outmost utilisation of data and knowledge is relevant to the improvement of the organisation (Kroll, 2015). The importance of performance information is to make sure that there is effective management, monitoring, proper business planning, and evaluation (Moynihan and Pandey, 2010). Performance information encourages accountability effectiveness enable management of the Department to be able to measure achievement against the targets, identify the scope change for improvement and better understand the issues involved, and this was highlighted on the report of Provincial Government, 2011).

Another way to promote effective of performance information management system is to have educational interactive sessions with employees so that they can be able to reflect on processes the outcome and be able to identify the challenges. (Kroll, 2015). There were several studies that were conducted that if employers establish educational system with employees, improvement can lead to the success of the organisation. (Moynihan and Pandey, 2010). Time to time educational interactive session with employees can re-share the organisation.

Evidence comes from organisational sciences which have pointed to the importance of met routines on the organisational level as well as from the field of social psychology that has focused on the cognitive aspects of habits and automaticity (Kroll, 2015) changing administrative routines in ways that embrace the measurement, reporting, and interpretation of performance information therefore seems to be a promising strategy to foster the information use (Kroll, 2015).

On one aspect Information Management (IM) plays an important role towards the initial targeting verse the actual of the individual and organisational performances. This study therefore explores the operational employees perspective on the performance of information management in an organisation that is mainly a project based across the government spheres (Research, 2006)

On the other aspect for Performance Information Management to be functional the system description should be put in place to provide detailed description of each Corporate Performance indicators under each organisational strategic objective. The document also outlines a description of the processes followed in the reporting of the performance, the acceptable performance evidence and the responsible target official. According to Franceshini (2007) the systems description is often poorly understood and the guidelines used are often poorly articulated. This situation leads to employees to lose hope or to have a wrong perception about performance information management.

1.7 Research Design

Creswell (2014) defines research design as a general plan for implementing the design which is been guided by the research one intents to peruse, it can be, qualitative, quantitative or mixed methods.

Qualitative research design

According to Payne and Payne (2005:175), qualitative research design is a method based on non-quantitative and assumptions. The information obtained from qualitative studies is not expressed in numerical terms, but rather in the nonmathematical terms. Qualitative research design has the

following characteristics; Narrative, phenomenology, ethnography, grounded theory and case study.

Based on the objectives of this study, the case study research design appears to be the most suitable choice. Case study is an approach to conducting research that provides an in-depth exploration of an individual. In the context of this study, According to (Yin, 2009), case study was used by the researcher because the study focused only on a group of employees in the Independent Development Trust in North West province. In order to better gain more insights about this group of employees other aspects should also be quantify like factors influencing their perspectives about performance information management systems. Hence in this study the use of case study alone was not sufficient.

Quantitative research design

Quantitative research is type of research where the data collected is in numerical form and uses statistics to analyse. The qualitative research is unbiased and the researcher performs the investigation based on objectives. Researchers often assume quantitative research to be precise and easily comparable because it is grounded in “hard” evidence, which is usually acquired experimental, correlational and survey design (Gerhardt, 2004:11). In this study, the researcher used survey research design to measure opinions of the Independent Development Trust employees in North West province about their perspectives with regard to the performance information management systems. Although, this is very useful but still the measurement of the Independent Development Trust employees opinions about the performance information management systems alone is not sufficient.

Drawing on the qualitative and quantitative research designs discussed above, as well as the main of this study, it appears that the mixed research design is the most suitable design approach. This allows combination of the strength of the qualitative and quantitative methodologies together in order to get more insight to the problem.

1.7.1 Research methodology

Research Methodology is the method one intends to take to collect data and to find the solution to a problem. The mixed methods methodology was used in this study. Mixed where both qualitative and quantitative research methodologies are grouped and applied simultaneously, as

indicated by Creswell (2009) to strengthen and improve the weaknesses between the two methods. Hence, in this study the mixed methods was utilised to enable the researcher to get a better insight about the problem being investigated in order to obtain answer to the initial research question as unambiguously as possible. Mixed method is classified according to four categories, which are explanatory, exploratory, embedded and triangulation design.

The researcher used exploratory research design because the main focus of the study was to investigate the Independent Development Trust employees' perspectives on performance information management systems exploring the challenges the organization is faced with. In this light, questionnaire (surveys) and interviews were used to gather data.

1.7.2 Population

Population can be defined differently because of different utilization. According to Goddard & Melville (2001) population is a group of interbreeding individual that exist together in time and space subjected to research interest. Population targeted in this study is 30 employees at Independent Development Trust North West.

1.7.3 Sampling Technics

According to Fink (2009:51) sampling can be divided into two categories, a convenience sampling and purposive sampling. Therefore purposive sampling was selected by an objective method and chances of participants can be calculated, while convenient based only on willing respondent.

The researcher of this study made use of purposive sampling based, because the elements and the population is known, (Rubin & Babbie, 2010:8). According to Macnee & McCabe, (2010:128), purpose sampling focuses on certain characteristics such as, attributes, attitude and experience.

The reasons for Blackenship (2010:87) deeming purpose sampling is because the researcher wants to get deep insights into the phenomenon concerning attitude and the experiences that employees have towards the performance information management systems in place in the North West Independent Development Trust.

1.7.4 Data collection tools

Collection of data was done by distributing a questionnaire and the Section D of the questionnaires was face to face interview; the primary purpose of this was to obtain key information from the participants. The advantage of this interview is to be able to identify and to be able to give clear understanding or instruction (Grove *et al.*, 2009).

Standard open-ended method kind of questions was used. Asking open-ended questions is an attempt to observe the reaction in order to analysis the perception that the participant has towards the asked question.

1.7.4.1 Questionnaire construction

The data collection tool was divided into four sections. Demographics is covered under section A Section B is structured in way that participants can be able to indicate whether the strongly disagree to strongly agree kind of questions. The importance of this is suitable when the researcher want to measure a construct. (Maree 2008:167), the qualitative is covert on the last Section, D. There different types of interviews that can be utilised to collect data, but in these study face to face interviews were conducted. The main purpose of this was for the researcher to observe on how the interviewer react to the asked questions and make follow-up questions were needed.

1.7.5 Data analysis methods

In this study, Microsoft Office Excel and SPSS (Statistical Package for the Social Sciences) was utilised as tools for interpreting data, such in order to facilitate an in-depth analysis of the problem under investigation. In examining the problem under investigation, the researcher used primary and secondary sources (Dawson, 2002). Since the researcher gathered data through the use of questionnaires and interview. Therefore the data was summarized on a statistical spread sheet, analysed and then interpreted.

1.8 Validity and reliability

According to Punch (2005:97), on the other side, implication is the pivotal point of validity while measurement validity refers to the level where the apparatus is genuinely used on the correct target. ".The importance of using multi methods approach in this research is to investigate the problem from different angle and to strengthen the validity of the findings.

On the other side, a dominant notion in measurement is called reliability (Punch, 2005:95). Kekana (2012:16) articulates "validity of information as the honesty and the exactness of the information and reliability as how dependable information. According to Mcneill & Chapman, (2005:9) the reliability of Data means that if ones uses this method or be used at some point in time will give the same results. The reliability of the questionnaire for this research is based on the same results that be obtained even if it be should it be tried all over again.

1.9 Ethical consideration

For the protection of the participants, all private information was kept secret by the researcher due to sensitivity of the subject under investigation. All the participants were free to depart from the session if they feel unhappy. Klenke (2016) also intensify that the researcher did not put into

any record of withdrawal during the interview sessions. In addition the participants were assured confidentiality, privacy and secrecy regarding divulged information.

1.10 Outline of the study

The main focus of the study was on North West Province, but the situation is related to all other nine (9) provinces in South Africa.

Chapter one

Chapter one outlines the introduction and the background of the study, Problem statement, objectives, aim of the study and the importance of the study.

Chapter 2: Literature Review

Chapter two focuses on literature review on different authors on the theories of performance Information Management system and its effect on perception of employees in which also can be associated to the Independent Development Trust.

Chapter 3: Research Methodology

The chapter discusses in detail the different methodologies and approaches used to conduct study.

Chapter 4: Presentation and analysis of results

This chapter highlights the discussion, analysis, and interpretation of the results obtained from chapter three.

Chapter 5: Summary, Conclusions and Recommendations

Will be conclusive chapter that highlight the recommendations, and results will be strongly discussed. Lesson learned and suggested future research direction.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter provides the most important part of literature, where evaluation and assessment take place. (Naidoo, 2010:8). The literature review addresses the objectives of the study in determining the extent in which perspective on performance information management affected employees performance in the Independent Development Trust. Naidoo (2010:8) argues that unless the impact of management style on employee performance is assessed as well as to investigate the manner in which performance information is managed there will not be any successful organisational outcome. A summary of the various sources consulted is provided to demonstrate a number of theories that the Independent Development Trust could follow in making the performance information management effective.

This chapter review the various authors with regard to perspective on performance information management that always results in job dissatisfaction and insecurity of staff members in an organisation. For this reason management theory; participation theory and information theory in organisations are the main discussion.

Theories are philosophies or ideas which could assist to understand and resolve the problem understudy (Swanson, (2013:12). The study focuses on some of the theories to clarify the perspectives: Information theory; Management theory; Participation theory Connectivism theory; and the Capabilities theory.

2.2. Information theory

Information theory is a technology used to assist in communication between internal and external issues that need to be handled by all organisations. To improve the relationship with other organisations and to make effective and efficient decision making (Li; Rao; Ragu-Nathan and

Ragu-Nathan (2005:618). For coordination purposes, infrastructure such as data communication tools, network connection, standard data structure, unified coding standards, information systems software such as enterprise-wide information systems and information systems applications centralised data base management systems, electronic data interchange (EDI), web-based or internet-based information systems (Kumar,2014:41).

Information can also take place between staff members or departments on the same or similar levels within the same office, departments or branches. Co-ordination between departments is necessary to solve problems and to promote output. The sharing of relevant information and ideas increases efficiency. Communication between employees on the same level fulfils a need socially and emotionally. Ideas, problems, misunderstandings, frustrations, rivalry and fears can be voiced and discussed with positive and negative results. It is advisable to supervise and direct horizontal communication. Information technology is also primarily used to automate the information delivery function in classrooms or working environment (Korter and Olubusoye, 2016:103).

When using information technology the most important variables are suggested: system quality, information quality and service quality. The quality of the system and quality of the information are considered as key factors affecting acceptance and improve the organisational performance Al-Mamary, Shamsuddin and Aziati, (2014:7). System quality is the desirable characteristics of information system. For example: ease of use, system flexibility, system reliability, and ease of learning, as well as system features of intuitiveness, sophistication, flexibility, and response times (Petter, DeLone, and McLean, 2008:236). The proposed theoretical framework assumed that Management Information Systems quality effect on the perceived usefulness and user satisfaction.

One of the necessary conditions for effective decisions is information. Managers have to digest and assimilate a lot of information before they can start to make good use of it or respond to it. By screening out some of it the danger exists that important information may not get the necessary attention. Flynn, Huo and Zhao, (2010:58) explain that an organisations cannot share information and data with its supply chain partners if its own systems are not integrated and further suggest that without internal integration, the data shared with supply chain partners may

not be accurate or timely. The organisation also needs to be internally integrated to speak with one voice and develop a coherent strategy and action plan with suppliers and customers.

Performance information indicates how well an institution is meeting its aims and objectives, and which policies and processes are working. Making the best use of available data and knowledge is crucial for improving the execution of government's mandate. Performance information is the key to effective management, including planning, budgeting, and implementation, monitoring and reporting. Performance information also facilitates effective accountability, enabling legislators, members of the public and other interested parties to track progress, identify the scope for improvement and better understand the issues involved.

2.2.1 Employees belief

Employees make their own decision but in most cases they are influenced by social context as well as the environment in which they work. It is of most importance for managers to be able to manage the relation, building and networks of support, and also having positive relationships with employees. A leader assist employees with good social skills would develop good working relationships with customers, managers of other departments, and group members. With good social skill is more likely to be invited by head-hunters to explore new career opportunities. The introduction of the Public Service Motivation concept contributes to influence employees towards the right direction (Perry and Hondeghem 2008:6), and much of this evidence falls under High PSM employees exhibit higher levels of organisational commitment, enjoy higher job satisfaction, experience greater job involvement, and require less extrinsic rewards (Pandey and Stazyk 2008:101). There is also evidence that PSM fosters positive citizenship behaviour internal (Pandey, Wright, and Moynihan 2008:89) and external to the organization (Houston 2006). There has, thus far, been surprisingly little investigation into how PSM might affect organisational decision making.

According to Brewer (2008:101), performance information brings cost to employees because it sometimes displaces the way they use it to make decisions and could make decisions more or less complex. Employees performance information use is difficult to observe. Therefore it is

impossible to enforce behaviour that is not obviously tied to self-interest. However in contexts with high-powered financial or tenure incentives tied to performance data such as those in performance contracts, performance information use may be related to their self-interest. There are also some instances where organisations formally organize processes of mandatory performance information use (Pandey, Sanjay, Bradley. Wright and Moynihan, (2008:89), thereby removing the voluntary component of performance information use. In such settings, performance information use is less likely to be a form of extra-role behaviour.

Employees perceive performance information system as way of assisting in achieving organisational goals that in itself encourages self-interest (Brewer, 2008:101). If high PSM employees see performance information use as a means of achieving organisational goals, they may also see it as a means to fulfil their desire to serve.

The aim of performance management system is to encourage continuous evaluation (Moynihan and Pandey 2010:849). It encourages organisational learning and accountability. Consequently, it improves the quality of organisational decision making (Moynihan 2008; Moynihan and Landuyt, 2009:1097).

2.3 Management theory

Management theories focus on the role of supervision, organisation and group performance and the exchanges that take place between leaders and followers. These theories base leadership on a system of rewards and punishments (Charry, 2012:100). In other words, on the notion that a leader's job is to create structures that make it abundantly clear what is expected of followers and the consequences, such as rewards and punishments, associated with meeting or not meeting expectations (Lamb, 2013:20).

The importance of management in an organisation should not be taken lightly. Research indicated that management activities are the most important key element in the success or failure of an organisation. Managers at all levels have a significant role to play in the functioning of the

organisation and to be clear about what their responsibilities are in it. The supervisor is active within an institution, which in turn functions within a larger environment. Consequently, in discussing the managerial tasks of the supervisor it is logical to start with the institution and its environment. When employees are successful, they are rewarded and when they fail, they are reprimanded or punished (Charry, 2012:112). Managerial or transactional theories often likened to the concept and practice of management and continue to be an extremely common component of many leadership models and organisational structures (Lamb, 2013:21).

Information Management should establish the organisational principles for various data life cycles across both structured and unstructured data sources, instituting a committee to govern the principles, and setting up the processes and procedures to harness the data such that meaningful business insights are derived and delivered to the consumers at the right time in the right format (Bhatt and Thirunavukkarasu, 2010). As with other core assets, namely financial, human, and physical, organisations should develop a formal function to manage and govern data, information, and knowledge as corporate assets.

The sum total of all the internal and external factors (also called variables) that may influence the continued existence of the organisation is called the management environment. In other words, managers have to get the best possible results by using the available environmental factors and despite some environmental stumbling blocks. Organisations that have the ability to adapt to a changing environment have a better chance of survival. Organisational performance is defined as accumulated end results of all the organization's work processes and activities. The common measures for organisational performance are organisational productivity and organisational effectiveness. Organisational productivity is a measure of how efficiently employees do their work. Organisational effectiveness is measure of how appropriate organisational goals are and how well an organization is achieving those goals (Yaser Shamsuddin, and Aziati 2014:121), According to Nath (2013:14), management information system provides several benefits to the business organization; to come out with appropriate responses to a business situation; the means of effective and efficient coordination between different departments at all the levels of the organization; access to relevant data and documents; use of less labour; improvement in organisational and departmental techniques; management of day-to day activities.

In addition Al-Mamary, and Shamsuddin, (2014:108) stated that various management levels are needed in order to exercise its functions in planning, organizing, directing, control and decision-making, so that:

- Information can easily available.
- The weakness of the organization should be evaluated so that corrective actions can be taken
- Correct decisions can be taken with the help of appropriate information processing and briefly in a timely manner.
- To help the organization to forecast in order to achieve the set goals.
- The ability to learn on how to write detailed reports
- Past information assist as the basis of its work and,
- Be ready to answer all questions for the purpose of correcting the weaknesses.

Evans, Hunter, and Price, (2011:55); Hong, Suh, and Koo (2011:14417) and (Khatri, and Brown, (2010:148) argue that there will always be challenges and barriers to prevent effective information: these are:

- Individual and organisational bottlenecks. For example: If it means our IT department has to create or do something new and the answer from manager is that, we can't do it. immediately the IT department was the place We're dealing with leadership bottlenecks by:

Making sure that decisions made promptly.

Making sure that tasks are completed.

Making sure that delegation of tasks is done

- Individual barriers such as internal resistance. Resistance is an inevitable response to any major change. Individuals naturally rush to defend the status quo if they feel their security or status are threatened

- Trust, as a consequence, the trustor is uncertain about the outcome of the other's actions; they can only develop and evaluate expectations. The uncertainty involves the risk of failure or harm to the trustor if the trustee does not behave as desired.
 - Motivation, as a desire to be committed. If people are not committed there will be no productivity.
 - A gap in awareness and knowledge: Trainers should also emphasize the need for new workers to communicate any questions or concerns they have about their training or about workplace hazards. This allows the new worker to help the trainer build a more comprehensive training programme that accommodates all the unique health and safety concerns of each individual employee
-
- Organisational barriers such as language issues: Problems with communication occur when the way in which we express ourselves is not fully understood and appreciated by those we want to communicate with, this is mostly caused by language. Some of these differences are within our control, with others are not, and being forewarned about such obstacles influences how successful communication will be.
 - Conflict avoidance: Conflict prevention is a method of dealing with conflict, which attempts to avoid directly confronting the issue at hand. Methods of doing this can include changing the subject, putting off a discussion until later, or simply not bringing up the subject of contention. If we do not do that we find ourselves missing good and healthy relationships
 - Bureaucracy: In most organisations management prefer to control and instruct without involving employees.
 - Distance: Some employees find themselves not being noticed by managers. This causes ineffectiveness and inefficiency.
 - Knowledge transfer and sharing: This refers to the exchange of knowledge between and among individuals, and within and among teams, organisational units and organisations. This exchange may be focused or unfocused, but it usually does not have a clear a priori objective. It is therefore important to information among teams.
 - Scarcity of time: scarcity causes single-mindedness and one tends to neglect more important or less timely demands. Scarcity also reduces executive control. When people suffer from scarcity they move from one pressing task to the next.

- Lack of awareness about Knowledge Management (KM). Most people do not seek information and these results in ignorance.
- Benefits: Most organisations do not provide benefits to workers and that demoralises them.
- Lack of top management support: In most cases, top management ignore their responsibility to support their subordinates and that cripples production.
- Lack of funding: Funding is always a problem when planning is not done properly.
- An unclear strategy: It is important for managers to plan strategically because the consequences affect employees.
- Weak IT support: When employees are not trained in IT there will be no production.
- Unclear information demand culture: Everyone should understand the culture of the organisation.
- Unbalanced effort versus reward. Most managers do not appreciate the work done by employees this results in discouraging workers
- Technology and knowledge complexity: Technology paralyses those who cannot use it.
- Ineffective communication: Serious problems arise when directives are misunderstood, when casual kidding in a team leads to anger, or when informal remarks by a top level manager are distorted. Each of these situations results from a breakdown somewhere in the process of communication. The issue is not whether we communicate, but how effectively we communicate.
- Inadequate information systems: Our inability to maintain an adequate management information system may have a material adverse effect on our business.

Best (2010:61) agrees that it is information which must be managed, rather than the technology. Processes must be in place to ensure data is clean and that nothing is entered that may contaminate the data. Processes should exist to document tacit knowledge and ensure the data obtained will support decision making and contribute to competitive advantage. Evans and Price, (2012:177) argue that Internal information is often managed in silos, and in a large manufacturing organisation, the manufacturing general manager owns internal valuable information while the CFO of an automotive services company. Lee, (2010:336) argues that the root of the problem with the management of information is the lack of accountability, as the structure of an organisation often does not include a role of Data-, Information or Knowledge

Manager. Clearly articulating accountability at all levels of the organisation will support the appropriate management of Information Assets.

Ammons, David and Roenigk, (2015:514) agree that using performance information to improve services is important. Top manager tend to meet regularly to discuss performance management systems of their departments for the purpose of progress, but do not allowing other managers or supervisors to do the same. It is important to meet and brainstorm and do strategy sessions. Moynihan, (2008) argue that collecting and reporting measures; relatively few take the next steps of analysing, discussing, and improving. In this case, different measurement tools are used by managers. Developing performance metrics usually follows a process of:

1. Initiating important processes/customer requirements
2. Making sure that quantifiable outputs of work are met
3. Determining targets against which results can be scored

Van de Walle and Van Dooren (2010:33) suggest the following as useful in improving performance management systems:

- Performance standards: It is important to initiate the targets which will assist in achieving the goals and objectives set.
- Performance measures: It is also important to monitor and evaluate the performance. This will assist in correcting deviations.
- Reporting of progress: If the reporting system is weak progress becomes weak
- Quality improvement: Employee errors or lack of motivation are the exception. The causes of most quality problems are the responsibility of management and supervisors. The systems they create – work processes and procedures – are out of control. So, to correct the problem, management and supervisors have to correct the system (processes and procedures). Interestingly, this rule runs counter to the more traditional assumption that problems are caused by the actions of the employees.

2.4 Participation theory

One of the central characteristics of quality participation is to increase employee involvement. The primary means for increasing involvement is through teams. The essence of participation is process and procedure improvement. Employee participation is the central element of process improvement. That is, participation requires management to give people the encouragement to share ideas and act on what they suggest. Problem-solving teams provide the natural vehicle for employees to share ideas and to implement improvements. This is made clear by Khatri and Brown, (2010:148): “When your measurement system tells you that your process is out of control, you need teamwork for structured problem-solving. Not everyone needs to know how to do all kinds of fancy control charts for performance tracking, but everyone does need to know where their process stands so they can judge if it is improving.”

When employees are involved in taking part in the implementation of performance management system obviously trust will be realized by management (Chandan and Jena, (2012:296), Participative leadership theories suggest that the ideal leadership style is very important because it assist one that take the input of others into consideration. Participative leaders encourage, motivate and influence others to participate and contribute from group members and help group members to feel relevant and committed to the decision-making process. A manager who uses participative leadership, rather than making all the decisions, seeks to involve other people, thus improving commitment and increasing collaboration, which leads to better quality decisions and a more successful business (Lamb, 2013:22). Carrie et al. (2010:79) confirm that employee participation in decision making is an important and vital factor, which contributes to organisational productivity, performance and the long term survival and productivity of an organisation. Participative management is a process in which employees share information and knowledge in order to bring an outstanding amount of effectiveness and efficiency in making decisions (Judge and Robbins, 2009:259). In this regard, Odendaal (2009:176) concurs and states that participative management devises the means of promoting as a solution for those who are slow and low in production. If employees are engaged in decisions that affect them, they will become more motivated, committed to the organisation, productive and satisfied with the jobs (Odendaal, 2009:176).

For improvement and development of performance management system managers are responsible for the structure of the organisation in terms of communication, information sharing and setting the right procedures for employee participation in decision making. However, in the South African labour relations, participative initiatives as regarded an attempt to disguise and ruin the way in which management is handled (Venter, Bendeman, Conradie, Venter, Holtzhausen, and Levy, 2009:474). Employers in South African labour relations arena objects to participative initiatives because according to managers, its delays the decision making process and takes control out of the hands of management. One can say that employers in South Africa do not promote participative initiatives in order to preserve managerial prerogatives.

2.4.1. Lack of union support

Trade Unions in South Africa are not trained to do their job because they become a barrier when it comes to performing their actual functions. There is bias and inferiority complex, as a result of which they fail to protect both managers and employees (Moriarty, 2010:373). Venter et al. (2009:474) suggest that Trade Unions perceive the introduction of participative structures as an attempt to weaken their power. As was the case in the past, perhaps this is the reason trade unions in SA concentrate more on collective bargaining functions, which consist of negotiations over wages and working conditions, rather than the promotion of meaningful and effective participative structures and practices.

2.4.2. Lack of employees commitment

If management lacks commitment and competencies to promote meaningful participation, employees will not feel obliged to be committed in any way (Venter et al., 2009:474). Another possible reason employees do not show any interest in participation is that management, in most cases, uses its managerial prerogative to ignore the inputs of employees, which eventually discourages or frustrates employees.

Compliance to regulations and rules of the organisation is important and if leadership does not comply or even show support very little improvement will be obtained. Dull (2009:255) demonstrates that leadership commitment to performance management fosters use among federal employees across agencies. Similarly, Walker et al. (2010:367) find that leadership support for performance management is significantly related to some forms of performance information use.

Another way in which leadership can foster performance information use is by creating a demand for performance (Askim, Johnsen and Christophersen 2008). Here, leaders are active participants in performance management systems, using them to hold employees responsible and accountable for outcomes.

2.5. Connectivism theory

The connectivism theory demonstrates connection in learning from past experience or from history which will assist in what has been learnt. Learning should be continuous in order to update oneself in new knowledge and what can happen in the future (Pitt and Bennett, 2008:290). Continued learning is centred on the capability to stay connected and belong to digital communities with which interests are and can be continuously shared (Baker and Buoni Fee2011:1). Connectivism is one form of networking, which will obviously broaden the ability and capability of a person. This can be done inside and outside the organisation. However, organisations are also constantly concerned with the threat posed by leak of confidential information through unguarded comments by employees on social media (Richards, 2012:22).

For this type of learning to take place, however, decision makers must be innovative and able to solve problems as well as knowledgeable of the information and use it in decision making (Van Dooren and Van de Walle 2008:12; Moynihan and Pandey 2010:849). Similarly, different individual and organisational characteristics have been linked to whether performance information promotes organisational learning (Askim, Johnsen and Christophersen. 2008:297; Moynihan 2012:95; Moynihan and Landuyt, 2009:1097).

Miladi and Malekmohammadi (2010:1529) argue that despite the fact that learning promotes effectiveness, challenges in the implementation of e-learning in developing nations still exist. These include:

- Lack of awareness amongst population: if the community is ignorant, it will be the responsibility of organisations to educate them.
- Low adoption rate: the population may also be slow in adopting in a current situation,
- Bandwidth and connectivity limitations: if information is not broad enough to reach everybody learning will be limited.

- Computer illiteracy and lack of quality e-learning content : technology is one way of learning and broadening the knowledge despite we are far or near
- Difficulty in engaging learners online and language barrier: If resources are not available or if one has a problem with language, there will always be barriers or obstacles.

These limitations in connectivity will affect the response time of e-learning system among developing nations institutions. Slow response from the e-learning system will create frustration and boredom among users and leads to low satisfaction. Osubor and Chiemeké, (2015:17) are of the opinion that high cost of bandwidth connectivity, poor electricity, lack of manpower to maintain the technology, poor level of literacy and awareness and the fear of the unknown are the major factors to measure the use of technology and Information system such as e-learning. All these problems and challenges sum up to the poor cultural practices that inhibit the adoption of e-learning innovations and system at the individual, institutional, and national levels.

In South Africa, for example, many Small, Medium and Micro enterprises cannot be provided with credit owing to lack of information. These new companies are not inducted or trained to understand what is expected of them and are regarded in other countries as the informal economy and therefore risky for economic growth although South Africa has a highly advanced credit information system, and the capacity and skills to address any identified credit access problems. However, the country faces significant challenges in collecting data from the large, less formal economy (Turner, Varghese and Walker, 2008:12).

Performance information is not only used by managers, but also by stakeholders, such as politicians, citizens or interest groups (Van Dooren and Van de Walle, 2008:11). Research has shown that actual implementation of such tools and systems tends to differ substantially from formal policy and that the actual use of performance information also often tends to lag behind the extent of performance information collected (Van Dooren and Van de Walle, 2008:11). Moynihan and Pandey (2010:849) confirm that this makes researching performance information difficult, because the concept may refer to very different realities across organisations. Using very narrow conceptions of performance information, however, forces the researcher to stick to analyzing organisations that are very similar, or that operate in a single jurisdiction.

2.6. Capabilities theory

The Capabilities theory conceptualizes the construct of dynamic Information System capability to address the sustainability issue of IS integration (Verde, De Castro, and Lopez, 2011:5). Capabilities are dynamic because the firm must continually build, adapt, and reconfigure internal and external competences to achieve congruence with the changing business environment when the rate of technological change is rapid, time to market is critical, and the nature of future competition and markets is difficult to determine (Verde, De Castro, and Lopez, (2011:5). Capabilities must be seen as enabler of establishing, generating and creating valuable strategies (Yang; Li and Wu, 2008:1128).

The above argument simply confirms IS an integration capability can be a powerful tool and technique to coordinate information and various activities within area across functional areas, and across the firm's boundaries of the extended value chain. This integration ability that is crucial for decisions can be made (Koskab, 2013:217). The information advantage achieved through the adoption of sophisticated technologies and the synergistic benefits achieved through to provide the sources of sustained competitive advantage for a firm. More specifically the argument is that IS integration can equip a firm to respond to various challenges quickly and help the firm enhance its cost and quality performance, which in turn affects firm profitability (Wilkin, and Chenhall 2010:10).

2.6.1. Information Security

According to Calder and Watkins (2008), the term 'information security' means the protection and back-up of information and services as well as systems and telecommunications in order to manage the risks directed at them. Protection and back-up are achieved in both normal and emergency conditions through administrative, technical and other measures. The main aim of information security is to safeguard the confidentiality, integrity and availability of information from threats and accidents arising from hardware and software faults, natural events and willful, negligent or accidental actions. Shareef (2016:139) describes Information Security as the process of identifying issues that have the possibility to cause damage or threat situations and implementing protections to eliminate this potential.

Information is an asset that, like other important business assets, is essential to an organisation's business and, consequently, needs to be suitably protected. This is especially important in the increasingly interconnected business environment. As a result of this interconnectivity, information is now exposed to a growing number and a wider variety of threats and vulnerabilities. Information can exist in many forms. It can be printed or written on paper, stored electronically, transmitted by post or by using electronic means, shown on films, or spoken in conversation. Whatever form information take, or means by which it is shared or stored, it should always be appropriately protected (Calder and Watkins, 2008).

Information security is connected to IT as the main and vital instrument or tool to make sure that important information is secured (Calder and Watkins 2008). Organisations Invest in IT because it is valuable and can take the organization to high standards (Simonsson, Johnson and Ekstedt 2010). As a close link between IT governance and information security exists, it is reasonable to believe that investments in IT governance are beneficial for an organisations information security. A problem is, however, that benefits to the organization are often indirectly related to the investment and may occur well into the future. It may, therefore, be difficult for managers especially those who are not knowledgeable in an organization to demonstrate the expected future value of investing in IT governance control objectives. To effectively direct investments endeavors, a crucial question is if there exist any differences in how effective these investments are in generating value. The need for decision support regarding investment opportunities in security is therefore needed.

2.6.2 Network Security



If there is no internet available, especially in connecting with the outside world in developing countries, the country will be separated from others and no information will be reached. It is therefore important that communication reaches a stage where e-government, e-business, or e-learning is available to avoid or reduce relevant risks. The trend of distributed computing has also weakened the effectiveness of central, specialist control. Many information systems have not been designed to be secured. The security that can be achieved through technical means is limited and should be supported by appropriate management and procedures. Identifying which

controls should be in place requires careful planning and attention to detail. Information security management requires, as a minimum, participation by all employees in the organization (Saida, Abdullahb, Ulib, and Mohamedc, 2014).

2.6.3 Privacy

As mentioned earlier the confidentiality of sensitive information should be kept to avoid threats especially unauthorised access to the citizen's private data. Most incidents publicised in the media involve private information on individuals which is contrary to individual's rights (Ma, Johnston and Pearson, 2008).

2.6.4 Access Control

User-oriented type which comprises on identification, authentication and authorization issues. In other words it is essential to protect systems in order to prevent intruders from using access control mechanism to gain government and citizens' information. Insufficient logical access controls reduce the reliability of departments' computerized data and increase the risk of unauthorized revelation. The interconnection of public and private networks and the sharing of information resources increase the difficulty of access control (Saida, Abdullahb, Ulib and Mohamedc 2014:433).The interconnection that will be categorised according to the individual needs and requirements as this will assist to keep organisational property secure from unwanted access.

2.7 Summary

This chapter focused on literature review of information performance management which assisted the researcher in analysing the perspectives of employees in the Independent Development Trust and to address the objectives of the study. Different theories were discussed to clarify the situation in organisations. The following chapter focuses on research methodology and design. However, there are barriers to effective performance due to lack of union support, lack of employees' commitment, lack of internet availability and high cost, particularly in developing countries along with Network attacks, systems architecture and network topology

issues, which are challenges, need to be considered. Information is frequently unreported, as there is no compelling reason to. Insufficient logical access controls reduce the reliability of a department's computerized data and increase the risk of unauthorized revelation.

CHAPTER 3: RESEACH METHODOLOGY

3.1 Introduction

Data needs to be collected for a research study to assist in answering the research questions being investigated. For this reason, data collection strategies need to be carefully planned. This chapter focuses on different approaches (techniques) used in order to collect data suitable to answer the research question in this study. Focal points include research design, research methodology, population and sampling procedure, data collection methods, and data analysis, which are introduced and discussed in detail.

3.2 Research Methodology and design

3.2.1 Research method and design

Research design refers to all issues related to the detailed work plan specifying how a research project will be carried out. Its main purpose is to assist a researcher in finding a suitable research method or methods that will be used for conducting a particular research study. Additionally, it also helps to guide a researcher in the process of selecting appropriate techniques of collecting data for answering the research questions. According to New York University (2011), the research design enables the research to be able to make use of the evidence obtained to answer the questions as easily as possible. Since there are various kinds of research questions, it is the responsibility of a researcher to ensure that selected research methods utilized the best fit to the problem. This can only be achieved by making sure that the collected data are consistent and suitable to answer the research questions.

In general, there are three research design approaches, namely quantitative, qualitative and mixed-method research designs (2, 3, and 4). The researched used mixed methods in this study, which is qualitative and quantitative to measure the extent of performance information systems.

Quantitative methods was employed to determine the factors that influences the perceptions of employees on the Performance Information Management systems, official were requested to

indicate the level to which they agree with the causes of the study, by indicating options from strongly agree to strongly disagree.

The questionnaire was structured in way that participants could indicate whether they strongly disagree or strongly agree kind of questions. This is suitable when the researcher wants to measure a construct (Maree 2008:167).

Unlike quantitative data, which are represented in the form of numbers, qualitative research designs deal with narrative data (meaning in words). Similar to quantitative data, narrative data also represent information about the world or about phenomena of interest. Narrative data are not numerical data. As such qualitative data can be observed but not measured. As a result, qualitative data are analysed using data coding techniques and making verbal synthesis. The narrative data analysis is conducted with the objective of understanding or gaining insights into what is observed (meaning about phenomena of interest). With the help of qualitative data analysis a researcher can understand how people feel and why they feel as they do (i.e. understand people's experience). Ten (10) questions were prepared to use for interviews in addition to the questionnaire used in the department. These questions were administered by the researcher.

Method

Two major issues were analyses:

- 🚩 To determine how performance management information systems are used to measure organisational performance in the Independent Development Trust in the North West Province.
- 🚩 To determine factors that influences the perceptions of employees on the Performance Information Management systems used in the Independent Development Trust in the North West Province.

3.2.2 Study Population and Sample Size

The population in statistical terms is defined by Investorwords (2011) as a group of individuals that share one or common characteristics from which data can be gathered and analysed. In this study, the target population consisted of 30 staff member from all sectional departments within the Independent Development Trust in The North West.

The study comprised thirty (30) employees. A document from Human Resource department indicates that North West Independent Development Trust has the population of 30 officials. The whole compliments staff is involves in any other way in the implementation of performance information management system in order to make sure that the available educational data, future based performance, “targets” are available to assist the organisation to reach its goal.

Purpose sampling was used in selecting $N = 30$ respondents for this study, and all 30 were from North West Provincial Independent Development Trust. Grinnell and Williams (1990:127) state that in most cases a 10% sample should be sufficient for controlling for sampling errors. However, differences in opinion exist with regard to the minimum number of respondents that should be involved in an investigation. Grinnell and Williams (1990:127) contend that 30 are sufficient to perform basic statistical procedures, while others feel that a minimum of 100 is sufficient. De Vos et al. (2010:202) refers to purposive sampling to be based entirely on the judgment of the researcher, in that a sample is composed of elements that contain the most characteristic, representative or typical attributes of the population. The judgment of the individual researcher is obviously a prominent factor in this type of sample.

3.2.3 Data Collection

The developed questionnaire presented in Appendix A. for the Independent Development Trust in the North West Province was administered by the researcher.

The questionnaire comprises of qualitative and quantitative questions, which can be referred to as mixed methods. The qualitative was mainly interview (Gill, Stewart, Treasure and Chadwick, 2008:291). According to Du Plessis (2015:3) an interview is process whereby the questions to

the interviewer and obtained answers from the interviewer. Interviews can be passed telephonic or face-to-face. The importance of conducting face-to-face interviews is that the researcher can observe the action of the respondent and be able to make follow up questions to the interviewer. .

The quantitative section covers the participants' background information. The characteristics of the participants on how they were selected are very important because these can influence the claims made about the findings of the research.

3.2.4 Data Analysis

Different data obtained from various usability tests using diverse data gathering methods were analysed using a triangulation approach. Statistical data were analysed using Statistical Package for social Sciences (SPSS) 2015 versions. Graphs (histograms) were also used to display and compare these data. The results displayed in graphs were interpreted and discussed. Conclusions were drawn based on the results from data analysis of the various usability tests performed as well as the interview conducted by the researcher.

3.11. Summary

Chapter 3 introduced and discussed the different approaches used to collect data appropriate to answering the research questions. The study was employed as a technique for collecting both qualitative and quantitative data needed to answer the research questions investigated in this study. The different procedures used for population sampling, including usability testing planning were discussed. Finally, the chosen data collection methods suitable for this study, which is the questionnaire and interview together with data analysis were also discussed. This chapter also discussed in detail the design of the usability test, different methodologies and approaches used to conduct the usability test and the usability test suite set up, as well as usability test conducted.

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Introduction

The data collection strategy is outlined in this chapter, as the results were presented from the use of the questionnaire administered to officials of North West Independent Development Trust. The results were analyzed and organized to be presented in chapter one.

4.2 Section A: Demographic Information

Demographic data analysis is divided into (2) parts the first part presents information related to gender, age group, second job status, highest qualification; number of years employed at the organisation and sections where employees are working in. The part of biographic section on the questions was to give indication of the profile of the participants.

4.2.1 Response rate

Thirty (30) questionnaires were distributed to respondents and administered at the Independent Development Trust, in the North West Province. Twenty three (23) questionnaires were completed and returned, which is 77% of the 30 questionnaires distributed.

4.2.2 Demographic information

This section outlines the personal data of the respondents, as illustrated on table 1.

Table 1 illustrates the gender of respondents at the Independent Development Trust.

Table 1: Gender of respondents

Gender	Frequency	%
Male	9	39
Female	14	61
Total	23	100

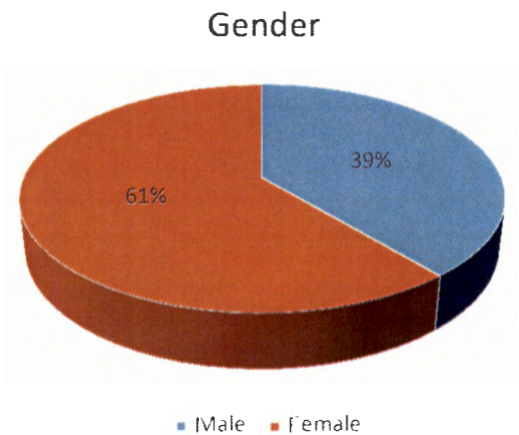


Figure 4.1 distribution of Gender of the respondents

Table 4.1 illustrates the total number of respondents who completed and returned the questionnaires, which amounted to 23, Sixty one percent (61%) of the responded were female and the 39% (9) were males. The split is further highlighted by Figure 4.1. It is clear that the variance between male and female respondent is very important, because female respondents are

at most twice the amount of male respondents. Based on the outcome of the study, this implies that there is more female dominance at the Independent Development Trust.

Table 4.2 Age groups distribution of the respondents at the Independent Development Trust

Age group	Frequency	%
Less than 25 years	1	4
25 – 30 years	1	4
31 – 35 years	8	35
36 – 40 years	5	22
41 – 45 years	3	13
46 – 50 years	1	4
More than 51 years	4	17
Total	23	100

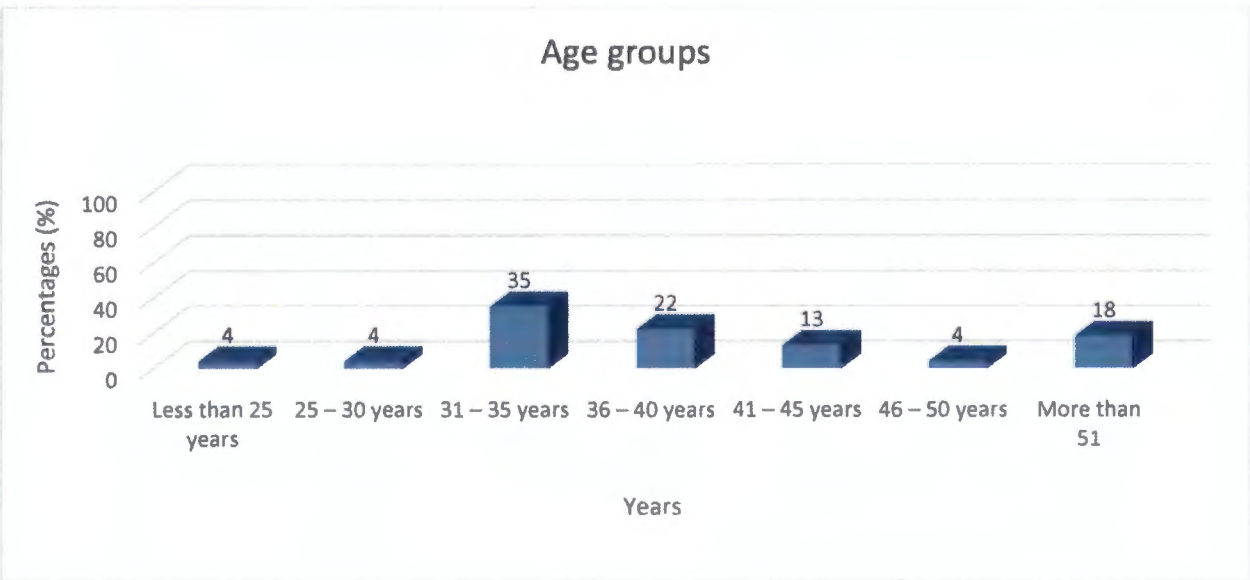


Figure 4.2 Age groups of respondents

Table 4.2 indicates that eight (35%) of respondent are aged 31 between 35 years, five (22%) were aged between 36 and 40 years; four (17%) were in the age bracket more than 51 and the minority were between the age less than 25 years, 25 – 30 years and 46 – 50 years with 4% respectively. The statistics indicates that most respondents (35) aged between 31 and 35 years of age. Similarly these age group results are highlighted in Figure 4.2. This implies that most of the employees at the Independent Development Trust are young and some and 17% are towards the age of 51 years nearing the retirement.

Table 4.3: Job status of the respondents

Job status	Frequency	%
Other	4	17
Manager	6	26
Line Manager	3	13
Operational Manager	10	44
Total	23	100



Figure 4.3 Job status of employees

As shown in Table 4.3, Forty four percent (44%) of the respondents are Operational Managers and, 26% are Managers while the minority (13%) is at line management level, but Seventeen percent 17% of the respondent did not mention their positions, but some mentioned that they are operational staff. The results are further illustrated in Figure 4.3.

Table 4.4: highest qualifications of the respondents

Highest qualification	Frequency	%
Other	2	9
Matric	1	4
Certificate	3	13
Bachelor Degree	8	35
Honours Degree	6	26
Master's Degree	3	13

Total	23	100
-------	----	-----



Figure 4.4 Highest qualifications of respondents

Table 4.4, reveals that most of the respondents in the organisation are graduates. Thirty five percent (35%) of the twenty three (23) who responded hold a Bachelor’s Degree; 26% have an Honours Degree, 13% hold Certificates and Masters Degrees respectively and the minority which is 4% has matriculation, some 9% of the respondents had Diplomas. This is an indication that majority of the respondents are educated and these have the ability to carry out their functions in the organisation adequately. These results are depicted in Figure 4.4.

Table 4.5: number of years the respondents has worked

Number of years	Frequency	%
0 – 5 years	14	61
6 – 10 years	4	18
11 – 15 years	1	4
16 – 20 years	3	13
21 years and above	1	4
Total	23	100



Figure 4.5 Number of years employed

According to Table 4.5, the majority of the respondents (61%) have worked at the organisation for between 0 – 5 years. Some 18% of the respondents have worked for between 6 and 10 years. The least number of respondents (4%) have worked at the organisation for between 11 and 15 years and 21 years and above, respectively. These results similarly are reflected on figure 4.5.

There is an indication that most of the employees started working for the organisation recently and are not familiar inexperienced with policies and processes of the organisation.

Table 4.6 sections respondents are working

Section employed in	Frequency	%
The Development Services Unit	11	48
The Development Services Unit	1	4
The Development Services Unit	3	13
The Corporate Services Unit	1	4
The Financial Services Unit	2	9
Programme Management Services Unit	5	22
Total	23	100

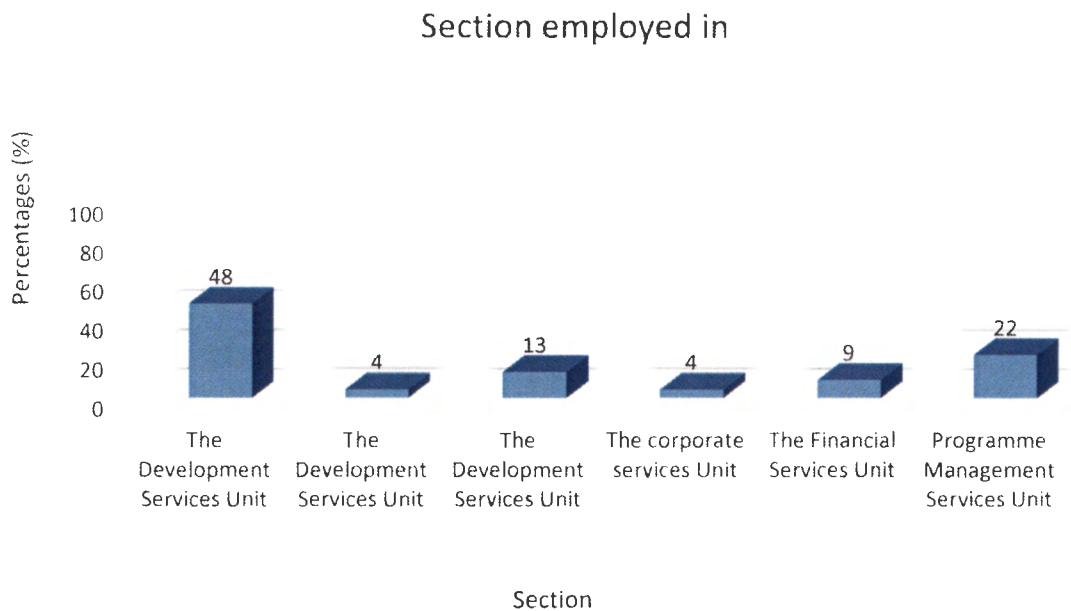


Figure 4.6: Section responded worked

Table 4.6 shows Forty eight percent (48%) of the respondent work in The Development Services Unit, 22% in Programme Management Services Unit while minority (4%) work in the Development Services Unit and the Corporate Services Unit, respectively. These results are indicated in Figure 4.6.

4.3 Section B: Quantitative data analysis

This section mainly analyses data on the management of information systems, factors influencing and information communication technology skills at the Independent Development Trust.

Table 4.7 management information systems are used to measure organisational performance in your organisation (n=23).

Statements	strongly agree	agree	uncertain	disagree	strongly disagree
	1	2	3	4	5
Establishing critical processes/customer requirements	(5) 21.7%	(4) 39.1%	(4) 17.4%	(4) 17.4%	(1) 4.3%
Identifying specific, quantifiable outputs of work	(5) 21.7%	(15) 65.2%	(2) 8.7%	(1) 4.3%	(0) 0%
Establishing targets against which results can be scored	(6) 26.1%	(14) 60.9%	(3) 13.0%	(0) 0%	(0) 0%
Control	(3) 13.0%	(14) 60.9%	(6) 26.1%	(0) 0%	(0) 0%
Benchmarking with other organisations	(2) 8.7%	(9) 39.1%	(7) 30.4%	(3) 13.0%	(2) 8.7%
Establishment of organisational standards, goals, and targets	(7) 30.4%	(12) 52.2%	(2) 8.7%	(2) 8.7%	(0) 0%
Documentation and reporting of progress in meeting standards	(9) 39.1%	(11) 47.8%	(2) 8.7%	(1) 4.3%	(0) 0%
Establishment of a program or process to achieve quality improvement	(7) 30.4%	(14) 60.9%	(0) 0%	(2) 8.7%	(0) 0%
Feedback	(6) 26.1%	(12) 52.2%	(3) 13.0%	(1) 4.3%	(1) 4.3%

Table 4.7 presents the responses to the statements relating to how management information systems are used to measure organisational performance at the Independent Development Trust. Nine (9) statements were posed to the respondents. They were asked to rate each item on a scale of 1 to 5 (1 = strongly agree; 2 = agree; 3 = uncertain, 4 = disagree and 5 = strongly disagree).

The focus of the study was to investigate how management information systems are used to measure organisational performance at the Independent Development Trust. Out of 23 responses received, 91.3% of the respondents agreed that if the organisation establishes a program or process in order to improve the quality this will be vital to the utilisation of management information systems as a measure for organisational performance; 87.0% indicated that establishing targets against which results can be scored, would be a useful tool for measuring organisational performance at the 86.9% highlighted that documentation and reporting of progress in meeting standards and identifying specific, quantifiable outputs of work can be identified as proper management information systems tools to measure performance of the organisation; 82.6% of the respondents indicated that establishment of organisational standards, goals and targets would allow for good measurement of the performance of the organisation. The best usage of knowledge and data is crucial for improving the standard of execution of the organisation's goal. Poister et al. (2015) further indicate that the responsibility of Performance Information Management is to ensure that existing education-related data and future performance based, are available to help the organization. Organisational human resource personnel and top management make use of performance information management systems for strengthening policy, planning, and operational management. According to Moynihan et al. (2011) proper planning, budgeting, monitoring and reporting are related to the effectiveness of performance information and also encourage accountability, scope change ,for public interest and important to stakeholders in order to tract progress for better implementation and improvement.

At the level of employee, performance management involves defining the goal setting performance targets and sensitising workers on the importance of meeting them. The assurance of Performance Information Management is based on ideas that are clear, goals that are measurable, and when the employees are been rewarded accordingly they can will be encouraged

to have the best interest of the organisation (Lee and Jimenez, 2011:168). However, while scholars have begun to address the link between PM and public organisational performance, (Poister, Pasha, and Edwards, 2013:625) little research has focused on the question of its micro, employee-level effects. Given the scope of performance management reforms in public organisations, understanding how Performance Information Management systems impact the attitudes and behaviours of frontline employees can be viewed as a significant research goal.

Some 30.4% of the respondents highlighted that they were uncertain whether benchmarking with other organisation was a good measure of organisational performance; 26.1% were not clear whether control was good management information system to be used for measuring organisational performance for the Independent Development Trust; and 17.4% were not sure whether establishing critical processes/customer requirements are good management information systems to be used to measure performance at the Independent Development Trust.

A total of 21.7% of the respondents disagree that establishing critical processes/customer requirements and benchmarking with other organisations will be good management information systems to be used for measuring organisational performance at Independent Development Trust. Performance Information Management is to ensure that existing education-related data and future performance based are available to help the organization. Organisational human resource personnel and top management, among others, should improve and strengthen policymaking, planning and management through the use of performance management (Poister, Aristigueta, Hall, 2015).

Performance classified is the accomplishment of a given task measured against pre-set known standards of accuracy, completeness, cost, and speed (Akomolafe, Bukola. Onyekwelu, Oniyide and Bello 2012:181). In contrast, performance is deemed to be the fulfillment of an obligation, in a manner that releases the performer from liabilities under the contract Ohemeng, 2010:456). Donald et al. (2010:1) argue that performance has so many extensions such as performance analysis, performance management, performance standard, performance evaluation and so many others and one unique feature of these extensions is that they all rely on information for their actualisation.

Tables 4.8: factors influencing Performance Information Management used (n=23)

Statements	strongly agree	agree	uncertain	disagree	strongly disagree
	1	2	3	4	5
Respond to the inquiries.	(6) 26.1%	(10) 43.5%	(4) 17.4%	(3) 13.0%	(0) 0%
Continuous evaluation of organisational	(3) 13.0%	(11) 47.8%	(7) 30.4%	(2) 8.7%	(0) 0%
Analysing performance and relating it to existing organisational arrangements	(6) 26.1%	(10) 43.5%	(4) 17.4%	(3) 13.0%	(0) 0%
improve the quality of organisational decision making	(3) 13.0%	(13) 56.5%	(6) 26.1%	(1) 4.3%	(0) 0%
The quality of the system	(6) 26.1%	(8) 34.8%	(6) 26.1%	(3) 13.0%	(0) 0%
Quality of the information	(8) 34.8%	(11) 47.8%	(3) 13.0%	(0) 0%	(1) 4.3%
System reliability	(6) 26.1%	(8) 34.8%	(7) 30.4%	(2) 8.7%	(0) 0%
Ease of learning	(5) 21.7%	(9) 39.1%	(8) 34.8%	(1) 4.3%	(0) 0%
Increase the sharing and construction	(4)	(11)	(6) 26.1%	(1) 4.3%	(1) 4.3%

of knowledge	17.4%	47.8%			
Impaired organisation performance	(4) 17.4%	(10) 43.5%	(7) 30.4%	(2) 8.7%	(0) 0%
Low organisational esteem	(4) 17.4%	(8) 34.8%	(8) 34.8%	(3) 13.0%	(0) 0%
Negative impact on long term strategic planning	(3) 13.0%	(9) 39.1%	(4) 17.4%	(7) 30.4%	(0) 0%

Table 4.8: Outlines the responses to the statements relating to factors influencing performance information management used at the Independent Development Trust. The respondents were requested to respond to twelve statements. They were asked to rate each item on a scale of 1 to 5 (1 = strongly agree; 2 = agree; 3 = uncertain, 4 = disagree and 5 = strongly disagree).

The study also investigated factors that tend to influence performance information management at the Independent Development Trust. Eighty two point six percent (82.6%) of the respondents of the twenty three (23) responses received, indicated that the quality of information is a vital factor influencing performance information management at the Independent Development Trust; 69.6% of the respondents highlighted that responding to inquiries and analyzing performance and relating it to existing organisational arrangements are important factors influencing performance information management use, 69.5% of the respondents indicated that improved quality of organisational decision making influences how the performance information management is carried out in their organisation; 60.9% were in consensus that the quality of the system and its reliability have massive influence in how performance information management is conducted in the organisation; 60.8% of confirmed that continuous evaluation of organisational and ease of learning are some of the factors that influences performance information management.

Moynihan and Pandey (2010:849) note that 'understanding public employee use of performance information is perhaps the most pressing challenge for scholarship on performance management'. The supply of performance information is vastly increasing in most public sectors

and across many different types of public organization (Moynihan, Pandey and Wright. 2012:143). A central aim behind performance information systems is that systematic and continuous evaluation of organisational performance should be used to improve future performance. By analysing performance and relating it to existing organisational arrangements, performance information is argued to promote organisational learning and, consequently, improve the quality of organisational decision making (Moynihan 2008; Moynihan and Landuyt 2009:1097).

Some 34.8% of the respondents highlighted that they were uncertain whether ease of learning and organisational esteem are key influencers of the performance information management at the Independent Development Trust; 30.4% were not clear whether impaired organization performance, continuous evaluation of organisational systems and system reliability are key influencers of the performance information management in their organisation; 26.1% of the respondents were not sure whether increasing the sharing and construction of knowledge, the quality of the system and improving the quality of organisational decision making influences performance information management in their organisation.

A total of 13.0% of the respondents disagreed that responding to inquiries, analysing performance and relating it to existing organisational arrangements, the quality of the system and low organisational esteem influences performance information management in their organisation.

Tables 4.9: Information Communication Technology skills available (n=23)

Statements	strongly agree	agree	uncertain	disagree	strongly disagree
	1	2	3	4	5
Networking learning	(6) 26.1%	(6) 26.1%	(5) 21.7%	(4) 17.4%	(2) 8.7%
Sophisticated technologies	(2) 8.7%	(7) 30.4%	(8) 34.8%	(5) 21.7%	(1) 4.3%
Threat of disclosing confidential information	(2) 8.7%	(6) 26.1%	(10) 43.5%	(4) 17.4%	(1) 4.3%
Organisational commitment,	(2) 8.7%	(11) 47.8%	(8) 34.8%	(2) 8.7%	(0) 0%
Enjoy higher job satisfaction, Experience	(2) 8.7%	(9) 39.1%	(6) 26.1%	(6) 26.1%	(0) 0%
Knowledge patterns	(2) 8.7%	(11) 47.8%	(5) 21.7%	(4) 17.4%	(1) 4.3%

Table 4.9: presents the responses to the statements relating to the kind of information communication technology skills available at the Independent Development Trust. The respondents were requested to respond to six statements. They were asked to rate each item on a scale of 1 to 5 (1 = strongly agree; 2 = agree; 3 = uncertain, 4 = disagree and 5 = strongly disagree).

The kind of information communication technology skills available at the Independent Development Trust, was also investigated in this study. Of the 23 responses received, 56.5%

agreed that knowledge patterns and organisational commitment are vital to information communication technology to enhance skills sets; 52.2% indicated that networking learning is vital for information communication technology available in the organisation.

Some 43.5% of the respondents highlighted that they were uncertain whether threat of disclosing confidential information was skill set for information communication technology available in their organisation; 34.5% were not clear whether organisational commitment and sophisticated technologies are key skills for information communication technology at Independent Development Trust; 26.1% of the respondents were not sure whether enjoying higher job satisfaction and experience were really vital skills for information communication technology at the Independent Development Trust.

A total of 26.1% of the respondents disagreed that enjoying higher job satisfaction and experience, sophisticated technologies and networking learning are important skills for information communication technology that are available at the Independent Development Trust.

Tables 4.9 Model used to improve Performance Information Management? (n=23)

Statements	strongly agree	agree	uncertain	disagree	strongly disagree
	1	2	3	4	5
Data communication tools	(5) 21.7%	(10) 43.5%	(7) 30.4%	(1) 4.3%	(0) 0%
Standard data structure	(8) 34.8%	(8) 34.8%	(6) 26.1%	(1) 4.3%	(0) 0%
Centralized data base management	(9) 39.1%	(10) 43.5%	(2) 8.7%	(1) 4.3%	(1) 4.3%
Employee participation in decision making	(13) 56.5%	(8) 34.8%	(2) 8.7%	(0) 0%	(0) 0%
Encouraging knowledge sharing	(16) 69.6%	(5) 21.7%	(0) 0%	(2) 8.7%	(0) 0%
Methods on rules, regulation, policies and mathematical approach	(10) 43.5%	(8) 34.8%	(2) 8.7%	(2) 8.7%	(1) 4.3%
Individuals constantly update their knowledge	(15) 65.2%	(7) 30.4%	(0) 0%	(1) 4.3%	(0) 0%

Table 4.9: presents the responses to the statements relating to best model to be used to improve performance information management. The respondents were requested to respond to seven statements. They were asked to rate each item on a scale of 1 to 5 (1 = strongly agree; 2 = agree; 3 = uncertain, 4 = disagree and 5 = strongly disagree).

A best model to be used to improve Performance Information Management at the Independent Development Trust was also investigated. Out of the 23 responses received, 95.6% of the respondents agreed that individuals constantly update their knowledge at the Independent Development Trust; 91.3% indicated that the organisation encourages knowledge sharing among the employees; 91.3% highlighted that employee participation in decision making is vital for the Independent Development Trust; 82.6% agreed that centralised data base management will be critical in improving performance information management at the Independent Development Trust; 78.3% suggested that methods on rules, regulation, policies and mathematical approach will be critical to performance information management for the Independent Development Trust; 69.1% agreed that standard data structure will improve performance information management at the Independent Development Trust and 65.2% indicated that data communication tools may lead to improved performance information management at Independent Development Trust.

Some 30.4% of the respondents were uncertain whether data communication tools will really improve the performance information management; 26.1% wondered whether standard data structure is the way go for Independent Development Trust; 8.7% did not understand whether the centralised data base management, employee participation in decision making and methods on rules, regulation, policies and mathematical approach will improve the performance information management at the Independent Development Trust.

A total of 13% disagreed that methods on rules, regulation, policies and mathematical approach will improve performance of information management at the Independent Development Trust; 8.7% clearly did not think that encouraging knowledge sharing in the organisation will improve performance information management; 4.3% highlighted that individuals constantly updating their knowledge, standard data structure and data communication tools will not improve performance information management at the Independent Development Trust.

4.5. Section C: Qualitative data analysis

This section allowed respondents to highlight whether there is induction at the Independent Development Trust, whether they have adequate technological skills for a demanding job, there

is enough training to improve performance of employees, do they contribute to annual reporting in the organisation, are they employed in their field of expertise or a different field altogether. The numbers indicated in this section are derived from the number of times the respondents say (Yes) or (No). Furthermore, this number is divided by the number of questionnaires to bring forth the numerical value, which was used to support the reasoning of responses.

4.5.1. Induction in the institution

The majority (82.6%) of respondents indicated clearly that there is new employee induction at the Independent Development Trust. Employees are taken into a three day workshop, which indicates to them the organisational processes, to enable the new appointees to understand what the organisation is all about. During the three-day workshop, various members representing different units share a presentation with the new appointees, which entails what each section is responsible for and the do's and don'ts of the organisation. Most of the time employees would to be sent to head office in Pretoria to undergo induction to ensure that they know what the organisation stands for (vision and mission). However, there were some of the respondents who acknowledges that there is proper work placement induction, but that some of employees have never attended it after joining Independent Development Trust, which is a worrying factor. Some 17.4% of the respondents stated that there is no work placement induction at the Independent Development Trust. Their reasons vary from unit being inducted not being aware whether such exercise exists in their organisation.

4.5.2. Technological skills

The majority (60.9%) of employees of the Independent Development Trust agreed that they have required skills sets to carry out any demanding job that can arise. Some of them went through some training to ensure that they are able to handle the demanding job environment. However, others felt that project management information systems are the more or less the same everywhere, hence they feel confident to carry out any task thrown to them. Most of the employees studied short courses, as well as in-house course, various software programmes and diplomas in

order to supplement their shortcomings in this different environment than their previous ones. Also their training as engineers affords them the skills needed for this type of demanding environment.

Some of the respondents 39.1% highlighted that they still need capacity building with regard to this environment, because they are in a totally different field from what they have studied, and do not have necessary technological skills sets required by the demanding job. Moreover, the capacity provided is only basic to enable them to perform basic duties. Some need more mentoring and training. Furthermore, the employees need more training. There is also lack of support for those employees lacking the required skills. Sometimes the employees are exposed to different software packages than the one they are used to, without adequate training provided.

4.5.3. Adequate training within your section

The majority (78.3%) of the respondents highlighted that there is a huge gap with regard to training in their respective sections. Moreover, employees keep applying for courses on offer at the organisation to enhance their skills but none are approved and this demoralises these employees. Furthermore, the Individual Development Plans (IDPs) at the Independent Development Trust are not implemented and no regular workshops/seminars/training takes place in the organisation. To the dismay of the respondents, management seems ignorant when it comes to employee development, because training is not a priority in the organisation. Lastly, respondents have also realised that sometimes because of their tight schedules it is impossible to go on training, but this does not mean that new systems can be implemented first and then training provided at a later stage. The Independent Development Trust must provide adequate information to make sure that employees are aware of the staff development courses in order to make provision for relevant courses staff need. Employees should not be obliged to request information from colleagues. The respondents highlighted the fact that HR functioned as an independent department, which makes it difficult for staff development. However the minority (23.7%) indicated that there is adequate training taking place in the organisation. Despite the odds, these employees have attended training in MS Project, Excel and Great Plain and contract agreement drawing (e.g. The Joint Building Contracts Committee, etc.).

4.5.4. Contribution towards annual institutional reporting

Most (80%) of the respondents felt that they are contributing immensely towards annual institutional reporting, because they had to submit progress reports of their programmes and projects, especially major projects. Moreover, these projects and programme reports are compiled and used as a basis for the annual organisational plan. Furthermore, this contribution comes through performance appraisal of the different sections in the organisation, which is used by management of the Independent Development Trust to inform Parliament. Some 20% of the respondents felt that they did not contribute anything towards annual organisational reporting, because they felt it was an executive function and only done in head office.

4.5.5. Employed exclusively according your field

The majority (78.3%) of the respondents felt that they are not employed within their field of expertise, because some are only employed to provide support to the other professional outside their field of study. One of the respondents highlighted that he/she was a legal person, but has been converted a development expert, which is way out of his/her comfort zone. Furthermore, others felt that even though they are outside their field of expertise, but the projects they are implementing did not have anything to do with their qualifications. Some of the respondents had political science degrees, but they were employed under social development, others were employed to carry out monitoring and evaluation, which was way out of their field of expertise.

The minority (21.7%) of the respondents felt that they were employed within their field of study or expertise, because programmes and projects they were involved in were in line with what they have studied. Furthermore, they have all the relevant technical skills and know-how to execute these projects effectively. Even though staff had no prior academic qualification, they had experience in the line of work they were doing.

4.5.6. Employed in a completely different field

Seventy percent as the majority (70%) of respondent highlighted that they were employed in the right field with accordance to their qualifications. Some indicated that this is the field they have always wanted to work in, the reason being they managed construction projects and as a qualified quantity surveyor, were in the relevant field. Moreover, they were busy with what they have studied academically. Most other ancillary activities were also linked to overall job specification and some of the respondents were employed in finance because of their B Com qualification.

Furthermore, a minority (30%) of respondents indicated that they were in a completely different field, because others were from legal department, but transferred to development department. One of the respondents even highlighted that he/she is monitoring the monitoring NPOs that create EPWP work opportunities, which has nothing to do with his/her field (Agricultural qualification).

4.6. Section C: Qualitative data analysis

This section allowed respondents to highlight challenges associated with the use of performance information management, the importance using the systems, and factors associated with performance information management. To highlight on the experience of the use of the current performance information management system, and the ability of the current system has to address the challenges and recommendations for improvement.

4.6.1. Importance of performance information management

The extreme importance of performance information management at the Independent development Trust that was highlighted by most of the respondent is because it enables the

organisation to achieve its goals and objectives. Moreover it assists the organisation to assess its objectives both for short and long term decision making. Furthermore it enables the development of the employees to carry out their day to day work or tasks to support management in achieving set goals. Performance Information Management allows employees to help to carry their duties in a structured manner, enhance employee and organisational accountability, fosters monitoring and control. Day-to-day performance of individuals or employees, and organisational performance as well as, productivity and self-worth can be measure by the use of performance information management systems.

4.6.2 Factors influencing performance information management systems in you organisation

Interviewees highlighted factors such as information accuracy, employee accountability, reliability and timeous information is the key influential factors towards performance information management. Moreover, factors such as organisational clean audits, human error and lack of HR personnel in regions, organsational transformation and expenditure accountability immensely affect performance information management systems.

4.6.3 Challenges you experienced with current performance information management systems

Interviewees highlighted that there are various challenges they encounter with the current system. Amongst others, there are challenges such as the ever changing organisational systems. Also people who are responsible for these systems are always changing, this makes it impossible for the employees at the Independent Development Trust to consistently understand and utilise these systems, as these changes cause many irregularities. Moreover, reports are not reliable as a result of information accuracy concerns. There are concerns related to the dashboard system, does not consistently respond to tasks, it is regarded as being slow by most employees, it cannot sometimes allow for changes to be executed in the reports already uploaded, and there is lack of communications between the head offices and regional offices on how to utilise dashboard forms correctly. Furthermore the lack of leadership skills amongst some managerial lines makes it impossible for the changes to be effected on time. Consequently, time wasted for each

submission as a result of the changes in submission templates which renders it impossible to compare contracts performance. Lastly, there are organisational audit challenges encountered at the Independent Development Trust, which affects the performance of the organisation at large.

4.6.4 Systems have the ability to address organisational challenges

The interviewees highlighted that if the organisation encourages employee involvement in decision making processes with regard to systems to be utilised, this will enable the current systems to address the challenges faced by the organisation. Furthermore, the employees need to input accurate information timeously for the systems to be effective and address the challenges. Moreover, performance information management is work in progress and addressing challenges as they arise will enhance the system's ability to deal with challenges in the long, as a result of pro-active decision making by management. Despite all this, some interviewees felt that the current system is not enabled to deal with challenges facing the organisation as a result of continuous changes facing the organisation and the employees at large. They further highlight that it is impossible for management to keep introducing new systems, whilst old systems are still causing more challenges that cannot be addressed by the organisation.

4.6.5 Recommendations for improvement of the current performance information management systems

There was a consensus amongst the interviewees that the organisation should conduct workshops and implement systems before the beginning of the financial year, not during the process of the financial year. Continuous improvement of skills is needed for the employees through training, to enable them accurately input information on the system. Moreover, the organisation should not introduce new systems before testing whether the existing systems are working or not. Furthermore, there should be consistency in leadership, to ensure consistent goals achievement and clear direction at the Independent Development Trust. The interviewees also highlighted that performance information management systems in place should be utilised as an informative document for HR to follow up with individuals, not a point system to allocate bonuses. As such, there is a need for the whole upgrade of the organisational system, increased e-mail capacity,

improved infrastructure that allows the employees to calculate and confirm organisational payments and encouragement of change management because performance information management keeps changing all the time. Lastly, the organisation should communicate clearly with individuals affected by the system, so that there is buy-in and support for the system by the employees, rather than developing systems which are not understood by the employees, which will result in employees not supporting the new system.

4.7 Reliability, validity and trustworthiness

According to Punch, (2005:97), on the one hand, implication is the pivotal point of validity while measurement validity, refers to the level where the apparatus is genuinely used on the correct target. The importance of using multi methods approach in this research is to investigate the problem from a different angle and to strengthen the validity of the findings. On the other hand, a dominant notion in measurement is called reliability (Punch, 2005:95).

Kekana (2012:16) articulates “validity of information as the honesty and the exactness of the information and reliability as how dependable information. The reliability of Data means that if ones uses this method or be used at some point in time will give the same results (Mcneill and Chapman, 2005: 9). The reliability of the questionnaire for this research is based on the same results that be obtained even if it is tried all over again.

4.8 Conclusion

Findings on demographics of the respondents were presented in this chapter, together with the factors influencing and information communication technology skills at the Independent Development Trust in the North West Province. The respondents overall results indicate that agreed that quality improvement can be achieved by improving processes or programmes as this is vital to the utilization of management information systems as a measure for organisational performance. Establishing targets against which results can be scored can be a useful tool for measuring organisational performance in Independent Development Trust and reporting on progress, document management in meeting standards and identifying specific, quantifiable

outputs of work can be identified as proper management information systems tools to measure performance of the organisation. There are challenges respondents felt that need to be addressed, which indicates that the current system to a large extent can address all the challenge, but only if the management involves employees in decision making processes, not utilising a top-down approach in implementing systems.

CHAPTER 5: SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study focuses on is on the employee's perception on performance information management systems in the independent development trust of the North West Province. The analysis gives directive to the usefulness of performance management system as an important tool for measuring organisational performance in Independent Development Trust, and reporting on progress document management in meeting standards and identifying specific, quantifiable outputs of work can be identified as proper management information systems tools to measure performance of the organisation.

Two key findings stand out, to address and answer the research questions. First: performance management information systems used to measure organisational performance. Second: factors that are influencing the perceptions of employees on the Performance Information Management systems. Third: the nature of Information Communication Technology. Addressing the challenges need the will power of the employer and the employees to reach a decision to understand the varies factors that are negative of positive impact on organisational effectiveness in order to maintain the use of performance information management systems

Section A – Summary

5.2. Summary

The study was conducted in the North West Province at The Independent Development Trust. The background of the study, research questions, problem statement, scope and the significance of the study were outlined in this study. The literature review outlines in details the theories of performance information management systems as highlighted in Chapter 2.

Research methodology gives clear directive on the research design which included the method of investigation. Sample Procedure and Sample Size, Data Collection, where a questionnaire was developed for the Department and administered by the researcher. The validity and reliability of

the variables were assessed using the item reliability, construct reliability, and average variance extract, together with Cronbach's coefficient alpha.

Data was obtained through questionnaire made up of sections: A: Demographic Information; Section B: This section analyses the management information systems; factors influencing and Information Communication Technology skills. Section C: This section is made up of open ended questions. Section D: Interview Questions.

All the questionnaires were carefully analysed and coded before capture into the SPSS soft package. Data were described with frequency counts. The responses were coded to facilitate entry into computer. Permission was obtained by the researcher from the Independent Development Trust in the North West Province to facilitate data collection. Ethical clearance form for compliance was obtained from the North West University. The questionnaire was distributed to all employees of the North West Independent Development Trust. A confidentiality clause was implemented in terms of the responses and results. Interpretation, analysis of the research findings were presented and discussed. The findings were split into four sections. The results from the analysis were checked if the primary research objective were met by the secondary research objectives. The results from the research were listed and discussed.

Section B - Findings

5.3 Conclusions of the study and major findings of the study

Recommendations, findings and conclusions are based on three (3) main objectives of the research.

The major objective is to explore and determine how performance management information systems are used to measure organisational performance in the Independent Development Trust in the North West Province.

Ninety five and six percent (95.6%) of the respondents agreed that individuals constantly update their knowledge at the Independent Development Trust; about ninety one a percent (91.3%) of

the respondents indicated that the organisation encourages knowledge sharing among the employees; ninety one and three percent (91.3%) of the respondents highlighted that employee participation in decision making is vital for the Independent Development Trust; eighty two and six percent (82.6%) of the respondents agreed that centralised data base management will be critical in improving performance information management at the Independent Development Trust; seventy eight and three percent (78.3%) suggested that methods on rules, regulation, policies and mathematical approach will be critical to performance information management for the Independent Development Trust; sixty nine and one percent (69.1%) of the respondents agreed that standard data structure will improve performance information management at the Independent Development Trust and sixty five and two percent (65.2%) of the respondents indicated that data communication tools may lead to improved performance information management at Independent Development Trust.

It is therefore recommended that, participative leaders encourage participation and contributions from group members and help group members to feel relevant and committed to the decision-making process. A manager who uses participative leadership, rather than making all the decisions, seeks to involve other people, thus improving commitment and increasing collaboration, which leads to better quality decisions and a more successful business. Like other forms of organisational behaviour, employees have discretion about whether and the degree to which they engage in it.

Information Management should therefore establish the organisational principles for various data life cycles across both structured and unstructured data sources, instituting a committee to govern the principles, and setting up the processes and procedures to harness the data such that meaningful business insights are derived and delivered to the consumers at the right time in the right format.

The following components can be used as a tool to measure performance management systems:

- Information can easily available.
- The weakness of the organisation should be evaluation so that corrective actions can be taken
- Correct decisions can be taken with the help of appropriate information processing and briefly in a timely manner.

- To help the organisation to forecast in order to achieve the set goals.
- The ability to take to learn on how to write detailed reports
- Past information assist as the basis of its work and,

Be ready to answer all questions for the purpose of correcting the weaknesses

The second objective of the study is to determine the factor that influences the perceptions of employees on the Performance Information Management systems used and in the Independent Development Trust in the North West Province.

About eighty two percent (82.6%) of the respondents indicated that the quality of the information is a vital factor influencing performance information management at the Independent Development Trust; sixty nine (69.6%) of the respondents highlighted that responding to inquiries and analyzing performance and relating it to existing organisational arrangements are important factors influencing performance information management used at Independent Development Trust; sixty nine and five percent (69.5%) of the respondents indicated that improved quality of organisational decision making influences how the performance information management is carried out in their organisation; sixty (60.9%) of the respondents were in consensus that the quality of the system and its reliability have massive influence in how performance information management is conducted in the organisation; sixty and eight percent (60.8%) of the respondents confirmed that continuous evaluation of organisational and ease of learning are some of the factors which influences performance information management.

What influences the perceptions of employees on the Performance Information Management systems are lack of internet availability and high cost, Network attacks, systems architecture and network topology issues are challenges needs to be considered. Information security will function as an enabler, such as: achieve e-government or e-business, and to avoid or reduce relevant risks. The security that can be achieved through technical means is limited, and should be supported by appropriate management and procedures. Identifying which controls should be in place requires careful planning and attention to detail.

Trade Unions should promote meaningful and effective participative structures and practices. Employees should be committed to promote meaningful participation. The leadership should actively signal support for performance management, managers may pursue a strategy of pro-forma compliance.

The third objective is to establish the Information Communication Technology skills available in the Independent Development Trust in the North West Province.

About ninety one percent (91.3%) of the respondents agreed that process establishment is important to improve quality within the organisation as this can be vital to the utilization of management information systems as a measure for organisational performance; eighty seven (87.0%) of the respondents indicated that establishing targets against which results can be scored, which can be a useful tool for measuring organisational performance in Independent Development Trust; sixty nine and 60.9% of the respondents highlighted that reporting on progress and document management are key for meeting standards and identifying specific, quantifiable outputs of work can be identified as proper management information systems tools to measure performance of the organisation; eighty two and six percent (82.6%) of the respondents indicated that establishment of organisational standards, goals and targets can allow for good measurement of the performance of the organisation.

It is recommended that the organisation put more focus on information sharing, and encourage team work strategy. In practice, the wide-spread nature of this phenomenon is evidenced by the information system (IS) for integration purposes, including information systems infrastructure such as data communication tools, network connection, standard data structure, unified coding standards, information systems software such as enterprise-wide information systems and information systems applications centralised data base management systems, electronic data interchange (EDI), web-based or internet-based information systems are very important.

Section C - Conclusion and Recommendations

5.5 Suggestions for further research

The research only focused on the North West Independent Development Trust, but there is a great need for it to be conducted across the entire South Africa. This raises a concern as to whether other Provinces might not be facing the same challenges. It's also suggested that there is a greater need to for Government intervention in terms of vocational education and skills development for the best interest of the South Africa for better service delivery.

APPENDIX A

QUESTIONNAIRE: TO THE INDEPENDENT DEVELOPMENT TRUST

I am **Suzan Andile Matladi**, an (MBA) Master's student at the North West University (MAFIKENG CAMPUS) and I am conducting a research study on the topic below:

EMPLOYEES PERSPECTIVE ON PERFORMANCE INFORMATION MANAGEMENT OF THE NORTH WEST PROVINCE: THE CASE OF THE INDEPENDENT DEVELOPMENT TRUST

Kindly assist in the completion of this study by furnishing the information as requested in the questionnaire. Your honest response will contribute to addressing the challenges encountered by the Independent Development Trust in the North West Province. Responses will be treated with the utmost confidentiality.

Please read the statements carefully and mark with a cross (X) in the appropriate block.

SECTION A

1. Demographic Information

1.1 Gender

Male	
Female	

1.2 Age group

Less than 25 years	
25 – 30 years	
31 – 35 years	
36 – 40 years	
41 – 45 years	
46 – 50 years	
More than 51	

1.3 Job status

Manager	
Line manager	
Operational manager	

NWU
LIBRARY

1.4 Highest qualification

Below Matric	
Matric	
Certificate	

Bachelor Degree	
Honours Degree	
Master's Degree	
Doctorate Degree	

1.5 Number of years employed at the your organisation

0 – 5 years	
6 – 10 years	
11 – 15 years	
16 – 20 years	
21 years and above	

1.6 Which Section are you employed in?

Office of the Chief Executive Officer	
Office of the Chief Operation	
The Development Services Unit	
The Development Services Unit	
The Development Services Unit	

The Financial Services Unit	
The Corporate Services Unit	
Programme Management Services Unit	

SECTION B

This section analyses the management information systems; factors influencing and Information Communication Technology skills. Please put a cross (X) or tick (√) in the applicable box to rate your level of agreement or disagreement. Mark one box only per statement:

How are management information systems used to measure organisational performance in your organisation.

No	Item	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
2.1	Establishing critical processes/customer requirements					
2.2	Identifying specific, quantifiable outputs of work					
2.3	Establishing targets against which results can be scored					
2.4	Control					
2.5	Benchmarking with other organisations					
2.6	Establishment of organisational standards, goals, and targets					
2.6	Documentation and reporting of progress in meeting standards					
2.7	Establishment of a program or process to achieve quality improvement					
2.8	Feedback					

What factors are influencing Performance Information Management used and in your organisation?

No	Item	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
2.9	Respond to the inquiries.					
2.10	Continuous evaluation of organisational					
2.11	analysing performance and relating it to existing organisational arrangements					
2.12	improve the quality of organisational decision making					
2.13	The quality of the system					
2.14	quality of the information					
2.15	system reliability					
2.16	ease of learning					
2.17	increase the sharing and construction of knowledge					
2.18	Impaired organisation performance					
2.19	Low organisational esteem					
2.20	Negative impact on long term strategic planning					

What kind of Information Communication Technology skills are available in your organisation?

No	Item	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
2.21	networking learning					
2.22	sophisticated technologies					
2.23	Threat of disclosing confidential information					
2.24	organisational commitment,					
2.25	enjoy higher job satisfaction, experience					
2.26	knowledge patterns					

Which best model can be used to improve Performance Information Management?

No	Item	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
2.23	data communication tools,					
2.24	standard data structure					
2.25	centralized data base management					
2.26	Employee participation in decision making					
2.27	encouraging knowledge sharing					
2.28	methods on rules, regulation, policies and mathematical approach					
2.29	individuals constantly update their knowledge					

SECTION C:

3. Please indicate whether there is induction in the institution?

If you answered YES to the above question, please indicate how induction was done?

.....

If you answered NO to the above question, please indicate the reason for this.

.....

4. Do you think you have technological skills to do a more demanding job than the one you have now?

If you answered YES, please indicate explain?

.....

If you answered NO, please indicate why?

.....

5. Do you think there is enough training within your section which could improve the employee performance?

If you answered YES, please indicate the type of training?

.....

.....

If you answered NO, please indicate why?

.....

.....

6. Do you contribute towards the annual report of the institution?

If you answered YES, please indicate how?

.....

.....

If you answered NO, please indicate why?

.....

.....

7. Are you employed exclusively according to your own field?

If you answered YES, please indicate how?

.....
.....

If you answered NO, please indicate why?

.....
.....

8. Are you employed in a completely different field?

If you answered YES, please indicate how?

.....
.....

If you answered NO, please indicate why?

.....
.....

Section D

Interview Questions

1. Explain the importance of using performance information management in your organisation?

.....
.....

2. Do you know of any factors that are influencing Performance Information Management systems used and in your organisation?

.....
.....

3. What are the challenges have you experience with the current performance information management systems?

.....
.....

4. Do you think that system in place have the ability to address the organisational challenges?

.....
.....

5. Based on your experience with the performance information management systems in place, do you have any recommendations for improvement?

.....
.....

THANK YOU FOR YOUR TIME AND CO-OPERATION

6. Bibliography

Ahmad, W., and Al-Kaabi, R., 2008. An Extended Security Framework for e-Government, Intelligence and Security Informatics, ISI 2008 IEEE International Conference, pp 294 – 295, 17-

Al-Mamary, Y.H., Shamsuddin, A., and Nor Aziati, A.H. 2014. The Relationship between System Quality, Information Quality, and Organisational Performance, International Journal of Knowledge and Research in Management and E-Commerce, Volume. 4, Issue 3, pp. 07-10

Al-Mamary, Y.H., and Shamsuddin, A., and Nor Aziati, A.H. 2014. Key factors enhancing acceptance of management information systems in Yemeni companies, Journal of Business and Management Research, Volume. 5, pp. 108-111.

Al-shboul, R. 2012. Security and Vulnerability in the E-Government Society. Contemporary Engineering Sciences, Vol. 5. No. 5, pp. 215 – 226.

Akomolafe, T. Bukola A. Onyekwelu, Oniyide A. Bello, 2012 "Prescriptive System for Performance Information Management System", Frontiers in Science, Vol. 2 No. 6, pp.181-186.

Ammons, D.; David, N., and Roenigk, D. J. 2015. "Performance Management in Local Government: Is Practice Influenced by Doctrine?" Public Performance and Management Review 38, No. 3. pp 514-41.

Aschengrau, A. and George, R. 2008. Essentials of Epidemiology in Public Health. 2nd edition. United States of America: Jones and Bartlett publishers.

Askim, J. 2007. How do politicians use performance information? An analysis of the Norwegian local government experience, International Review of Administrative Sciences, 73(3): 453-472.

Askim, J., A. Johnsen and K.-A. Christophersen. 2008. 'Factors behind Organisational Learning from Benchmarking: Experiences from Norwegian Municipal Benchmarking Networks', Journal of Public Administration Research and Theory, 18, 2, 297–320.

Askim, J. 2009. The Demand Side of Performance Measurement: Explaining Councillors' Utilization of Performance Information in Policymaking. *International Public Management Journal*. 12(1): 24-47

Bagraim, J., Jaga, A. and Meyer, I. 2010. *People management*. Mason, OH: Custom Publishing.

Baker D, Buoni N, Fee M, Vitale C 2011. *Social Networking and Its Effects on Companies & Their Employees*. Neuman University, 1-14.

Behn, R. 2012. Motivating and steering with comparative data: How the bar chart and “the list” might help to steer social integration. *International Public Management Review*, 13(1), 21–37.

Best, D. P. 2010. The future of information management. *Records Management Journal*, 20(1), 61-71.

Bhatt, Y., and Thirunavukkarasu, A. 2010. Information management: A key for creating business value. *The Data Administration Newsletter*

Bishakha, M., Ganapathy, P., and Malavika. 2010. A study on employee engagement in two Indian businesses. *Asian Journal of Management Research*, pp 87-79.

Bouckaert, G. and J. Halligan. 2008. *Managing Performance: International Comparisons*. New York: Routledge.

Boyne, G. 2010. Performance Management: Does it work? In: Walker, R.M., Boyne, G.A., and Brewer, G.A. (Eds) *Public Management and Performance: Research Directions*. Cambridge: Cambridge University Press, pp. 207-226)

Brassington F, and Pettit S. 2003. *Principles of Marketing, Third Edition*. Prentice Hall/Financial Times. New Jersey.

Brewer, Gene A. 2008. Employee and organisational performance. In *Motivation in public management: The call of public service*, ed. James L. Perry and Annie Hondeghem, 101–7. Oxford: Oxford Univ. Press.

Calder, A, and S Watkins. 2008. IT governance a manager's guide to Data Security and ISO 27001/ISO 27002. Kogan Page,

Chandan K. S. and Jena, s. 2012."Organisational performance management system: exploring the manufacturing sectors", Industrial and Commercial Training, Vol. 44 Iss 5 pp. 296 - 302

Cetindamar D., Çatay B., Basmaci O.S., and Competition through collaboration: insights from an initiative in the Turkish textile supply chain, Supply Chain Management: an international journal, 2005; 10: 238-240.

Clayton C., Matsiliza N.S., (2015).Management of employee performance in the South African Public Service: the case of the National Department of Rural Development and Land Reform in the Western Cape. Problems and Perspectives in Management , 13(3- 125)

Clifford, J. Michael, L and John, L. 2007. Designing and Conducting Research in Education. Sage Publisher.

Collins English Dictionary 2014.Complete and Unabridged, 12th Edition 2014 HarperCollins Publishers,

Cooper, D. R. and Schindler, P. S. 2003. Business Research Methods. International Edition. New Delhi: Tata McGraw- Hill.

Creswell, J. W.2014. Qualitative, Quantitative and Mixed Method approaches. 4th Ed. Sage.

Department of National Treasury Different departments, 2007. Department of National Treasury 2007. The Framework for Managing Programme Performance Information. Cape: Oxford University Press.

Department planning, monitoring and evaluation Strategic Plan 2015-2020, Government Printers.

De Vos, A. S., Strydom, H., Fouche, C. B. and Delport, C.S.L. 2010. Research at grass roots for social sciences and human service professions. 3rd edition. Pretoria: Van Schaik Publisher.

Dooren and S. Van de Walle, 2008. (eds.), Performance information in the public sector: How it is used. Palgrave, Hound mills; pp. 211-226

Dull, Matthew. 2009. Results-model reform leadership: Questions of credible commitment. *Journal of Public Administration Research and Theory* 19:255–84.

Du Plessis, Y. 2014. Qualitative and Quantitative Methodology: Data Collection and analysis of Quality of findings and results. Mafikeng: Graduate School of Business and Government Leadership, University of North West

Evans, N., Hunter, G., and Price, J. 2011. Intellectual assets of organisations. *Communications of Global Information Technology (COGIT)*, 3, 55-65

Evans, N. & Price, J. 2012 Barriers to the Effective Deployment of Information Assets: An Executive Management Perspective. *Interdisciplinary Journal of Information, Knowledge, and Management* Volume 7, 177-199.

Fink, A.2009. How to conduct surveys: A step by step guide. 4th Ed. London. Sage

Flynn, B.B., Huo, B., & Zhao, X., 2010.The impact of supply chain integration Performance: approach .*J.Oper.Manag.*28 (1), 58–71

Foss N. J., Husted K., Michailova S. (2010). Governing knowledge sharing in organizations: Levels of analysis, governance mechanisms, and research directions. *Journal of Management Studies*, 47(3), 455–482

Frederick, Lori E. Ross Tara L. Bruno and Patricia G. Erickson 2011. Exploring gender and sexual minority status among street-involved youth, *Vulnerable Children and Youth Studies: An International Interdisciplinary Journal for Research, Policy and Care*, 6:2, pp166-183.

Gerhart, B., and Fang, M. 2004, 'National Culture and Human Resource Management: Assumptions and Evidence.' *The International Journal of Human Resource Management*, 16, 971–986.

Gill, P, Stewart, K., Treasure, E, Chadwick, B. 2008. Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*. 204(6): 291-295 [Accessed: 2015/08/01]

Grabot B., Marsina S., Mayere A., Riedel R., Williams P., 2011. Planning information processing along the supply-chain: a socio-technical view, *Behavioural Operations in Planning and Scheduling*, 2011; 123-158.

Gravetter, J. and Forzano, B. 2009. *Research methods for psychology*. Australia: Cengage Learning.

Grinnell and Williams 1990. *Research in social work: a primer*. Itasca, IL: Peacock.

Güngör, P. 2011. The Relationship between Reward Management System and. *Procedia Social and Behavioural Sciences*, 1510–1520.

Hanuman, M. 2006. *A Critical Evaluation of Bed Occupancy Rates at Public Hospitals in the eThekweni District and Recommendations for Addressing Critical Shortages*. MBA. Regent Business School.

Hong, D., Suh, E., and Koo, C. 2011. Developing strategies for overcoming barriers knowledge sharing based on conversational knowledge management: A case study of a financial company. *Expert Systems with Applications*, 38(12 14417-14427.

Hood, C. 2007. Public Service Management by Numbers: Why Does it Vary? Where has it come from? What Are the Gaps and the Puzzles? *Public Money & Management*, 27(2): 95-102.

Independent Development Trust (IDT) report 2015/2016. Pretoria: Government Printers.

InvestorWords.(2011). Definition investment. Retrieved from <http://www.investor.com/2599/investment.html>

Jonathan, D., Breul, Moravitz, C., 2007. *Integrating Performance and Budgets: The Budget Office of Tomorrow: IBM centre of the business of government*, Rowmen & Littlefield Publishers: United State

- Kekana, M.J. 2012. Intergovernmental Relations on the provision of basic services at Local Government: Mahikeng Local Municipality. Paper presented at SAAPAM Conference on Governance and Policy practice held at Cape Town on April 2013. Cape Penizula University of Technology, Western Cape.
- Khalid, M. I. Khreishah, A., and Azeem, M., 2014 Cloud Computing Security: A Survey, Computers -Open Access Journal, Vol 3, and pp. 1-35.
- Khatri, V., & Brown, C. 2010. Designing data governance. Communications of the ACM, 25(1), 148-152.
- Khurana M., Mishra P., Singh A., Barriers to information sharing in supply chain of manufacturing industries, Int. J. Manufact. Syst, 2011; 1: 9-29.
- Korter, G.O. Olubusoye, O. E. 2016. Information Communication Technology and the African Student An International Multi-disciplinary Journal, Ethiopia Vol. 10(2), Serial No.41, April, 2016: 103-122.
- Koskab, A.2013. Knowledge Sharing Process, Innovation Capability and Innovation Performance: An Empirical Study Procedia - Social and Behavioural Sciences 75 Published by Elsevier Ltd. 217 – 225
- Kumar, V., 2014.Impact of information technology on supply chain of Indian industries. Int.J.Eng.7 (1), 41–48.
- Kumar, R. 2008. Research Methodology, APH Publisher. New Delhi. 1-6
- Kumar, R. 2014. Research Methodology: A step-by-step Guide for beginners. Sage. London.
- Lee, A. S. 2010. Retrospective and prospects: Information systems research in the last and next 25 years. Journal of Information Technology, 25, 336-348.
- Lee, G., and Jimenez, B. S. 2011. Does performance management affect job turnover intention in the federal government? The American Review of Public Administration, 41, 168-184.

- Li, S., Rao, S.S., Ragu-Nathan, B., Ragu-Nathan, T.S., 2005. Development and Validation of a measurement instrument for studying supply chain management practices. *J.Oper.Manag.*23, 618–641.
- Ma, Q., Johnston, A. C. and Pearson, J. M. 2008. Information security management objectives and practices: a parsimonious framework. *Information Management and Computer Security* 16(3); pp. 251-270
- Madden, A.D. 2000. Information as a representation of knowledge and data *Aslib Proceedings* Vol 52, No.9, October 2000 – 343
- Maree, A. K. 2008. Setting the benchmark for research in the management of acute pain in emergency departments vol. 13 (1) pp 57–60.
- Martin, B. , A. Hazen , and M. Sarrafzadeh . 2006. Knowledge management and the LIS professions: Investigating the implications for practice and for educational provision. *Australian Library Journal* 27 (8): 12 – 29
- McNeill, P. & Chapman, S., 2005. *Research methods* 3rd ed., New York: Routledge.
- Miladi, H., and Malekmohammadi, I. 2010. Feasibility of application of e-learning in higher education using factor analysis (Case study: agricultural extension and education students in Razi university). *Journal of agricultural extension and education researches*, 3(1), 1529. [Persian].
- Moriarty, J. 2010. Participation in the Workplace: Are Employees Special? *Journal of Business Ethics*, 92 (3), pp 373-384.
- Mouton, J., and Marais. 'Basic Concepts in the Methodology of Social Science: HSRC Series in Methodology. Series ed. Pretoria: HSRC
- Moynihan, D. P. 2008. *The dynamics of performance management: Constructing information and reform*. Washington, DC: Georgetown University Press.
- Moynihan, D.P. and N. Landuyt. 2009. 'How Do Public Organisations Learn? Bridging Cultural and Structural Perspectives', *Public Administration Review*, 69, 6, 1097–105.

Moynihan, Donald P., and Landuyt N., 2009. How do public organisations learn? Bridging structural and cultural divides. *Public Administration Review* 69:1097–105.

Moynihan, D. P., Fernandez, S. Kim, S LeRoux, K. Piotrowski, S. J. Yang, K and Wright. B. E. 2011. Performance measurement amidst governance complexity. *Journal of Public Administration Research and Theory* 21: (i) 141–i155.

Moynihan, D.P. and Pandey, S.K. 2010. The Big Question for Performance Management: Why do Managers Use Performance Information? *Journal of Public Administration Research and Theory* 20(4): 849-866.

Moynihan, D.P. and D.P. Hawes. 2012. ‘Responsiveness to Reform Values: The Influence of the Environment on Performance Information Use’, *Public Administration Review*, 72, Suppl. 1, 95–105.

Moynihan, D.P., S.K. Pandey and B.E. Wright. 2012. ‘Setting the Table: How Transformational Leadership Fosters Performance Information Use’, *Journal of Public Administration Research and Theory*, 22, 1, 143–64.

Naidoo, N. 2010. An Evaluation of Customer Retention Strategies at a Retail Hearing Aid Company. MBA. Regent Business School.

Nielsen, P. A. 2013. Performance information in politics and public management: Impacts on decision making and performance (Ph.D.). Aarhus University, Aarhus

Odendaal, A. 2009. Motivation: From Concepts to Applications. In Judge, T., Robbins, S., Roodt, G., and Odendaal, A. (2009). *Organisational Behaviour: Global and Southern African Perspectives*. 2nd ed. Cape Town: Pearson Education.

Ohemeng, F. K.L. 2010. The Dangers of Internationalization and “One Size Fits All” In Public Sector Management. Lessons from Performance Management in Ontario and Ghana. *International Journal of Public Sector Management*, 23(5): 456-478.

Osubor, V. O. and Chiemeké, S. C. 2015 The Impacts Of Information Culture on E-Learning Innovation Adoption In Learning Institutions In Nigeria *African Journal of Computing & ICT* Vol 8. No. 1, 17-27

Pandey, Sanjay K., Bradley E. Wright, and Moynihan D.P. 2008. Public service motivation and interpersonal citizenship behaviour: Testing a preliminary model. *International Public Management Journal* 11:89–108.

Pandey, Sanjay K., and Edmund C. Stazyk. 2008. Antecedents and correlates of public service motivation. In *Motivation in public management: The call of public service*, eds. James L. Perry and Annie Hondeghem, 101–17. Oxford: Oxford Univ. Press.

Payne, G. and Payne, J. 2005. *Key Concepts in Social Research*. London. Sage

Perry, James L., and Anne Hondeghem. 2008. *Motivation in public management: The call of public service*. Oxford: Oxford Univ. Press

Petter, S., & DeLone, W. and McLean, E. 2008. Measuring information systems success: models, dimensions, measures, and interrelationships. *European Journal of Information Systems*, vol.17, pp. 236-263.

Pitt, M, & Bennett J. 2008. Workforce ownership of space in a space sharing environment. *J. Facilities Management*, 6(4):290-302.

Poister, T. H., Pasha, O. Q., and Edwards, L. H. 2013. Does performance management lead to better outcomes? Evidence from the U.S. public transit industry. *Public Administration Review*, 73, 625-636.

Pollitt, C., Harrison, S., Dowswell, G., Jerak-Zuiderent, S., and BAL, R. 2010. Performance Regimes in Health Care: Institutions, Critical Junctures and the Logic of Escalation in England and the Netherlands. *Evaluation* 2010 16(1): 13-29

Pramlal, L. 2004. *'Portfolio Careers' and the Search for Flexibility in Later Life Britain*: Sage Publisher.

Prasad, Acklesh, Heales, John, and Green, Peter. "A capabilities-based approach to obtaining a deeper understanding of information technology governance effectiveness: Evidence from IT steering committees." *International Journal of Accounting Information Systems* 11, 2010: 214-232.

Razavi M.N., Iverson L., A grounded theory of information sharing behaviour in a personal learning space, in, ACM, 2006, p. 459-468.

Robinson, J. A 2009. Remembering Our Past. Studies in Autobiographical Memory. Cambridge University Press.

Saida, A. R. Abdullahb, H Ulib, J. and Mohamedc Z. A 2014. Relationship between Organisational Characteristics and Information Security Knowledge Management Implementation. Procedia - Social and Behavioral Sciences 123 (2014) 433 – 443

Saharan, U. 2003, Research Methods for Business: A Skill Building Approach, John Wiley & Sons, New York, NY.

Saunders, M., Lewis, P. and Thornhill, A. 2007. Research Methods for Business Students. 4th Edition. England: Pearson Education Limited England.

Sekaran, U. 2003, Research Methods for Business: A Skill Building Approach, John Wiley & Sons, New York, NY.

Shan, W., Zhang, Q., 2009. Extension theory and its application in evaluation of independent innovation capability. Kybernetes. 38 (3/4), 457-467.

Shareef, S. M. 2016. Enhancing Security of Information in E-Government. Journal of Emerging Trends in Computing and Information Sciences. Vol. 7, No. pp 139-146.

Shibly, H. (2011). Human resources information systems success assessment: An integrative model. Australian Journal of Basic and Applied Sciences, 5(5), 157-169.

Simonsson, M, P Johnson, and M Ekstedt. "The effect of IT Governance Maturity on IT Governance Performance." Information Systems Management, December 2010: 10-24.

Singh V., 2012 A Dissertation Submitted in Partial Fulfillment of Master of Arts in Human Resource Management : Performance Appraisal & its Effectiveness in KRIBHCO (NOIDA)

- Swanson, Richard A. 2013 *Theory Building in Applied Disciplines*. San Francisco, CA: Barrett-Koehler Publishers.
- Taylor, J. 2009. Strengthening the Link between Performance Measurement and Decision-making. *Public Administration*, 87 (4): 853-871.
- Taylor, J. 2011. Factors influencing the use of performance information for decision-making in Australian state agencies. *Public Administration*, 89, 4, pp. 1316–1334.
- Tshuma, N. 2010. An Evaluation of a Change Strategy to Integrate Nutrition in HIV and AIDS Programmes run by the Community AIDS Response. MBA Thesis. Regent Business School
- Turner, M. A; Varghese, R., and Walker, P. 2008 *Information Sharing and SMME Financing in South Africa: A Survey of the Landscape* PERC Press. Chapel Hill, North Carolina. USA.
- United Nations Development Group. 2010. *Results-Based Management Handbook*, Clean Draft Version. Available: www.un.org/files/UNDG_RBM_Handbook.pdf [2013, January 6].
- Van Dooren, W. 2008. Nothing new under the sun? Change and continuity in the twentieth-century performance movements, in Van
- Van Dooren, W. and S. Van de Walle (eds.). 2008. *Performance Information in the Public Sector: How it is used*. Basingstoke: Palgrave Macmillan.
- Van Dooren, W. 2011. Better performance management: Some single- and double-loop strategies. *Public Performance & Management Review*, 34(3), 420–433.
- Van Dooren, W., Bouckaert, G., and Halligan, J. 2010. *Performance management in the public sector*. New York, NY: Routledge.
- Van de Walle, S., and Van Dooren, W. 2010. How is information used to improve performance in the public sector: Exploring the dynamics of performance information? In: Walshe, K., Harvey, G. and Jas, P. (Eds). *Connecting knowledge and performance in public services: From knowing to doing*. Cambridge: Cambridge University Press, pp. 33-54

Venter, R., Bendeman, H., Conradie, M., Dwortzanowski-Venter, B., Holtzhausen, M., and Levy, A., 2009. *Labour Relations in South Africa*. 3rd Edition. Cape Town: Oxford University Press.

Verde, M.D., De Castro, G.M., Lopez, J.E.N. 2011. Organisational knowledge assets and innovation capability. Evidence from Spanish manufacturing firms, *Journal of Intellectual Capital*, 12(1), pp.5-19

Wallin, J., Larsson, A., Isaksson, O., and Larsson, T. 2011. *Measuring Innovation Capability Assessing Collaborative Performance*

Walker, R. M., Damanpour, F., and Devece, C. A. 2011. Management innovation and organisational performance: The mediating effect of performance management. *Journal of Public Administration Research and Theory*, 21, 367-386

Welman, C. Kruger, F. and Mitchell, B. 2010. *Research Methodology* 3rd ed. Cape Town: Oxford University Press.

Wilkin, C. L Chenhall R. H 2010. A review of IT governance: A taxonomy to inform accounting information systems. *Journal of Information Systems*, 2010 in *Product-Service System Innovation*, 3rd CIRP International Conference on Industrial Product Service Systems, Braunschweig

Yam, Richard C.M., William Lo, Esther P.Y. Tang and Antonio, K.W. Lau. 2010. *Technological Innovation Capabilities and Firm Performance*, World Academy of Science, Engineering and Technology.

Yang T.-M., Maxwell T.A. 2011. Information-sharing in public organisations: A literature review of interpersonal, intra-organisational and inter organisational success factors, *Government Information Quarterly*, 2011; 28: 164-175.

Yang, Heng-Li and Wu, T.C.T. 2008. Knowledge sharing in an organization. *Technological Forecasting & Social Change*, 75, 1128- 1156

Yaser Hasan Al-Mamary, Alina Shamsuddin, and Nor Aziati, "Factors Affecting Successful Adoption of Management Information Systems in Organisations towards Enhancing

Organisational Performance.” *American Journal of Systems and Software*, vol. 2, no. 5 (2014): 121-126. doi: 10.12691/ajss-2-5-2.

Yin, R. K. 2009. Case study research, design and method. London: Sage Publications Ltd.

Zaytseva, T “Performance management system of Public and Private sector organisations in Russia: comparative research”, by Tatiana Assistant professor of School of Public Administration? Moscow State University, Russia, the 9th NISPAcee Annual Conference: “Government, Market and the Civil Sector: The search for a productive partnership”

Zu’bi, H. M., and Al-Onizat, H. H., 2012. E-government and Security Requirements for Information Systems and Privacy (Performance Linkage), *Journal of Management Research*, Vol 4. No.4.